## MATIBUSE



## INTRODUCTION

Matibus SE is suitable for medium door phone and video door phone installations. Matibus SE is ideal for making new systems and modernizing old ones.

## BASIC FEATURES OF THE MATIBUS SE

2-wires installation for door phone system or UTP 5e for audio/video receivers, regardless of the number of users,
Secrecy of the conversations,
Maximum number of door phones 510 ora 256 audio/video receivers (in one column),
The ability to create systems with the main and additional entrances,
Built into the keyboard lock function code,
Built-in panel additional relay, for example to control automatic gate,
General codes for opening the doors (64), may be individual for each of the keyboards
510 individual codes opening the door associated with members codes,
The maximum number of keyboards 239,
House phones programming by the setting jumpers,
The possibility of parallel connection 2 house phones,
Signaling the open door,
The possibility to work with switchboard,
Additional service features such as measurement of the current in the house phones line.
Possibility of connection analog call module using digitiser.
Call Module with Dallas key reader.

## TYPES OF INSTALLATION

## AUDIO INSTALLATION WITH ONE ENTRANCE PANEL

Connection with one entrance panel and max. 255 door phones (using oneriser in the power unit).


Connection with one entrance panel and max 510 doorphones (using two risers in the power unit).


## INSTALLATION WITH SEVERAL MAIN ENTRANCE PANELS

Connection up to 240 entrance panels and max 510 doorphones (using two risers in power unit).


TYPES OF WIRES

AUDIO INSTALLATION WITH MAIN ENTRANCE PANELS AND SECONDARY ENTRANCE PANELS ('MASTER/SLAVE’ ARCHITECTURE)
In this type of installation it is possible to connect to one power supply up to 240 (in theory) entrance panels. Max number of users is 510 * numbers of power supply (in case of using two risers for each power supply).


AUDIO/VIDEO DOORPHONE INSTALLATION WITH ONE ENTRANCE PANEL

This type of installation allows connection one entrance panel and max. 127 video door-phones (using one riser in the power unit) or 254 video door-phones (using two risers in the power unit).


## AUDIO/VIDEO INSTALLATION WITH MAIN ENTRANCE PANELS CONNECTED IN PARALLEL

In this type of installation it is possible to connect several main entry panels with to parallel. Max number of users is 254 (in case of using two risers for power supply)


## VIDEO INSTALLATION WITH MAIN ENTRANCE PANELS AND SECONDARY ENTRANCE PANELS ('MASTER/SLAVE’ ARCHITECTURE)

In this type of installation it is possible to connect to one power supply up to 240 (in theory) entrance panels. Max number of users is 254 * numbers of power supply (in case of using two risers for each power supply).


GENERAL INFORMATION ABOUT MATIBUSSE INSTALLATION

Proper design is the basis of reliable working video door-phone installation.
When connection is made use only tested and high quality cables.
A few examples of producers guarantee high quality cables: Technokabel, Molex Premise Networks, Belden Generic BT, Legrand, Alcatel, MegaLine, Draka Comteq.
Making wires connections inside buildings is defined by norm PNEN 50174-2:2000 - "Information technology - Cabling installation Part 2: Installation planning and practices inside buildings"
In particular information apply interaction between different cable systems are stated on page 24-27.
Rules separate signal cables and electric cables result from two general reasons: safety and electromagnetic interferences (EMI).

## WIRES

Each terminal allow connect max. $1.5 \mathrm{~mm}^{2}(\phi 1.38 \mathrm{~mm})$ wire. If it is necessary to connect wire more than $1.5 \mathrm{~mm}^{2}$ use plug adaptor. For connection use wires with proper section listed in table below.
Do not use stranded cable only solid cable.
All cables should be proper wiring, fastening and signing.
The most important conclusion to result from "EN 501742:2000" norm is requirement refer to distances between signal cables and electrical cables (up to $\sim 400 \mathrm{~V}$ ) and it must be min. 200 mm . From this rule is excluded last 15 m of the line.

Each transmission line 'is not only two wires' but a long line segment, where fundamental importance is the impedance and secondly the loop resistance.
For signal video and digital data stream the most important is impedance. In contrast to acoustic waveform where length line is conditioned by loop resistance. 80 m linear track is the full length of the wave for the transmission spectrum of $A C$ over 4 MHz 's. Conclusion is that very important is amount of attenuation and the level of iducted noise in a specific band.
The miniumum of requirements related to connection with UTP 5E cable must be understanding as follows:

1. Used UTP cable must comply with EN-50171 norm and apply D class (category 5E)
2. UTP cable consist of four twisted pair of copper ("pure of the copper"). Each of pairs have different length of twisting in order to decrease mutual interferences called crosstalks. Wire crosssection: $S=0,205 \mathrm{~mm} 2, \phi 0,511 \mathrm{~mm}(24 \mathrm{AWG}), 84.22 \Omega / \mathrm{km}$, in PVC shield or LZSH (free of halogen material).
Green pair have the lowest attenuation in UTP cable next is orange pair and blue pair. The worst is brown pair. It is not apply to small acoustic band but $\sim 10 \mathrm{MHz}$ MatibusSE band.

In the case of installation video door-phone system where cables were lie down already, it is necessary to measure the actual parameters for this cables. The measurement should include basic electrical parameters and transmision parameters with multimeter and LAN cable tester.

## MAXIMUM DISTANCES DEPENDING ON WIRE CROSS SECTION

In basic MatibusSE installation (with power supplies ref no. 1052/33R and 1052/31R) we suggest use YTDY cables.
Maximum distances depending on wire cross-section (diameter). Enhanced communication mode and classical receivers (MatibusSE)

| Function | Line | Cross-section (diameter) compared to distance [m] |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathrm{mm}^{2}$ (mm) |  |  |  |  |
|  |  | 25 [m] | 50 [m] | 100 [m] | 200 [m] | 300 [m] |
| Power supply call module / digitalizer | 12 V AC | 0.5 (0.8) | 0.5 (0.8) | $1^{(1)}(1.13)^{(1)}$ | - ${ }^{(2)}$ | - ${ }^{(2)}$ |
| Data bus (communication mode MATIBUS $_{\text {SE }}$ ) | DD+, DG+ | $\begin{gathered} 0.5 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 0.5 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (1.13) \\ \hline \end{gathered}$ | $1.5{ }^{(2)}$ | $2.5{ }^{(2)}$ |
| Audio bus | LD, LG | 0.5 (0.8) | 0.5 (0.8) | 1 (1.13) | $1.5{ }^{(2)}$ | $2.5{ }^{(2)}$ |
| Ground DD+ DG+, LD, LG | OL | 0.5 (0.8) | 0.5 (0.8) | 1 (1.13) | $1.5{ }^{(2)}$ | $2.5{ }^{(2)}$ |
| Electical lock Line | CL+ CL- | 0.5 (0.8) | 1 (1.13) | - | - | - |
| Wires for calling and audio line analog call module - digitalizer | GR1..GR3 G1..G8 441, GL1, GL2, AC1, AC2 | $\begin{gathered} 0.5 \\ (0.8) \end{gathered}$ | $\begin{gathered} 1 \\ (1.13) \end{gathered}$ | $\begin{gathered} 1 \\ (1.13) \end{gathered}$ | 1.5 | 1.5 |
| Door-phones ground | OL | 0.5 (0.8) | 0.75 (0.98) | 1 (1.13) | $1.5{ }^{(2)}$ | 2.5 |
| Door-phones riser Line (classical door-phones ref no. 1132/620) | LU1, LU2 | $\begin{gathered} 0.5 \\ (0.8) \end{gathered}$ | $\begin{gathered} 0.5 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (1.13) \\ \hline \end{gathered}$ | - | - |

Table annotation

1. It is recommend to divide power supply lines from signal lines (as separate cable).
2. Only when is used additional power supply ref no. 1052/2

Maximum distances for data buses and audio lines with communication mode RS485, advanced door-phones and dis-dec devices.

| Distance | 20 m | 45m | 50m | 60 m | 150m | 200m | 250m | 270m | 300 m | 450m |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS | CAT 5E |  |  |  |  |  |  |  |  |  |
| Video VA, VB | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair ${ }^{(1)}$ | 1 pair $^{(1)}$ | 1 pair $^{(1)}$ |
| Data (RS485) DG + , DG-, DD+, DD- | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair |
| Audio LG, LD, OL | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | 2 pairs | 2 pairs | 3 pairs |


| RISER LINE | CAT 5E |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| door-phones ref no. 1134/522, 1140/522 | 1 pair | 1 pair | 1 pair | 1 pair | - | - | - | - | - | - |
| dis-dec** with video door-phone NEXO | OK | OK | - | - | - | - | - | - | - | - |
| dis-dec** with video door-phone SIGNO, WINSPOT | OK | OK | OK | OK | - | - | - | - | - | - |
| RISER LINE | CAT 6 |  |  |  |  |  |  |  |  |  |
| door-phones ref no. 1134/522, 1140/522 | 1 pair | 1 pair | 1 pair | 1 pair | 1 pair | - | - | - | - | - |
| dis-dec** with video door-phone NEXO | OK | OK | - | - | - | - | - | - | - | - |
| dis-dec** with video door-phone SIGNO, WINSPOT | OK | OK | OK | OK | OK | OK | - | - | - | - |
| RISER LINE | YDY $2 \times 1,5 \mathrm{~mm}^{2}$ |  |  |  |  |  |  |  |  |  |
| door-phones ref no. 1134/522, 1140/522 | OK | OK | OK | - | - | - | - | - | - | - |

1. Only in case of using ref no.1795/250 booster.

Recommended colors of the wires in the bus
VIDEO bus (VA, VB) - orange solid, white/orange stripe
DATA bus (DG+, DG-, DD+, DD-) - green solid, white/green strip
AUDIO bus (LG, LD, OL) - any
RISER LINE (LU1 or LU2, OL ) - green solid, white/green strip
In case of twisting wires together, it is recommended to use:
1 pair green solid and green/white stripe
2 pairs are composed of wires: green solid and green/white stripe with orange solid and orange/white stripe
3 pairs are composed of wires: green solid and green/white stripe with orange solid and orange/white strip and with blue solid and blue/white stripe

In case of twisting wires together it is neccessary to take solid one colours together and stripped colours together.
** No matter the distance of riser it is recommended to use cable UTP CAT 6.
In riser the maximum number of dis-dec is 25 !
NOTE!!!
In case of using more than 10 dis-dec device in one riser it is mandatory to use cable UTP CAT 6. Additionaly we recommend to use auxiliary cable UTP for increasing cross-sections power line wires - R1, R2. Maximum distance between receivers and dis-dec device is 30 m (for video door-phone NEXO ref no. $1708 / 400$ is 20 m ).

## LIST DEVICES AVAILABLE IN SYSTEM MATIBUS ${ }_{\text {se }}$

External equipment:
ref no. 1052/70
ref no. 1052/70-RF
ref no. 1052/100D ref no. 1052/100VD ref no. 1052/101D ref no. 1052/101VD ref no. 1052/101VD-RF ref no. 1052/102D ref no. 1052/103 ref no. 1052/104 ref no. 1052/105D ref no. 1052/105VD ref no. 1052/106D ref no. 1052/106VD ref no. 1052/107D ref no. 1752/40 ref no. 1752/141D ref no. 1752/142D ref no. 1752/146D ref no. 1752/147D
ref no. 1752/141VD
ref no. 1752/142VD ref no. 1752/142VD-RF
ref no. 1752/146VD
ref no. 1752/147VD

Internal equipment:
ref no. 1131
ref no. 1131/1 ref no. 1131/620
ref no. 1131/621
ref no. 1132
ref no. 1132/1
ref no. 1132/620
ref no. 1132/621
ref no. 1133
ref no. 1133/1
ref no. 1133/42
ref no. 1134/1
ref no. 1134/622
ref no. 1140/1
ref no. 1140/41
ref no. 1140/50
ref no. 1140/522
ref no. 1140/621
ref no. 1708/400

SINTHESI module with DALLAS key reader
SINTHESI module with RFID key/kard reader and information window
Digital call module with keyboard, numeric display and hood
Vertical digital call module with keyboard, numeric display and hood
Digital call module with keyboard, numeric display, information module and hood
Vertical digital call module with keyboard, numeric display, information module and hood
Vertical digital call module with keyboard, numeric display, information module, RFID key reader and hood Digital call module with keyboard, numeric display, double information module and hood
SINTHESI digital call module with keyboard and numeric display in two modules for only audio installations SINTHESI digital call module with keyboard and numeric display in two modules used for video installations Digital call module with keyboard, numeric display, DALLAS key reader and hood
Vertical digital call module with keyboard, numeric display, DALLAS key reader and hood
Digital call module with keyboard, numeric display, DALLAS key reader, information module and hood
Vertical digital call module with keyboard, numeric display, DALLAS key reader, information module and hood Digital call module with keyboard, numeric display, DALLAS key reader, double information module and hood SINTHESI module with color camera for 1052/104 only panel
Digital call module with color camera, keyboard, numeric display and hood
Digital call module with color camera, keyboard, numeric display, information module and hood
Digital call module with color camera, keyboard, numeric display, DALLAS key reader and hood
Digital call module with color camera, keyboard, numeric display, DALLAS key reader, information module and hood
Vertical digital call module with color camera, keyboard, numeric display and hood
Vertical digital call module with color camera, keyboard, numeric display, information module and hood
Vertical digital call module with color camera, keyboard, numeric display, information module, RFID key reader and hood
Vertical digital call module with color camera, keyboard, numeric display, DALLAS key reader and hood
Vertical digital call module with color camera, keyboard, numeric display, small information module, DALLAS key reader and hood
ref no. 1740/40
ref no. 1740/952
ref no. 1740/90
ref no. 1855/952
ref no. 1855/11A

Door phone "URMET" working only with disdec device
Door phone "URMET" with additional button working only with disdec device
Door phone "URMET" working with classic MatibusSE installation
Door phone "URMET" with additional button working with classic MatibusSE installation
Door phone "SCAITEL" working only with disdec device
Door phone "SCAITEL" with additional button working only with disdec device
Door phone "SCAITEL" working with classic MatibusSE installation
Door phone "SCAITEL" with additional button working with classic MatibusSE installation
Door phone "ATLANTICO" working only with disdec device
Door phone "ATLANTICO" with additional button working only with disdec device
Door phone "ATLANTICO" with three additional buttons, color silver working only with disdec device
Door phone "UTOPIA" with additional button working only with disdec device
Door phone "UTOPIA" with two additional buttons working with classic MatibusSE installation
Door phone "SIGNO" with additional button working only with disdec device
Door phone "SIGNO" with additional button, color graphite working only with disdec device
Top-table for "SIGNO" door phones
Door phone "SIGNO" dedicated to working with switchboard installation
Door phone "SIGNO" with additional button working with classic MatibusSE installation
7" handsfree video door phone "NEXO" working only with disdec device

Video door phone "SIGNO" 4,3" working only with disdec device
Video door phone bracket for "SIGNO" MatibusSE working only with disdec device
Video door phone bracket for "SIGNO" working only with disdec device
Video door phone bracket for "WINSPOT" MatibusSE working only with disdec device
Video door phone "WINSPOT" 4,3" working only with disdec device

Power supplies, relays, distributors, digitalizers:
ref no. 1052/7R
ref no. 1052/20
ref no. 1052/31R ref no. 1052/33R ref no. 1052/54RM ref no. 1752/20D

## Switchboard:

ref no. 1052/40R

Digitalizer to push-button audio panels
Additional power supply
Power supply for MASTER installations only
Power supply MASTER/SLAVE installations
Distributor-decoder (Dys-Dec) for video signal distribution
Video power supply

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/100D


## GENERAL INFORMATION

Digital call module ref no. 1052/100D is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP2.

## CONSTRUCTION

Digital call module with keyboard ref no. 1052/100D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | -Through built-in three <br> position power regulation <br> circuit $\mathrm{U}_{\text {max }=12 \mathrm{~V}}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC} \mathrm{max:} \mathrm{1A/24V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $152 \times 110 \times 23-35 \mathrm{~mm}$ <br> $($ ref no. $1052 / 100 \mathrm{D})$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $175 \times 135 \times 23.6 \mathrm{~mm}$ <br> $($ with hood 525/RP2) |
| Weight: | $0,8 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/101D


## GENERAL INFORMATION

Digital call module ref no. 1052/101D is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP3.

## CONSTRUCTION

Digital call module with keyboard ref no. 1052/101D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with backlight information module, which enables putting a list of users or other information. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC}$ or + 20 V DC |
| :--- | :--- |
| Electrical lock driver | - Through built-in three position <br> power regulation circuit <br> $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: $1 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $152 \times 163 \times 23-35 \mathrm{~mm}$ (ref no. <br> $1052 / 101 \mathrm{D}$, ref no. 1052/106D) |
| Dimensions (L. $\times$ W. $\times$ D.) | $175 \times 188 \times 23.6 \mathrm{~mm}$ <br> $($ with hood 525/RP3) |
| Weight: | $1,05 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF. 1052/105..105D


## GENERAL INFORMATION

Digital call module ref no. 1052/105D is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP2.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/105D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or} \mathrm{+} \mathrm{20} \mathrm{V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | - Through built-in three <br> position power regulation <br> circuit $\mathrm{U}_{\text {max }=12 \mathrm{~V}}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC} \mathrm{max:} \mathrm{1A/24V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $152 \times 110 \times 23-35 \mathrm{~mm}$ (ref no. <br> $1052 / 100 \mathrm{D}$, ref no.1052/105D) |
| Dimensions (L. $\times$ W. $\times$ D.) | $175 \times 135 \times 23.6 \mathrm{~mm}$ <br> $($ with hood 525/RP2) |
| Weight: | $0,8 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF. 1052/106..106D


## GENERAL INFORMATION

Digital call module ref no. 1052/106D is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP3.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/105D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with backlight information module, which enables putting a list of users or other information Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC}$ or + 20 V DC |
| :--- | :--- |
| Electrical lock driver | - Through built-in three position <br> power regulation circuit <br> $\mathrm{U}_{\max =12 \mathrm{~V}}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: 1A/24V DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Wymiary (dł. x szer.x gł.) | $152 \times 163 \times 23-35 \mathrm{~mm}$ (ref no. <br> $1052 / 101 \mathrm{D}$, ref no. $1052 / 106 \mathrm{D})$ |
| Wymiary (dł. x szer.x gł.) | $175 \times 188 \times 23.6 \mathrm{~mm}$ <br> $($ with hood 525/RP3) |
| Weight: | $1,05 \mathrm{~kg}$ |

DIGITAL CALL MODULES

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/102D


## GENERAL INFORMATION

Digital call module ref no. 1052/102D is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP4.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/102D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with double backlight information modules, which enables putting a list of users or other information. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or} \mathrm{+} \mathrm{20} \mathrm{V} \mathrm{DC}$ |
| :--- | :--- |
|  | - Through built-in three <br> position power regulation <br> circuit $\mathrm{U}_{\text {max }=12 \mathrm{~V}}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC} \mathrm{max:} \mathrm{1A/24V} \mathrm{DC}$ |
| Electrical lock driver | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Working temperature: | $152 \times 218 \times 23-35 \mathrm{~mm}$ (ref no. <br> $1052 / 102 \mathrm{D}$, <br> $n o .1052 / 107 \mathrm{D})$ |
| Dimensions (L. $\times \mathrm{W} . \times$ D.) |  |
| Dimensions (L. $\times$ W. $\times$ D.) | $183 \times 250.6 \times 24 \mathrm{~mm}$ <br> $($ with hood 525/RP4) |
| Weight: | 1.2 kg |

DIGITAL CALL MODULE WITH KEYBOARD REF
NO. 1052/107D


## GENERAL INFORMATION

Digital call module ref no. 1052/107D is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP4.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/107D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with double backlight information modules, which enables putting a list of users or other information Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC}$ or + 20 V DC |
| :--- | :--- |
| Electrical lock driver | - Through built-in three position <br> power regulation circuit <br> $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: $1 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $152 \times 218 \times 23-35 \mathrm{~mm}$ (ref no. <br> $1052 / 102 \mathrm{D}$, ref no.1052/107D) |
| Dimensions (L. $\times$ W. $\times$ D.) | $183 \times 250.6 \times 24 \mathrm{~mm}$ <br> $($ with hood 525/RP4) |
| Weight: | 1.25 kg |

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/100VD VERTICAL


## GENERAL INFORMATION

Digital call module ref no. 1052/100VD VERTICAL is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-M.

## CONSTRUCTION

Digital call module with keyboard ref no. 1052/100VD VERTICAL is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. Call module has all characteristics of vandalproof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | -Through built-in three <br> position power regulation <br> circuit Umax $=12 \mathrm{~V}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC} \mathrm{max:} \mathrm{1A/24V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $206 \times 89 \times 23 \div 35 \mathrm{~mm}$ <br> (ref no. $1052 / 100 \mathrm{VD}$ ) |
| Dimensions (L. $\times$ W. $\times$ D.) | $238 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ <br> $($ with hood 525/RPV-M) |
| Weight: | $0,72 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/101VD VERTICAL


GENERAL INFORMATION
Digital call module ref no. 1052/101VD VERTICAL is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-D.

## CONSTRUCTION

Digital call module with keyboard ref no. 1052/101VD VERTICAL is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with backlight information window, which enables putting a list of users or other information. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V}$ DC |
| :---: | :---: |
| Electrical lock driver | -Through built-in three position power regulation circuit $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> -NO-C-NC max: 1A/24V DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. x W. x D.) | $269 \times 89 \times 23 \div 35 \mathrm{~mm}$ (ref no. 1052/101VD) |
| Dimensions (L. x W. x D.) | $301 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ (with hood 525/RPV-D) |
| Weight: | $0,90 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF. 1052/105VD VERTICAL


## GENERAL INFORMATION

Digital call module ref no. 1052/105VD VERTICAL is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-M.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/105VD VERTICAL is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V}$ DC |
| :---: | :---: |
| Electrical lock driver | -Through built-in three position power regulation circuit $\mathrm{U}_{\mathrm{max}}=12 \mathrm{~V}$ <br> -NO-C-NC max: 1A/24V DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. x W. x D.) | $206 \times 89 \times 23 \div 35 \mathrm{~mm}$ (ref no. 1052/105VD) |
| Dimensions (L. x W. x D.) | $238 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ (with hood 525/RPV-M) |
| Weight: | $0,74 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF. 1052/106VD VERTICAL


## GENERAL INFORMATION

Digital call module ref no. 1052/106VD VERTICAL is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-D.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/105VD VERTICAL is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with backlight information window, which enables putting a list of users or other information. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V}$ DC |
| :---: | :---: |
| Electrical lock driver | $\begin{aligned} & \text {-Through built-in three position } \\ & \text { power regulation circuit } \\ & \mathrm{U}_{\text {max }}=12 \mathrm{~V} \text { (NO } \\ & -\mathrm{NO}-\mathrm{C}-\mathrm{NC} \text { max: } 1 \mathrm{~A} / 24 \mathrm{~V} \text { DC } \\ & \hline \end{aligned}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Wymiary (dł. x szer.x gł.) | $269 \times 89 \times 23 \div 35 \mathrm{~mm}$ (ref no. 1052/106VD) |
| Wymiary (dł. x szer.x gł.) | $\begin{aligned} & 301 \times 121 \times 24.5 \div 36.5 \mathrm{~mm} \\ & (\text { with hood } 525 / \text { RPV-D) } \\ & \hline \end{aligned}$ |
| Weight: | $0,92 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/101VD-RF VERTICAL


GENERAL INFORMATION
Digital call module ref no. 1052/101VD-RF VERTICAL is designed for MATIBUSse system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-D.

## CONSTRUCTION

Digital call module with keyboard ref. 1052/101VD-RF VERTICAL is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. The panel is provided with backlight information window which enables putting a list of users or other information. Information window is integrated with RFID key/card reader. Call module has all characteristics of vandal-proof panel.

SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V}$ DC |
| :---: | :---: |
| Electrical lock driver | -Through built-in three position power regulation circuit $U_{\text {max }}=12 \mathrm{~V}$ <br> -NO-C-NC max: 1A/24V DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. x W. x D.) | $\begin{array}{\|llllll} 269 & x & 89 & x & 23 \div 35 & \mathrm{~mm} \\ \text { (ref no. } & \text { 1052/101VD-RF) } \end{array}$ |
| Dimensions (L. x W. x D.) | $\begin{aligned} & 301 \times 121 \times 24.5 \div 36.5 \mathrm{~mm} \\ & \text { (with hood 525/RPV-D) } \\ & \hline \end{aligned}$ |
| Weight: | 0,92 kg |

DIGITAL CALL MODULES

REF NO. 1052/100VD -/106VD

DIGITAL CALL PANEL WITH KEYBOARD
REF NO. 1052/100-S WAVE


## GENERAL INFORMATION

Digital call module ref no. 1052/100-S is designed for MATIBUSsE. system.

This call module must be flush mounted

## CONSTRUCTION

Digital call module with keyboard ref no. 1052/100-S is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{lub} \mathrm{+} \mathrm{20} \mathrm{V} \mathrm{DC}$ |
| :--- | :--- |
| Electric lock driver | $-\quad$ Through built-in three <br> position power regulation <br> circuit $U_{\text {max }}=12 \mathrm{~V}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: $1 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions <br> $(\mathrm{L} \times \mathrm{W} \times \mathrm{D})$ | $230 \times 130 \times 23[\mathrm{~mm}]$ |
| Flush mounting box <br> dimensions (L $\times \mathrm{W} \times \mathrm{D})$ | $171 \times 130 \times 46[\mathrm{~mm}]$ |
| Weight: | $1,2 \mathrm{~kg}$ |

DIGITAL CALL PANEL WITH KEYBOARD
REF NO. 1052/101-S WAVE


## GENERAL INFORMATION

Digital call module ref no. 1052/101-S is designed for MATIBUSse. system.

This call module must be flush mounted
CONSTRUCTION
DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/101-S IS MADE OF STAINLESS STEEL. PARTICULARLY NOTEWORTHY IS THE METAL ILLUMINATED KEYBOARD. THE PANEL IS PROVIDED WITH BACKLIGHT INFORMATION MODULE, WHICH ENABLES PUTTING A LIST OF USERS OR OTHER INFORMATION. CALL MODULE HAS ALL CHARACTERISTICS OF VANDAL-PROOF PANEL.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC}$ lub +20 V DC |
| :--- | :--- |
| Electric lock driver | - Through built-in three position <br> power regulation circuitU <br> max $=12 \mathrm{~V}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions <br> $(\mathrm{L} \times \mathrm{W} \times \mathrm{D})$ | $235 \times 183,8 \times 23[\mathrm{~mm}]$ |
| Flush mounting box <br> dimensions $(\mathrm{L} \times \mathrm{W} \times \mathrm{D})$ | $171 \times 184 \times 46[\mathrm{~mm}]$ |
| Weight: | $1,65 \mathrm{~kg}$ |

DIGITAL CALL MODULES
-
REF NO. 1052/105-S -/106-S

DIGITAL CALL PANEL WITH KEYBOARD REF NO. 1052/105-S WAVE


## GENERAL INFORMATION

Digital call module ref no. 1052/105-S is designed for MATIBUSse. system.

This call module must be flush mounted

## CONSTRUCTION

Digital call module with keyboard ref no. 1052/105-S is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECYFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{lub} \mathrm{+} \mathrm{20} \mathrm{V} \mathrm{DC}$ |
| :--- | :--- |
| Electric lock driver | $-\quad$ Through built-in three <br> position power regulation <br> circuit $U_{\text {max }=12 \mathrm{~V}}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: $1 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions <br> $(\mathrm{L} \times \mathrm{W} \times \mathrm{D})$ | $230 \times 130 \times 23$ |
| Flush mounting box <br> dimensions (L $\times \mathrm{W} \times \mathrm{D})$ | $171 \times 130 \times 46$ |
| Weight: | $1,2 \mathrm{~kg}$ |

DIGITAL CALL PANEL WITH KEYBOARD REF NO. 1052/106-S WAVE


GENERAL INFORMATION
Digital call module ref no. 1052/106-S is designed for MATIBUSse. system.

This call module must be flush mounted

## CONSTRUCTION

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1052/106-S IS MADE OF STAINLESS STEEL. PARTICULARLY NOTEWORTHY IS THE METAL ILLUMINATED KEYBOARD. THE PANEL IS PROVIDED WITH BACKLIGHT INFORMATION MODULE, WHICH ENABLES PUTTING A LIST OF USERS OR OTHER INFORMATION PANEL IS EQUIPPED WITH DALLAS KEY READER. CALL MODULE HAS ALL CHARACTERISTICS OF VANDAL-PROOF PANEL.

## SPECYFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC}$ lub +20 V DC |
| :--- | :--- |
| Electric lock driver | - Through built-in three position <br> power regulation circuitU <br> max $=12 \mathrm{~V}$ |
| $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: $1 \mathrm{~A} / 24 \mathrm{~V}$ DC |  |$|$| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Dimensions <br> $(\mathrm{L} \times \mathrm{W} \times \mathrm{D})$ | $235 \times 183,8 \times 23[\mathrm{~mm}]$ |
| Flush mounting box <br> dimensions (L W W x D) | $171 \times 184 \times 46[\mathrm{~mm}]$ |
| Weight: | $1,65 \mathrm{~kg}$ |

DIGITAL VIDEO CALL MODULE WITH KEYBOARD
REF NO. 1752/141D

| $\bigcirc \bigcirc$ |  |
| :---: | :---: |
| $\begin{aligned} & \sigma 000 \\ & \sigma 00 \\ & \sigma 00 \\ & \sigma 00 \end{aligned}$ |  |
| $๑ \square \square \square$ | Wybierz numer lokalu ipoczekaj na połaczenie lub zatwierdź przyciskiem <br> 1 |
|  |  |
|  |  |
| $\bigcirc$ | $\bigcirc$ |

## GENERAL INFORMATION

Digital call module ref no. 1752/141D is designed for MATIBUS SE system. It is built of two modules: keyboard module and video module.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP3.

## CONSTRUCTION

Digital call module with keyboard ref. 1752/141D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. Call module has all characteristics of vandal-proof panel

## BASIC FEATURES

Calling to all doorphones,
Transferring picture of caller,
Opening the doors with general and individual opening codes,
Release of NC-C-NO relay with general and individual opening codes,
Possibility to attach opened door sensor,
Possibility of use of PH input as a local opening door button,
Possibility of system configuration,
System status display.

DIGITAL VIDEO CALL MODULE WITH KEYBOARD REF NO 1752/146D


## GENERAL INFORMATION

Digital call module ref no. 1752/141D is designed for MATIBUS SE system. It is built of two modules: keyboard module and video module.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP3.

## CONSTRUCTION

Digital call module with keyboard ref. 1752/146D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25{ }^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel

## BASIC FEATURES

Calling to all doorphones,
Transferring picture of caller,
Opening the doors with general and individual opening codes,
Release of NC-C-NO relay with general and individual opening codes,
Possibility to attach opened door sensor,
Possibility of use of PH input as a local opening door button,
Possibility of system configuration,
System status display.

DIGITAL CALL VIDEO PANEL WITH KEYBOARD REF NO. 1752/142D


## GENERAL INFORMATION

Digital call module ref no. 1752/142D is designed for MATIBUS $\mathrm{SE}_{\mathrm{SE}}$ system. It is built of three modules: keyboard module, video module and information module.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP4.

## CONSTRUCTION

Digital call module with keyboard ref. 1752/142D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED and additional information module. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25{ }^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. Call module has all characteristics of vandal-proof panel

## BASIC FEATURES

Calling to all doorphones,
Transferring picture of caller,
Opening the doors with general and individual opening codes,
Release of NC-C-NO relay with general and individual opening codes,
Possibility to attach opened door sensor,
Possibility of use of PH input as a local opening door button,
Possibility of system configuration,
System status display.

DIGITAL CALL VIDEO PANEL WITH KEYBOARD REF NO 1752/147D


## GENERAL INFORMATION

Digital call module ref no. 1752/147D is designed for MATIBUS SE $^{\text {M }}$ system. It is built of modules: keyboard module, video module and information module.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RP4.

## CONSTRUCTION

Digital call module with keyboard ref. 1752/147D is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED and additional information module. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25{ }^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel

## BASIC FEATURES

Calling to all doorphones,
Transferring picture of caller,
Opening the doors with general and individual opening codes,
Release of NC-C-NO relay with general and individual opening codes,
Possibility to attach opened door sensor,
Possibility of use of PH input as a local opening door button,
Possibility of system configuration,
System status display.

DIGITAL CALL VIDEO PANEL WITH KEYBOARD REF NO. 1752/141VD VERTICAL


## GENERAL INFORMATION

Digital video call module ref no. 1752/141VD is designed for MATIBUS $_{\text {SE }}$ system.

It is offered in wall mounted with rain hood type of housing.
This video call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-D.

## CONSTRUCTION

Digital video call module with keyboard ref. 1752/141VD is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC}$ or +20 V DC |
| :--- | :--- |
| Electrical lock driver | -Through built-in three position <br> power regulation circuit U U <br> max $=12 \mathrm{~V}$ |
| NO-C-NC max: $1 \mathrm{~A} / 24 \mathrm{~V}$ DC |  |$|$| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Dimensions (L. $\times$ W. $\times$ D.) | $269 \times 89 \times 23 \div 35 \mathrm{~mm}$ <br> $($ ref no. $1752 / 141 \mathrm{VD})$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $301 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ <br> (with hood 525/RPV-D) |
| Weight: | $0,90 \mathrm{~kg}$ |

DIGITAL CALL MODULE WITH KEYBOARD REF NO. 1752/146VD VERTICAL


## GENERAL INFORMATION

Digital video call module ref no. 1752/146VD is designed for MATIBUS $_{\text {se }}$ system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-D.

## CONSTRUCTION

Digital video call module with keyboard ref. 1752/141VD is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | - Through built-in three position power <br> regulation circuit $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> - NO-C-NC max: $1 \mathrm{~A} / 24 \mathrm{~V}$ DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $269 \times 8 \times \quad$ x $\quad 23 \div 35 \quad \mathrm{~mm}$ <br> (ref no. $1752 / 146 \mathrm{VD}$ ) |
| Dimensions (L. $\times$ W. $\times$ D.) | $301 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ <br> (with hood 525/RPV-D) |
| Weight: | $0,90 \mathrm{~kg}$ |

DIGITAL CALL VIDEO PANEL WITH KEYBOARD REF NO. 1752/142VD VERTICAL


## GENERAL INFORMATION

Digital video call module ref no. 1752/142VD is designed for MATIBUS $_{\text {SE }}$ system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-W.

## CONSTRUCTION

Digital video call module with keyboard ref. 1752/142VD is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25{ }^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. The panel is provided with backlight information window, which enables putting a list of users or other information. Call module has all characteristics of vandalproof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | -Through built-in three position <br> power regulation circuit $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> - NO-C-NC max: $1 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $332 \times 89 \times 23 \div 35 \quad \mathrm{~mm}$ <br> (ref no. $1752 / 142 \mathrm{VD})$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $364 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ <br> $($ (with hood 525/RPV-W) |
| Weight: | $1,20 \mathrm{~kg}$ |

DIGITAL CALL VIDEO PANEL WITH KEYBOARD REF NO. 1752/142VD-RF VERTICAL


## GENERAL INFORMATION

Digital video call module ref no. 1752/142VD-RF is designed for MATIBUS $_{\text {se }}$ system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-W.

## CONSTRUCTION

Digital video call module with keyboard ref. 1752/142VD-RF is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25{ }^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. The panel is provided with backlight information window, which enables putting a list of users or other information. Information window is integrated with RFID key/card reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | -Through built-in three position <br> power regulation circuit $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> - NO-C-NC max: $1 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $332 \times 89 \times 23 \div 35 \quad \mathrm{~mm}$ <br> (ref no. $1752 / 142 \mathrm{VD}-\mathrm{RF})$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $364 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ <br> (with hood 525/RPV-W) |
| Weight: | $1,20 \mathrm{~kg}$ |

REF NO. 1752/141VD...147VD

DIGITAL CALL VIDEO PANEL WITH KEYBOARD
REF NO. 1752/147VD VERTICAL


## GENERAL INFORMATION

Digital video call module ref no. 1752/147VD is designed for MATIBUS $_{\text {SE }}$ system.

It is offered in wall mounted with rain hood type of housing.
This call module can be optionally flush-mounted with dedicated frame ref no. 525/RPV-W.

## CONSTRUCTION

Digital video call module with keyboard ref. 1752/147VD is made of stainless steel. Particularly noteworthy is the metal illuminated keyboard. It is equipped with color camera with white LED. Call module is also equipped with temperature control system which turns on the heater when temperature drops below $10{ }^{\circ} \mathrm{C}$, and turns it off when temperature rises above $25{ }^{\circ} \mathrm{C}$. It ensures proper camera's working temperature and prevents water vapor condensation on camera's lens. The panel is provided with backlight information window, which enables putting a list of users or other information. Panel is equipped with Dallas key reader. Call module has all characteristics of vandal-proof panel.

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or}+20 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | -Through built-in three position <br> power regulation circuit Umax=12V <br> - NO-C-NC max: $1 \mathrm{~A} / 24 \mathrm{~V}$ DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $332 \times 89 \times 23 \div 35 \quad \mathrm{~mm}$ <br> $($ (ef no. $1752 / 147 \mathrm{VD})$ |
| Dimensions (L. $\times$ W. $\times$ D.) | $364 \times 121 \times 24.5 \div 36.5 \mathrm{~mm}$ <br> (with hood 525/RPV-W) |
| Weight: | $1,20 \mathrm{~kg}$ |

## DESCRIPTION OF TERMINAL BOARD

## KEYBOARD MODULE

NC Normally close relay contact.
C Common relay contact.
NO Normally open relay contact.
+V Input voltage + 15 $\ldots+20$ V DC.
GND Ground.
AC2 Input voltage ~12 V AC.
AC1 Input voltage $\sim 12 \mathrm{~V} \mathrm{AC}$.
R Additional control terminal for video version.
EXI Controlled input contact.
PH Door lock release.
GND Ground.
LG Audio line.
D(D+) Data line (D line in case of MATIBUS SE communication module or D+ line in case of RS485 communication module).
D- Data line (D- line in case of RS485 communication
module).

+ CL Electric lock output (+).
-CL Electric lock output (-).
X8 Key reader socket input.
BACKLIT INFORMATION MODULE
VDD Input voltage + 15 ...+20 V DC
GND Ground.


## VIDEO MODULE

R Video switching enable signal for video door phone systems
VA Differential video signal output (positive).
VB Differential video signal output (negative).
R2 Camera power positive input ( +18 Vdc ).
GND Video ground.
G Not used.
G1 Not used.
G2 Not used.
LG Audio line*.
SKR Audio Line information signal **.
AVDD Audio power positive input (+18Vdc).
AGND Audio ground.

* Audio line must be connected to the video module. It have not to be connected to the keyboard module.
** Line for connection keyboard module speaker output with video module. Second wire (speaker ground in keyboard module) must be connected to the AGND terminal.


## BASIC FEATURES

Calling to all doorphones,
Opening the doors with general and individual opening codes,
Release of NC-C-NO relay with general and individual opening codes,
Possibility to attach opened door sensor,
Possibility of use output for video service,
Possibility of use of PH input as a local opening door button,
Openninh the doors or activate NC-C-NO relay with DALLAS Key (only in modules with DALLAS reader).
Transferring picture of caller (only ref no. 1752/14xD),
Possibility of system configuration,
System status display.

## DISPLAYING POWER SUPPLY SERIAL NUMBER

In order to display power supply serial number enter sequence: $0 * 1 \#$. After this younger part of serial number will be displayed. Press again \# button to display older part of serial number.

## DISPLAYING CALL MODULE SERIAL NUMBER

In order to display call module serial number enter sequence: $0 * 2 \#$. After this younger part of serial number will be displayed. Press again \# button to display older part of serial number.

## DISPLAYING POWER SUPPLY ID

In order to display power supply ID enter sequence: $0 * 3$ \#.

## DISPLAYING KEYBOARD ID

In order to display keyboard ID enter sequence: $0 * 4 \#$.

## DISPLAYING POWER SUPPLY SOFTWARE VERSION

In order to display power supply software version enter sequence $0 * 5 \#$ on call module connected to power supply additional input.

DISPLAYING CALL MODULE SOFTWARE VERSION
In order to display call module software version enter sequence: $0 * 6 \#$.

## TEMPORARY SWITCHING BETWEEN PHYSICAL AND LOGICAL CODES

In order to temporarily switch codes to physical enter sequence: $0 * 50606 \#$. Physical codes will be valid until system reset or entering above sequence again.

## POWER SUPPLY RESET

In order to reset the power supply enter sequence: $0 * 666 \#$ on call module connected to power supply additional input. In case of multi input system, after entering above sequence on call module connected to main channel, only MASTER power supply will be reset.

## EMERGENCY ENTER INTO PROGRAMMING MODE

If we don't know the password we must press SW1 button (see Figure 1) located on keyboard printed board and within 2 seconds press * button.

## ELECTRICAL CONNECTIONS

All the electrical connections must be made by the man with basic knowledge of electrical engineering.
All connections must be made in accordance to attached schemes and with disconnected power supplies.

## USER MANUAL

## LOGICAL CODES FACTORY SETTINGS

By default power supply is provided with the first 25 logical codes for each channel. Quantity of codes can be increased by changing relevant parameters (steps 7.04 and 7.05). In order to automatic increase of quantity of codes modify parameters in steps 7.04 and 7.05, and then generate codes in step 4.04. With factory setting channel 1 serves logical codes within 1-25 range, and channel 2 servers logical codes within 26-50 range. With this setting system can serve up to 255 doorphones, but automatically can generate only 50 logical codes. Despite the set of parameters in steps 7.04 and 7.05, user can manually generate logical codes for up to 255 doorphones.
The logical codes for LU1 line by (default is 25) equals the value set by jumpers in binary code. For LU2 line logical codes begin default at 26 and equals the value set by jumpers plus the value with was set in option 7.04 in the power supply programming menu (by default is 25). For example: physical address " 1 " of doorphone in LU2 equals logical codes 26. Therefore, system has the ability to assign logical code to any doorphone in the system.

## COMMUNICATION MODULE CONFIGURATION

On installations where all devices have built-in RS485 communication module (terminals $\mathrm{D}+$ and D -) it is recommended to use RS485 communication mode.
On mixed installations (with power supplies ref no. 1052/33 and ref no. 1052/33R) it is required to use power supply ref no. 1052/33R as a MASTER power supply. Please note to set communication mode in main channel to Extended (step 9.04). Communication mode in secondary channel should depend on keyboard's type attached to this channel. In case of use ref no. 1052/1x panels family or digitalizer ref no. 1052/7 it is required to use Normal or Extended communication mode. In case of use ref no. 1052/10x panels family or digitalizer ref no. 1052/7R it is required to use RS485 communication mode.

## DOOR OPENING SIGNALIZATION OR DRIVE NC-C-NO RELAY

During opening door or drive NC-C-NO relay the animation or inscription OPEN will be shown on the call panel display

## CALL TO DOORPHONES

Each user can be called by entering relevant 4-digit code from range $1 . . .9999$. In system with MASTER/SLAVE power supply each handset can have two call codes (main and additional). Call codes (logical codes) are assigned by relocation to relevant doorphones physical codes. Each doorphone has unique physical code resulted from number of riser and address setting in doorphone.
After entering code user can wait for 3 seconds to initiate call or press \# to call immediate.
In case of mistake press * button to cancel code, and enter correct one.
Called doorphones will ring as long as it was programmed (1 to 30 seconds). After this time call will be canceled. Pickup time is signalled by recurent double call signal (this option can be turned on) - from 1 to 30 seconds,
Conversation is possible when user pick up the handset. During conversation user can open the door (press open the door button on doorphone). Pressing this button will generate confirmation signal. The electric lock will be open as long as we programmed it (range 1 to 30 s ). It will be indicated by dashes on display.

Maximum time of conversation is between 30 to 120 s. After that time in the receiver will be played signal to warn that the conversation is nearly over, and after it, the conversation will be disconnected.

## OPENING THE DOOR (CONTACT +CL -CL) WITH GENERAL CODES

We are able to open the door using one of 64, 4-digits general opening codes.
To do it:
Press \# button,
Enter general opening code,
Press \# button to confirm.
This function can be disabled in programming menu.

## OPENING THE DOOR (CONTACT +CL -CL) WITH INDIVIDUAL CODES

We are able to open the door using 1 of the individual opening code. Individual opening code is made of 4-digits opening code preceded with call code ( 1 to 4 digits), which was associated with. Individual opening code can has from 5 to 8 digits.

In case of use of additional entrance you need to follow below steps to open the door:
Press \# button,
Enter individual opening code (5 to 8 digits),
Press \# button to confirm.
In case of use of main entrance you need to follow below steps to open the door:
Press \# button,
Enter logical code of the flat,
Enter idividual opening code (5 to 8 digits),
Press \# button to confirm.
This function can be disabled in programming menu.
Opening the door is signaled with characteristic short beep in doorphone (it can be disabled in menu).

## NC-C-NO RELAY OUTPUT RELEASE WITH GENERAL CODES

Call module allows the inclusion of any device (eg: open automatic gate) with use of NC-C-NO relay output. In order to release NC-CNO relay output it is required to enter 1 of 64, 4-digits general opening codes.

To do it:
Double press \# button,
Enter general opening code,
Press \# button to confirm.
This function can be disabled in programming menu.
Release time can be programmed within 1 to 30 seconds range.

## NC-C-NO RELAY OUTPUT RELEASE WITH INDIVIDUAL CODES

Call module allows the inclusion of any device (eg: open automatic gate) with use of NC-C-NO relay output. In order to release NC-CNO relay output it is required to enter one of individual opening codes.
Individual opening code is made of 4-digits opening code preceded with call code ( 1 to 4 digits), which was associated with individual opening code can has from 5 to 8 digits.

In case of use of additional entrance you need to follow below steps to release the relay output:
Press \# button,
Enter individual opening code (5 to 8 digits),
Press \# button to confirm.
In case of use of main entrance you need to follow below steps to release the relay output:
Press \# button,
Enter logical code of the flat,

Enter idividual opening code (5 to 8 digits),
Press \# button to confirm.
This function can be disabled in programming menu.
Releasing the relay output is signalled with characteristic short beep in doorphone (it can be disabled in menu)

Release time can be programmed within 1 to 30 seconds range

## OPENING THE DOOR OR RELEASING NC-C-NO RELAY OUTPUT WITH DALLAS KEY

Call module is equipped with Dallas key reader. It is possible to open the door or release NC-C-NO relay output with Dallas key. In order to open the door just close the Dallas key to the reader. When system recognize the key, then call module backlight turns from red to green, signal will be generated from the speaker and the electric lock will be released.
Opening the door with Dallas key will be signalled with short beep in doorphone.

## USE OF EXI OUTPUT

Call module is equipped with controlled EXI terminal. By default EXI terminal is connected to GND with jumper. If we replace jumper with any sensor (eg: contactor), call module will respond to any interruption of the circuit between EXI and GND terminals. It will result with connecting relevant EO output to +20 V output in power supply. This function can be used for example to unclosed door signalization.

## USE OF PH INPUT

Call module is equipped with PH terminal, which can be used as a local opening door button. Shorting PH and GND terminals will result in electric lock releasing for programmed time. In another word, to realize opening door function just press the button which will short PH and GND terminals.

## USE OF R OUTPUT

Call module is equipped with open collector type $R$ terminal. This output is active (connected with GND) from call time to end of conversation time of any user. R output is dedicated for video module, but way of use can be adjusted.

## PROGRAMMING

To simplify installation in MATIBUS SE system call module with keyboard is supplied with pre-programmed setting showed below:

- Logical codes from 1 to 25 for each riser,
- For every logical code a unique, individual opening codes was assigned,
- 3 second time for opening electric door lock,
- 5 second ring duration time,
- 20 second pick-up time,
- 120 second max time of conversation.

Thanks to this indicial settings MATIBUS ${ }_{\text {SE }}$ system requires only correct connection according to the schematic and correct settings of a doorphone address jumpers to work.

MASTER power supply can be programmed trough a call panel connected to main or extended channel.
SLAVE powers supply have to be programmed trough a call panel connected to extended channel.

## ENTERING TO THE PROGRAMMING MODE

In order to enter to the programming mode:
Double press 0 button,
Entering 8 digits access password,
Confirm password by pressing \# button.
Default enter password is : 21082004
After enter the correct password on the LED will display this information:


## PROGRAMMING MENU

In the programming menu are two levels of programming. It means that after letter "P" there are place for 3 digits number, where every digit is one level of programming mode. Every level is defined in range from 1 to 9 . The level of programming mode is display on the LED just like it has been shown below.


Where XXX is 3 digits number informing installer about actual part of programming mode.

## PROGRAMING MODE FUNCTION

To choose relevant programming steps, please enter 2 associated digits number and confirm by pressing the \# button.
After enter to the right part of programming on the LED display appears value of the parameter.

Press * button to back to main menu,
Press \# button to confirm parameter,
Enter new parameter and press \# button to confirm.
During the programming personal call users and opening codes please hold the \# button for about 1s.
To delete any personal call user or opening code please press and hold * key for about 1s.

| P | 0 | X | X | Configuration LUx line contact |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 0 | Default settings restore |
|  |  | 0 | 1 | Stop time |
|  |  | 0 | 2 | Pause time |
|  |  | 0 | 3 | Address impulse length |
|  |  | 0 | 4 | ON time |
|  |  | 0 | 5 | Minimum opening impulse |
|  |  | 0 | 6 | Maximum opening impulse |
|  |  | 0 | 7 | Openning current |
|  |  | 0 | 8 | OFF current threshold |
|  |  | 0 | 9 | ON current threshold |
|  |  | 1 | 0 | Operating mode LU1 line.** |
|  |  | 1 | 1 | Operating mode LU2 line.** |
|  |  | 1 | 2 | Impulse time for additional button |
| P | 1 | X | X | Global settings |
|  |  | 0 | 1 | Edit and changing installer password |
|  |  | 0 | 2 | Change the ID of call module. |
|  |  | 0 | 3 | Automatic user call code confirmation. |
|  |  | 0 | 4 | Personal opening code using confirmation. |
|  |  | 0 | 5 | Sound level of the keyboard. |
|  |  | 0 | 6 | Type of user codes. |
|  |  | 0 | 7 | General opening codes mode. |
|  |  | 0 | 8 | Individual opening codes mode. |
|  |  | 0 | 9 | Change function of the relay NC-C-NO with electrical lock. |
|  |  | 1 | 0 | Voltage level of doorphone line. |
|  |  | 1 | 1 | PH keyboard input settings.** |
|  |  | 1 | 2 | EXI keyboard input settings.** |
|  |  | 1 | 3 | Keyboard type.** |
|  |  | 1 | 4 | Visulization method of opening door **** |
| P | 2 | X | X | Time settings |
|  |  | 0 | 1 | Electrical lock- time of working. |
|  |  | 0 | 2 | Time of calling signal. |
|  |  | 0 | 3 | Pick up time. |
|  |  | 0 | 4 | Maximum time of conversation. |
|  |  | 0 | 5 | NC-C-NO relay activation time. |
|  |  | 0 | 6 | Time between pressing buttons.** |
| P | 3 | X | X | Erase data |
|  |  | 0 | 1 | Delete of all logical user codes SLAVE. |
|  |  | 0 | 2 | Deleting all individual opening codes. |
|  |  | 0 | 3 | Deleting all general opening codes. |
|  |  | 0 | 4 | Deleting all logical user codes MASTER. |
|  |  | 0 | 5 | Deleting all Dallas keys. |
|  |  | 0 | 6 | Deleting all digitizer data. |
|  |  | 0 | 9 | Deleting all data. |
| P | 4 | X | X | Default settings restore |
|  |  | 0 | 1 | Logical user codes restore. Top range limited by step 7.04 and 7.05 . |
|  |  | 0 | 2 | Individual opening codes restore. |
|  |  | 0 | 3 | General opening codes restore. |
|  |  | 0 | 4 | All of data restore. |


|  |  | 0 | 9 | Defaults settings P1 P2 and P7 restore. |
| :---: | :---: | :---: | :---: | :---: |
| P | 5 | X | X | Codes and disdec configurations |
|  |  | 0 | 1 | Logical user codes programming. |
|  |  | 0 | 2 | Re-mapping logical user codes. |
|  |  | 0 | 3 | Individual opening codes programming. |
|  |  | 0 | 4 | General opening codes programming. |
|  |  | 0 | 5 | Dallas key programming (associated Dallas key to user code). |
|  |  | 0 | 6 | Dallas key delete. |
|  |  | 0 | 7 | Dallas key identification. |
|  |  | 0 | 8 | Automatically disdec addressing. ***** |
|  |  | 0 | 9 | Disdec individual user settings. ***** |
|  |  | 1 | 0 | Change logical code during conversation or active preview function. ***** |
| P | 6 | X | X | Service functions |
|  |  | 0 | 1 | Serial number of power supply. |
|  |  | 0 | 2 | Serial number of call module. |
|  |  | 0 | 3 | Measurement the current in riser 1.* |
|  |  | 0 | 4 | Measurement the current in riser 2.* |
|  |  | 0 | 5 | Power supply software version. |
|  |  | 0 | 6 | Call module software version. |
| P | 7 | X | X | Advanced functions |
|  |  | 0 | 0 | Keyboard backlight adjustment. |
|  |  | 0 | 1 | Switch on switchboard service. |
|  |  | 0 | 2 | Programming number of keyboard uniting logical entry EXI with EO of power supply in additional channel. |
|  |  | 0 | 3 | Programming number of keyboard for El terminal in the power supply for the additional channel. |
|  |  | 0 | 4 | Top range of user codes for riser 1.* |
|  |  | 0 | 5 | Top range of user codes for riser 2.* |
|  |  | 0 | 6 | Frequency of electric door lock mode. |
|  |  | 0 | 7 | Electric door lock- time of current DC. |
|  |  | 0 | 8 | Manage doorphones buttons. |
|  |  | 0 | 9 | Electrical door lock modes. |
|  |  | 1 | 0 | Switchboard stations control.** |
|  |  | 1 | 1 | OC1 output settings.** |
|  |  | 1 | 2 | Turning off opening button during loud conversations.** |
|  |  | 1 | 3 | Power supply type.** |
|  |  | 1 | 4 | Linkage EI, OC1, OC2 in system power supply *** |
|  |  | 1 | 5 | Keyboard address for auto-on function *** |
| P | 8 | X | X | MASTER/SLAVE functions |
|  |  | 0 | 1 | Change the ID of MASTER power supply. |
|  |  | 0 | 2 | Logical user codes programming for the main channel. |
|  |  | 0 | 3 | Re-mapping logical user codes of the main |
|  |  | 0 | 4 | Programming number of keyboard uniting logical entry EXI with EO of power supply in the main channel. |
|  |  | 0 | 5 | Programming number of keyboard for El terminal in the power supply for the main channel. |


| P | 9 | X | X | Improvements functions |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 1 | Deactivation "OFF" information. |
|  |  | 0 | 2 | Measurement the current in the doorphone line during conversation. |
|  |  | 0 | 3 | Service parameter. |
|  |  | 0 | 4 | Communication type in the main channel. |
|  |  | 0 | 5 | Communication type in the additional channel. |
|  |  | 0 | 6 | Additional ring during pickup time. |
|  |  | 0 | 7 | Automatic choosing of MASTER power supply. |
|  |  | 0 | 8 | Power supply reset. |
|  |  | 0 | 9 | Updating call module keyboard software. |

* See the manual "Settings logic codes".
** functions available with firmware version above 1745.
*** functions available with firmware version above 2429
**** functions available with firmware version above 2475.
***** functions available with firmware version above 2601.


## 0. CONFIGURATION LUx LINE CONTACT

This parameters should be modified only in case of system malfunction. For example: problems with calling doorphone or open electrical lock. Before making any changes make sure that all another reason (wrong connection, improper configuration, etc) was removed.
NOTICE. Parameters group "0" working only with classical doorphones (parameter 010 or 011 set on „0"). For door-phones ref no. 1134/522, 1140/522 and disdec's ref no. 1052/54x parameter is not used.

## 000 DEFAULT SETTINGS RESTORE



This function restore default settings group " 0 " except parameters 010 and 011. Parameteres 010 and 011 can be restored in program 409. To activate this function press \# button. During this process on LED display will be shown this communication:


001 STOP TIME


In this step is possible to change stop time length. Value of this parameter can be change by enter values from range 500-9999 or not. Return to main manu by short pressing *

To save changes press:
Default setting:
\#

002 PAUSE TIME


In this step is possible to change pause time length. Value of this parameter can be change by enter values from range 500-9999 or not. Return to main manu by short pressing *

## To save changes press: Default setting: 3150

## 003 ADDRESS IMPULSE LENGTH



In this step is possible to change pause time length. This parameter shuld be increased when is calling door-phone problem. (ex. after type address on entry panel, door-phone is calling with one lower address). Before any changes check program P. 502 and P. 503. Value of this parameter can be change by enter values from range 1500-2200 or not. Return to main manu by short pressing *.

To save changes press:
\#
Default setting:

## 1950

## 004 ON TIME (TIME FOR SWITCH ON DOOR-PHONE)



In this step is possible to change ON time (time for switch on doorphone) length. Value of this parameter can be change by enter values from range 500-9999 or not. Return to main manu by short pressing *

To save changes press: \#
Default setting:

$$
3150
$$

## 005 MINIMUM OPENING IMPULSE



In this step is possible to change minimum opening impulse (impulse while system detect opening door).
Parameter should be change only when is a problem with opening electrical-lock from door-phone. If electrical-lock is opening too often (ex. during conversation) parameter must be increased or decreased if electrical-lock sometimes is not opening.
Before any changes check proper value for program P. 712
Value of this parameter can be change by enter values from range 1-255 or not. Return to main manu by short pressing *
$\begin{array}{ll}\text { To save changes press: } & \text { \# } \\ \text { Default setting: } & \mathbf{2 3}\end{array}$
006 MAXIMUM OPENING IMPULSE


In this step is possible to change maximum opening impulse (impulse while system detect opening door).
Parameter should be change only when is a problem with opening electrical-lock from door-phone.
Before any changes check proper value for program P. 712
Value of this parameter can be change by enter values from range
1-255 or not. Return to main manu by short pressing *

To save changes press: \#
Default setting: 78

007 OPENING CURRENT


In this step is possible to change opening current difference needed to opening door. Parameter should be change only when is a problem with opening electrical-lock from door-phone.
Parameter must be decreased if electrical-lock is not opening door. Value of this parameter can be change by enter values from range 1-255 or not. Return to main manu by short pressing *

To save changes press: \#
Default setting:
120

008 OFF CURRENT THRESHOLD


In this step it is possible to change door-phone off current threshold during conversation. Parameter should be change only when is a problem with hang up door-phone (conversation is still connected). If parameter value is too high, conversation is still connected after hang-up door-phone. On the other hand if parameter value is too low, system disconnect conversation after first ring. Before any changes check parameter values with program P.202, 203, 204. Value of this parameter can be change by enter values from range 1-255 or not. Return to main manu by short pressing *

To save changes press: \#
Default setting: 84

## 009 ON CURRENT THRESHOLD



In this step is possible to change door-phone on current threshold during ringing. Parametr should be change when after calling doorphone it ring once and the entry panel display OFF.
If parameter value is too low, system turn on door-phone for a while and next disconnect him (ringer not be generated).
Value of this parameter can be change by enter values from range 1-255 or not. Return to main manu by short pressing *

To save changes press: \#
Default setting: 180
010 OPERATING MODE LU1 LINE **


In this step, we set a parameter that determines the mode of a LU1 line. The parameter should be set to:
" 1 " only when the power supply will work with advanced doorphones ref no. 1134/522, 1140/522 or video brackets ref no. 1202/952R (discontinued). Please note that door-phones ref no. 1134/522, 1140/522 are not compatibile with door-phones ref no. 1131/620, ref no. $1132 / 620$ and ref no . 1132/520 and their varieties (they can not be fitted with them within the same line LU1). Video-brackets ref no. 1202/952R are not compatibile with video brackets ref no. 1202/952.
The parameter should be set to "2" (multi mode) only when the power supply wilk work with advanced door-phones ref no.

1134/522, 1140/522 and two devices working parallel on one logical code. Please note that multi mode is not compatibile with anoder modes.
The parameter should be set to " 3 " only when the power supply will work with disdecs ref no. 1052/54R or ref no. 1052/54RM. Please note that disdecs are not compatibile with another devices for ex. ref no. 1134/522, 1140/522 or ref no. 1132/620 and his varieties.

We can choose:
0 Standard door-phones MATIBUS SE. .
1 Advanced door-phones ref no. 1134/522, 1140/522 and brackets ref no. 1202/952R (discontinued).
2 Advanced door-phones ref no. 1134/522, 1140/522 multi mode
3 Disdec mode - ref no. 1052/54R and ref no. 1052/54RM
To save changes press \#
Default settings 0
011 OPERATING MODE LU2 LINE **


In this step, we set a parameter that determines the mode of a LU2 line.
The parameter should be set to "1" only when the power supply will work with advanced door-phones ref no. 1134/522, 1140/522 or video brackets ref no. 1202/952R (discontinued). Please note that door-phones ref no. 1134/522, 1140/522 are not compatibile with door-phones ref no. 1131/620, ref no. 1132/620 and ref no . 1132/520 and their varieties (they can not be fitted with them within the same line LU1).
Video-brackets ref no. 1202/952R are not compatibile with video brackets ref no. 1202/952.
The parameter should be set to "2" (multi mode) only when the power supply wilk work with advanced door-phones ref no. 1134/522, 1140/522 and two devices working parallel on one logical code. Please note that multi mode is not compatibile with anoder modes.
The parameter should be set to " 3 " only when the power supply will work with disdecs ref no. 1052/54R or ref no. 1052/54RM. Please note that disdecs are not compatibile with another devices for ex. ref no. 1134/522, 1140/522 or ref no. 1132/620 and his varieties.

## We can choose:

0 Standard door-phones MATIBUS ${ }_{\text {SE }}$.
1 Advanced door-phones ref no. 1134/522, 1140/522 and brackets ref no. 1202/952R (discontinued).
2 Advanced door-phones ref no. 1134/522, 1140/522 multi mode
3 Disdec mode - ref no. 1052/54R and ref no. 1052/54RM
$\begin{array}{ll}\text { To save changes press } & \text { \# } \\ \text { Default settings } & \mathbf{0}\end{array}$

## 012 IMPULSE TIME FOR ADDITIONAL BUTTON



In this step it is possible to change length of time for detection additional button on.
Value of this parameter can be change by enter values from range 1-100 or not. Return to main manu by short pressing *.

To save changes press: \#
Default setting: 100
Note. Additional button for standard door-phones (program P010 and P011 set to: "0") during conversation not work. The line must
be in stand-by mode to activate additional button (hang-up doorphone).

1. GLOBAL SETTINGS

101 EDIT AND CHANGING INSTALLER PASSWORD


To change the password press \#. Than the LED display will turn off and we are able to enter any 8 digits password. Confirm of every enter digit will be shown on display like a vertical line. At the LED display will be shown this communication:


To save changes press \#
Default password: 21082004
102 CHANGE THE ID OF CALL MODULE


To change the call module ID press \#. Than LED display will show actual ID of call module. We are able to enter new ID in range from 1 to 239 and confirm by pressing \#.
Setting of this parameter is reasonable only when there is many entrances.

Default setting:
Random in range from 1 to 239
103 AUTOMATIC USER CALL CODE CONFIRMATION


There are two ways to choose the logical user code:
0 Enter the code without pressing \# button after,
1 Enter the code and press \# button to confirm.

To save changes press \#.
Default setting: 0

## 104 PERSONAL OPENING CODE USING CONFIRMATION



In this step we are setting parameter responsible for short signal played in the doorphone when individual opening code associated with that doorphone was used. We can choose:
0 Turn off confirmation of opening the door and exit NC-C-NO,
1 Turn on confirmation of opening the door,
2 Turn on confirmation of opening the exit NC-C-NO,
3 Turn on confirmation of opening the door and exit NC-C-NO.

| To save changes press | \#. |
| :--- | :--- |
| Default setting: | $\mathbf{3}$ |

105 SOUND LEVEL OF THE KEYBOARD


Sound intensity of the audible signals produced by the call module.

## We can choose:

0 Turn off signals.
7 Turn on - max. level of signals
$\begin{array}{ll}\text { To save changes press } & \text { \# } \\ \text { Default setting: } & \mathbf{1}\end{array}$

## 106 TYPE OF USER CODES



Parameter sets in this step determine type of user code using in system.

## 0 Logical codes,

1 Physical codes.

## $\begin{array}{ll}\text { To save changes press } & \text { \# } \\ \text { Default setting: } & \mathbf{0}\end{array}$

Logic code This is max. 4 digits code from full range from 1 to 9999, which is programmable to any physical code. Logical code can be programmed just to one physical code.
Physical code Format of this code is CFFF, where $\mathbf{C}$ is the number of riser (1or 2) to which doorphone is physically connected, FFF is address of the doorphone which is the same binary value what jumpers set in the doorphone.

## Example 1

If the doorphone is connect to the riser $\mathbf{1}$ and jumpers are set as an address 4, than to call we have to enter code 14, what will be shown on LED display:


Example 2
If the doorphone is connect to the riser 2 and jumpers are set as an address 15 than to call we have to enter code 215, what will be shown on LED display:


The logical code is any 4 - digit code from the full ranging from 1 to 9999, which can be attributed to Physical arbitrary code. The logical code may be assigned to only one physical code.

## 107 GENERAL OPENING CODES MODE



Parameter sets in this step determine range of using general opening codes.
$\begin{array}{ll}\mathbf{0} & \text { General opening codes turn } \\ \mathbf{1} & \text { Function active for lock out } \\ \mathbf{2} & \text { Function active for relay ou } \\ \mathbf{3} & \text { Function active for lock and } \\ \text { NO). } \\ \\ \text { To save changes press } \\ \text { Default setting: } & \mathbf{3}\end{array}$
(+CL, -CL),
Function active for relay output (NC-C-NO),
3 Function active for lock and relay output (+CL,-CL and NC-C-

108 INDIVIDUAL OPENING CODES MODE


Parameter sets in this step determine range of using general opening codes. We can choose:
0 Individual opening codes turned off,
1 Function active for lock output (+CL, -CL),
2 Function active for relay output (NC-C-NO),
3 Function active for lock and relay output.
To save changes press \#.
Default setting:
3
109 CHANGE FUNCTION OF THE RALAY WITH ELECTRICAL LOCK


This function change the relay with electrical lock. We can choose: 0 Normal work,
1 Change function.
$\begin{array}{ll}\text { To save changes press } & \text { \#. } \\ \text { Default settings: } & \mathbf{0}\end{array}$
Default settings:
110 VOLTAGE LEVEL OF DOORPHONE LINE


Parameter sets in this step determine voltage level of doorphone line. This step is important only if system works with 7 V doorphone. You must not connect 7 V to 12 V line power. We can choose:
$0 \quad 12 \mathrm{~V}$ door-phone line (door-phones ref no. 1132/520, ref no. 1132/521, ref no. 1131/620-12, ref no. 1131/621-12, ref no. 1132/520-12, ref no. 1132/521-12).
17 V door-phone line (door-phones ref no. 1131/620, ref no. 1131/621, ref no. 1132/620, ref no. 1132/621).

## NOTICE

If installation have more than 15 door-phones ref no. 1134/522, $1140 / 522$ in one riser it is recommend to set parameter 010 or 011 to 0 (for 12 V door-phone line).

To save changes press \#.
Default setting:
3

## 111 PH KEYBORD INPUT SETTINGS **



In this step, we can change the function of a PH input terminal. We can choose:
0 Normal operation. PH is a direct opening (postman pushbutton),
1 PH input active calls a switchboard station (by shorting PH terminal to ground).
$\begin{array}{ll}\text { To save changes press } & \text { \#. } \\ \text { Default setting: } & \mathbf{0}\end{array}$


In this step, we can change the function of EXI input terminal. We can choose:
0 EXI input active calls a switchboard station (by shorting EXI terminal to ground)
1 Normal operation.

| To save changes press | \#. |
| :--- | :--- |
| Default setting: | $\mathbf{1}$ |

113 KEYBOARD TYPE**


Step allows you to select the type of a call module. If the option 1.13 is set to "1", call module sends an additional information to the power supply to activate OC1 output during conversation time (OC1 is shorted to ground). This function will work only if the doorphone is connected to the power supply where step 7.11 was set to " 1 ". This option can be used to: e.g. power an additional monitor.

This option is important in case of a system with video bracket ref. 1202/952R. Then, in each panel holding the camera, parameter 1.13 have to be set to "1". Set this parameter to "0" will result lack of video on bracket ref. 1202/952R. This function will work only if the video bracket ref. 1202/952R is connected to the power supply where step 7.11 was set to " 1 ".
We have to choose:
0 Standard panel,
1 Video panel.
To save changes press
Default settings:

## \#.

114 VISUALIZATION METHOD OF OPENING DOOR ***


Step allows you change visualization method of opening door (rotate dashes or ОРЕП sign). You can choose:
0 Display rotate dashes.
1 Display „ОРЕП" sign.
To save changes press \#.
Default setting:
1

## 2. TIME SETTINGS

201 ELECTRICAL LOCK-TIME OF WORKING


After pressed the \# button on the LED display will be shown actual programmed time in seconds. To confirm that time press \# button or enter number of seconds from 1 to $\mathbf{3 0} \mathbf{s e c}$.
To save changes press
\#.
Default setting:
3


After pressed the \# button on the LED display will be shown actual programmed time in seconds. To confirm that time press \# button or enter new time in range from 1 to $\mathbf{3 0} \mathbf{s e c}$.

To save changes press
\#.
Default setting:
5

203 PICK UP TIME


In this step we are programming the maximum time for picking up the handset.
After pressed the \# button on the LED display will be shown actual programmed time in seconds. To confirm that time press \# button or if we want to change it, just enter correct time in range from $\mathbf{1}$ to 30sec.

| To save changes press | \#. |
| :--- | :--- |
| Default setting: | $\mathbf{2 0}$ |

## 204 MAXIMUM TIME OF CONVERSATION



In this step we are programming the maximum time of conversation, after which the connection will be disconnected. After pressed the \# button on the LED display will be shown actual programmed time in seconds. To confirm that time press \# button or if we want to change it, just enter correct time in range from $\mathbf{3 0}$ to $\mathbf{1 2 0}$ sec.
To save changes press
Default setting:
120

## 205 RELAY ACTIVATION TIME



After pressed the \# button on the LED display will be shown actual programmed time in seconds. To confirm that time press \# button or enter new time in range from 1 to $\mathbf{3 0} \mathbf{s e c}$.

To save changes press \#.
Default setting:
3

## 206 TIME BETWEEN PRESSING BUTTONS **



This parameter affects the maximum amount of time between keystrokes in the call module. Exceeding this time (for example, when writing code) is indicated by a mistake.
When you press \# the display shows the current value of idle time between keystrokes in seconds. This time, we can confirm with the \# or changed by choosing a value between $\mathbf{1 - 3 0} \mathbf{~ s e c}$.

To save changes press \#.
Default setting:

USER MANUAL
3. ERASE DATA

301 ERASE ALL LOGICAL USER CODES SLAVE


To activate this function please press \# button. During this process on LED display will be shown this communication:


302 ERASE ALL INDIVIDUAL OPENING CODES


To activate this function please press \# button. During this process on LED display will be shown this communication:


303 ERASE ALL GENERAL OPENING CODES


To activate this function please press \# button. During this process on LED display will be shown this communication:


304 ERASE ALL LOGICAL USER CODES MASTER


To activate this function please press \# button. During this process on LED display will be shown this communication:


305 DELETING ALL DALLAS KEYS


To activate this function please press \# button. During this process on LED display will be shown this communication:


306 DELETING ALL DIGITIZER DATA


To activate this function please press \# button. During this process on LED display will be shown this communication:


309 ERASE ALL DATA


This function erase:
Individual opening codes,
General opening codes
Logical user codes SLAVE
Logical user codes MASTER
Dallas ${ }^{\circledR}$ keys
Digitizer data

To activate this function please press \# button. During this process on LED display will be shown this communication:

4. DEFAULT SETTINGS RESTORE

401 LOGICAL USER CODES RESTORE. TOP RANGE LIMITED BY STEP 7.4 AND 7.5


To activate this function please press \# button. During this process on LED display will be shown this communication:


402 INDIVIDUAL OPENING CODES RESTORE


To activate this function please press \# button. During this process on LED display will be shown this communication:


403 GENERAL OPENING CODES RESTORE


To activate this function please press \# button. During this process on LED display will be shown this communication:


404 ALL DATA RESTORE

USER MANUAL


This function restore:
Individual opening codes,
General opening codes,
Logical user codes.
To activate this function please press \# button. During this process on LED display will be shown this communication:


409 DEFAULT SETTINGS P1 P2 AND P7 RESTORE


This feature applies to restore:
Restore parameters 010 i 011 (PO).
Restore global settings (P1).
Restore times (P2).
Restore advanced settings (P7).
To activate this function please press \# button. During this process on LED display will be shown this communication:

5. LOGICAL USER AND OPENING CODES

501 LOGICAL USER CODES PROGRAMMING


After pressing the \# button on the LED display will be shown this communication:


C Riser number (1 or 2).
FFF Physical code (address set by jumpers in the doorphone in the range 1-255).

Logic user code can be associated to every physical user code. To do it:
Enter the number of riser to which doorphone is connected,
Enter physical code of the doorphone,
Confirm by pressing \# button.
If the physical code was not associated with any logical user code on the LED display will be shown this communication:


If physical code has been already associated, than on the LED display will be shown programmed code.

Than we are able to:
Keep previous code or enter new one in range from 1-9999, than confirm.
Confirm entered code by pressing and hold for a while the \# button. If we just press the \# button than the system will propose first free logical user code, we can confirm by pressing and holding \# button, or just press the \# button to continue searching.

Searching process of first free logic code will be shown on LED display with this kind of communication:


In every moment of programming we are able to stop by pressing the $*$ button.

Logic code can be associated just to the one physical code.
If we will try to program physical code to existing logical code, than call module will play short warning signal and start blinking existing physical code on the LED.

Than we are able to:
Hold the button \#, what will overwrite logical code from existing to valid physical code,
or
Press the button $*$, if we would like to return to the place where we can offer new logical code to program

Default settings For riser 1-codes in range from 1 to 25 For riser 2 - codes in range from 26 to 50

502 RE-MAPPING LOGICAL USER CODES


After pressing the \# button on the LED display will be shown this communication:


LLLL - logical user code (in range 1-9999)
In this step we can reprogram (change) any logical code of doorphone even if we do not know his physical code.

After entering the logical user code which we want to change and confirm it by pressing the \# button, the LED display will show for a while physical code associated to logical code, and after it on the LED display will start blinking LLLL, which tell us that we can program new logical user code. If we had entered new code press and hold the \# button to program it.

The probe of change previously associated logical code will be warning by a signal and blinking the physical code on the display.

Now you can confirm your choose by press and hold \# button or cancel it without any changes by pressing $*$ button.

## 503 INDIVIDUAL OPENING CODES PROGRAMMING



After pressing the \# button on the LED display will be shown this communication


LLLL - ersonal user code (in range 1-9999)
In this step we can program 4 digits individual opening code to every logical user code. To do it:
Enter logical code.
Confirm by pressing the \# button.
If logical code is not associated with any opening code, LED display this communication:


If logical code is already associated with some opening code, this opening code will be shown on the LED display.
Than you should:
Enter 4 digits number of new code, or leave previous one
Confirm by pressing and holding for a while the \# button or delete by pressing the $*$ button.

Default settings Unique table of codes for every serial number of power supply.

504 GENERAL OPENING CODES PROGRAMMING


You can program 64 general opening codes with the possibility of individual assignment to specific keyboard. The maximum number of codes is constant for the MASTER power supply which means in practice with all operated keyboards divided them among themselves.
To assign a code to specific keyboard, necessary is programming codes from its level. There is no possibility of code assignment to other keyboard than we programmed.

Displaying codes is cycle to the last busy code. Press \# to display next code. The code in the form of "0000" means a free place. No symbol "0000" means the total fill the memory.

When you browse the codes, you can see the following formats:
a The normal of 4-digit means a general code for all keyboards. To accept code push \# button,
b Number 4-digit with a dot on the right means the code assigned to the programming keyboard,
c Number 4-digital flashing means a code assigned to another keyboard.
After pressing the \# button on display shows the first 4-digits general opening code. Now we can:
Browse programmed codes. To approve the code press and hold \#,

Assign a code to the keyboard by pressing \# (not hold). This is signaled by dot on the right side of the display. To approve the code push \# button,
Assign a code to all keyboards by double-pushing \# button (not hold). Dots should disappear. To approve the code please push \# buttons,
Delete the code displayed by pressing and holding for about 1 second $*$ button.
You can't change the existing code, you must enter it again. Hold \# button to save the new / revised code.

Default settings: One general opening code: 1234.

## 505 RFID OR DALLAS ${ }^{\oplus}$ KEY PROGRAMING

RFID or Dallas ${ }^{\circledR}$ key programming consist on assigned key or keys to each user (each logical user code).


After pressing the \# button on the LED display will be shown this communication:


In order to assigned Dallas key to user:
Enter logical user code,
Confirm by pressing \# button, LED displays this communication:


Attach the Dallas key to the reader
The keyboard should beep twice to confirm. In case of failure, the keyboard generate warning signal, LED displays Er12. It means that Dallas key is faulty or it is already assigned to other user.

Note that in any time you want to exit the step just press *.
506 RFID OR DALLAS ${ }^{\circledR}$ KEY DELETE
This step allows you to delete RFID or Dallas ${ }^{\circledR}$ key (for example if lost).


After pressing the \# button on the LED will be shown this communication:


In order to delete RFID or Dallas ${ }^{\circledR}$ key:
Enter logical user code,
Confirm by pressing \# button. LED displays 4 last chars of key's serial number. If user has more than one key, press \# button to display serial number another key,
Press and hold \# button to delete selected key,
If you enter wrong user code, the keyboard generates warning signal, LED displays Er04, if you enter user code without assigned

RFID or Dallas ${ }^{\circledR}$ keys, the keyboard generates warning signal, LED displays Er08,
After delete RFID or Dallas ${ }^{\circledR}$ key, LED display this communication:


You can enter next user code to delete another RFID or Dallas ${ }^{\circledR}$ key or press * button to exit.

## 507 RFID OR DALLAS ${ }^{\oplus}$ KEY IDENTIFICATION

This step allows you to identify Dallas key.


Pressing the \# button, on the LED will be shown this communication:


In order to identify RFID or Dallas ${ }^{\circledR}$ key user code:
Attach key to the reader,
LED displays user code assigned to this key. If key was not assigned to any user, the keyboard generate warning signal.
Press \# button to exit.

## 508 AUTOMATICALLY DISDEC ADDRESSING

This option allows automatically disdec addressing. Receivers (door-phones or video-door-phones) connected to the disdec are programmed automatically (without using jumpers).


After pressing \# display entry panel shows:


Enter riser number 1 or 2 where are disdecs connected and address offset value. If you want get physical address (out A) from 1 first disdec enter riser(C) $=1$ and address offset value(FFF)=0. Receivers connected to the disdec will have assigned continuously physical addresses. First disdec outputs: 1,2,3,4 and second disdec outputs: 5,6,7,8 and so on...

Addressing method depicted on the image below:


If you want start physical address first disdec from 5 you must make address offset. In step P. 508 enter riser number (C)=1 and address offset value $(F F F)=4$. NOTICE: Offset value must be divide by $4!!!$ In this case receivers will have assigned continuously physical addresses. First disdec outputs: $5,6,7,8$ and second disdec outputs: 9,10,11,12 and so on..

Press \# button. Entry panel camera turn on and power supply will have searched disdecs. (on the screen you will see number of found disdecs). After last found disdec will be break for 2sec. Next entry panel beep twice and system came back to the configuration menu.
If the number of disdecs will be over 6, you should remember to increase values in step P. 704 and P. 705 depending from riser.
Next go to step P. 509

## NOTICE

For addressing disdecs video signal is mandatory.
In case of using only audio call module, during configuration disdecs it is necessary to supply line $A, B$ with +18 Vdc through $1 \mathrm{k} \Omega$ resistors.

## 509 DISDEC INDIVIDUAL USER SETTINGS

Each receiver connected with ref no. 1052/54R might be configured individually or globally. Configure as following:


After pressing \# display entry panel shows:


Where:
C Riser number (1 or 2).
FFF Receiver physical address.
To configure global door phone settings enter riser number and in place physical address value: 0 . This mean all individual settings will be changed for all users in this riser.

To configure individual door phone setting enter riser number and receiver physical address, confirm by \#.
Display entry panel shows:


Choose program number and confirm \#.
Next type proper value and confirm \#.
$\operatorname{Pr} 1$ - Configuration calling tone (1-4)
$\operatorname{Pr} 2-$ Configuration calling volume (1-9)
1 - Lowest volume
9 - Highest volume
Pr 3 - Receiver type
1 - doorphone
2 - video-doorphone
3 - hands-free video-doorphone ref no. 1708/400 (NEXO)
4 - emergency module ref no. 1052/1122 (MIKRA)
After confirmation system went back to the configuration menu. Display entry panel shows:


Example 1:
If you want change calling tone and type receiver with physical address 2 connected with any disdec in riser 1 . You ought to:
Go to program P. 509 power supply configuration
Display entry panel shows:

Enter 12


Confirm by \#
On the display you will see:


First change calling volume to 9 for example. Enter 2 (program number)


Confirm by \#
Next enter parameter value to 9 (maximum loud):


## Confirm by \#

Next on the display you will see:


Enter 12


Confirm by \#
On the display you will see:


We want to change receiver type. Enter 3 (program number):


Confirm by \#
Next enter parameter value to 2 :


Confirm by \#
Next on the display you will see:


Exit from this step by pressing *
Example 2:
If you want change type receiver globally, connected to the riser 1. For example to support hends-free video-doorphones ref no. 1708/400 (NEXO), you ought to:
Go to program P. 509 power supply configuration Display entry panel shows:


Enter 10 (riser number: 1, all devices: 0 )


Confirm by \#
On the display you will see:


We want to change receiver type. Enter 3 (program number):


Confirm by \#
Next enter parameter value to 3 (hands-free video-doorphone ref no. 1708/1 NEXO):


## Confirm by \#

Next on the display you will see:


Exit from this step by pressing *
NOTICE
Actual value is not presented when enter to sub-program in this step.

Always after change configuration steps P010, P011, P508, P509 it's necessary to power down all system for approximately 60 sec .

## 510 CHANGE LOGICAL CODE DURING CONVERSATION OR ACTIVE PREVIEW FUNCTION

This option allows reallocate receiver logical code during conversation or active preview function.


After pressing \# display entry panel shows (blinking dot):


Call user which one you want to change logical code or active preview function from his apartment.
After established connection enter new logical code.
Confirm by \#
On the display you will see


Terminate connection.
On the display you will see blinking dot


In case of change another receiver logical code please establish connection.
Exit from this program by reset power supply with code 0*666\#
This function is working for main and auxiliary call module also.
It's active until the system will be reset.
Changed codes are saved permanently.
6. SERVICE FUNCTIONS
6.01 SERIAL NUMBER OF THE POWER SUPPLY


Entering in to this function we are able to get known serial number of the power supply serving this system. Based on this number individual opening codes are generated, that is why this number is so important when we need to reconstruct in a paper form the whole list of the individual opening codes.
After confirm by pressing the \# button on the screen will be shown less significant part of the supply serial number, for example: power supply with serial number- 4220:


Power supply serial number can displayed in 2 parts, because it can be in range from 1 to 5 digits, and LED display is 4 digits.
After confirm by pressing the \# button on the screen will be shown less significant part of the supply serial number, for example: power supply with serial number- 14220:


Another pressing the \# button will show the rest part of the serial number:


602 SERIAL NUMBER OF CALL MODULE


Entering in to this function we are able to get known serial number of the call module serving this system. After confirm by pressing the \# button on the screen will be shown the call module number, for example: for call module with serial number 2390 LED will display


Call module serial number can displayed in 2 parts, because it can be in range from 1 to 5 digits, and LED display is 4 digits.
After confirm by pressing the \# button on the screen will be shown less significant part of the supply serial number, for example: call module with serial number-12220:


Another pressing the \# button will show the rest part of the serial number:


603 MEASUREMENT THE CURRENT IN RISER 1


Entering in this function we are able to get known approximate value of current in riser 1, measuring instrument is in mA .

604 MEASUREMENT THE CURRENT IN RISER 2


Entering in this function we are able to get known approximate value of current in riser 2, measuring instrument is in mA . MIMN

## 605 POWER SUPPLY SOFTWARE VERSION



Entering in this function we are able to get known the version of power supply software serving this system.
After confirm by pressing the \# button on the screen will be shown the software version, for example software in version 2297 the LED display will show:


606 CALL MODULE SOFTWARE VERSION


Entering in this function we are able to get known the version of call module software serving this system.
After confirm by pressing the \# button on the screen will be shown the software version, for example software in version 903 the LED display will show:

7. ADVANCED FUNCTIONS
7.00 KEYBOARD BACKLIGHT ADJUSTMENT


This step allows you to adjust the brightness of the keyboard backlight. This setting is individual for each call modules.

The following will appear:


Press and hold the \# button to confirm old value or enter new parameter (brightness of the backlight will change automatically after entering new parameter) press and hold the \# button to confirm.
$0 \quad$ Backlight turned off,
255 Max. brightness of the keyboard backlight.
Attention: on the LED display always appears " 0 ".
Default settings: 255
701 ACTIVATE SWITCHBOARD FUNCTION


In this step we are able to activate or deactivate switchboard function. We can choose:
0 Switchboard function is inactive,
1 Switchboard function is active.

To save new parameter please press \# button.
Default settings:

702 PROGRAMMING NUMBER OF KEYBOARD UNITING LOGICAL ENTRY EXI WITH EO OF POWER SUPPLY IN ADDITIONAL CHANNEL.


In this step we are able to set the number of call module keyboard, where by turning on terminal EXI, terminal EO also will be turned on in the power supply which is serving this call module.
We are able to set:
1-239 Number of selected keyboard,
0 All keyboards,
255 No keyboard.

To save new parameter please press \# button.
Default settings: 0
703 PROGRAMMING NUMBER OF KEYBOARD FOR EI TERMINAL IN THE POWER SUPPLY FOR THE ADDITIONAL CHANNEL


In this step we are able to set the number of call module keyboard, by this module we can turn on NC-C-NO relay exit, if we turn on terminal EI in the power supply which is serving this call module.
We are able to set:
1-239 Number of selected keyboard,
0 All keyboards,
255 No keyboard.
To save new parameter please press \# button.
Default settings: 0
704 TOP RANGE OF USER CODES FOR RISER 1


In this step we are able to set:
Top range of physical user code served by switchboard,
Number and range of logical user codes generate automatically in riser 1.

Step 7.04 is no used if user codes are generate manual.
If you want to automatically increase the number of supported logical codes modify the parameter in step 7.04 and enter into an step 4.04. Then it is automatically generate such a number of logical codes that was specified in parameter 7.04.
For example, changing the parameter to 30 in the 7.04 option, and then automatically generating code in step 4.04 for riser 1. A logical codes will be available from 1 to 30 , however for riser 2 will start from 31. Logical code 31 will correspond to the physical setting jumpers on a doorphone to "1".

We can choose:1-255
Please note that the highest value corresponds to the set on the jumpers address in doorphone on riser 1.

To save new parameter please press \# button.
Default settings: 25

## 705 TOP RANGE OF USER CODES FOR RISER 2



In this step we are able to set:
Top range of physical user code served by switchboard,
Number and range of logical user codes generate automatically in riser 1.

Step 7.04 is no used if user codes are generate manual. If you want to automatically increase the number of supported logical codes modify the parameter in step 7.04 and enter into an step 4.04. Then it is automatically generate such a number of logical codes that was specified in parameter 7.04.
For example, changing the parameter to 30 in the 7.04 and 7.05 option, and then automatically generating code in step 4.04 for riser 1 and 2. A logical codes for riser 1 will be available from 1 to 30 , and from 31 to 60 . Logical code 31 will correspond to the physical setting jumpers on a doorphone to "1".

We can choose:1-255
Please note that the highest value corresponds to the set on the jumpers address in doorphone on riser 1.

To save new parameter please press \# button.
Default settings - 25

## 706 FREQUENCY OF ELECTRIC DOOR LOCK MODE



In this step we are programming frequency of electric door lock mode, which is connected to call module by terminals +CL -CL. These terminals are able to service electric door lock for DC and AC voltage. Parameter which we will choose in this part of the programming mode, set the frequency of the voltage which show on the terminals $+\mathrm{CL}-\mathrm{CL}$.
Below table shows dependence between chosen parameter and frequency of electric lock:

| Parameter | Frequency |
| :---: | :---: |
| 0 | DC |
| 1 | 500 Hz |
| 2 | 250 Hz |
| 3 | 166 Hz |
| 4 | 125 Hz |
| 5 | 100 Hz |
| 6 | 83 Hz |
| 7 | 71 Hz |
| 8 | 62 Hz |
| 9 | 55 Hz |
| 10 | 50 Hz |
| 11 | 45 Hz |
| 12 | 41 Hz |
| 13 | 38 Hz |
| 14 | 35 Hz |
| 15 | 33 Hz |
| 16 | 31 Hz |
| 17 | 29 Hz |
| 18 | 27 Hz |
| 19 | 26 Hz |
| 20 | 25 Hz |

To save new parameter please press \# button.
Default settings: 15

### 7.07 ELECTRIC DOOR LOCK TIME OF CURRENT DC



In first phase electric door lock works with DC current after strictly definite time appears AC current.
After pressing the \# button on the LED display will be shown actual time of DC current in ms. You can confirm this value by pressing the \# button or change by entering new value in range from $0-$ 250 ms

To save old or new parameter please press \# button. Default settings: 200
7.08 OTHER DOORPHONE BUTTONS


Doorphones ref no. 1131/621 and ref no. 1132/621 have an additional button (or extra buttons) to call switchboard station or control OC in the power supply. This is realized through the inclusion of an adequate resistance in parallel with the line. The power supply recognizes two thresholds resistance: $180 \Omega$ and $68 \Omega$. We can choose:
$0 \quad 180 \Omega$ controls OC and $68 \Omega$ calls switchboard,
$1180 \Omega$ calls switchboard and $68 \Omega$ controls OC.
In firmware version higher than 1745 we have 4 option to chose:
$0 \quad 180 \Omega$ calls switchboard and $68 \Omega$ controls OC.
Both buttons calls switchboard,
Both buttons controls OC
$3180 \Omega$ controls OC and $68 \Omega$ calls switchboard,
To save new parameter please press \# button.
Default settings:

## 705 TOP RANGE OF USER CODES FOR RISER 2



In this step we are able to set:
Top range of physical user code served by switchboard,
Number and range of logical user codes generate automatically in riser 1.

Step 7.04 is no used if user codes are generate manual. If you want to automatically increase the number of supported logical codes modify the parameter in step 7.04 and enter into an step 4.04. Then it is automatically generate such a number of logical codes that was specified in parameter 7.04.
For example, changing the parameter to 30 in the 7.04 and 7.05 option, and then automatically generating code in step 4.04 for riser 1 and 2. A logical codes for riser 1will be available from 1 to 30, and from 31 to 60 . Logical code 31 will correspond to the physical setting jumpers on a doorphone to "1".

We can choose:1-255
Please note that the highest value corresponds to the set on the jumpers address in doorphone on riser 1.

To save new parameter please press \# button.
Default settings:
25

## 706 FREQUENCY OF ELECTRIC DOOR LOCK MODE



In this step we are programming frequency of electric door lock mode, which is connected to call module by terminals +CL -CL. These terminals are able to service electric door lock for DC and AC voltage. Parameter which we will choose in this part of the programming mode, set the frequency of the voltage which show on the terminals +CL-CL.
Below table shows dependence between chosen parameter and frequency of electric lock:

| Parameter | Frequency |
| :---: | :---: |
| 0 | DC |
| 1 | 500 Hz |
| 2 | 250 Hz |
| 3 | 166 Hz |
| 4 | 125 Hz |
| 5 | 100 Hz |
| 6 | 83 Hz |
| 7 | 71 Hz |
| 8 | 62 Hz |
| 9 | 55 Hz |
| 10 | 50 Hz |
| 11 | 45 Hz |
| 12 | 41 Hz |
| 13 | 38 Hz |
| 14 | 35 Hz |
| 15 | 33 Hz |
| 16 | 31 Hz |
| 17 | 29 Hz |
| 18 | 27 Hz |
| 19 | 26 Hz |
| 20 | 25 Hz |

To save new parameter please press \# button.
Default settings: $\quad 15$

## 707 ELECTRIC DOOR LOCK TIME OF CURRENT DC



In first phase electric door lock works with DC current after strictly definite time appears AC current. After pressing the \# button on the LED display will be shown actual time of DC current in ms. You can confirm this value by pressing the \# button or change by entering new value in range from $\mathbf{0 - 2 5 0 ~ m s}$

To save old or new parameter please press \# button.
Default settings: 200

## 708 OTHER DOORPHONES BUTTONS



Doorphones ref no. 1131/621 and ref no. 1132/621 have an additional button (or extra buttons) to call switchboard station or control OC in the power supply. This is realized through the inclusion of an adequate resistance in parallel with the line. The power supply recognizes two thresholds resistance: $180 \Omega$ and $68 \Omega$. We can choose:
$0 \quad 180 \Omega$ controls $O C$ and $68 \Omega$ calls switchboard,
$1180 \Omega$ calls switchboard and $68 \Omega$ controls OC.
In software version higher than 1745 we have 4 option to chose:
$0 \quad 180 \Omega$ calls switchboard and $68 \Omega$ controls OC.
1 Both buttons calls switchboard,
2 Both buttons controls OC
$3180 \Omega$ controls OC and $68 \Omega$ calls switchboard,

In case of set-up line LU1 and LU2 to work with doorphones ref no. 1134/522, 1140/522 or brackets ref no. 1202/952R this parameter does not apply. Power supply firmware 2475 or higher allows mentioned devices operate additional buttons like follows:

On-hook handset or during the conversation:
Pressing additional button 1 controls OC1.
Pressing additional button 2 controls OC2.
Idle and off-hook handset:
Pressing additional button 1 call to the switchboard
Pressing additional button 2 activate the preview function (auto-on) configurable in step 715

NOTE:
Remember that for doorphones ref no. 1131/621 and ref no. 1132/621 additional button is active ONLY when line is in idle state.

To save new parameter please press \# button. Default settings:

709 ELECTRICAL DOOR LOCK MODES


We can choose:
0 Normal,
1 Reversible (only DC). Max current 150 mA . If current will be higher it will damage the call module.
You mustn't connect electromagnetic armature directly to the CL+ and CL- connectors.

This parameter can be set-up for each call module.
To save new parameter please press \# button. Default settings: 0

710 SWITCHBOARD STATIONS CONTROL **


In this step you can choose a switchboard station type of work.
If the parameter is set to "1" then when you call from a call module (where option 1.13 is set to " 1 ") ' $R$ ' connector will be active to drive camera module and first four relay units in switchboard which can be used e.g. for driving a monitor.
0 Standard settings,
1 Switch board station witch monitor.
To save new parameter please press \# button.
Default settings:
0
711 OC1 OUTPUT SETTINGS **


In this step, we set the OC1 output mode power supply. During the call from the call video panel (where the parameter 1.13 is set to 1 ), power supply will short OC1 output to ground.
Followed conditions have to be fulfilled to activate OC1 output:

1) The connection is to take place from a doorphone connected to the power supply which have step 7.11 set to " 1 ", and
2) From the video call panel which step 1.13 was set to "1".

We have to choose:

0 Normal mode. OC1 is given ground potential when the button is pressed in a doorphone connected to the line of LU1,
1 Set ground potential on OC1 terminal during conversations.

To save the parameter to confirm it pressing \#
Default settings: 0
712 TURNING OFF OPENING BUTTON DURING THE LOUD CONVERSATIONS **


Reason to use this function is to rule out accidental openings during a conversation.
When you press \# the display shows the current value of the parameter. The parameter value is expressed in \%.
We can choose:
0 Function inactive - the system works "normally",
1-100 The higher the value the more difficult to obtain an accidental opening of the electric lock with loud conversation. Please note that the increase of parameter hinder the normal opening.

To save new parameter please press \# button.
Default settings:
50

## 713 POWER SUPPLY TYPE **



Setting this parameter is required for proper operation of the program MBse STUDIO.
We can chose:
0 MASTER power supply ref. 1052/31A and ref. 1052/31R,
1 MASTER/SLAVE power supply ref. 1052/33 and ref. 1052/33R

To save new parameter please press \# button.
Default settings: 1
714 LINKING EI, OC1 AND OC2 INPUTS IN THE POWER SUPPLIES ***


This option enables linking (coupling) EI, OC1 and OC2 in the power supplies contained within the system. It is possible to linking one or all functions. In addition, for different power supplies various functions can be linked. For example: within a single system power supply in stair 1 and 2 can have linked only OC1 and for power supply in stairs 3 and 4 only input El

You can choose:
0 All inputs works independent.
1 All inputs El works parallel (for additional entrances).
2 All inputs OC1 works parallel.
4 All inputs OC2 works parallel.
Note: Parameters can be added together.
For example: We want to link inputs El and OC1 each power supply. In this parameter you have to enter sum result options what you want to have linked, in this case $(1+2)=3$.
After entering the parameter 3 operation will be as follows: When you press the button in doorphone responsible for activation OC1, it will be activated for each power supply where the parameter 714 is set to $2,(1+2)=3,(2+4)=6$ and $(1+2+4)=7$. When you apply ground for EI, each additional call modules (or one selected, see
step 703 or 805) will drive theirs own relay. Relay activation will be possible for additional call modules connected to the power supplies where parameter 714 is set to $1,(1+2)=3,(1+4)=5$, $(1+2+4)=7$

To save new parameter please press \# button. Default settings: 0

715 ADDRESS (ID) CALL MODULE FOR PREVIEW (AUTO-ON) FUNCTION ***


This feature i available only for door-phones ref no. 1134/522, 1140/522, brackets ref no. 1202/952R and distributor-decoder ref no. 1052/54R.
This feature allows establish connection between receiver (doorphone, video-door-phone) and call module with specific address (ID) number. Call module can be connected as a primary or secondary. To establish a connection with the call module do it as follows:
Lift the handset.
Press the preview (auto-on) button in the video-door-phone or a function key in the door-phone.

Disconnection is the same way as for a normal connection between the call module and the receiver. Max conversation time is 2 min . Please note that this feature is configured for each power supply separately. It is needed if you want to allow connect receivers in riser A (connected to the power supply with $I D=23$ ) with main call module with $I D=207$ and receivers in riser $B$ (connected to the power supply with $I D=53$ ) with secondary call module with $I D=148$.

You can choose:
1-240 secondary call module address (ID). In this case just simply enter secondary call module address (ID) without prefix.
1001-1240 main call module address (ID). In the case please enter a four digit address (ID) of main call module with prefix "1". For example for main call module with address (ID) 20, please enter value 1020.
Others function disabled
Note! It is impossible to establish connection between receiver and secondary call module connected to the different power supply.

To save new parameter please press \# button.
Default settings: 0 (function disabled)
8. MASTER/SLAVE FUNCTIONS

801 CHANGE THE ID OF MASTER POWER SUPLLY


This step allows you to check, set or modify ID number of MASTER power supply. After pressing \# button LED displays ID number of power supply connected with this keyboard.

ID number could be show in two ways:
Digits with dots, it means that this power supply acts as MASTER.
Digits without dots, it means that this power supply acts as SLAVE.
Entering ID number and single press \# button (NOT HOLD) lead to appear dots - power supply connected to the keyboard will be act as MASTER. Another pressing \# button lead to disappear dots power supply will be act as SLAVE.

This step is important only in system with several entrance panels. In system with several power suppliers only one unit has to be MASTER. MatibusSE automatically set one of the power suppliers
as MASTER. If you set new MASTER, the old one (set automatically or manual) changes to SLAVE automatically.

To save settings press and hold \# button.
This step has to be set from additional keyboards connected to power suppliers. If you turn off MASTER from main keyboard, keyboard will exit programming menu automatically.

Default settings: $1-239$ random number, MASTER
802 LOGICAL USER CODES PROGRAMMING FOR THE MAIN BUS


After pressing the \# button, on the LED will be shown this communication:


C Riser number (1 or 2),
FFF Physical code (the same address what jumpers set in the doorphone in range 1-255).

Logic code can be associated to every possible jumpers set in the doorphone (physical code). To do it:

Enter the number of riser to which doorphone is connected,
Enter physical code of the doorphone,
Confirm by pressing \# button.
If the physical code was not associated with any logical user code the LED displays this communication:


If physical code has been already associated, than the LED display shows programmed code. Than we are able to:

Keep previous code or enter new one in range from 1-9999, than confirm,

Confirm entered code by pressing and hold for a while the \# button. If we just press the \# button than the system will propose first free logical user code, we can confirm by pressing and holding \# button, or just press the \# button to continue searching.

Searching process of first free logic code will be shown on LED display with this kind of communication:


In every moment of programming we are able to stop by pressing the * button.
Logic code can be associated just to the one physical code.
If we will try to program physical code to existing logical code, than call module will play short warning signal and start blinking existing physical code on the LED. Than we are able to:

Hold the button \#, what will overwrite logical code from existing to valid physical code,
or

Press the button *, if we would like to return to the place where we can offer new logical code to program.

SLAVE power supplier has to be programmed from its additional keyboard.
MASTER power supplier can be programming from its additional or any main keyboards.

803 RE-MAPPING LOGICAL USER CODES FOR THE MAIN BUS


This step allows you to assign any logical user code in additional channel to any logical user code in main channel.
After pressing the \# button, the LED display shows this communication:


Next enter existing logical user code in additional channel, for example 1234.


If logical user code for additional channel is not assigned, after pressing the \# button LED displays this communication:


Enter logical user code for the main bus, confirm pressing the \# button.

If logical user code for additional channel is already assigned, confirm the old one or enter new code, then press the \# button or press * to delete.
SLAVE power supplier has to be programmed from its additional keyboard.
MASTER power supplier can be programming from its additional or any main keyboards.

804 PROGRAMMING NUMBER OF KEYBOARD UNITING LOGICAL ENTRY EXI WITH EO OF POWER SUPPLY IN THE MAIN BUS


In this step we are able to set the number of call module keyboard, where by turning on terminal EXI, terminal EO also will be turned on in the power supply.
We are able to set:
1-239 ID number os selected keyboard.
0 All keyboards.
255 No keyboard.
In $n$ this step on LED appears dots.
To save new parameter please press \# button.
Default setting: 0
805 PROGRAMMING NUMBER OF KEYBOARD FOR EI TERMINAL IN THE POWER SUPPLY FOR THE MAIN BUS


In this step we are able to set the ID number of call module keyboard, which can activate relay NC-C-NO, if we turn on terminal El in the power supply which is serving this call module.

We are able to set:
1-239 ID number os selected keyboard.
0 All keyboards.
255 No keyboard.
In n this step on LED appears dots.
To save new parameter please press \# button.
Default setting: 0
9. FEATURES THAT IMPROVE

901 DEACTIVATION "OFF" INFORMATION


This step allows you to deactivate displaying "OFF" information in case of lack calling doorphone. System are checking, whether doorphone is connected.

We are able to set:
0 Activate "OFF" information,
1 Deactivate "OFF" information.

To save parameter press \# button.
Default setting:
0
902 MEASUREMENT THE CURRENT IN THE DOORPHONE LINE DURING CONVERSATION


This step allows measuring and displaying the current in the door phone line during conversation (instead of logical user code)

We are able to set:
0 Display user code during conversation,
1 Display current value during conversation.
To save new parameter please press \# button.
Default setting:
0
903 SERVICE PARAMETER


Default setting: 0
904 COMMUNICATION MODE IN MAIN BUS


In this step we can set type of the communication mode with a keyboard in power supply main bus.
We can choose:

## 0 Normal mode

1 Enhanced mode (with higher sensivity and power).
2 RS485 mode.
In enhanced mode, an increase in transmitter power and receiver sensitivity are made in the power supply. This mode is
recommended for difficult installation conditions such as systems whose lines are vulnerable to serious disruption.
RS485 mode is preferred for large installations (where the distance between drivers and the panels are significant). The condition for the correct operation mode RS485 is to use two wires in the data lines ( $D(D)+$ and $D-)$ - twisted pair cable. Please also note that in all power supplies, communication mode was equally set.
This option applies to MASTER / SLAVE power supply.
To save new parameter please press \# button.
Default setting:

## 905 COMMUNICATION MODE IN AUXILIARY BUS



In this step we can set type of the communication mode with a keyboard in power supply auxiliary bus.
We can choose:
0 Normal mode
1 Enhanced mode (with higher sensivity and power).
2 RS485 mode.
In enhanced mode, an increase in transmitter power and receiver sensitivity are made in the power supply. This mode is recommended for difficult installation conditions such as systems whose lines are vulnerable to serious disruption.
RS485 mode is preferred for large installations (where the distance between drivers and the panels are significant). The condition for the correct operation mode RS485 is to use two wires in the data lines ( $D(D)+$ and $D-)$ - twisted pair cable. Please also note that in all power supplies, communication mode was equally set.
This option applies to MASTER / SLAVE and MASTER power supply.

To save new parameter please press \# button.
Default setting: $\quad 1$
906 ADDITIONAL RING DURING PICKUP TIME


This step allows annexing additional ring-back tone on the doorphone while waiting for pick up the handy (pickup time).
We are able to set:

## 0 OFF

1 ON
To save new parameter please press \# button.
Default setting:
1
907 AUTOMATIC CHOOSING OF MASTER POWER SUPPLY


This step allows turning on/off automatic choosing of MASTER power supply in MASTER/SLAVE system.
We are able to set:
0 Automatic choosing of MASTER supplier turn off,
1 Automatic choosing of MASTER supplier turn on.
If you set 1, you must define MASTER yourself.
If you set 0 , system automatic choose MASTER.
To save new parameter please press \# button.
Default setting: 1

908 POWER SUPPLY RESET


Press the \# button to enter this step and reset power supply. Keyboard will turn off for a while. Keyboard will exit programming mode.

909 UPDATING CALL MODULE KEYBOARD SOFTWARE


This step allows updating call module keyboard software. Press the \# button to enter this step and update the keyboard. LED will countdown. When power supply is updated correctly than call module emits two confirmation sounds. Otherwise you will hear error sound.
Notice !! Interruption during flashing call module will damage device.

## ERROR CODES

Call modules detect and identify lots of errors in MATIBUSSE system. Communication about detected errors will be shown on the LED display with correct code credited to specific error. Based on this communication we are able to define what kind of problem happened.
In the table below we present list of errors code with explanation.

| E | r | 0 | 1 | Short-circuit in riser 1 |
| :---: | :---: | :---: | :---: | :---: |
| E | r | 0 | 2 | Short-circuit in riser 2 |
| E | r | 0 | 3 | Entering call code too slow |
| E | r | 0 | 4 | Logical user code has not been programmed |
| E | r | 0 | 5 | Incorrect open code |
| E | r | 0 | 6 | Line is busy |
| E | r | 0 | 7 | Incorrect installer code |
| E | r | 0 | 8 | User code without assigned Dallas key |
| E | r | 0 | 9 | Incorrect physical code format |
| E | r | 1 | 0 | Inactivity time too long (in programming mode) |
| E | r | 1 | 1 | Several door phones with the same address |
| E | r | 1 | 2 | Dallas key already assigned |
| E | r | 1 | 3 | EEPROM full |
| E | r | 1 | 4 | Switchboard stations is busy |
| E | r | 1 | 5 | Power supply is already in the programming mode. |
| - | - | - | - | Flashing four horizontal lines indicate the lack of communication between call module and power supply (eg, broken line D). The lines are flashing from the moment you try to send any information from the call panel to power supply for example pressing any button, lack of communication. After recovery of communication and try to send any information to power supply (eg pressing any key) horizontal lines disappears. |

USER MANUAL

CALL MODULES REF NO．1052／100D，REF NO． 1052／105D，REF NO．1052／100．．106VD AND REF NO． 1052／101VD－RF ADJUSTMENTS

Board of the keyboard is pre－adjusted during production process． Potentiometers P1，P2，P3 allows for module adjustment，but do it only if it is necessary．

| Mark | Function |
| :---: | :--- |
| Keyboard module |  |
| P1 | Volume level adjustment． <br> Turn right to volume up． |
| P2 | Microphone sensitivity adjustment． <br> Turn right to increase it． |
| P3 | Feedback adjustment |

Call module board is equipped with J 1 jumper，which allows on threeleveladjustment of the current of electric lock，as described below：

| Jumper setting | Current value |
| :---: | :---: |
| － | 150mA（reversed electric lock）＊ |
| 㐭 | 300mA |
| 回 | 600mA |

＊NOTE ！！Read step P7．09 of the programming menu．
Jumper J2 allows to select communication module（MATIBUS SE － or RS485）．Standard communication module is used in systems based on power supplies ref no．1052／33 and ref no．1052／31A． RS485 communication module is used in systems based on power supplies ref no．1052／33R and ref no．1052／31R（more details in COMMUNICATION MODULE CONFIGURATION）．

| Jumper setting | Communication mode |
| :---: | :---: |
| $\square$ | RS485． |
| 回 | MATIBUS $_{\text {SE }}$ |

Figure 1 －location of call module potentiometers．


Fig． 1

## BACKLIGHT MODULE ADJUSTMENTS FOR CALL MODULES REF NO．1052／101D AND REF NO 1052／106D

In the rear backlight module you can find P1 potentiometr for brightness adjustment．

| Backlight module |  |
| :--- | :--- |
| P1 | Backlight brightness adjustment |

Figure 2 －location of P 1 potentiometr


Fig． 2

BACKLIGHT MODULE ADJUSTMENTS FOR CALL MODULES REF NO．1052／106VD AND REF NO 1052／101VD

In the rear backlight module you can find P1 potentiometr for brightness adjustment．

| Backlight module |  |
| :---: | :--- |
| P1 | Backlight brightness adjustment |

Figure 2 －location of P1 potentiometr


Fig．2a

## BACKLIGHT MODULE ADJUSTMENTS FOR CALL MODULE REF NO. 1052/101VD-RF

In information window integrated with RFID key/card reader backlight brightness adjustment carried in step 4 in programming mode. The RFID module is available six programming steps (all other programming steps apply to jobs reader in stand-alone mode, and therefore they will not be described). To access the programming menu, hold down PROG button for at least 1 second. Then the green LED (next to the button PROG) lights up continuously and every few seconds will flash together with the LED module Information contained in the front. The number of flashing green light LED signals a definite step in the programming menu. Substitution step followed by a short (less than one second) pressing the PROG button. To exit programming, at any time hold PROG button for at least 3 seconds. Automatic exit from the programming menu will be after 60 sec . if there has been no response from the user.

If the RFID reader is in fourth step programming mode (the LED light flashing cyclically 4 times) applying to the reader any Key (Card or Tag) will increase the brightness the highlighted one of the 5 degrees of brightness. increasing the brightness followed at intervals of 0.5 seconds. After reaching maximum brightness level drops to its minimum value, and the whole cycle repeats. To set the desired brightness should be put down the key from the reader. After exiting the programming mode of RFID reader LED's will shone with the brightness in last set.

Warning !
Jumper Z1 of RFID reader (Fig. 3a) module must be established for correct working with Matibus SE system.


Fig. 3a

## VOLUME LEVEL ADJUSTMENT FOR VIDEO MODULE

In the rear video module you can find P1 potentiometr for volume level adjustment. Simultaneously for microphone and speaker

| Mark | Function |
| :---: | :---: |
| P1 | Volume level (micrpohone and speaker). |

Figure 3 - potentiometer P1 location.


Fig. 3

## SYSTEM STARTING

## SYSTEM WITH MASTER

1. Connect the devices.
2. Turn the power on.
3. Check if on power supply there is green LED turned on and red LED is not blinking. Blinking of red LED mean that there is short-circuit on doorphones line (described in manual).
4. Check the operation of call module:
5. Check the voltage. If call module is correctly powered on then keypad will be backlighted and red dot will blink on display. Otherwise check:

- check your installation,
- check the presence of voltage on AC1 and AC2 contacts

6. Check the communication. The easiest way to do it is to press any digit key on keyboard (1 to 9). After pressing given digit it should be displayed. If there is no communication:

- check your installation,
- check the voltage value on $D(D+)$ contact (values are described in the manual).

7. Check the audio line with calling to any doorphone (addresses $1-25$ - riser 1, 26-50 - riser 2). If there is no audio:

- check your installation,
- check the voltage value on LG contact (values are described in the manual).

8. If necessary, change the logical code.
9. Call again any of doorphones and check all functions like opening door, etc.
10. Change the installer code.

## SYSTEM WITH MASTER/SLAVE

1. Before starting the system you need to plan the main entrance codes.
2. Connect the devices.
3. Turn the power on.
4. Check if on power supply there is green LED turned on and red LED is not blinking. Blinking of red LED mean that there is short-circuit on doorphones line (described in manual)
5. System will automatically assign MASTER power supply (in case of parameter 9.07 is set). MASTER power supply is the first power supply connected to the system. This is done only once when you start the system for the first time. If you have set 9.07 parameter to 0 it is required to choose MASTER power supply manually (step 8.01).
6. Check the operation of call module which is an additional entrance:
7. Check the voltage. If call module is correctly powered on then keypad will be backlighted and red dot will blink on display. Otherwise check:

- check your installation,
- check the presence of voltage on AC1 and AC2 contacts.

8. Check the communication. The easiest way to do it is to press any digit key on keyboard (1 to 9). After pressing given digit it should be displayed. If there is no communication:

- check your installation,
- check the voltage value on $D\left(D_{+}\right)$contact (values are described in the manual).

9. Check the audio line with calling to any doorphones (addresses 1-25 - riser 1, 26-50 - riser 2). If there is no audio:-- check your installation,

- check the voltage value on LG contact (values are described in the manual).

10. Enter programming menu in each of power supplies. If necessary change logical codes for an additional entrance.
11. Check the voltage. If call module is correctly powered on then keypad will be backlighted and red dot will blink on display. Otherwise check:

- check your installation,
- check the presence of voltage on AC1 and AC2 contacts

12. Check the communication. The easiest way to do it is to press any digit key on keyboard (1 to 9 ). After pressing given digit it should be displayed. If there is no communication:

- check your installation,
- check the voltage value on $D(D+)$ contact (values are described in the manual)

13. Enter to the programming menu of the call module which is the main entrance.
14. Set the logical codes for all power supplies of main entrance (step 8.02 or 8.03 ). Please remember not to set two identical logical codes for the main entrance. If it occurs one of them will be deleted.
15. Check the audio line in main call module with calling to any doorphone. If there is no audio:

- check your installation,
- check the voltage value on LG contact (values are described in the manual).

16. Call again any of doorphones and check all functions like opening door, etc.
17. Change the installer code.

## VOLTAGE VALUES ON THE SPECIFIC LINES

| Linia | 1052/31R | 1052/33R |
| :---: | :---: | :---: |
| LU1 or LU2 idle state, <br> parameter 110 set on 1,  <br> parameter 010 or 011 set on 0.   | 6.2V | 6.2V |
| LU1 or LU2 during conversation, parameter 110 set on 0 , parameter 010 or 011 set on 0 .. | 12V | 12V |
| LU1 or LU2 voltage parameter 010 or 011 set on 1. | 12V | 12V |
| LU1 or LU2 during conversation. | 6.2 V | 6.2 V |
| LD idle state. | 12 V | 0 V |
| LD during conversation (one device is active) | 10.2V | 10.2V |
| LG idle state. | - | OV |
| LG during conversation (one device is active) | - | 10.2V |
| DD+ idle state ( low communication or RS485). | $3.2-3.4 \mathrm{~V}$ | 3.2-3.4 V |
| DD- idle state ( low communication or RS485). | 0.70-1.3 V | $\begin{aligned} & 0.70-1.3 \\ & V \end{aligned}$ |
| DD+ idle state ( high communication ). | $8.0-9.0 \mathrm{~V}$ | $8.0-9.0 \mathrm{~V}$ |
| DD- idle state ( high communication ). | 0.70-1.3 V | $\begin{aligned} & 0.70-1.3 \\ & \mathrm{~V} \end{aligned}$ |
| DG+ idle state ( low communication or RS485). | - | $\begin{aligned} & 3.2-3.4 \\ & \mathrm{~V}^{*} \end{aligned}$ |
| DG- idle state ( low communication or RS485 ). | - | $\begin{aligned} & 0.70-1.3 \\ & \mathrm{~V}^{*} \end{aligned}$ |
| DG+ idle state ( high communication). | - | $\begin{aligned} & 8.0-9.0 \\ & \mathrm{~V}^{*} \end{aligned}$ |
| DG- idle state ( high | - | 0.70-1.3 |


| communication ). |  | $\mathrm{V}^{\star}$ |
| :--- | :--- | :--- |

## NOTICE!!!

Voltage values are approximate.
Voltages on main bus depends up configure MASTER power supply.
*- voltage appear only when power supply are setup as MASTER or is connected with any MASTER power supply.

## MOUNTING OF AUDIO STAINLESS STEEL CALL MODULES REF NO. 1052/10XY

In order to ensure good digits visibility, call module shouldn't be mounted in front of strong light sources (sunlight, strong lights, etc.). Housing should be flush mounted in such way that it does not protrude from wall. Follow below steps to mount call module made from stainless steel ref no. 1052/100D -/101D -/102D -/105D /106D -/107D and VERTICAL panels.

## WALL MOUNTED VERSION

Take the keyboard module front panel off
Disconnect the terminal block from keyboard module signal connector
Fit the cable through the hole B located in back part. (fig. 3).
Fasten the housing to the wall using 4 holes A located in back part (fig. 3).
Connect the wires to the corresponding terminals in terminal block module.
Insert terminal blocks into sockets in way that labels on block will match labels on board cover (in keyboard module).
Close the panel and fasten the front panel of keyboard module with two screws.

## FLUSH-MOUNTED VERSION

For flush-mounted version it is recommend to use the frame ref. 525/RP2 -/RP3 or -/RP4(V), sold separately, in order to hide any inaccuracies of the hole execution.
Follow below steps to flush mount stainless steel call module ref. 1052/100..100D or ref. 1052/105..105D:
Place the frame in the hole.
Take the keyboard module front panel off.
Disconnect the terminal block from keyboard module signal connector.
Fit the cable through the hole B located in back part. (fig. 3).
Fasten the housing to the wall using 4 holes A located in back part (fig. 3) .
Connect the wires to the corresponding terminals in terminal block module.
Insert terminal blocks into sockets in way that labels on block will match labels on board cover (in keyboard module).
Close the panel and fasten the front panel of keyboard module with two screws


Fig. 3

## MOUNTING OF THE LABEL WITH NAMES (OPTIONAL)

## Follow below steps to mount of the label with name

1. Unscrew the information module mounting screw by key patent.
2. Disconnect the backlight power wires from information module or the terminal block from keyboard module signal connector.
3. Unscrew 4 M 3 nuts and tighten up push plate to the fornt call module. See fig 4. Note: The washers are under the nuts.
4. Remove the washers.
5. Gently disassembly a push plate.
6. Place a description card in plexiglas cavity.
7. Put on a push plate for plexiglas. Please remember to proper place plexiglas stripes according to positioning holes in push plate. Hole in bottom push plate should be find above mounting hole screw. Hole in bottom push plate should be found above mounting hole screw. Location positioning holes fig 4.
8. Mount washers and gently tighten up push plate to the front by 4 nuts.
9. Fasten information module front plate
10. Connect terminal block or power wires to the information module. Plus - red wire (VDD connector), Minus - black or blue wire (GND connector).


NOTE !! Information module push plate and plate with diode LED are not disassemble.
$X$ - version of call module
0 - call module
1 - call module with information module
2 - call module with double information module
5 - call module with DALLAS key reader
6 - call module with DALLAS key reader and information module

7 - call module with DALLAS key reader and double information module

Y - trim of call module
D - call module housing with hood

## SINTHESI CALL MODULE WITH KEYBOARD REF

 NO. 1052/104

## GENERAL INFORMATION

Digital call module with keyboard ref no. 1052/104 is designed for digital door-phone system MATIBUS ${ }_{\text {SE }}$.and is based on SINTHESI call module. Call module could be upgraded to video door-phone system by adding camera module ref no. 1748/40
Call module could be wall or flush mounted (accessories have to be bought separately)

More information about SINTHESI mounting parts you can find on our website: www.miwiurmet.com.pl

## BASIC SYSTEM FUNCTIONS

Calling to all house phones,
General and individual opening codes,
Dallas key reader (only in 1052/15./15D and 1052/16../16D),
Exit transmitter NC-O-NO controlled by general and individual opening codes and additional button in the house phone,
Open door input.
Exit dedicated to handling video,
Hall button timed input,
Programmable system,
System information shown on LED display.

## STRUCTURE

Call module is based on Sinthesi S2 line and it is made from anodizing aluminum. No. ref. 1052/104 corresponds to 2 Sinthesi modules, and is provided with LED display.

- 2 modules Sinthesi, anodizing aluminum front panel,
- Loudpeaker,
- Adjustable call module microphone sensitive,
- Microphone,
- Adjustable call module speaker volume,
- Emergency programming button (for use if password is unknown),
- LED display,
- Terminal boards
- DALLAS ${ }^{\text {T }}$ key reader socket


Fig. 1 Front site

## DESCRIPTION OF TERMINAL BOARD

LG Audio line.
OL Ground.
D(D+) Data line (D line in case of MATIBUS SE communication module or D+ line in case of RS485 communication module).
D- Data line (D- line in case of RS485 communication module).
R Video switching enable signal for video door phone systems.
SP_I Input terminal for internal speaker.*
SP_O Output terminal for speaker (used to connect external speaker).*
GND Ground.
NO Normally open relay contact.
C Common relay contact.
NC Normally close relay contact.
PH Door lock release.
GND Ground.
EXI Controlled input contact.
AC1 Input voltage $\sim 12 \mathrm{~V}$ AC.
AC2 Input voltage ~12 V AC.
+V Input voltage + 15 $\ldots+20 \mathrm{~V}$ DC.
-V Input voltage ground.
CLM Adjustment the electric lock current.
CLS Adjustment the electric lock current.
CLH Adjustment the electric lock current.
-CL Electric lock output (-).
+CL Electric lock output (+).
iButton DALLAS ${ }^{\text {TM }}$ key reader socket.

* NOTE

Please read subheading SPEAKER CONFIGURATION

## SPECIFICATION

| Power supply | $\sim 12 \mathrm{~V} \mathrm{AC} \mathrm{or} \mathrm{+} \mathrm{20} \mathrm{V} \mathrm{DC}$ |
| :--- | :--- |
| Electrical lock driver | -Through built-in three <br> position power regulation <br> circuit $\mathrm{U}_{\text {max }}=12 \mathrm{~V}$ <br> $-\mathrm{NO}-\mathrm{C}-\mathrm{NC}$ max: $1 \mathrm{~A} / 24 \mathrm{~V}$ DC |
| Working temperature: | $-20^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| Dimensions (Sinthesi <br> module) | 2 |
| Dimensions with camera <br> (Sinthesi module) | 3 |
| Weight: | 0.45 kg |

Programmimng menu is the same like in stainless steel modules.
Only difference is with key * corresponding with

## ADJUSTMENT

Call module is pre-adjusted during the manufacturing process. Potentiometers allow adjustment of the panel, however, should perform this step only if it is really necessary.

| Mark | Function |
| :---: | :--- |
| $\square$ | Adjusting the call module speaker and <br> micropohone volume (simultaneously) |

Rysunek 1 - położenie potencjometrów.


Jumper J1 allows to choose proper communication mode. (MATIBUS ${ }_{\text {SE }}$ - standard communication mode or RS485).
Standard communication mode is used in power supplies ref no. 1052/33 and ref no. 1052/31A.
RS485 communication mode can be used in installations with power supplies ref no. 1052/31R and ref no. 1052/33R (more in user manual subheading "COMMUNICATION MODULE CONFIGURATION").

Terminals CLS, CLM and CLH allows adjustment the electric lock current. It is possible to use three levels of current threshold.


* NOTE

Please have a read - step 709 programming menu.

## SPEAKER CONFIGURATION

In case of using call module ref no. 1052/104 as an audio module only (in door-phone system), the terminals SP_I and SP_O have to be connected together.

In case of using call module ref no. 1052/104 with video module ref no. 1752/40 (video door-phone system), the terminals SP_O and GND have to be connected to the external speaker (GL, GL in video module ref no. 1752/40)

| Description | Connection terminals |
| :---: | :---: |
| AUDIO ONLY <br> (SP_O and SP_I short-circuit) |  |
| VIDEO <br> (SP_O and GND connected to the external speaker) |  |

## INSTALLATION

Call module ref no. 1052/104 must be installed on Sinthesi S2 frame (not provided)
Jumper between GND and EXI simulate the door is closed.
Mentioned above GND and EXI terminals are used to connect open door contact.

## FLUSH MOUNTING

Call module ref no. 1052/104 can be used alone or in combination with following modules::

- camera module (ref no. 1752/40)
- camera module with 1 push button (ref no. 1752/41)


## Important:

The door unit module should be installed at a height of approximately $1.55 \div 1.60$ metres.
The module should not be illuminated from behind to make the calling module display easier to read. Never direct the module towards strong sources of light (e.g. the sun, lampposts, light bulbs, flashes or glare).


Fit the flush mounting box in line with the wall: it must not project..


Fit the module holder frame.


Fit the module in the frame.


Turn the frame round and connect wires..


INSTALLATION

- Adjust correct perpendicularity of the panel.
- Close the frame and fasten the screw A.
- Position the panel on the frame.
- Fasten screw B on screw A..


The wall cover frames are used to conceal possible irregularity of the wall surrounding the flush-mounting box. Embed the flush mounting box in the wall, position the wall cover frame and fasten the module holder lower screw. Frame fastening is completed by tightening the upper frame screw last.

## ACCESSORY INSTALLATION

FLUSH MOUNTED VERSION WITH WALL COVER FRAME
The wall cover frames are used to conceal possible irregularity of the wall surrounding the flush-mounting box. Embed the flush mounting box in the wall, position the wall cover frame and fasten the module holder lower screw. Frame fastening is completed by tightening the upper frame screw last.


## FLUSH MOUNTED VERSION WITH RAIN HOOD

Rain hoods are used to protect the calling module from the weather. Embed the flush mounting box in the wall, position the waterproof hood and fasten the module holder lower head. Hood fastening is completed by tightening the upper frame screw last.


WALL-MOUNTED VERSION WITH CASE AND HOOD
The case and hood is provided with frame and module holder. Fasten the hood to the wall by means of three bolts. Arrange the hole for passing the wires through the lower area of the casing and the head.

Fit the modules in the frame then position the panel..


## ELECTRICAL CONNECTIONS

All the electrical connections must be made by the man with basic knowledge of electrical engineering.
All connections must be made in accordance to attached schemes and with disconnected power supply.

## DALLAS ${ }^{\text {TM }}$ KEY READER <br> NR <br> REF. 1052/70



## GENERAL INFORMATION

## BASIC FEATURES

Key reader module is used for expand call module ref. no 1052/104 to feature DALLAS ${ }^{\text {M }}$ KEY READER

## MOUNT

Mounting the module ref no. 1052/70 is following

1. Press the module ref. no $1052 / 70$ to the handle until the latch clicks.

[^0]
## SPECIFICATION

| Supply voltage: | 5 V DC |
| :--- | :--- |
| Weight: | 0.1 kg |

RFID KEY/CARD READER WITH INFORMATION

## MODULE REF. NO. 1052/70-RF



## GENERAL INFORMATIONS

Module ref. 1052 / 70-RF is a device access control system designed for system MATIBUS SE. It can works independently (stand-alone mode). It supports key-rings and standard RFID cards UNIQUE 125 kHz, eg. Ref. no. 1052 / KZ. Front RFID module is made of aluminum and plexiglass. It allows placement of a list of tenants. Backlight color is red. When you open the door red off, and the backlighting changes to green. The module can adjust the brightness of the backlight. The module has configurable audible signal (buzzer). The signaling can be turned off entirely, or set to one of three levels of volume.
Module can connect an external button that will cause the behavior of the module in such a way as during application of the programmed key - so-called "opening button".
You can configure the module settings, add, delete and edit keys through software on the PC.

## DESCRIPTION OF TERMINAL BOARD

+ / ~ AC / DC (polarity independent).
$-/ \sim$ AC / DC (polarity independent).
NC relay contact normally closed.
COM Relay common.
NO Relay normally open.
PH terminal opening button (the postman button).


## TECHNICAL DATA

| Working temperature: | $-20^{\circ} \mathrm{C} \div+45^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Supply: | $8 \div 30 \mathrm{~V} \mathrm{DC}$ <br> $6 \div 21 \mathrm{~V} \mathrm{AC}$ |
| Power: | 1.2 W |
| Weight: | 0.14 kg |

## CONSTRUCTION



## PROGRAMING IN MATIBUS SE SYSTEM

The device connects to the panel with keyboard through connector J 1 and 5 -wire cable (included in the package with RFID module). Additionally, you should connect power to the module/panel ( +V and GND of the panel - reverse polarity protection). Please do not connect device with working power supply of the panel.
After connecting the module and turn on the power, it will be automatically detected by the system. In this mode, the keys are programmed by entering the programming menu AC adapter (point P505 of programming step). The data stored keys are remember in the power supply Ref. no. 1052 / 31R or 1052 / 33R.
Warning!
During operation in Matibus SE system, the jumper M/B on module ref. no. 1052 / MKD must be installed.

## SCHEME OF CONNECTION WITH THE PANEL



## PROGRAMING IN STAND-ALONE MODE USING „PROG" BUTTON

This mode is used eg. in analog systems. The keys are stored in the internal memory of the device. After applying the previously stored key/card module change the highlight color from red to green and the relay is "on" for the time specified by the user. In the module can be program maximum 2000 keys.

To access the programming menu, hold PROG for at least 1 second. Then the green LED next to the button PROG starts flashing and steady light every few seconds will flash together with the LED module of the information contained in the front. The blinking green LED signals a definite step in the programming menu.
Changing of program step followed by a short (less than 1 second) pressing the PROG button.
The module ref. no. 1052 / 70-RF has seven steps of programming. To exit the program at any time should be hold PROG button for at least 3 seconds. Automatic exit from the program menu will be after 60 sec. if there has been no response from the user. With PC application, you can enable / disable the option to enter the menu system.

## ADDING A NEW KEY

The LED flashes cyclically 1 time. After affixing the key to the reader follows his reading (signaled by illumination of green LEDs and red LEDs light turns off), and then save it to a memory. In the case of an erroneous entry key will be blinking red LEDs. Flashing red LEDs may be one of three states:

- key is already stored in memory,
- there was an error reading key
- reader's memory is full.


## REMOVAL SINGLE KEY

The LED flashes periodically 2 times. In this mode, affixing its stored key to the reader will light up green LEDs while extinguishing the red LEDs and remove it from the memory. Flashes red LED indicates that the key was not found written in the memory, or there is an incorrect reading.

## REMOVAL ALL KEYS

The LED flashes 3 times cyclically. In this mode, followed by the removal of all keys stored in the reader's memory. Quadruple application to the reader any key (stored by the reader or not) will be deleted with the memory of all stored keys.

## ADJUSTING BRITHNESS OF THE BACKLIGHT

The LED flashes cyclically 4 times. In this step, applying to the reader any key will increase the brightness of the backlight for 5 levels of brightness. Increasing the brightness occurs at intervals of 0.5 seconds. Once the maximum brightness level drops to its minimum value, and the whole cycle repeats itself.

## ADJUSTING THE TIME OF SWITCHING RELAY

The LED flashes cyclically 5 times. The default time of the relay is 1 sec . Each application key to the reader extends the time that the relay by 1 sec . Touchdown key is signaled by momentary lighting up of green LEDs. The maximum duration of the relay is 20 seconds.

## ADDING „MASTER" KEY

The LED flashes cyclically 6 times. In this step, you can add the socalled "MASTER" key. Applying the key to the reader will save the key as the MASTER key. Only one key can be the key to MASTER. This key can be configured module ref. 1052 / 70-RF without unscrewing it and pressing the button PROG. More action MASTER
key is in the "PROGRAMMING IN STAND-ALONE MODE USING "MASTER" KEY".

## BUZZER VOLUME

The LED blinks 7 times cyclically. In this step, you can change the volume of the buzzer. Applying the key to the reader will change the volume of the buzzer. Last played the buzzer volume is stored. To turn off the buzzer, remove the jumper BU.

## PROGRAMMING IN STAND-ALONE MODE USING "MASTER" KEY

Application to module ref. 1052 / 70-RF MASTER key will enter the programming mode. While working in programming mode any another application of MASTER key will change the programming step. After going through the whole cycle of programming menu (7 steps) will exit the programming menu. Active step programming menu flashing LEDs indicate information module. Only in the fourth step of the programming mode - "Adjusting brightness of the backlight" LEDs do not blink.

Warning:
Changing the settings for each step programming menu, make different key than the MASTER key.
MASTER key will not turn on the relay as normal key. Record Setting the backlight brightness, buzzer volume and time of the relay takes place only after exiting the programming mode. Adding and deleting keys takes place while application to the module..

## OPENING BUTTON PH

Module ref. 1052 / 70-RF can connect an external opening button. It should be connected into terminals "PH" and "- / ~". Button will turn on the relay the same as application programmed key to the reader.

## JUMPER M/B

During operation in Matibus SE system, the jumper M/B on module ref. no. 1052 / 70-RF must be installed..

In stand-alone mode jumper status does not matter.

## JUMPER BU

The jumper is used to enable / disable the buzzer. Founded jumper activates the buzzer. Removed the jumper off the buzzer.

## POWER

In stand-alone mode module must be supplied with DC voltage range $8 \mathrm{VDC} \div 30 \mathrm{~V}$ DC or alternating voltage with a range of 6VAC $\div 21 \mathrm{VAC}$.

## MOUNT

Mounting the module ref no. 1052/70-RF is following

1. Press the module ref. no $\mathbf{1 0 5 2} / \mathbf{7 0}-\mathrm{RF}$ to the handle until the latch clicks.

2. Plug module to iBUTTON socket in call module ref. no 1052/104

CAMERA MODULE FOR MATIBUS SE SINTHESI CALL MODULE REF NO. 1752/40


## GENERAL INFORMATION

Camera module ref no. nr ref. 1752/40 is designed for digital doorphone system MATIBUS SE . This module have built-in signal adapter for differential video signals.Camera module is equipped also with speaker. This speaker have to be connected if used with call module ref no. 1052/104

Camera call module is available in two versions
Ref no. 1752/40 Camera module with speaker.
Ref no. 1752/41 Camera module with 1 push button and speaker.
More detailed information about above parts you can find on our website: www.miwiurmet.com.pl

## DESCRIPTION OF TERMINAL BOARD

R2 Video input voltage +18 V DC
T Camera on control.
A Video signal output (twisted-pair line).
B Video signal output (twisted-pair line).
+TC Camera power (+).
R1 Video input voltage GROUND.
GL Speaker terminal.
GL Speaker terminal.

## TECHNICAL DATA

| Sensor: | CCD 1/3" |
| :--- | :--- |
| Light: | White diode LED |
| Lens: | $\mathrm{f}=4 \mathrm{~mm} \mathrm{~F}=3,5$ |
| Shutter: | fixed |
| Min. illuminance level | 10 Lux |
| Input voltage | $14-18 \mathrm{Vdc} \max$ |
| Max current consumption | 180 mA |
| Camera field of view | to adjust |
| Working temperature | $-5^{\circ}+50^{\circ} \mathrm{C}$ |
| Dimensions: $(\mathrm{h} \times \mathrm{w})$ | $90 \times 125 \mathrm{~mm}$ |

## IMAGING ANGLES

Camera field of view can be adjusted. To do this use special dial in the back of module..
Pivoting angles of the camera with respect to central position are:

- VERTICAL $+10^{\circ}-15^{\circ}$
- HORIZONTAL+ $10^{\circ}-10^{\circ}$


HORIZONTAL


VERITCAL


## INSTALLATION

NAME TAG REPLACEMENT (MODULE REF NO. 1752/41)
There are different types of name tag:
White
for provisional writing with a felt-tip pen (standard)
Anthracite for engraving (standard)

KOWALSKI


KOWALSKI

Proceed as follows to insert the name tags in the specific housing:

- Remove the frame (if installed) and remove the extractable front.
- Fit the name tags.

Reposition the extractable front


RFID KEY/CARD READER WITH INFORMATION MODULE REF. NO. 1052/MKD


## GENERAL INFORMATIONS

Module ref. 1052 / MKD is a device access control system designed for both systems: MATIBUS SE and BASIC. It can works independently (stand-alone mode). It supports key-rings and standard RFID cards UNIQUE 125 kHz, eg. Ref. no. 1052 / KZ. Front RFID module is made of stainless steel and plexiglass. It allows placement of a list of tenants. Backlight color is red. When you open the door red off,
and the backlighting changes to green. The module can adjust the brightness of the backlight. The module has configurable audible signal (buzzer). The signaling can be turned off entirely, or set to one of three levels of volume.
Module can connect an external button that will cause the behavior of the module in such a way as during application of the programmed key - so-called "opening button".
You can configure the module settings, add, delete and edit keys through software on the PC.
The security module is a patent screw fastening the front panel. For assembly of the needed housing ref. no. 5025 / OPD1.. 4 depending on the configuration of the module / panel.

## DESCRIPTION OF TERMINAL BOARD

+ / ~ AC / DC (polarity independent).
- / ~ AC / DC (polarity independent).

NC relay contact normally closed.
COM Relay common.
NO Relay normally open.
PH terminal opening button (the postman button).

## DANE TECHNICZNE

| Working temperature: | $-20^{\circ} \mathrm{C} \div+45^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Supply: | $8 \div 30 \mathrm{~V} \mathrm{DC}$ |
| Power: | $6 \div 21 \mathrm{~V} \mathrm{AC}$ |
| Weight: | 1.2 W |

## CONSTRUCTION



## PROGRAMING IN MATIBUS SE SYSTEM

The device connects to the panel with keyboard through connector J 1 and 5 -wire cable (included in the package with RFID module). Additionally, you should connect power to the module/panel (+ V and GND of the panel - reverse polarity protection). Please do not connect device with working power supply of the panel.
After connecting the module and turn on the power, it will be automatically detected by the system. In this mode, the keys are programmed by entering the programming menu AC adapter (point P505 of programming step). The data stored keys are remember in the power supply Ref. no. 1052 / 31R or 1052 / 33R.

## Warning!

During operation in Matibus SE system, the jumper M/B on module ref. no. 1052 / MKD must be installed.

## SCHEME OF CONNECTION WITH THE PANEL

PANEL
REF, 1052/PR100
R REF, 5025/OPD3
REF. 1052/MKD

## PROGRAMING IN BASIC SYSTEM

The device connects to the panel with keyboard through connector J 1 and 5 -wire cable (included in the package with RFID module). Additionally, you should connect power to the module/panel (+ V and GND of the panel - reverse polarity protection). Please do not connect device with working power supply of the panel.
After connecting the module and turn on the power, it will be automatically detected by the system. In this mode, the keys are programmed by entering the programming menu of the panel. The data stored keys are remember in the Basic panel.

## Warning!

During operation in BASIC system, the jumper M/B on module ref. no. 1052 / MKD must be not installed.

SCHEME OF CONNECTION WITH THE PANEL


## PROGRAMING IN STAND-ALONE MODE USING „PROG" BUTTON

This mode is used eg. in analog systems. The keys are stored in the internal memory of the device. After applying the previously stored key/card module change the highlight color from red to green and the relay is "on" for the time specified by the user. In the module can be program maximum 2000 keys.

To access the programming menu, hold PROG for at least 1 second. Then the green LED next to the button PROG starts flashing and steady light every few seconds will flash together with the LED module of the information contained in the front. The blinking green LED signals a definite step in the programming menu.
Changing of program step followed by a short (less than 1 second) pressing the PROG button.
The module ref. no. 1052 / MKD has seven steps of programming. To exit the program at any time should be hold PROG button for at least 3 seconds. Automatic exit from the program menu will be after 60 sec . if there has been no response from the user. With PC application, you can enable / disable the option to enter the menu system.

## ADDING A NEW KEY

The LED flashes cyclically 1 time. After affixing the key to the reader follows his reading (signaled by illumination of green LEDs and red LEDs light turns off), and then save it to a memory. In the case of an erroneous entry key will be blinking red LEDs. Flashing red LEDs may be one of three states:

- key is already stored in memory,
- there was an error reading key
- reader's memory is full.


## REMOVAL SINGLE KEY

The LED flashes periodically 2 times. In this mode, affixing its stored key to the reader will light up green LEDs while extinguishing the red LEDs and remove it from the memory. Flashes red LED indicates that the key was not found written in the memory, or there is an incorrect reading.

## REMOVAL ALL KEYS

The LED flashes 3 times cyclically. In this mode, followed by the removal of all keys stored in the reader's memory. Quadruple application to the reader any key (stored by the reader or not) will be deleted with the memory of all stored keys.

## ADJUSTING BRITHNESS OF THE BACKLIGHT

The LED flashes cyclically 4 times. In this step, applying to the reader any key will increase the brightness of the backlight for 5 levels of brightness. Increasing the brightness occurs at intervals of 0.5 seconds. Once the maximum brightness level drops to its minimum value, and the whole cycle repeats itself.

## ADJUSTING THE TIME OF SWITCHING RELAY

The LED flashes cyclically 5 times. The default time of the relay is 1 sec. Each application key to the reader extends the time that the relay by 1 sec . Touchdown key is signaled by momentary lighting up of green LEDs. The maximum duration of the relay is 20 seconds.

## ADDING „MASTER" KEY

The LED flashes cyclically 6 times. In this step, you can add the socalled "MASTER" key. Applying the key to the reader will save the key as the MASTER key. Only one key can be the key to MASTER. This key can be configured module ref. 1052 / MKD without unscrewing it and pressing the button PROG. More action MASTER key is in the "PROGRAMMING IN STAND-ALONE MODE USING "MASTER" KEY".

## BUZZER VOLUME

The LED blinks 7 times cyclically. In this step, you can change the volume of the buzzer. Applying the key to the reader will change the volume of the buzzer. Last played the buzzer volume is stored. To turn off the buzzer, remove the jumper BU.

## PROGRAMMING IN STAND-ALONE MODE USING "MASTER" KEY

Application to module ref. 1052 / MKD MASTER key will enter the programming mode. While working in programming mode any another application of MASTER key will change the programming step. After going through the whole cycle of programming menu (7 steps) will exit the programming menu. Active step programming menu flashing LEDs indicate information module. Only in the fourth step of the programming mode - "Adjusting brightness of the backlight" LEDs do not blink.

## Warning:

Changing the settings for each step programming menu, make different key than the MASTER key.

MASTER key will not turn on the relay as normal key. Record Setting the backlight brightness, buzzer volume and time of the relay takes place only after exiting the programming mode. Adding and deleting keys takes place while application to the module..

## OPENING BUTTON PH

Module ref. 1052 / MKD can connect an external opening button. It should be connected into terminals "PH" and "- / ~". Button will turn on the relay the same as application programmed key to the reader.

## JUMPER M/B

During operation in Matibus SE system, the jumper M/B on module ref. no. 1052 / MKD must be installed..
During operation in BASIC system, the jumper M/B on module ref. no. 1052 / MKD must be not installed.

In stand-alone mode jumper status does not matter.

## JUMPER BU

The jumper is used to enable / disable the buzzer. Founded jumper activates the buzzer. Removed the jumper off the buzzer.

## POWER

In stand-alone mode module must be supplied with DC voltage range $8 \mathrm{VDC} \div 30 \mathrm{~V}$ DC or alternating voltage with a range of 6 VAC $\div 21 \mathrm{VAC}$.

To attach the label to the names (information module), follow these steps:

1. Remove the 4 nuts M3 pressing the PCB to front panel. Note under the nuts are pads.
2. Remove the pads.
3. Gently remove the PCB (PCB - plate with electronics).
4. Insert the card with an appropriate description in the bay plexiglass.
5. Put the PCB on plexiglass. Be sure to tag plexiglass positioning in the recess positioning the PCB. Positioning marks located on the two opposite ends of the PCB. Please also note on the correct placement of the PCB. Indentation at the bottom of the PCB should make the hole for the mounting screw.

6. Apply pads and gently tighten the 4 nuts PCB to the front.


INSTALLATION OF MODULE 1052/MKD IN EG. 1052 / 101D PANEL (A SIMILAR PROCEDURE WILL BE FOR THE OTHER PANELS WITH THE MODULE INFORMATION


To mount the module follow the steps below.

1. Turn off power to the keyboard.
2. Remove the information module by removing the screw patent.
3. Remove the keyboard module by loosening the screws patent.
4. Disconnect the information from the keyboard module.
5. Connect to the terminals $+/ \sim$ and $-/ \sim$ DC (best terminals + V, GND panel - Reverse polarity protection).
6. Connect the J1 socket one end of the RFID module

6 - conductor cable, while the other end into the socket on the panel (red socket). Please note that the plug can be put only in one direction (the tabs in the plug should cover the hole in the PCB keyboard with slot).
7. Place the keyboard in the housing module. Then fasten it with screws patent.
8. Place the housing RFID module. Then tighten the screw him patent.
9. Turn on the power of the keyboard.

EMERGENCY CALL MODULE REF NO. 1052/1122


## GENERAL INFORMATION

Emergency call module ref no. 1052/1122 is designed for digital door-phone system MATIBUS ME. and is based on MIKRA call module. Emergency call module could be wall or flush mounted (accessories have to be bought separately - flush mounted with dedicated flush mounting box ref no. 1122/60)
Emergency call module has a compact design and backlit green button where you can place the name tag.
Emegrency call module works only in systems with dis-dec devices ref no. 1052/54RM or ref no. 1052/54R and switchboard ref no. 1052/40R
This call module allow only estabilish a connection to the switchboard.
The emergency call module does not suport electric lock.

## DESCRIPTION OF TERMINAL BOARD

RD Input voltage (positive)
R1/6 Input voltage (ground
1 Speaker call module
2 Micropohone call module
Call signal CP

## SPECIFICATION

| Working temperature: | $-10^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Dimensions (L. $\times$ W. $\times$ D.): | $99 \times 185 \times 20 \mathrm{~mm}$ |
| Input voltage | 18 V DC |
| Protection degree | IP 44 |
| Weight | $0,5 \mathrm{~kg}$ |

## CONFIGURATION

Emergency call module have to be proper connected and configured to the dis dec device.
Configuration is the same like in case of configuring dis dec device except step 5.09 power supply configuration menu.
Output dis-dec device where is connected emergency call module have to be set for support emergency call module. To do this go to sub program Pr3 in step 5.09 power supply configuration menu and set value to 4 .

Example:
Configuration emergency call module is connected to the OUT C dis-dec device. Dis-dec device is connected to the riser 1 power supply. Switchboard function is active and dis-dec support in configuration power supply is active.

To configure emergency call module like above follow steps: Address dis-dec devices (step 5.08).
Go to step 5.09 power supply configuration menu.
On the display you will see:


Where:
C Riser number (1 or 2).
FFF Receiver physical address (after addressing).
Enter 13 (riser no 1, receiver physical address: 3)
Confirm by \#.
On the display you will see:


Enter program number: 3 and confirm by \#.


Enter parameter value: 4 and confirm by \#.


After confirmation system return to main screen:


Exit from this configuration step by *
NOTICE!
Actual value is not presented when enter to sub-program in this step.

Always after change configuration steps P010, P011, P508, P509 it's necessary to power down all system for approximately 60sec

Simultaneously with the emergency call module within a dis-dec device can operate other receivers (connected to the other outputs). The installation may be more than one emergency call module..

## USER MANUAL

## CALLING TO SWITCHBOARD STATION

To call the switchboard station simply press any button on emergency call module.
When switchboard stadion is busy or communication in riser line is estabilished fast beeping sound will be generated (busy tone).Additionaly when switchboard stadion is busy on the LCD screen information massage of the call attempt will be shown. When switchboard stadion is not on or not responding (not connected) you will hear single error tone.

## CALING TO EMERGENCY CALL MODULE FROM SWITCHBOARD STATION

You can call to the emergency call module from the switchboard station. When calling the emergency call module will call for approx. 1 sec , and then automatically will be activated audio. The call is done by entering the number of the alarm panel in the switchboard station.

## MOUNTING

Follow below steps to Mount of the emergenecy call module Unscrew C screw on the bottom emergency call module and open cover


Fig. 1 Opening emergency call module
It is suggested to install emergency call module at the height show below, according to the system to be realized.


Fig. 2 Installing call module.

Connect the wires to the coressponding terminals


Fig. 3 Connecting wires

Fit the name holders


Rys. 4 Installing description window.


Rys. 5 Filling name tag

Close cover emergency call module.


Rys. 6 Closing emergency call module cover.
Screw patent screw.
In case of flush mounteed it is neccessary to use flush mounting box ref no. 1122/60 (sold separately)

Emergency call module equippment:


## ELECTRICAL CONNECTIONS

All the electrical connections must be made by the man with basic knowledge of electrical engineering.
All connections must be made in accordance to attached schemes and with disconnected power supply.

HOUSE PHONE
REF. 1132/620


## BASIC FEATURES

## BASIC FUNCTIONS

Conversation
Door opening.
Door phone $1132 / 620$ is provided with LED. LED indicates calling signal. Especially useful in MUTE mode.

## CONNECTION TO THE SYSTEM

House phone is connecting to the 2 wire installation. House phone ref. 1132/620 can cooperate with house phones ref. 1131/520 and 1132/520.
WARNING: Door phone ref. 1132/620 works with 7V voltage (please set parameter 1 in the step 110 of programming mode)

DESCRIPTION OF TERMINAL BOARDS
$+L \quad$ Data line.
-L GND (OL).
T:68 Additional button connection (68 Ohm)
T:180 Additional button connection (180 Ohm)

## PROGRAMMING



The house phone physical address is set with jumpers. We can set the phone number from 1 to 255 . The first jumper (from right) is the number 1. We use only first 8 jumpers (from right) and the other two are used for testing house phone. Number of house phone is set in binary code, as described on the PCB. Each jumper founded increases the number of numbers corresponding to house phone. Below are details on the sample settings jumpers. For an installation with only main call modules and one main power supply ref. 1052/31A (the maximum number of users 510) code house phones equal to the value set by jumpers in binary code (for riser nr.1) and code calls will be equal to the number set by jumpers plus the number of 255 (for riser No.2).

| Ustawienie zworek | Physical address |
| :---: | :---: |
| $\begin{array}{rl} \hline & 128 \\ \hline 0 & 6432 \end{array} 16$ | 1 |
|  | 25 |
|  | 12 |
| 1286432168421 <br>  | 240 |
|  | 129 |

CALL VOLUME ADJUSTMENT

| Settings of J2. | Call volume. |
| :---: | :---: |
| $\begin{array}{ccc}\circ & \circ & \circ \\ \square & \circ & \circ\end{array}$ | No jumper - MUTE. During calling signal LED is blinking. |
| 6 $\circ$ 0 <br> - $\circ$ $\circ$ | Maximum calling signal. |
| 0 1 $\circ$ <br> $\square$ $b^{\prime}$ $\circ$ | Medium calling signal. |
|  | Minimum calling signal. |

HOUSE PHONE
REF. 1132/621


## BASIC FEATURES

Door phone ref. 1132/621 is based on ref. 1132/620, but it is provided with additional button, and ready for fitting other 6 supplementary buttons.
Additional button can be used for: calling switchboard, control NONC relay etc.

Additional button is connected with terminals T:68 and -L and serves to control power supply terminals OC1 and OC2 (depending on riser). If terminals of power supply OC1 and OC2 are connected to EI, system will control NO-C-NC relay in the call module.

MIMI

DOORPHONE SIGNO REF. NO. 1140/522


## BASIC FEATURES

Doorphone ref. 1140/522 is an advanced tool dedicated to work for digital call system MATIBUS SE equipped with a switchboard station. Installation is simple and fast, because all the vertical wires of the call system are connected to the connector inside the doorphone.

Doorphone ref. 1140/522 is available in white (with piano gloss). It is equipped with a button to open the door and two additional button. It has the possibility to add an extra function button ref. 1140/55 (in total there may be up to 3). These buttons are independent of each other and can be used for different additional functions, e.g.:
Calling switchboard station,
Control power supply terminals OC1 and OC2,
Other features (which require additional wires to connect to the doorphone).
Doorphone can be table mounted using kit ref. 1140/50.

## BASIC FUNCTION

- Conversation.
- Opening door.
- Calling switchboard station or control power supply OC terminals
- Informing the user about the switchboard station status when it's called from the doorphone.
- Additionally doorphone has a built in LED indicating the call and the three-tier system volume.


## PODŁ ĄCZENIE DO SYSTEMU

For a standard installation process using 2 wire installation, doorphone ref. 1140/522 should be connected to a common vertical LU line.

## WARNING!

Doorphone ref. 1140/522 are not compatible with doorphone ref. 1131/620, ref. 1132/620 and ref. 1132/520 and their varieties (they can't be fitted with them within the same line LU).
Doorphone ref. 1140/522 only work with a power supply Ref. 1052/31R and ref. 1052/33R.
For proper operation of a doorphone ref. 1140/522 is required to set " 1 " in step 0.10 or 0.11 of the power supply parameter programming menu.
Doorphone address must be different from "0". Doorphone ref. 1140/522 can not operate at the same physical and logical address within the same riser.

## DESCRIPTION OF TERMINAL BOARDS

LU
OL
3D
T2
T1
OL
+W
-W
MA

Data Line.
GND.
External signal Line (local door bell).
Function key No. 2.
Function key No. 1. GND of function key „," of duplicate call (collector optocoupler) ," " of duplicate call (emiter optocoupler) MultiAdres - terminal, which connects uniphones working on a common address call

Grounds of OL are conected to each other In uniphone
OPIS ZŁACZ
J1 Address number jumpers.
J2 Service interface.
ZW1 Master/Slave jumper

## PROGRAMMING



Doorphone can be programmed using jumpers. Number from 1 to 127 (connector J1) can be set. It is a physical address of the doorphone. First jumper (top) is the number of 1, last one (first from the bottom) is the number of 64. Each jumper increases the address number by the number corresponding to the jumper.
Table with some examples was shown below.
The logical codes for LU1 line by (default is 25) equals the value set by jumpers in binary code. For LU2 line logical codes begin default at 26 and equals the value set by jumpers plus the value with was set in option 7.04 in the power supply programming menu (by default is 25). For example: physical address "1" of doorphone in LU2 equals logical codes 26. Therefore, system has the ability to assign logical code to any doorphone in the system.

| Jumper settings | Doorphone address number |
| :---: | :---: |
|  | 1 |
|  | 12 |
|  | 25 |
| $\begin{aligned} & 6432 \end{aligned} 16$ | 70 |

## COOPERATION PARALLEL UNIPHONES

It is possible to connect up to 4 uniphones ref. 1140/522 on the one call. To uniphones will be call on the same logical address with configuration bellow:

- Set the same physical address on each home uniphone.
- Uniphones connect together cable plugged into the terminal MA,
- In anyone of uniphones jumper Master / Slave must be established.
- In all other unifonach jumper Master / Slave must be removed.

Then calling the address, eg. 5 will call all home stations connected to each other, and the call will be available at the home station, where the receiver is lifted as first.

## CALL VOLUME ADJUSTMENT

Under the hanger to the handset is a 3-position lever to adjust the volume of call signal


## USER MANUAL

## CALLING TO SWITCHBOARD STATION

To call the switchboard station pick up the handset and press the function key number 1 . While waiting for the call the speaker of the doorphone will generate a slow beeping sound. In case of occupation of the switchboard station fast beeping sound will be generated (busy tone) and on the LCD screen of the switchboard station information massage of the call attempt will be shown.

## FEEDBACK CONNECTION TO PANEL

The function allows the linking of the uniphone to one selected in the programming menu panel. The panel can be located in the entrance of the main and supplementary. To function to work, you must set point 113 and 715 programming menu in Power Supply 1052/31..33R connected to the phone rise.

This function is performed by pressing the function button number 2 when the handset is lifted. The call will be automatically disconnected after the time set in section 204 in programming menu.

Feedback connection will be not proceed when:

- During conversation between panel and uniphone In the rise.
Panel which ID is specified in section 715 Power Supply is busy. Progress call back from another receiver in the rise.

Disconnects can occur by:

- unsuspension handset uniphone.
- key "*" pressed on the panel.


## CONNECTOR OC1

Pressing the function key number. 1 when the handset is on-hook or during a conversation will turn on OC1.

## CONNECTOR OC2

Pressing the function key number. 2 when the handset is on-hook or during a conversation will turn on OC2.

## LOCAL FEATURE DOOR BELL

Short circuit to ground terminal 3D and OL will generate an doorbell in selected home station.

## DUPLICATE CALL

Terminals +W and -W this optocoupler output terminals, active during the call signal and the local signal to the door bell, that can be used to control for example. Chime or siren light. The maximum permissible DC voltage between terminals +W and -W is 30 V . the maximum allowable current flowing through the terminals + In and In is 50 mA .

## OPENING ELECTRIC LOCK WITHOUT NEED TO PICK-UP THE HEADPHONE

By pressing the button to open the door during a call from the panel, the unit will automatically lead to the opening of the door (there is no such possibility in the ordinary home station, for example. Ref. 1132/620), and then automatically disconnects from the panel.

## CHANGE RINGING TONE IN UNIPHONE

This function allows you to select one of six tones, call (ringing).
To change the ring tone:
Press and hold the key to open the door. Hold down the button to open the door press the function key No. 1 (lower button) - uniphone should generate a ring tone. Letting go and then pressing the function button No. 1 there is a change of tone ringing call.
Saving the ring as an active is after release the key function key number. 1 for approx. 2 seconds

## INSTALATION

SIGNO home station can be mounted on a wall or set on a desk using an inclined base.

The device is designed for operation inside buildings. They should be installed in a dry place.

The device is not impervious to dust.

## WALL MOUNTING

Doorphone should be mounted at the height of 1,55 meters from the ground.

To mount the doorphone on the wall you should follow the steps below:

1. Spread the doorphone cover releasing the plastic latches using a screwdriver (Fig. 1).


Fig. 1
2. Attach the doorphone to the wall using two supplied bolts (Fig. 2).
3. Drag wires through the hole in the back of doorphone.
4. Shorten the wires to the required length and remove isolation from their ends


Fig 2.
5. Connect the cable ends to the appropriate terminals of a doorphone.
6. Assemble the two parts of the housing (Fig. 3).

POWER SUPPLY MASTER/SLAVE
REF. 1052/33R (REF. 1052/31R IS ONLY MASTER)


## GENERAL INFORMATION

The power supply ref. 1052/33R is a basic power supply of system MATIBUS $_{\text {SE }}$. It allows:
Support for two risers, each one can have up to 255 doorphones (a total of 510 doorphones).
Software support up to 240 keyboards on additional line.
Software support up to 240 keyboards on main line.
Software support up to 255 power supplies.
Remember system settings.
Remember up to 64 general codes.
Remember up to 510 individual codes.
Remember up to 1500 Dallas key.
Range of the physical codes $1 . . .255$ (each riser).
Range of the physical codes $1 \ldots 9999$.
Switchboard station support.
Energetically support for 1 keyboard.
Diagnostic LEDs.
Easy software upgrade

## FACTORY SETTINGS OF LOGICAL CODES

By default power supply is delivered with first 25 logical codes programmed for each channel. Number of codes can be increased by changing parameters in panel programming menu (steps 7.04 and 7.05). In order to automatically increase number of supported logical codes user must respectively modify the parameters in steps 7.04 and 7.05 , and then generate the codes by entering the programming menu step 4.04. By default channel 1 supports logical codes of 1-25, while channel 2 supports logical codes of 26-50.
With this settings system supports 255 doorphones, but automatically can generate only 50 logical codes. Despite the set parameters in steps 7.04 and 7.05 , you can manually generate the logical codes for 255 door phones.
The logical codes for LU1 line by (default is 25) equals the value set by jumpers in binary code. For LU2 line logical codes begin default at 26 and equals the value set by jumpers plus the value with was set in option 7.04 in the power supply programming menu (by default is 25). For example: physical address "1" of doorphone in LU2 equals logical codes 26. Therefore, system has the ability to assign logical code to any doorphone in the system.

## CONFIGURING AND UPGRADING SOFTWARE

In the upper edge of the label there is a power connector MBseStudio which allows to connect device with computer. Using appropriate software "MBse Studio" user can configure, reconfigure system and also upgrade software. Upgrade can be done with „MIWI-UPGRADE" software. All configuration is stored in external memory, so upgrading process doesn't erase any settings of the device.
In the MASTER-SLAVE system, power supply configuration can be done with keyboard plugged to additional input (secondary bus). Please note that if you change setting (eg: times) in only one power supply, these changes only apply to this power supply (locally). In case of Main Entrance, keyboard takes over parameters of power supply to which door phone currently used for conversation is
connected to. These parameters are for example time, electrical lock settings etc. Only MASTER power supply can be programmed through Main Entrance.

CONSTRUCTION


## DESCRIPTION OF TERMINAL BOARD

$\sim 0 \quad$ Input voltage ~0 V.
~230 Input voltage ~230 V AC.
DG+ Main bus data line ( $D$ in case of MATIBUS ${ }_{S E}$ communication module; $\mathrm{D}_{+}$in case of RS485 communication module).
DG- Main bus data line (D- in case of RS485 communication module).
LG Main bus voice line.
OL GND.
DD+ Secondary bus data line ( $D$ in case of MATIBUS ME communication module; $\mathrm{D}_{+}$in case of RS485 communication module).
DD- Secondary bus data line (D- in case of RS485 communication module).
LD Secondary bus voice line.
OC1 Open collector output.
OC2 Open collector output.
AC1 Output 12 V AC.
AC2 Output 12 V AC.
EO Open door output.
El Electric lock or relay control input.
+20 Output +20 V DC.
LU2 Doorphones line (riser II).
OL GND.
LU1 Doorphones line (riser I).

## DIAGNOSTIC

Two LEDs indicate the status of the power supply. When green LED is turned on with solid light it means that voltage is present and microprocessor is working properly. When green LED is flashing it means that device is receiving data.
Single flash of red LED and then break - it means short-circuit on first riser of door phones.
Double flash of red LED and then break - it means short-circuit on second riser of door phones.
Triple flash of red LED and then break - it means short-circuit on both risers of door phones

## COMMUNICATION MODULE CONFIGURATION

On installations where all devices have built-in RS485 communication module (terminals $D+$ and $D$-) it is recommended to use RS485 communication mode.
On mixed installations (with power supplies ref. 1052/33 and ref. $1052 / 33 R$ ) it is required to use power supply ref. 1052/33R as a MASTER power supply. Please note to set communication mode in main channel to Extended (step 9.04). Communication mode in secondary channel should depend on keyboard's type attached to this channel. In case of use ref. 1052/1x panels family or digitaliser
ref. 1052/7 it is required to use Normal or Extended communication mode. In case of use ref. 1052/10x panels family or digitaliser ref. $1052 / 7 \mathrm{R}$ it is required to use RS485 communication mode.

TECHNICAL DATA

| Input voltage: | 230 V AC |
| :--- | :--- |
| Power: | 20 VA |
| Output voltage: |  |
| Output 0L, +20 | $20 \mathrm{~V} / 0,4 \mathrm{~A} \mathrm{DC}$ |
| Output AC1, AC2 | $12 \mathrm{~V} / 0,8 \mathrm{~A} \mathrm{AC}$ |
| Operating temperatur: | $-5^{\circ} \mathrm{C} \div+45^{\circ} \mathrm{C}$ |
| Protection | Thermical |
| Dimensions: |  |
| Length |  |
| Width | 180 mm |
| Deep | 90 mm |
| Weight: | 75 mm |
| Lenght is equal to 10 DIN modules. | $0,85 \mathrm{~kg}$ |

The device is intended for indoor use. It should be installed in a dry and airy places.

## VALUES OF CURRENT *

## NOTE!

Below values relate to doorphones current: ref. 1131/520,
ref. 1131/521, ref. 1131/620, ref. 1131/621, ref. 1132/520,
ref. 1132/521, ref. 1132/520-12, ref. 1132/521-12, ref. 1132/620, ref. 1132/621.

| Lp. | Event | Values of <br> current in <br> door phone's <br> line |
| :--- | :--- | :--- |
| 1 | Idle state | $1-6 \mathrm{~mA}$ |
| 2 | Conversation with uniphone <br> usage (silence in handset) | $80-90 \mathrm{~mA}$ |
| 3 | Conversation (silence in handset) | $100-120 \mathrm{~mA}$ |
| 4 | Pressing of functional button <br> $180 \mathrm{R} \mathrm{(line} \mathrm{voltage} \mathrm{7} \mathrm{V)}$ | $60-72 \mathrm{~mA}$ |
| 5 | Pressing of functional button <br> 180 R (line voltage 12 V) | $30-40 \mathrm{~mA}$ |
| 6 | Pressing of functional button <br> 68 R (line voltage 7 V) | $85-95 \mathrm{~mA}$ |
| 7 | Pressing of functional button <br> 68 R (line voltage 12 V) | $140-160 \mathrm{~mA}$ |

Value of current depends largely on the lenght of of the line of doorphones.

Values of current from 1,4,5,6 and 7 points you can see in 6.03 or 6.04 of programming menu (depending on the riser).

Values of current form 2 and 3 points you can see by changing parameter to 1 in step 9.02 of programming menu.
Value of current during conversation is shown on panel's display.

## INSTALLATION

Power supply can be mounted on a DIN rail or screwed to the base with use of two screws or bolts with minimum dimensions of $\phi 4 / 50 \mathrm{~mm}$. Mounting of power supply is shown on Figure 1a and 1b. To mount power supply on a DIN rail it is required to pull blocking cotter (use flat screwdriver), insert power supply on DIN rail, and release the cotter. After mounting power supply on DIN rail it can be protected against disassembly by fixation of cotter to the housing with a $\phi 4 / 36 \mathrm{~mm}$ screw nut. It is shown on Figure 2.


Fig. 1a: Mounting on DIN rail.


Fig. 1b: Mounting on DIN rail.


Fig. 2 Protecting against disassembly.
Mounting by screwing power supply to the surface is shown on Figure 3.


Fig. 3 Mounting on surface.

## DEVICE LOCATION

All devices should be installed in dry and airy places. It is recommended to install these devices in special boxes designed for this purpose.
Equipment should be separated from near electric, phone, antenna lines, etc.

## WIRES

To the single connector can be attached a wire with a maximum diameter of $1,5 \mathrm{~mm}^{2}$. For connections, use cables with sufficient cross section given in the tables below. Do not twist the wires in order to increase their cross-section.
Using a link cable, please note that the unisolated end of the wire is properly twisted and will not cause short circuits between adjacent terminals.
If stiff cables are used please note that device is mounted properly that wires will not cause the detachment of device or damage of terminals.
All cables should be tied together and properly labeled

## ELECTRICAL CONNECTIONS

All the electrical connections must be made by the man with basic knowledge of electrical engineering.
All connections must be made in accordance to attached schemes and with disconnected power supply.

The electrical installation in the building should contain multipolar connector adapter having at least 3 mm of space between all the poles. Supply voltage can be attached only if all connections has been made and after fixing the protective covers of terminals

REF. 1052/20


## BASIC FEATURES

The additional power supply ref. 1052/20 is used in the systems with multi entrances structure only for power modules call.

## DESCRIPTION OF TERMINAL BOARDS

| $\sim 0$ | Input voltage ~0 V. |
| :---: | :--- |
| $\sim 230$ | Input voltage $\sim 230 \mathrm{~V}$. |
| $\sim 115$ | Input voltage $\sim 115 \mathrm{~V}$ |
|  |  |
| 0 | GND for DC output voltage. |
| +20 | Output voltage +20 V DC. |
|  |  |
| $\sim 0$ | Output voltage AC |
| $\sim 12$ | Output voltage $\sim 12 \mathrm{~V}$ AC |

## TECHNICAL SPECIFICATION

| Input voltage | 230 V AC <br> Or <br> 115 V AC |
| :--- | :--- |
| Power | 20 VA |
| Output voltage |  |
| $0,+20$ | $20 \mathrm{~V} \mathrm{DC} 0,.8 \mathrm{~A}$ max. |
| Operating temperature | $-5^{\circ} \mathrm{C} \div+45^{\circ} \mathrm{C}$ |
| Protectio | Fuse 100 mA |
| Dimensions |  |
| Length | $126 \mathrm{~mm} \mathrm{(7DIN)}$ |
| Width | 90 mm |
| Deep | 75 mm |

## VIDEO POWER SUPPLY REF. NO 1752/20D

## GENERAL INFORMATION

Video Power Supply Ref. no. 1752 / 20D is designed for installations of MATIBUS SE system with the video.
The main features include:

- Ensuring energy efficiency for video installations,
- Commutation main bus data connections
and the secondary bus data for rise I and II.
- The ability to integrate video amplifier regulated to the risers.
- The ability to quickly connect up to 3 panels
keyboard input, additional or principal.
In addition, the power supply has a green LED indicating connection status to the mains.


## CONSTRUCTION



## DESCRIPTION OF TERMINAL BOARDS

~0V Input voltage ~0V
~230V Input voltage ~230V
R2 Camera power positive output 18,3 VDC
R1 Camera power ground
LU1 RJ12 connector for riser LU1
LU2 RJ12 connector for riser LU2
P1 RJ45 connector - input panel no. 1
P2 RJ45 connector - input panel no. 2
P3 RJ45 connector - input panel no. 3
MAG GL RJ45 connector - input of main bus data
IN

MAG GL RJ45 connector - output of main bus data
OUT
WE RJ45 connector - input of secondary
DOD bus data from power supply ref. no. 1052/31R...33R
WE RJ45 connector - input of main bus
GL data from power supply ref. no. 1052/31R...33R

## JUMPERS P1, P2, P3, TER, AMP

In the power supply 1752 / 20D panels can be easily change from the main bus data to secondary bus data and vice versa.
To do this, attach a suitable jumper P1, P2 and P3, respectively, for the panel 1, 2 and 3 .Then the data line, audio and video signal will be automatically redirected to the correct bus data.

- No jumper means panel working on the secondary bus data,
- Established jumper means panel working on the main bus data

The jumper marked TER is permanently turn on termination video signal in the main bus data.
The jumper labeled as AMP permanently turn on video amplifier to both divisions.

## VIDEO AMPLIFIER

The amplifier can increase the range of video transmission in the risers 1 and 2. At longer distances, switching amplifier improves the quality of the video signal. Switching amplifier is performed by setting jumper AMP.

TECHNICAL DATA

| Supply: | 230 VAC |
| :--- | :--- |
| Power: | 60 VA |
| Output voltage of R2, R1: | $18,3 \mathrm{~V} / 2,5 \mathrm{~A} \mathrm{DC}$ |
| Working temperature: | $-5^{\circ} \mathrm{C} \div+45^{\circ} \mathrm{C}$ |
| Power security: | thermal |
| Dimensions: |  |
| Length | 180 mm |
| Width | 90 mm |
| Thickness | 75 mm |
| Weight: | $0,45 \mathrm{~kg}$ |
| The length matches to 10 DIN modules. |  |

RJ45 connectors on the both sides of wires should be installed on T-568 standard. The list of wires colors and their corresponding pin standard T-568 shown in the figure below:


RJ-45
Pin 1


| No. | Color |
| :--- | :--- |
| 1 | Orange-white |
| 2 | Orange |
| 3 | Green-white |
| 4 | Blue |
| 5 | Blue-white |
| 6 | Green |
| 7 | Brown-white |
| 8 | Brown |

For connecting the risers with Dys-Dek 1052/54RM use RJ12 connectors plug (6P6C). The list of wires colors and their corresponding pins shown in the table below:

| No. | Color |
| :--- | :--- |
| 1 | Green-white |
| 2 | Orange-white |


| 3 | Blue |
| :--- | :--- |
| 4 | Blue-white |
| 5 | Orange |
| 6 | Green |

A pair of brown color-coded wires should be connected to terminals: R1 - Brown-white
R2 - Brown.

The list of connectors, wires colors and their corresponding pins shown in the table below:

Connectors LU1 i LU2 (RJ12).

| No. | Color | Designation | Description |
| :--- | :--- | :--- | :--- |
| 1 | Green-white | OL | Ground line of <br> doorphones |
| 2 | Orange-white | VB | Video signal. <br> Line B twisted <br> pair |
| 3 | Blue | Positive (+) <br> video power <br> supply (+18V <br> DC) |  |
| 4 | Blue-white | R1 | Ground video <br> power supply |
| 5 | Orange | VA | Video signal. <br> Line A twisted <br> pair |
| 6 | Green | LU | Line of <br> doorphones |

On the second end of this wire should be installed plug RJ45 using T-568 standard. Plug with RJ45 connect to Dys-Dek ref. No. 1052/54RM.

Connectors WE DOD (RJ45).

| No. | Color | Designation | Description |
| :--- | :--- | :--- | :--- |
| 1 | Orange-white | OL | Ground line of <br> doorphones <br> LU1 |
| 2 | Orange | LU1 | Line <br> doorphones <br> LU1 |
| 3 | Green-white | 0L | Ground line of <br> sound |
| 4 | Blue | DD+ | Data line of <br> secondary bus <br> data DG+ |
| 5 | Blue-white | DD- | Data line of <br> secondary bus <br> data DG- |
| 6 | Green | LD | Line of sound <br> for secondary <br> bus data |
| 7 | Brown-white | OL | Ground line of <br> doorphones <br> LU2 |
| 8 | Brown | LU2 | Line <br> doorphones of <br> LU2 |

The second end of this wire should be connected to power supply ref. No. 1052/31R...33R.

## Connectors WE GL (RJ45).

| No. | Color | Designation | Description |
| :--- | :--- | :--- | :--- |
| 1 | Orange-white | - | Not connected |


| 2 | Orange | - | Not connected |
| :--- | :--- | :--- | :--- |
| 3 | Green-white | OL | Ground line of <br> doorphones |
| 4 | Blue | DG+ | Data line of main <br> bus data DG+ |
| 5 | Blue-white | DG- | Data line of main <br> bus data DG- |
| 6 | Green | LG | Line of sound for <br> main bus data |
| 7 | Brown-white | EO | Switching the <br> video signal from <br> the main bus <br> data to the riser |
| 8 | Brown | - | Not connected |

The second end of this wire should be connected to power supply ref. No. 1052/31R...33R.

Connectors MAG GL (RJ45).

| No. | Color | Designation | Description |
| :--- | :--- | :--- | :--- |
| 1 | Orange-white | VB | Video signal. Line <br> B twisted pair |
| 2 | Orange | VA | Video signal. Line <br> A twisted pair |
| 3 | Green-white | OL | Ground line of <br> sound |
| 4 | Blue | DG+ | Data line of main <br> bus data DG+ |
| 5 | Blue-white | DG- | Data line of main <br> bus data DG- |
| 6 | Green | LG | Line of sound for <br> main bus data |
| 7 | Brown-white | R1 | Ground <br> power supply |
| 8 | Brown | R1 | Ground <br> power supply |

The second end of this wire should be connected to next power supply ref. No. 1752/20D.

Connectors P1, P2 i P3 (RJ45).

| No. | Color | Designation | Description |
| :--- | :--- | :--- | :--- |
| 1 | Orange-white | VB | Video signal. <br> Line B twisted <br> pair |
| 2 | Orange | VA | Video signal. <br> Line A twisted <br> pair |
| 3 | Green-white | OL | Ground line of <br> sound |
| 4 | Blue | DG+ | Data line of <br> bus data DG+ |
| 5 | Blue-white | DG- | Data line of <br> bus data DG- |
| 6 | Green | LG | Line of sound |
| 7 | Brown-white | R1/GND | Ground video <br> power supply |
| 8 | Brown | R | Switching <br> camera |

The second end of this wire should be connected to panel with camera module for ex. 1752/141D.

## WAY TRANSMISION OF SIGNAL VIDEO IN THE SYSTEM

In the complex video installations, it is recommended that the video signal from the panels pinned in the main bus leading distribute from the space located in the middle of the system, so that the video signal has unidirectional character. This method is illustrated on Fig. 4a.

Suppose that the total length of the bus data video denoted as S , then:
$S=A 1+A 2+\ldots+A n+B 1+B 2+\ldots+B n+C 1$ or;
$S=A 1+A 2+\ldots+A n+B 1+B 2+\ldots+B n+C 2$ or;
$S=A 1+A 2+\ldots+A n+B 1+B 2+\ldots+B n+C n$.
In the case where the video bus data length S exceeds 250 m use the video distributor Ref. 955/40. How to connect the distributor Ref. 955/40 is shown in Fig. 4b.

## MONTAGE

The power supply is mounted on a DIN rail or screwed to the substrate using two screws or bolts minimum dimensions $\varnothing 4 / 50 \mathrm{~mm}$ Fig. 3. The method of mounting the power supply is shown in Figure 1a and 1b. To mount the power supply for DIN rail use a flat screwdriver to pull the pin locking, then put the power supply on a DIN rail, then release the pin. After mounting the power supply on the rail, you can protect it against dismantling by fusing the pin with the casing using bolt and nut dimensions $\varnothing 4$ / 36 mm . The protection method shown in Figure 2.


Fig. 1a The method of mounting the power supply on rail (pull the pin).


Fig. 1b The method of mounting the power supply on rail (release the pin).


Fig. 2 Protect against dismantling by fusing the pin with the casing


Fig. 3 Screwing to the substrate using two screws or bolts

## ELECTRICAL CONNECTIONS

Electrical connections should be performed by a person with knowledge of the basic issues of electrical engineering. All connections should be made in accordance with the attached schedule, and with disconnected power supply.
The building installation should include, multi-pole connector adapter with at least 3 mm spacing between all poles. The supply voltage must be accompanied only after all connections and the protective cover after screwing supply terminals.

DISTRIBUTOR-DECODER (DISDEC)
REF NO. 1052/54RM


## GENERAL INFORMATION

Distributor-decoder is device dedicated to working with MatibusSE system. This device perform many functions simultaneously. Video signal distribution. Device distribute video signal for each receiver. Additional device contain coax to twisted-pair cable adaptor.
Decoder. For each disdec may be connected max. 4 "4+n" system receivers. For example door-phones ref no. 1132/2 or video-door-phones with coax bracket ref no. 1202/90, ref no. 1740/90 etc. It is possible connect door-phones with one or without additional buttons but functionality will be limited.
Through this device it is possible to adopt old door-phones (from analog " $4+\mathrm{n}$ " doorphone system) to MatibusSE system.
Device ref no. 1052/54RM or ref no. 1052/54R characterized by low consumption power in stand-by mode. Thanks to all system decrease power consumtion (disdec is active only this one which is calling)

## TECHNICAL SPECIFICATION

| Power supply voltage: | $18-20 \mathrm{~V}$ DC |
| :--- | :--- |
| Current line R1, R2 <br> stand-by mode | 2 mA |
| Current line R1, R2 load <br> mode | $15 \mathrm{~mA}+$ receiver current |
| Dimensions: $\mathrm{I} \times \mathrm{w} \times \mathrm{h})$ | $141 \times 107 \times 36.5 \mathrm{~mm}$ |
| Short circuit protection <br> and overload protection | Thermal |
| Max. distance receiver <br> from disdec | 20 m |
| Operating temperature | $0^{\circ} \mathrm{C} \div+50^{\circ} \mathrm{C}$ |

## TERMINAL PINS DESCRIPTION

## RISER_IN Riser In.

RISER_OUT Riser Out.
OUT A Output no. 1.
OUT B Output no. 2.
OUT C $\quad$ Output no. 3.
OUT D Output no. 4.
3DA Floor call for device 1.
3DB Floor call for device 2.
3DC Floor call for device 3.
3DD Floor call for device 4.
GND Ground for buttons

CONSTRUCTION


Rys. 1.
X1 Service terminal
D1 LED operating mode.

## CORRECTION

Correction should be done only when it is necessary.
Potentiometer description:
RM User microphone sensitivity correction in entry panel (riser) direction
RS User volume correction during connection with entry panel (riser)

## PROGRAMMING

Programming device is described in power supply configuration menu. Step 5.08 and 5.09

SWITCHBOARD STATION REF. 1052/40R


## GENERAL INFORMATIONS

Switchboard station ref. 1052/40R is dedicated to MATIBUS SE system. It can be used in MASTER / SLAVE systems with power supply ref. 1052/33R
Basic features:

- Communication between switchboard station and doorphones.
- Call switchboard station through keyboard.
- Call switchboard station through doorphone.
- Possibility of call association.
- Possibility of call from switchboard station to call module.
- Day/Night mode.
- Change function between relay NC-C-NO and electrical lock.
- Registering events, possibility of further viewing.
- Phone book.
- 8 call repeaters in the shape of LED
- 8 relays control (in paralel with LEDs)
- Date/Time function.
- Turning on specified functions signaled by LED
- USB port.


## CONSTRUCTION

Switchboard station is equipped with $2 \times 16$ character LCD display, which shows all information about switchboard station.
From the back side there are 4 slots:


BUS socket is used for connecting switchboard with system bus.

| PIN no. | Mark | Description |
| :---: | :---: | :--- |
| 1 | LG | Voice LINE |
| 2 | NC | Not used |
| 3 | D (D+) | Data line (In case of RS485 <br> communication: data line D+) |
| 4 | OL | GND |
| 5 | D- | In case of RS485 communication: <br> data line D- |

USB is used for connecting switchboard with PC, for example for upload user's phonebook or update the software.

PINs of I/O socket are output terminals of 8 built-in relays.
Figure below presents the topology of contact:


| PIN no. | Mark | Description |
| :---: | :---: | :---: |
| 1 | Out1b | NC terminal of relay no. 1 |
| 2 | Out2b | NC terminal of relay no. 2 |
| 3 | Out3b | NC terminal of relay no. 3 |
| 4 | Out4b | NC terminal of relay no. 4 |
| 5 | Out5b | NC terminal of relay no. 5 |
| 6 | Out6b | NC terminal of relay no. 6 |
| 7 | Out7b | NC terminal of relay no. 7 |
| 8 | Out8b | NC terminal of relay no. 8 |
| 9 | GND | GND |
| 10 | Out1 | Common terminal of relay no. 1 |
| 11 | Out2 | Common terminal of relay no. 2 |
| 12 | Out3 | Common terminal of relay no. 3 |
| 13 | Out4 | Common terminal of relay no. 4 |
| 14 | Out5 | Common terminal of relay no. 5 |
| 15 | Out6 | Common terminal of relay no. 6 |
| 16 | Out7 | Common terminal of relay no. 7 |
| 17 | Out8 | Common terminal of relay no. 8 |
| 18 | GND | GND |
| 19 | Out1a | NO terminal of relay no. 1 |
| 20 | Out2a | NO terminal of relay no. 2 |
| 21 | Out3a | NO terminal of relay no. 3 |
| 22 | Out4a | NO terminal of relay no. 4 |
| 23 | Out5a | NO terminal of relay no. 5 |
| 24 | Out6a | NO terminal of relay no. 6 |
| 25 | Out7a | NO terminal of relay no. 7 |
| 26 | Out8a | NO terminal of relay no. 8 |

Socket $=$ is used for supply switchboard station (12 V DC).
TECHNICAL DATA

| Power supply: | $12 \mathrm{~V} \mathrm{DC} / 500 \mathrm{~mA}$ |
| :--- | :--- |
| Operating temperature: | $0^{\circ} \mathrm{C} \div+45^{\circ} \mathrm{C}$ |
| Dimensions: $(\mathrm{H} \times \mathrm{W} \times \mathrm{D})$ | $212 \mathrm{~mm} \times 237 \mathrm{~mm} \times 70 \mathrm{~mm}$ |
| Weight: | 2.15 kg |

## CONFIGURATION

Switchboard station can be configured through MENU. To get into programming menu:

- Press and hold for about 4 sec. (1) button.
- Enter 4-8 digits password (if only it has been set).

If you enter wrong password, you will get into programming menu, but not all steps will be available.

Navigation in the programming menu:

- Use (1) buttons to change option.
- Use button to enter to submenu.
- Use $\triangle$ button to back to upper level.

|  |  |  | 1. C.MODULE NAMES |
| :---: | :---: | :---: | :---: |
|  |  |  | 2. RELAYS OPTIONS (*) |
|  |  |  | 3. SETS OF CLOCK |
|  |  |  | 4. CHANGE PASSWORD (*) |
| MENU |  |  | 5. LEV BUZZER |
|  |  |  | 6. DAY/NIGHT MODE (*) |
|  |  |  | 7. LANGUAGE |
|  |  |  | 8. COMM MODE |
|  |  |  | 9. FV VERSION |
|  |  |  | 10. DEFAULT SETTINGS (*) |

(*) - options available only after entering correct password.

## 1 C.MODULE NAMES

This step allows you to assign or view names or other descriptions of entrance panels.
In case of empty list, the following will appear:

## REPERTORY EMPTY

Other case, description of the first entrance panel will appear:

```
MOD: 239 S: 10
```

STAIRCASE 1

It means: The name of entrance panel is STAIRCASE 1; panel ID is 239; panel is connected to power supply number 10. This panel works as additional panel (letters MOD).
In case of main entrance panel will appear:

```
MAIN C.MODULE: }
```

GATE 1

Use $(1$ buttons to scroll the list of panels.
Press button to enter EDIT mode:
ADD NEW. Choose ADD NEW to create new description. The following will appear:

## SUPPLY ADDR:

Enter number of power supply connected to relevant panel and press $(\perp$ to confirm. If panel is connected to the main channel (main entrance) just press $(\downarrow$. The following will appear:


Enter entrance panel ID and press to confirm. The following will appear:

## ENTER NAME:

- use

buttons to change character,
- use button to confirm character and move to the next character,
- use ${ }^{X}$ button to back to previous character,
- press button twice to confirm name and exit.

EDIT. This function allows you to change the name, panel ID or power supply address of actually displayed panel. Change of these parameters has influence only in switchboard station (doesn't effect power supply settings).

The current power supply ID will appear:

```
SUPPLY ADDR:
10
```

Use $\oplus$ button to confirm old ID.
To change ID:

- use $\times$ button to delete old ID,
- enter new ID,
- use button to confirm new ID

If you only delete old numer and press $\quad$ button without entering new power supply ID, panel will be treated like the main entrance.

Changing power supply ID can be useful when we move this panel to another power supply and want to remain panel's old name.

After confirmation the current panel ID will appear:

```
C. MOD. ADDR:
```

220

Use button to confirm old ID.
To change ID:

- use $X$ button to delete old ID,
- enter new ID,
- use button to confirm new ID

Changing panel ID can be useful when we replace this panel with new one and want to remain old panel name.

After confirmation the following will appear:
ENTER NAME:
STAIRCASE 1

- double press $\Theta$ button to confirm old name
- press ${ }^{X}$ button several time (depending to name lenght) to delete old name.
- enter new name

Use (1) buttons to change character.
Use $( \lrcorner)$ button to confirm character and move cursor to the next character,
Use ${ }^{\star}$ button to back to previous character,
Press ${ }^{(4)}$ button twice to confirm name and exit.
DELETE. Allows to delete currently displayed panel. Use ( $\dagger$ button to delete.

DELETE ALL. Allows to delete all panels. Use $( \lrcorner)$ button to delete all panels.

## 2 RELAYS OPTIONS

Switchboard station has 8 built-in relays. Activation of any of the relays is confirmed by turning on relevant LED.
Each relay can be activated by different event (action), for example calling switchboard from doorphone number 1011 will activate relay number 1.
Use (1) buttons to select relay number. Use ${ }^{(1)}$ button to switch to edit mode.

| RELAY: 1 | $F: 1$ |
| :--- | :--- |
| NO ACTION |  |

Up to 16 different events (calling from doorphone or entrance panel) can be associated to one relay. Number next to letter F indicates number of function.

Use (1) buttons to scroll the list of function.
In the lower row of LCD display there are displayed actions for selected function. Press $(\perp$ button to modify.

In the edit mode you can set activation of relay, for example:

- call from single doorphone or specific group of doorphones has failed (activated only one function),
- missed call both from doorphone and entrance panel (activated both functions).

Use ${ }^{\otimes}$ button to return to the previous option.
Use ${ }^{( \lrcorner)}$button to enter view mode again.
Use ${ }^{\triangle}$ button to exit option.

REPEATER D.PHONE (REPEATER DOORPHONE). Relay will be activated by calling switchboard from doorphone.
The following will appear:

Enter range of address (first address, press $\Theta$, last address and press ( ${ }^{()}$).

REPEATER MODULE. Relay will be activated by calling switchboard from entrance panel.

The following will appear:

| REPEATER MODULE |  |
| :--- | :--- |
| SUP | ENT |

Enter number of power supply connected to additional entrance panel and press $( \lrcorner$ button. In case of main entrance panel, press ( $)$ button without giving number of power supply. Enter ID panel, and press ${ }^{( }$button to confirm.

NO ACTION. Relay will be not activated by any events.

## 3 SETS OF CLOCK

Switchboard station has built-in clock. In the stand-by mode switchboard station displays actual time and date. This function is used also for automatic switching day/night mode.

Enter date/time and press ( ${ }^{()}$button to confirm settings. Use ${ }^{\star}$ button to delete character if you make mistake.

## 4 CHANGE PASSWORD

Password can be 4-8 digits long. If password has been activated (set) then user can access to all menu options only after entering correct password.

The following will appear:

## NEW PASSWORD:

Before changing password you will be requested for entering old password. After that you can set new password. Use ${ }^{( }$button to confirm new password

## CONFIRM PASSWORD

If you enter incorrect password then proper information will be displayed and system will exit this option. To deactivate password function, enter old password and double press $( \pm$.
Use ${ }^{\triangle}$ button to exit option without saving.

## 5 LEV BUZZER

This option allows to enable/disable sounds of switchboard station keyboard.

Use
(1) buttons to select option.

Use button to confirm and exit option.

## 6 DAY/NIGHT MODE

Switchboard station can be set to day or night mode. In night mode all calls from entrance panels are forwarded to switchboard station. There are three ways to switch between day and night mode:

| Mode | Description |
| :---: | :---: |
| MANUAL | Switchboard station can be switched to night mode by pressing button. |
| AUTO+MANUAL | Switchboard station can be switched to night mode by pressing button or by built-in clock. |
| AUTO | Switchboard station can be switched to night mode by built-in clock.. |

Use (1) buttons to select option. Use $(\perp$ button to confirm (and edit - hour of automatic switching) option. Time of switching can be set only in AUTO+MANUAL and AUTO modes. In Manual
mode use button to switch switchboard station to night mode. If you choose AUTO+MANUAL or AUTO mode, the following will appear:

## TIME ON

00:00

Set night mode switch on and press . The following will appear:

## TIME OFF

00:00

Set night mode switch off and press
Use ${ }^{x}$ button to exit option.

## 7 LANGUAGE

This option allows to switch language displayed in switchboard station between Polish, English and Russian. Use (1) buttons to select option. Use button to confirm and exit option.

## 8 COMM MODE

Switchboard station can communicate with system through one of two communication modes:

- MATIBUS ME $_{\text {(by default: line D) }}$
- RS485

Use (1) buttons to select option.
Use button to confirm.
Use X button to exit option.

## 9 FV VERSION

This option allows to know the switchboard station's software version and date.
Use ${ }^{\triangle}$ button to exit option.

## 10 DEFAULT SETTINGS

This option allows to restore default settings of switchboard station. The following will appear:

```
                                    RESET
DEFAULT SETTINGS
```

Use ${ }^{\triangle}$ button to exit without saving.
Use button to confirm.
The following will appear:

## WAIT...

Default settings will be restored in 45 seconds.
Restoring default settings will erase:

- Phone book entries,
- Names of entrance panels,
- Relay settings,
- Additional settings like password, sounds of keyboard.


## USER MANUAL

## FUNCTIONAL KEYS

Swtichboard station has several functional keys to simplify use of station. Below you can find description:

| Key | Description |
| :---: | :---: |
| 沙年 | Day/Night mode |
| (1) (1) | Phone book / change function |
| (1) | Events view |
| (2) | Changing a caller between doorphone and call module. |
| $\bigcirc$ | Door open |
| (1) | Confirmation key |
| (X) | Exit key |
| (12) | Change function of the relay NC-C-NO with electrical lock. |
| $\rightarrow$ | Keyboard call button |
| (0) | Make a call |

## CALL FROM ENTRANCE PANEL

To call switchboard station from entrance panel:

- On the keyboard press button 0. All other keyboard attached to this bus and to main bus will be engaged. On the displays of these keyboards will appear as below:


On the calling keyboard will appear:


- Switchboard station will generate ring tone, on display appears entrance panel ID and name of entrance panel (cyclically)

CALL MODULE: K:239 S:10/STAIRCASE 1

This indicates that call is made from entrance panel number 239, which is the additional call module (K) connected to the (S) power supply number 10.

If the handset is picked up, on display appears entrance panel ID, its name and conversation time (cyclically).


- Switchboard station will ring after call from keyboard. If station attendant doesn't pick up the handset then on display will appear information of missed call (event) and numer of event
with time and date. Next to button $\square$ there will be LED turned on. If switchboard station was busy during connection attempt, then missed call message will be displayed also as event.

```
19-10-2007 20:53
EVENTS:1
```

- Conversation can be disconnected by pressing button $X$ on the keyboard or by hanging up the handset.
- During conversation station attendant can open the house by pressing $\Theta$ button.


## CALL FROM DOORPHONE

To call switchboard station from doorphone:

- Pick up the handset of the doorphone.
- Press function button. All main and relevant additional call modules connected to this power supply will be engaged.
- During waiting for connection in every 1 second period there will be intermittent beep heard. If switchboard is busy in every 0.5 second period there will be intermittent beep heard.

- Switchboard station will generate ring tone and on display appears number of doorphone and it's name.

```
DOORPHONE:
NOWAK
```

- If the switchboard handset is picked up, on display appears number of doorphone, its name and conversation time.


## DOORPHONE10/NOWAK

 10sek.- If switchboard station attendant doesn't pick up call then on station's display will be shown missed call message (event). If switchboard station was busy during connection attempt, then missed call message will be displayed also as event and numer of event with time and date. Next to button (M) there will be LED turned on.

```
19-10-2007 20:53
```

EVENTS (1)

- Conversation can be disconnected by hanging up handset. Hanging up doorphone handset during calling switchboard station is registered as event
- Disconnecting conversation from switchboard station can be done by pressing $X$ button or hanging up the handset.


## CALL TO DOORPHONE

To call doorphone from switchboard station:

- Pick up the handset,
- Dial logical user code (as for main channel), press $X$ to delete one digit in case of mistake

$$
\leftarrow 10
$$

- Press
to make a call. The following will appear (DOORPHONE NO will be flashing):

```
CONNECTING...
DOORPHONE: }1
```

- If the user pick up the handset, on display appears number of doorphone, it's name and conversation time



## CALLING FROM SWITCHBOARD STATION TO CALL <br> MODULE

To call a specific call module:

- Pickup the handset in switchboard station.
- Press ${ }^{\circ}$ button.
- Use
buttons to select the call module from C.MODULES NAMES.
- Press button.

To enter to the call module edit menu press $(\downarrow$ button.

- The following will appear:

- Call module should generate beep, and the following should appear:

－To disconnect call from switchboard station just hang the handset or press $X$ button．
－To disconnect call from call module press \＃button．


## CALL ASSOCIATION

Switchboard station allows call transfer from call module to doorphone．
To do it：
－Call from call module to switchboard station．
－Press transfer button（\＄）（on switchboard station）．The following will appear：

－Enter doorphones＇s number which you want to connect or use
buttons to enter phone book．After selecting doorphone press button to make a call．
－With button you can switch between callers（call module and doorphone）．
－Press button to association a call between call module and doorphone．
－To disconnect just hang the handset or press $X$ button．

## DAY／NIGHT MODE

Switchboard station can operate in Day and Night modes．If Day／Night mode changeover is set to manual or AUTO＋MANUAL then switchboard station operator can switch mode at any time by pressing 翐汸 button．Night mode will be indicated by turning on LED located next to 疁 button．In Day／Night mode changeover is set to automatic then 率的 button is inactive．In this mode Night mode is also indicated by turning on the LED．
In the Night mode all calls from entrance panels are automatically forwarded to switchboard station．Switchboard station starts ringing and the following will appear ：

## RELAY FROM： <br> K： 239 S：10／ENTRANCE1

This indicates that call has been forwarded from entrance panel number 239，connected to power supply number 10．This is cyclically switched with panel＇s name．

## EVENT STORAGE

Missed call message（event）will be displayed，after：
－Unsuccessful call attempt of switchboard station from doorphone（waiting time exceeded，switchboard station is busy，doorphone is hanged during waiting for connection time）．
－Unsuccessful call attempt of switchboard station from call module（waiting time exceeded，switchboard station is busy）

Switchboard station can store up to 256 events（missed calls）．
When the event occurs the LED next to ${ }^{(M)}$ button lights up．Press
（1）button to display events in order of their occurrence．
Use（1）buttons to scroll between events．
－Press and hold button to enter EVENT OPTION menu．
Now you can：
DELETE．Use this option to delete single event．（currently displayed）．Press $(+$ button to confirm．

DELETE ALL．Use this option to delete all stored events．
Use $X$ button to exit without saving．After pressing this button event will disappear from display but it will be still in switchboard
station＇s memory．Event can be displayed again by pressing（M） button．

If missed call came from additional entrance panel then following will appear：

```
MOD: 239 S: 10
30-02-09 3:00
```

Additional entrance panel with ID number 239，connected to power supply number 10 called at 3：00 30．02．09．

If missed call came from main entrance panel then following will appear：

```
M. C. MOD.: }2
30-02-09 3:00
```

If missed call came from uniphone then following will appear：

```
DOORPHONE: }1
30-02-09 3:00
```

Doorphone with ID numer 10 called at 3：00，30．02．2009．

## PHONE BOOK

Swithboard station is equiped with built－in phone book with capacity up to 1024 users．
Press $\mathbb{Z}$ button to enter to the phone book．Use（1）buttons to scroll between entries．

To connect with specific numer：
－Lift handset，
－Press button to enter the phone book，
－Use $(1$ buttons to select number，
－Press button．
To disconnect：
－Hang the handset，
or
－Press ${ }^{X}$ button（regardless mode）
To enter to the phone book＇s menu press $\pi$ button and press and hold for about 4 seconds button．
In menu user can：

ADD NEW. Use this option to assign name to the logical code. The following will appear:

## ENTER ADR:

Press button to confirm. The following will appear:

## ENTER NAME:

- Use
buttons to select character,
- Press button to confirm and move cursor to next position.
- Double press ${ }^{(-)}$button to exit option and save current name.
- Use $\triangle$ to delete one character or exit without saving (multiple pressing).

EDIT. Use this option to edit name and address. The following will appear: (editing uniphone name with ID number 1001):

## ENTER ADR: <br> 1001

Press button to confirm address without any changes. To change logical code it is required to delete old code with button, and then enter new one and confirm it with ${ }^{( }$button The following will appear:

## ENTER NAME:

KOWALSKI
You can:

- Confirm old name by double pressing (د) button.
- Delete old name by multiple pressing ${ }^{X}$ button (depending on name's lenght).
- Enter new name (old one must be deleted). Use buttons to select character. Use (1) to confirm character and move cursor to the next letter. Use $\triangle$ button to delete character. Double press $( \lrcorner$ button to save the name and exit menu.

DELETE. Use this option to delete currently displayed name. Use (د) button to confirm.

DELETE ALL. Use this option to delete all entries. Use button to confirm.

## CHANGE FUNCTION OF THE RELAY NC-C-NO WITH ELECTRICAL LOCK

Press
button to change function of the relay NC-C-NO with electrical lock. This allows switchboard station operator to control automatic gate connected to the switchboard station. Usage of this function is indicated by turning on LED located next to $\sqrt{2}^{2}$ button.

## OPENING SELECTED DOORS

Switchboard station operator has possibility to open selected doors or gate connected to the switchboard station as a main entrance. Opening selected doors can be performer only if the handset is hanged.

To open selected door:

- Press - button,
- Enter entrance ID number,
- Press button.

To release NO-C-NC relay (open gate):

- Press $\because$ button,
- Press $\pi^{2}$ button. LED next to this button should turn on,
- Enter entrance ID number,
- Press button.
- Press $\pi^{2}$ button again. LED next to this button should turn off.


## ADJUSTMENT

Switchboard station is pre-adjusted during manufacturing process. Potentiometers located on the bottom plate allows adjustment of the device, however, this operation should be performed only if it is really needed.

| Mark | Function |
| :--- | :--- |
|  |  |
|  | Constrast of display |
|  | Volume of handset speaker. |
|  |  |
|  |  |

## INSTALLATION

Device is designed to use inside buildings. It should be mounted in dry places.

## ERRORS REPORT

On display could appear error reports.
SWITCHBOARD TURNED OFF
This message appear if option in programming menu of power supply (step 7.01) is turned off. (switchboard station handling deactivated)

## SW PORT DISABLED

LINE BUSY
This message appear if LU line is engaged, and is displayed only when trying to call.


## SHORT-CIRCUIT

This message appear if there is short-circuit on LU line, and is displayed only when trying to call.

## SHORT CIRCUIT

## NO SYSTEM RESPONSE

This message appear after call attempt while there is no communication between switchboard station and power supply (probably line D is damaged or there's no MASTER).

```
NO ANSWER
FROM SYSTEM
```


## MISSED DOORPHONE

This message appear when user try to make a call to a disconnected doorphone.

## MISSED DOORPHONE

## NO ANSWER

This message appear when user doesn't pickup his doorphone.


## MISSED SUPPLY IN SYSTEM

If you try to connect to the call module from switchboard station connected to the power supply with incorrectly defined ID number (Edit for call module name) or to power supply which does not respond, the following will appear:

```
MISSED SUPPLY
``` IN SYSTEM




do nastepnego
zasilacza

\({ }^{2} 175222000\)
o nastepnego panela
1752/141D


\title{
MIWI-URMET Co. Ltd. Pojezierska 90A 90-341 Lodz, Poland \\ Tel.: 0048426162100 \\ fax: 0048426162113
}

\section*{e-mail: miwi@miwiurmet.pl http://www.miwiurmet.pl}```


[^0]:    2. Plug module to iBUTTON socket in call module ref. no 1052/104
