OUTDOOR PANEL

METAKOM

MK10.2-RF(MF)

PASSPORT
user's manual

Valid for filling

To be completed by the repair company

Contents of the repair. Name and number according to the scheme of the

replaced part or unit. The place and nature of the defect::

_____

_____

_____

_____

_____

_____

Signature of the person who carried out repairs _

Date of repair _

(day, month, year)

Signature of the owner of the product, confirming the
repair_

Repair company stamp with the city:

CONTENTS

1. PURPOSE

The ourdoor panel **METACOM MK10.2-RF (MF)** (hereinafter referred to as the intercom) represents a specialized microprocessor system intended for installation in multi-apartment buildings, offices, as well as for organizing a selective communication system with up to 10subscribers.

Modification of the outdoor panel METACOM MK10.2-RF has a built-in scanner of contactless RFID keys with an operating frequency of 125 kHz.

Modification of the outdoor panel METACOM MK10.2-MF has a built-in scanner of Mifare contactless keys with a working frequency of 13.6 MHz.

As the subscriber keys in the modification of METAKOM MK10.2-RF, contactless keyholders METAKOM supporting Proximity technology (hereinafter RF keys) are used. For the modification of METAKOM MK10.2-MF, contactless METAKOM fobs supporting Mifare technology (hereinafter MF-keys) are used. MF-keys have a special identification number coding system. The built-in MF reader supports the work with the keyfobs encoded in the factory.

As terminal devices installed at subscribers, it is recommended to use TKP-01, TKP-05M, TKP-06M, TKP-10M, TKP-10M, TKP-12M, TKP-14M or other interphone handsets designed for intercoms with coordinate The addressing system for the production of METACOM.

The door phone provides a call signal to the subscriber's TCH, a duplex connection of the visitor to the subscriber, remote opening of the lock upon a signal from the TCH.

The lock can also be opened by means of the RF (MF) -key, using the code dialed on the outdoor panel, or by pressing the EXIT button installed at the entrance door inside the entrance.

To enable the use of different types of locks, the METACOM MK10.2-RF (MF) outdoor panel is available in two versions:

Full model name	Lock type	Terminal marking of terminal blocks	Description of the output node
METAKOM MK10.2-RF(MF)**E**	Electromagnetic lock without control board	LOCK -line normally closed to the common wire of the lock GND.	Powerful key transistor. When you open the lock, it turns off.
MK10.2-RF(MF)**M**	Electromechanical lock without control board	LOCK - line normally open with the common GND lock wire.	Powerful key transistor. When you open the lock, it turns on.

Valid for filling

TEAR-OFF COUPON N1

FOR THE WARRANTY REPAIR OF THE OUTDOOR PANEL
METAKOM
MK10.2

To be completed by the manufacturer

Serial number of the product _

Release date _

(day, month, year)

Representative of the QC of the manufacturer
_____

(QC stamp)

Address for return of the coupon to the manufacturer:

Russia, 241024, Bryansk city, Delegate street, 68, LTD "Metakom"

To be completed by a trade or installation organization

Date of sale _

(day, month,year)

Seller _

(signature or stamp)

Stamp of the trade organization:

Date of commissioning

(day, month,year)

Installer _____

(signature or stamp)

The stamp of the organization that conducted the installation:

Appendix 1.

Code tables.

Table №1

flat №	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	6	17	18	19	20
Code	0529	7970	8740	1362	9813	4966	8801	2433	0899	2307	4628	0278	3352	6961	9538	3923	0356	9077	4727	2039

Table №7

flat №	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Code	2065	4627	3605	0053	9542	0102	5488	6273	5266	8436	6149	4118	0039	2338	0819	2643	4723	0358	6549	6135

The output stage with a transistor is designed for direct control of the lock winding without the use of any additional control board or demagnetization.

The power supply of the outdoor panel and lock can be provided from the METACOM BP-2U power supply.

The full name of the calling panel consists of the following elements:

MK10.2 – RF E V N

```
----------   ---  -  -  -
   1         2    3  4  5
```

1. MK10.2   - model name;
2. RF(MF)   - support for contactless remote controls METAKOM;
3. E   - for electromagnetic lock,
     M   - for electromechanical lock,
4. V   - built-in video camera and infrared illumination,
     {space}   - without a video camera,
5. N   - intercom supports work on the network.

2. DISTINCTIVE FEATURES

- Direct addressing of subscribers;
- Built-in switch for 10 subscribers;
- 2 ringer volume levels, 3 ring tone tones;
- Presence of a mode of auto-collection of keys;
- In the modification MF, user keys are used with the encoding of the identification number (the keys are coded in the manufacturer);
- Transfer of all the doorphone settings to a personal computer (or another pre-mophone) and back through the METAKOM adapter MKA-02U and the TM-key DS1996 (L). It is possible to configure all modes of operation of the doorphone and input subscriber RF (MF) keys using a personal computer
- (PC) in a comfortable laboratory environment. The information thus prepared is transferred to the nonvolatile memory of the call block. A copy of this information is stored on the PC and used for subsequent servicing.
- Possibility of the organization of interphone network type 1 Master / 16 Slave (one main input, 16 additional);
- The possibility of diagnosing the system during commissioning (testing the hands-on subscriber with the output of the parameters of the audio line on the LED backlight);
- Correction of the parameters for determining the position of the tube for each subscriber separately (adjustment can be carried out for each subscriber separately);
- Vandal-proof design - special keypad design, installation on site with a special key;
- Waterproof keyboard with illumination of each key, illumination of the key reader;
- Return to the factory settings call block, while storing recorded keys;
- Self test on power up or reset.

10. WARRANTY OF THE MANUFACTURER

The manufacturer guarantees the compliance of the METACOM MK10.2-RF call block (METAKOM MK10.2-MF) with the requirements of MTCM.420570.004 TU when the user uses, stores and transport rules.

Warranty period - 12 months from the date of sale, but not more than 18 months from the date of manufacture.

Service life is 5 years from the date of manufacture.

Without presentation of a voucher for warranty repair and (or) in violation of the safety of seals, mechanical, electrical or other types of damage caused by improper transportation, storage, operation or actions of third parties, no claims for quality are accepted Repair is not carried out.

The address of the manufacturer:
Russia, 241024, city of Bryansk, ul. Delegate, 68,
LLC "Metacom"
phone / fax: (4832) 68-28-26
Tel. (4832) 68-37-95
http: // www.metakom.ru
E-mail: os@metakom.ru

11. COMPLETE SET OF OUTDOOR PANEL

1. Outdoor panel 1 pc.
2. Passport 1 pc.
3. Fixing kit 1 pc.
4. Special key 1 pc.
5. Packing box 1 pc.

9. TRANSPORTATION AND STORAGE

Packaged products can be transported by all modes of transport, except for unsealed aircraft compartments and open decks of ships and vessels, in accordance with the rules for the carriage of goods operating on this type of transport.

As a transport container used boxes wooden, group and other containers, ensuring the safety of the goods during transportation.

Products should be stored only in a packed form when there are no acidic, alkaline or other aggressive impurities in the surrounding air.

3. OPERATING FUNCTIONS

- Indication of modes of operation by backlighting the buttons of the keyboard;
- Sound control of button pressing;
- Call the subscriber by pressing a button on the outdoor panel;
- Sound control of making a call to the subscriber (sending a ringing tone of another key, if the subscriber's handset is not packed);
- Full-duplex subscriber-visitor;
- Remote opening of the lock from the subscriber's TCH;
- Local opening of the lock by a set of a general or individual access code;
- Local opening of the lock by an individual RF (MF) key;
- Local opening of the lock from the entrance by pressing the EXIT button;
- Sound signaling the use of an individual subscriber code or RF (MF) -key on the TCH of the corresponding subscriber (function included on request);
- Ability to prohibit the maintenance of the subscriber's TCH while maintaining access to the individual code;
- Code lock operation in common code mode, in individual codes mode or jointly (programmable);
- Adjustment of all parameters of work for the most complete conformity to the requirements shown on a place of installation;
- Use the master RF (MF) key to quickly enter the programming mode.

4. SELF-TEST

When the power supply of the outdoor panel is turned on, a self-test procedure is performed. If an error is detected, a corresponding beep and a light indication are issued.

If the EEPROM chip fails to initialize, the button illumination flashes 2 times. If the error is caused by the fact that a new (or previously used in the other device) EEPROM was installed, perform a full initialization of the EEPROM (see section 7.3). If the error message continues to appear, replace the EEPROM chip.

If a key fault is detected, the button illumination flashes 3 times, its operation is blocked, and the function of opening the door lock from the exit button and RF (MF) - keys is operable.

When the audio line is short-circuited, an error signal sounds and the button illumination flashes 2 times, when the line breaks, an error signal sounds and a single flashing of the button illumination occurs.

8. USING OUTDOOR PANEL BY SIBSCRIBERS

After power on, the intercom is in standby mode. Subscriber numbers are highlighted in red.

After pressing the subscriber number button, the visitor establishes a connection with the subscriber's TCH and provides the set number of ringing tones. If the subscriber does not pick up the handset, after the set number of ring tones has been exhausted, the outdoor panel returns to the standby mode. When the receiver is off, the call signals are given in a different key. In this case, the subscriber needs to hang up, wait for the call signal of another tone and lift the handset.

When the subscriber removes the handset, the highlight of the corresponding subscriber's number changes to green, communication with the subscriber is established and the visitor can speak.

The lock is opened by pressing the button on the TCH of the subscriber. This turns on the highlighting of all subscriber numbers in green.

If the subscriber has hung up, the conversation is interrupted and outdoor panelreturns to standby mode. You can also interrupt the conversation by pressing any button on the call block.

After the set time limit has expired, the conversation will be interrupted automatically (see section 7.).
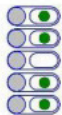
If the function of "general" or "individual" codes is activated, then to enter the door opening code, you must press and hold any button until two sound signals appear. After that it is necessary to enter the code on the keyboard (for the common code 1234, for the individual code from the table). If the code is entered correctly, the lock is opened.

If the network protocol is activated, then at the time of a network call, the number illumination goes out. When the connection with the subscriber is established, the numbering of the numbers in red will start flashing. In this case, dialing the number on the keyboard is blocked. The door is opened by the exit button or stored in memory RF(MF) key.

If the network number is from 1 to 9, the first character is to enter "0" next number (for example: network number 5 - "0", "5", etc.).
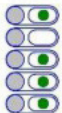
Section №27 Number of subscribers served.

Used to set the number of subscribers served. It is set if the number of subscribers serviced by the outdoor panel less than 10. To enter, the first digit must be entered with "0" followed by the number of subscribers (for example: the number of subscribers 6 - "0", "6", etc.). To exit without changes, press "0", "0".

Section №29 Select the melody of the sound signal.

It is used to set one of 3 options for the sound signal of a call. After entering the section to select the first melody, you must type "1", the second - "2" the third - "3". To exit the section without changes, press "0".

5. SPECIFICATIONS

Maximum resistance of the access line	Not more than 30 Ohm
Maximum number of subscribers served	10
Maximum subscriber number (for network version))	999
Maximum number of RF (MF) keys	975
Number of RF (MF) keys per apartment	To 975
Offset of subscriber numbers (for network version)	1...999**
Number of ringing signals applied to the TCH	6…14**
Duration of the lock opening	3…11 sec**
Restriction of the duration of the conversation	40…120 sec**
Maximum number of individual codes	10
Maximum number of the code table	255
Number of digits of the subscriber code	4
Number of digits of the total code	4
Number of digits of the master code	6
Operating temperature range	-30…+40°C***
Relative humidity (at 35 ° C)	95%
Supply voltage (DC)	15…18V
Maximum current consumption in standby mode (without a video camera), not	180 mA
Peak consumption current (when a call signal is applied to a subscriber's TCH)	210 mA
Overall dimensions of the block, not more (height x width x thickness)	155x180x40 mm
Unladen weight, not more than	0,8 kg

* - when using multiple switches

** - programmable parameter

*** - for modifications with index "V" operating temperature range -10 ... + 40 ° C.

6. INSTALLATION PROCEDURE

ATTENTION! There is a dangerous voltage in the power supply - 220V. Do not perform installation and maintenance work with the power turned on. In the outdoor panel and other doorphone devices, except for the power supply unit, there are no voltages exceeding 18V.

The following sequence of actions is recommended:

1. Carefully study this instruction manual and block diagram.
2. Prepare a niche for installing outdoor panel (see the layout in Figure 1).
3. Install the power supply, the lock and the opening button from the room. Connect the outdoor panel housing to the protective earth bus.
4. Set the apartment's lodging in a telephone conversation room (TCH).
5. Install the wiring. Make taps from the loops and connect the TCH of all the subscribers. (Figure 2)
6. Check that the connections are correct.
7. Turn on the power, the button illumination in red should turn on, enter the programming mode (see section 7.2) and perform the following actions:

   a) Change the code to enter the programming mode and, if necessary, program the master RF (MF) key. Be careful when entering the code. **WRITE MASTER CODE!**

   b) If necessary, set the shift of the range of subscriber numbers (see section 7.3). This parameter should always be set first, since all further operations with subscriber numbers will depend on the set offset.

   c) Program subscriber RF (MF) -keys.

   d) If the intercom will be used on the network, it is necessary to enter, the number of the first subscriber, the network number (from 1 to 16), the number of subscribed subscribers (see 7.3). **Attention!** If the number of the first subscriber is entered is different from "1", then the offset of the subscriber numbers must be taken into account when setting the following parameters. As the Master intercom, outdoor panel MK2003.2-RFE (V) N can be used.

   e) If a common code is used in the code lock mode, then change the common code and switch the outdoor panel to the common code mode. Write down the general code (see section 7.3).

   f) If a common code is used in the code lock mode, then change the common code and switch outdoor panel to the common code mode. Write down the general code (see section 7.3).

   g) If individual codes are used, create a code table (see section 7.3). Record the code table number.

   h) If necessary, change the duration of the ringing signal, the duration of the lock opening, the duration of the call restriction, etc. The factory settings are in most cases optimal.

NOTE: Items a ... g can be pre-made using a personal computer. In this case, the prepared information is transferred to the call block memory via the METAKOM MKA-02U adapter and the DS1996 (L).

8. Check the operation of outdoor panel in the doorphone mode and in the code lock mode.
9. Secure outdoor panel to a previously prepared niche with the supplied hardware kit.

Section No. 22 Reading the electronic media DS1996 (L)

Used to transfer information from the TM-key O81996 (b) to the memory of the outdoor panel. To transfer information, it is necessary to connect the readers (key reader KTM-1P) to the terminal blocks TM and EMO.

After entering the section, attach the DS1996 (L) key to the reader, the data transfer will begin. When errors occur,

An erroneous signal sounds. The end of the recording is a sign of the end of the information transfer. **Warning: be sure to wait for the correct end of the reading, otherwise there may be malfunctions in the outdoor panel operation.**
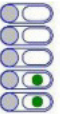
Section No. 23 Changing the system code

Used to change the access code to programming mode. After entering the section, you must type "1", to allow entering a new access code or "0" to exit without changes. If the code entry is enabled, dial the new system code. After dialing the 6th digit, the new code will be automatically saved.

Section # 24 Master key recording

Used to record a master key intended for a fast entry into the programming mode. Any supported RF key can be used as the master key. After entering the section, you need to press: "1" - to record the master key, "5" - to delete the master key. After entering the recording mode, you must attach the key to the reader, if the key is read correctly, the master key will be recorded. To exit the section without changes, press "0".

Section No. 25 Return to factory settings.

Used to set the factory settings. After entering the section, it is necessary to press "1" to confirm the installation, then the parameters will be automatically changed, and the key database will not change. To exit the section without changes, press "0".

Section No. 26 Enabling the Network Protocol

Used to disable the network protocol or set the network number of the doorphone working on the network. To disable the network protocol, press "0", "0". To enable the network protocol, you must set the network number of the intercom. It can be from 1 to 16. The network number is set according to the subscriber numbers being serviced, i.e. the intercom with the network number "1" will serve the initial numbers of the subscribers, and with the network number "16" - the last numbers of the subscribers.

It is necessary to remove the handset from the stand, press the button to open the lock and hold it in the pressed state, then press "8". Manual correction is described in P 19, 20.

Section No. 19 Setting the threshold for determining the position of the handset.

Used to adjust the range for determining the position of the handset. If there is an incorrect positioning of the handset (long line, use of some video monitors with adapters, etc.), then you can adjust the threshold position of the handset. in a certain range. The threshold shift is in the range 1 ... 9. Correctness of the correction can be verified using cl.18.

After entering the section, it is necessary to dial the subscriber's number, for which it is necessary to change the threshold, then dial the threshold offset value (press button 1 ... 9). To exit the section without changes, press "0".

Section No. 20 Setting the threshold for the opening of the lock button on the subscriber's handset

Used to adjust the threshold for the opening of the lock button on the subscriber handset. If there is an incorrect determination of the lock opening signal (long line, use of some video monitors with adapters, etc.), it is possible to adjust the threshold of operation of the lock opening button on the subscriber handset. in a certain range. The threshold shift is in the range 1 ... 9. Correctness of the adjustment can be verified using A.18.

After entering the section, you need to dial the number of the subscriber for which you want to change the threshold, then dial the threshold offset value (press button 1 ... 9). To exit the section without changes, press "0".

Section No. 21 Recording of electronic media DS1996 (L)

Used to transfer information from the memory of outdoor panel to the TM-key DS1996 (L). For the transfer of information, it is necessary to connect the readers (key reader KTM-1P) to the terminal boxes "TM" and "GND".

After entering the section, attach the DS1996 (L) key to the reader, the data transfer will begin. When errors occur,

An erroneous signal sounds. The end of the recording is a sign of the end of the information transfer.

Warning: be sure to wait for the correct end of the record, otherwise later when reading incorrect information in the work of the outdoor panel there may be failures.

10. In versions of the outdoor panel with index V, the built-in video camera can be powered from external or internal voltage 12V. For power supply from the internal source, the terminals "+ UV" and "+ 12V" must be closed.

11. Make a note in the tear-off coupons about the date of commissioning the outdoor panel. If the volume of the call is insufficient, adjust the required parameters (microphone sensitivity and speaker volume) by trimmer resistors on the back of the call unit.

Install the power supply, if possible, in the boxes, niches, at the ceiling. The power supply must be installed within 15 meters of outdoor panel. The "EXIT" button provides opening of the lock when leaving the entrance and is installed near the entrance door inside the entrance.

To reduce the influence of climatic factors (low temperature, high humidity, frost, dew), the outdoor panel and the lock should be installed on the second door of the entrance located in the vestibule.

The cross-sections of the wires connecting the power supply unit to outdoor panel and the lock, should be not less than 0,35mm2 (KSPV 2x0,64 or ШВВП 2x0,5), the rest - not less than 0,12mm2. As a connecting wire, it is recommended to use a wire with colored insulation of cores. To reduce the influence of external influences, the connection is recommended to be carried out with a shielded cable. For installation of video equipment use a coaxial cable of the type RK-75.

For intercoms MK10.2 with a network function when installing a digital line (AV), use a twisted pair. On long communication lines on the "Master" and the last "Slave" intercom, install 120 ohm resistors between the terminals AB.

The "+" terminal of the TCH is connected to the bus of tens, and the "-" TCH is connected to the bus of units. Before connecting the TCH, the line must be checked for short-circuit. Line resistance should not exceed 30 ohms.

In the intercom there is protection against short circuit of the line. At this time, communication with the TCH will be impossible. All other functions are available.

Installation of other outdoor panels is performed in accordance with the passports for these blocks.
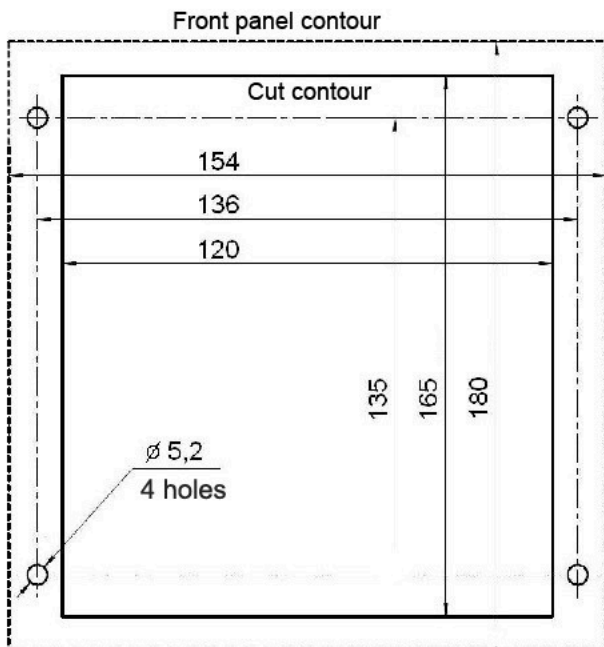
Front panel contour

Cut contour

154

136

120

135 165 180

⌀ 5,2
4 holes

Figure 1. Markup for installation of the outdoor panel

If the table number is from 1 to 9, the first character is to enter "00" next the table number (for example: table number 5 - "0", "0", "5", etc.).

If the table number from 10 to 99 is required by the first character, enter "0" next the table number (for example: table number 12 - "0", "1", "2", etc.).

A sign of saving the parameter is the sound signal and the appearance of a "running line" of button illumination.

To exit the section without changes, press "0", "0", "0". Some code tables are in Appendix 1.

Section No.15 Changing individual code

Used to enter a new individual code in the set table of individual codes. After entering the section, you need to press the subscriber number button, for which you need to change the code. Yes, it is necessary to dial a new individual code. After dialing the 4th digit, the new code will be automatically saved.

Section No.16 Activation of subscriber notification by code or key.

Used to activate the subscriber alert mode when using an individual code or key. After entering the section, it is necessary to press the button of the number of the subscriber being switched off, then press:

«1» - If you want to enable maintenance;
«2» - If it is necessary to disconnect the maintenance;
«0» - If you want to exit without changing the parameter;
If you enter correctly, you will hear a sound signal.

Section No.17 Internal Switch Test

Used when installing or failing the outdoor panel operation. After entering the section, press "1" to start the test. To exit the section, press "0". After the start, the subscriber's pipes will alternately be connected and a short beep will be delivered.

Section No.18 Test of subscriber handsets

Used to determine the position of the handset at the subscriber during installation or the failure of the outdoor panel After entering the section, it is necessary to press the subscriber number button, for which it is necessary to check the handset, the connection will be established and the value of the handset position will be displayed on the keypad illumination: "1" - short circuit, "2" - the handset is lying, "3" - the tube is removed, "4" is a line break.

If the threshold values are different, then correction is necessary. To automatically correct the threshold for determining the position of the subscriber handset, it is necessary to lay the handset on the stand, then press "8". To automatically correct the threshold for the opening of the lock on the subscriber's handset

Section No.10 Number of ringing tones

Used to set the number of ringing tones that are fed to the TCH. The call signal to the subscriber's TCH consists of an alternation of a musical fragment and a pause. This function determines the number of music fragments to be sent to the TCH.
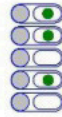
The minimum unalterable number of signals 6. The input value can be from 1 to 9. In this case, the number of signals varies from 6 to 14, i.e., 6 buttons correspond to the pressed button 1, and 14 to the button 9.

After entering the section, you must press the button corresponding to the required number of signals. To exit the section without changes, press "0".

Section No. 11 Ringing volume

Used to set the desired sound level of the ring signal in the handset. After entering the section, you must press the subscriber number button, for which you want to change the volume of the call, then press "1" - to set the minimum volume level, "2" - to set the maximum volume level. To exit the section without changes, press "0". If the input is correct, a beep will sound..

Section No.12 Enabling of the general or individual code

Used to allow the work of a common or individual code. After entering the section, you need to press: "1" - to allow the work of the general code, "2" - to prohibit the work of the common code, "3" - to permit the work of the individual code, "4" - to prohibit the work of the individual code. For simultaneous work of the general and individual code it is necessary to allow the work of the general, then individual code. To exit the section without changes, press "0".

Section No.13 Changing the General Code

Used to enter a new common code. After entering the section, you must type "1" to enter a new common code or "0" to exit without changes, then type a new common code. If the code consists of 3 digits, the first value is "0". After dialing the 4th digit, the new code will be automatically saved.

Section No.14 Changing the Code Table Number

Used to generate a new table of individual codes. After entering the section, you need to dial a three-digit codebook number.
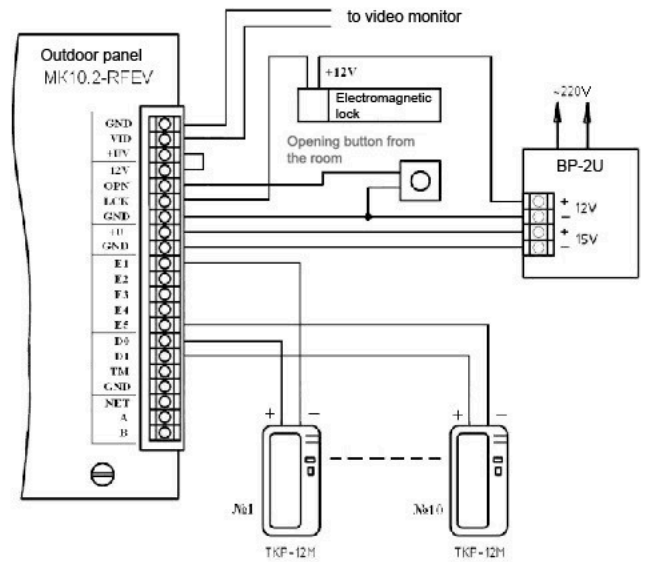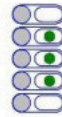
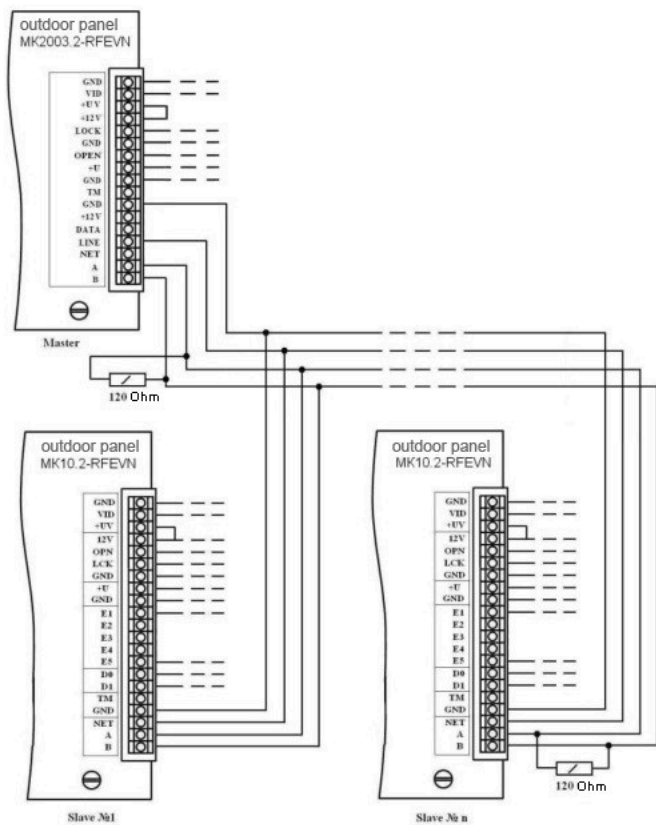Fig. 2 Example of installation of the outdoor panel MK10.2-TMV

Fig. 3 Example of installation when combining intercoms in a network.

a beep will sound and a "running line" will appear on the indicator. To exit the recording mode, press "0".

Section No. 4 Erasing of electronic keys

Used to remove RF (MF) keys from the memory of the outdoor panel. Removal is carried out in 3 modes: deleting "shared" keys, deleting "individual" keys and deleting all keys. After entering the section, you need to press: "1" -to delete "common" keys, "2" - delete "individual" keys, "3" - delete all keys. To exit the section without removing the keys, press "0".

After logging into the "individual" key deletion subsection, you must enter the subscriber number whose keys will be deleted. When you delete the keys, you will hear a beep and a "running line" will appear on the indicator.

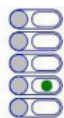### Section No. 7 Activation of electronic key collection mode

Used to automatically record subscriber keys when the key is applied to the reader. This opens the door.

After entering the section, you must press "1" to allow auto-collection or "2" to disable auto-collection. To exit the section without changes, press "0".

Section No. 8 Time of opening the castle

Used to set the required duration of the lock opening. The minimum unchanged opening time is 3 seconds. The input value can be from 1 to 9. In this case, the opening time varies from 3 to 11 seconds, i.e., the pressed button 1 corresponds to a time of 3 seconds, and the button 9 to 11 seconds.

After entering the section, you must click the button corresponding to the required opening time in seconds. To exit the section without changes, press "0".

Section No. 9 Talk time

Used to set the required duration of the call of the visitor to the subscriber. Minimum non-modifiable talk time 40 seconds. The input value can be from 1 to 9. In this case, the opening time changes from 40 to 120 seconds, i.e., the pressed button 1 corresponds to a time of 40 seconds, and the button 9 to 120 seconds.
After entering the section, press the button corresponding to the required time. To exit the section without changes, press "0".
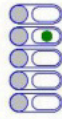
A sign of saving the parameter is the sound signal and the appearance of a "running line" of button illumination.

To exit the section without changes, press "0", "0", "0".

This setting affects all subsequent changes in the parameters of the outdoor panel so it must be performed at the beginning of the change of the subordinate parameters of the outdoor panel.

Section No. 2 Disconnecting subscribers

Used to disconnect the subscriber's service. When you call a disconnected subscriber, an erroneous beep will sound. After entering the section, it is necessary to press the number of the disconnected subscriber, then press:

«1» - If it is necessary to enable maintenance;
«2» - If it is necessary to disconnect maintenance;
«0» - If it is necessary to exit without changing the parameter;

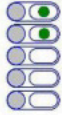If you enter correctly, you will hear a sound signal.

This setting affects all subsequent changes in the parameters of the outdoor panel, so it must be performed at the beginning of the change of the subordinate parameters of outdoor panel.

Section No.3 Recording of electronic keys

Used to enter RF (MF) keys in the memory of the outdoor panel. Recording RF (MF) keys is carried out in 2 modes:
- Common keys mode,
- Mode of "individual" keys.

In the mode of "common" RF (MF) keys, the keys are written to the common database without pointing to a particular subscriber, and the function of notifying the subscriber is unavailable. In the mode of "individual" RF (MF) keys, the key is written to the number of the particular subscriber.

If an error occurs during the recording of RF (RF) keys, the number of keys will overflow, then an error message will be issued and further key recording will not be possible.

After entering the section, you need to press: "1" - to write the public keys, "2" - to record the individual keys.

After entering the public key recording mode, the backlight of button 1 will flash red. Attach a key to the reader, the key will be recorded, if the key is already written, then an error signal will sound. If the key is correctly written, an audible signal will sound and a "running line" will appear on the indicator. To exit the recording mode, press "0".

After entering the record mode of individual keys, the button illumination will flash in green. It is necessary to dial the number of the subscriber to which the keys will be recorded, then the backlight of button 2 will flash red. Attach a key to the reader, the key will be recorded, if the key is already written, then an error signal will sound. If the key is written correctly

7. PREPARATION FOR WORK

Preparing the intercom for work consists in programming the parameters to match the system to the requirements of the installation site and the input of the RF (MF) subscriber key. Programming is carried out directly from the outdoor panel keypad or on a personal computer using a special program, the METAKOM MKA-02U adapter and the Dallas iButtontm DS1996 (L) TM key. All parameters are stored in the device's non-volatile memory (hereinafter EEPROM), ensuring the safety of data in the absence of supply voltage.

When the outdoor panel is delivered, the EEPROM contains the initial settings shown in the table.

N	Parameter	Value
1	Offset of subscribers	No
2	Prohibition of subscribers	All are allowed
3	Autoset mode	Disconnected
4	Lock opening time	4 sec
5	Talk time	90 sec
6	Number of ringing tones	10
7	Using common or individual code	Codes disabled
8	Number of code table	1
9	Enable subscriber notification by key or code	Disconnected
10	Handset position detection threshold level	5
11	Threshold level of the activation of the button for opening the lock on the subscriber tube	5
12	System code	123456
13	Master key	Not programmed
14	Network Protocol	Disconnected

In the programming mode, it is possible to repeatedly change any of these parameters, as well as return all settings to their original state.

In the outdoor panel, you can view the serial number. The serial number is set at the factory and will not be changed later on. For viewing, it is necessary to press and hold any button, turn on the power supply, hold the button until the sound signal appears, then the number of the serial number will be displayed, the first number is the highest digit of the serial number number, then seven remaining values are displayed in order eight-digit serial number.

7.1 OUTDOOR PANEL PROGRAMMING MODE

In the programming mode, access to the sections is made by typing the corresponding two-digit section number in the keyboard row, if there is a subsection, access to it is done by pressing the corresponding buttons. The numbering of the keyboard buttons starts with the upper button - the value is "1", the lower button - the value "0".

To enter sections from 1 to 9, you must enter the first character "0" next the partition number ("0" "1", "0" "2", etc.). Exit the programming mode by pressing the "0" "0" buttons. The exit from the sections is indicated in the corresponding descriptions. If no changes have been made or the buttons are pressed, the partition or programming mode will automatically exit after a while. The table shows the names of the sections and the combination of buttons for accessing them.

N menu	Menu name	Entering the menu	Submenu	Entering the submenu
1	First subscriber number	«0» «1»	---	---
2	Disconnecting subscribers	«0» «2»	---	--
3	Writing keys	«0» «3»	Common keys	«1»
			Individual keys	«2»
4	Erasing the keys	«0» «4»	Common keys	«1»
			Individual keys	«2»
			All keys	«3»
7	On autoset key mode	«0» «7»	---	--
8	Lock opening time	«0» «8»	---	--
9	Talk time	«0» «9»	---	--
10	Ringing time	«1» «0»	---	--
11	Ringing volume	«1» «1»	---	--
12	Enable common or individual code	«1» «2»	Enable common code	«1»
			Disable common code	«2»
			Enabling in. code	«3»
			Disable the in. code	«4»
13	Changing the General Code	«1» «3»	---	--
14	Changing the code table	«1» «4»	---	--
15	Changing individual code	«1» «5»	---	--
16	Notification by code or key	«1» «6»	---	--
17	Embedded Switch Test	«1» «7»	---	--
18	Subscriber handset test	«1» «8»	---	--
19	Setting the threshold for determining the position of the handset	«1» «9»	---	--
20	Setting the threshold for the opening of the lock button on the subscriber tube	«2» «0»	---	--
21	Record in DS1996	«2» «1»	---	--
22	Reading from DS1996	«2» «2»	---	--
23	Changing the system code	«2» «3»	---	--
24	Master key recording	«2» «4»	erase the master key	«5»
			record master-key	«1»
25	Factory setting	«2» «5»	---	---
26	Enable NetworkProtocol	«2» «6»	---	---
27	Number of subscribers served	«2» «7»	---	---
29	Select the melody of the sound signal	«2» «9»	---	---

7.2 ENTER TO PROGRAMMING MODE

To enter the programming mode, you need to know a special master code or a programmed master key.

A) Enter the programming mode using the master code.

When the call unit is in standby mode, you must press and hold any button, wait for 2 beeps to sound, continue to hold the button until 3 beeps sound, the green keypad will flash, then dial the master Code ("123456" - factory master code), with each press accompanied by an audible signal and the inclusion of the keyboard backlight. After that, if the code is entered correctly, the call block goes into the programming mode, the sign of finding in the programming mode is the green light of the keyboard.

B) Enter the programming mode using the master key.

When the call unit is in standby mode, you must press and hold any button, wait for 2 beeps, continue to hold the button until 3 beeps sound, the green keypad will flash, then type "0" 0, 0, 0, 0, 0. Then attach the master key to the reader. After the master key is identified, it will enter the programming mode.

7.3 DESCRIPTION OF THE SECTIONS OF THE PROGRAMMING MODE

(On the right side, in the description of the sections of the programming mode, there is an image of the keyboard backlight when entering this section.)

Section 1 Set the offset of subscribers.

Used to set the offset of subscriber numbers if the number range exceeds the maximum value of the subscribers served. This parameter must be set if the intercom will be used in the network. After entering the section, you need to dial the three-digit number of the first subscriber.

If the first subscriber number from 1 to 9 is required by the first character Enter "00" next number of the subscriber (for example: first subscriber number 1 - "0", "0", "1", first subscriber number 5 - "0", "0", "5", etc.).

If the first subscriber number is from 10 to 99, the first character must be entered "0" next number of the subscriber (for example: first subscriber number 10 - "0", "1", "0", but-measures of the first subscriber 55 - "0", " 5 "" 5 ", etc.).