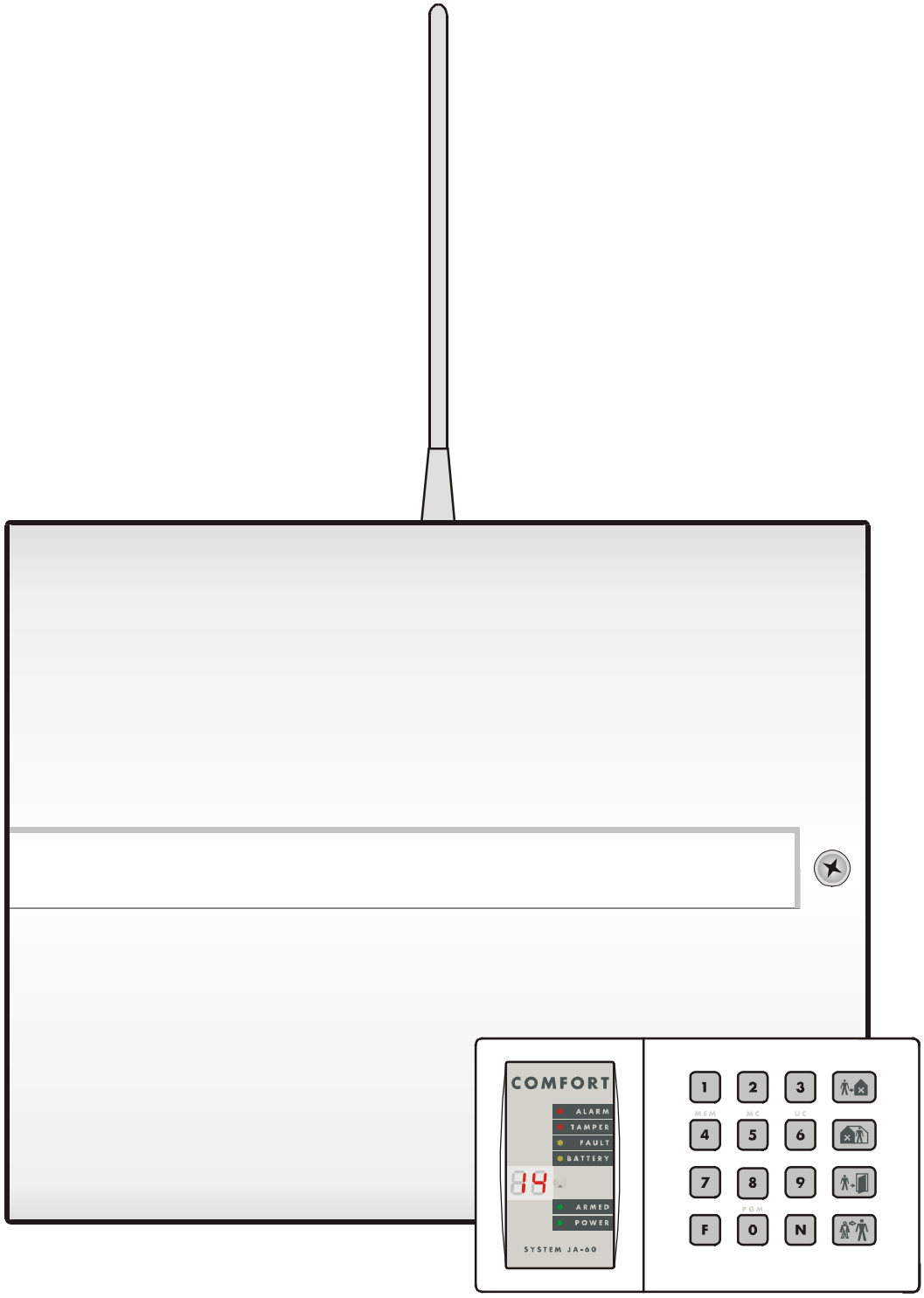
JA-63 „*PROFI*“ Alarm system
Installation manual



JABLOTRON

Contents:

This manual is valid for control panel model JA-63 version GK61006 (control panel board) and DY61232 (telephone communicator board).
The use of Comlink Windows v. 58 software or higher is required for this control panel and can be obtained from our home page at www.jablotron.cz

This product should be installed by professional installers. The manufacturer assumes no liability for damages caused by incorrect installation or improper use of this system.

1 Architecture of the control panel

The JA-63 "Profi" is a fully programmable control panel with building block architecture. By programming, it can be split into two separately operated sections (with a shared section). It has a built in power supply and there is ample space for a back up battery (12V, 1.3Ah or 2.6Ah) in the control panel case.

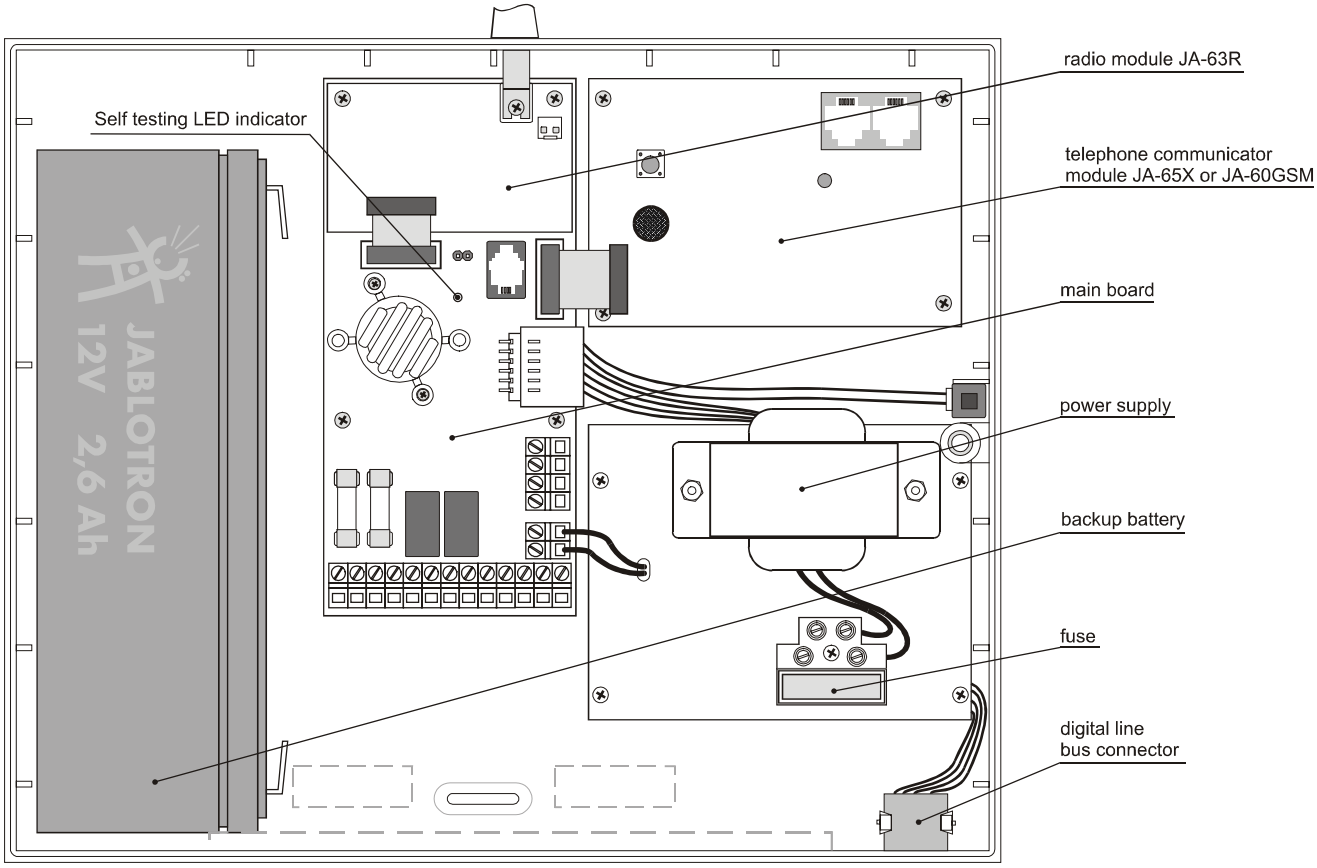
The **JA-63K main board has 4 hard-wired input**s with programmable triggering (NC, balanced or double balanced) and programmable reactions.

Model **JA-63KR** (equipped with the "R" radio communicating module) **has 16 wireless zones**. Up to two JA-60 detectors can enrolled into each zone (totally 32 as a maximum). In total model 63KR has 20 zones (4 wired and 16 wireless). Up to 8 wireless controllers (remote controls or wireless keypads), a JA-60A wireless siren and unlimited number of UC family wireless output modules can be enrolled as well. If more zones are required, another JA-6x control panel can be enrolled as a subsystem (Master & Slave architecture). The master control panel receives information from the sub control panel and it can also arm and disarm the subsystem panel.

Telephone module "X" can communicate with a Monitoring Station, send two voice messages, send five SMS messages via SMS server (or dial a numeric Pager) or. It can also communicate with a remote PC (using ComLink SW and a JA-60U modem).

GSM dialer JA-60GSM sends SMS messages, calls to predefined telephone numbers and plays audible warning, communicates with 2 CMS, allows remote access from a phone's keypad and can be set via web page.

Operation and programming is possible via the JA-60E keypad (either directly wired to the control panel or remotely using JA-60U modem). The control panel equipped with a radio module (63KR, 63KRX) can also be programmed and operated by a JA-60F wireless keypad and can also be operated by RC-11, RC-22 or RC-60 remote controls or by a JA-60D wireless keypad. Operation and programming is also possible via a PC using ComLink SW (locally or remotely via JA-60U modem).



the internal layout

Available models of the JA-63 system

control panel	R module	X module	GSM module	description
JA-63K	no	no	no	four zone hard wired control panel
JA-63KR	yes	no	no	16 zones wireless (up to 32 detectors) & 4 hard wired zones
JA-63KRX	yes	yes	no	16 zones wireless (up to 32 detectors) & 4 hard wired zones & digital telephone communicator.
JA-63KRG	yes	no	yes	16 zones wireless (up to 32 detectors) & 4 hard wired zones & GSM dialer.

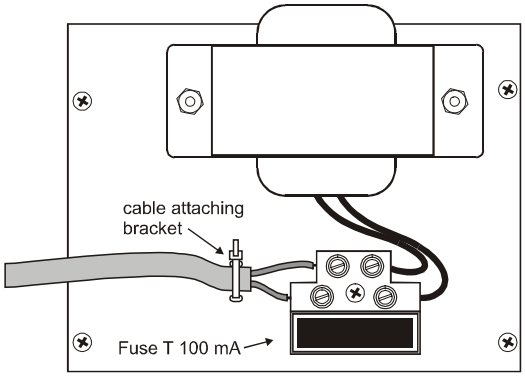
Note: *Radio module R can not be "aftermarket" installed into 63K and 63KX models. Telephone communicator X module and GSM dialer JA-60GSM can be installed additionally to a 63K or 63KR control panels.*

2 Control panel installation

- The control panel should be easily accessible but not visible. There should be a power socket available and also a telephone line (if the system has an optional built in dialer).
- Attach the control panel's rear housing to the wall (see drilling diagram on the last page of this manual).
- Route all the cables to the control panel (power, input loops, telephone line etc.) before you tighten the case to the desired location.

Note: Only a qualified technician can provide the installation, telephone line connection and servicing. User is not allowed to open the cover and/or make any modification.

2.1 Mains supply connection



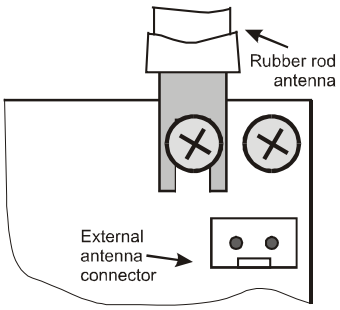
It is specified to connect the control panel by a permanent two-wire cable. The power supply has a double isolation. The ground wire is unattached.

- An inlet is realized by a permanent two-wire cable with a double isolation – wire diameter 0.75 – 1.5 mm^2. The inlet must be connected to the independent circuit breaker (10 A max) in the object, which has function of the switch.
- Thread the Inlet through the power supply case bushing; connect the wires to the terminals (equipped by a fuse T100mA / 250 V).
- Cable must be firmly fixed to the power supply board by a sliding strap (firstly check again that the wires are firmly secured in terminals)

3 Antenna for the radio module

If the "R" radio module is used, install its antenna (rubber rod or an external model AN-01). The antenna must not be shielded by any metal object in its proximity. The working range of the wireless accessories is about 100 meters under optimal conditions. However, building materials can absorb or obstruct radio signals and communication can also be effected by interference from other radio signals. For these reasons, you should anticipate a shorter working range for indoor installations.

3.1 Rubber rod antenna used in the control panel

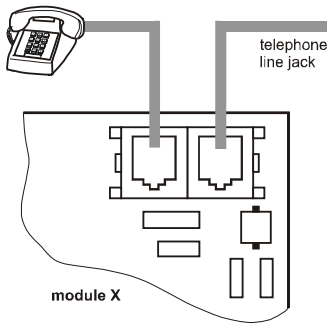


There is a hole on the top of the control panel case for the rubber antenna. The rubber antenna is supplied with the control panel. Attach the antenna to the board using the provided screw as shown in the diagram. The antenna must not be obstructed by any metal object.

3.2 External antenna use

An optional external antenna, model AN-01, has a connector which fits the connector on the radio module board. If you use the external antenna, the rubber antenna should not be installed. The AN-01 antenna has a small plastic ring on its end, used to hang it from the wall. Its active part (from the plastic ring to the coil) should be installed vertically and should not be obstructed by any large metal object. The antenna can be located behind furniture, etc.

4 Connection of a telephone line to the digital telephone communicator



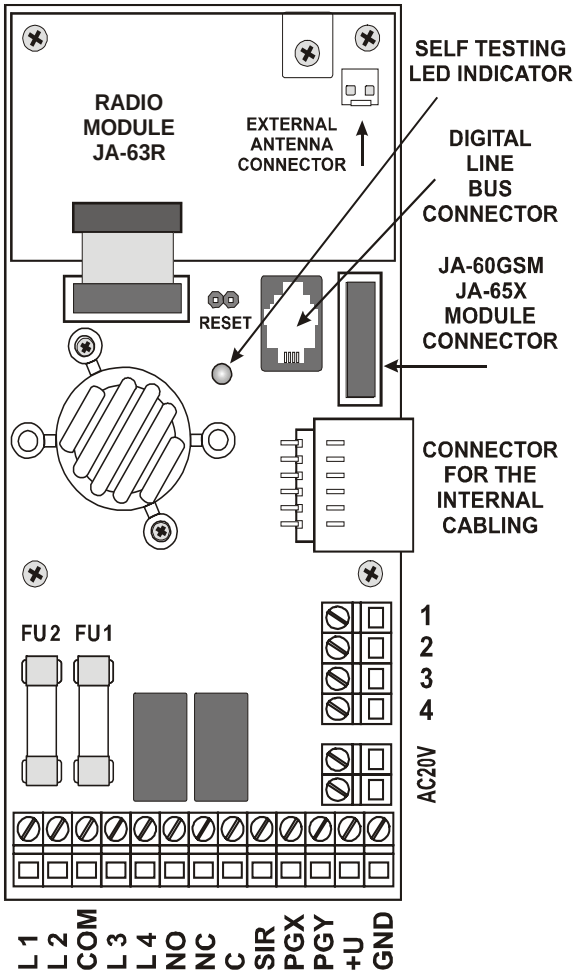
If the 65X module is installed, the control panel can communicate with a Monitoring Station, send voice messages, SMS messages and dial a numeric Pager as well as communicate with a remote PC. A standard analog telephone line (type TNV 1-3) must be connected to the module for these functions.

- Use the provided telephone cable to connect the telephone line to the IN jack on the X module (see diagram)
- Connect a telephone, fax or other phone operated device to the OUT jack, marked with a phone symbol
- When the control panel is in normal stand by mode, the phone line and any attached device will operate as normal

Note: The communicator must be plugged directly to a telephone line socket. All other devices (telephone, facsimile machine, modem etc.) should be connected to the communicator output.

5 Terminals and connectors on the main board

There is a Digital data jack for the JA-60E keypad(s) and/or for a PC interface cable. The same connecter is also available on the bottom right corner of the control panel housing. The digital bus signals are also available on terminals 1234.



1,2,3,4 digital data terminals provide an option to use standard cable for the wiring of JA-60E keypads.

Up to four JA-60E keypads *can be wired to the control panel (connected in parallel). The total length of the keypad cables should not exceed 100m. If using the jack connectors, the data cable length should not exceed 10 meters. Use ordinary twisted pair cable connected to the 1234 terminals for longer distance.*

AC20V – output of the power transformer (20VAC) is connected to this pair of terminals.

L1,L2, L3, L4 – hard wired zone inputs – detector outputs can be wired here: see examples of wiring on page 7. For each input it is possible to program its method of triggering: Normally Closed loop, balanced loop (2k2) or double balanced loop (2x 1k1) and the type of reaction of the system (see section 10.2).

Factory default setting: all inputs are triggered as balanced loops, reactions: L1= delay, L2= next delay, L3= instant a L4= tamper

COM common terminal to close (balance) the input

NO is a normally open contact of the alarm output relay.

NC is a normally closed contact of the alarm output relay.

C is a common contact of the alarm output relay, max. load 60V / 1A. The relay is turned on during any alarm.

SIR is an external siren output. In the normal mode it has a +U terminal voltage. In the alarm mode it has a GND terminal potential. Connect an ordinary external siren to +U and SIR terminals (max. load 0,7 A). A two wires back up siren should be connected to the GND and the SIR terminals (during an alarm, the charging will temporarily halt). The siren can also be used for arming and disarming chirps and as an audible indicator while in the testing mode (see section 10.19).

PGX, PGY are outputs (switching to GND when activated, max. 12V, 100mA). The function of these outputs are determined by the setting in the programming mode (see 10.6). The control panel also wirelessly transmits the PGX and PGY signals and UC receiving units can be used as remote outputs for these signals.

+U is a back up power output for external items (detectors etc.). The max. permanent current is 0.4A (1.2 A for max. 15 min - not more then one cycle per hour). This output is fused (FU2 1.6A) and supervised by the control panel. If it is overloaded, a control panel failure will be indicated (fault C).

GND is a common ground terminal for power output (-).

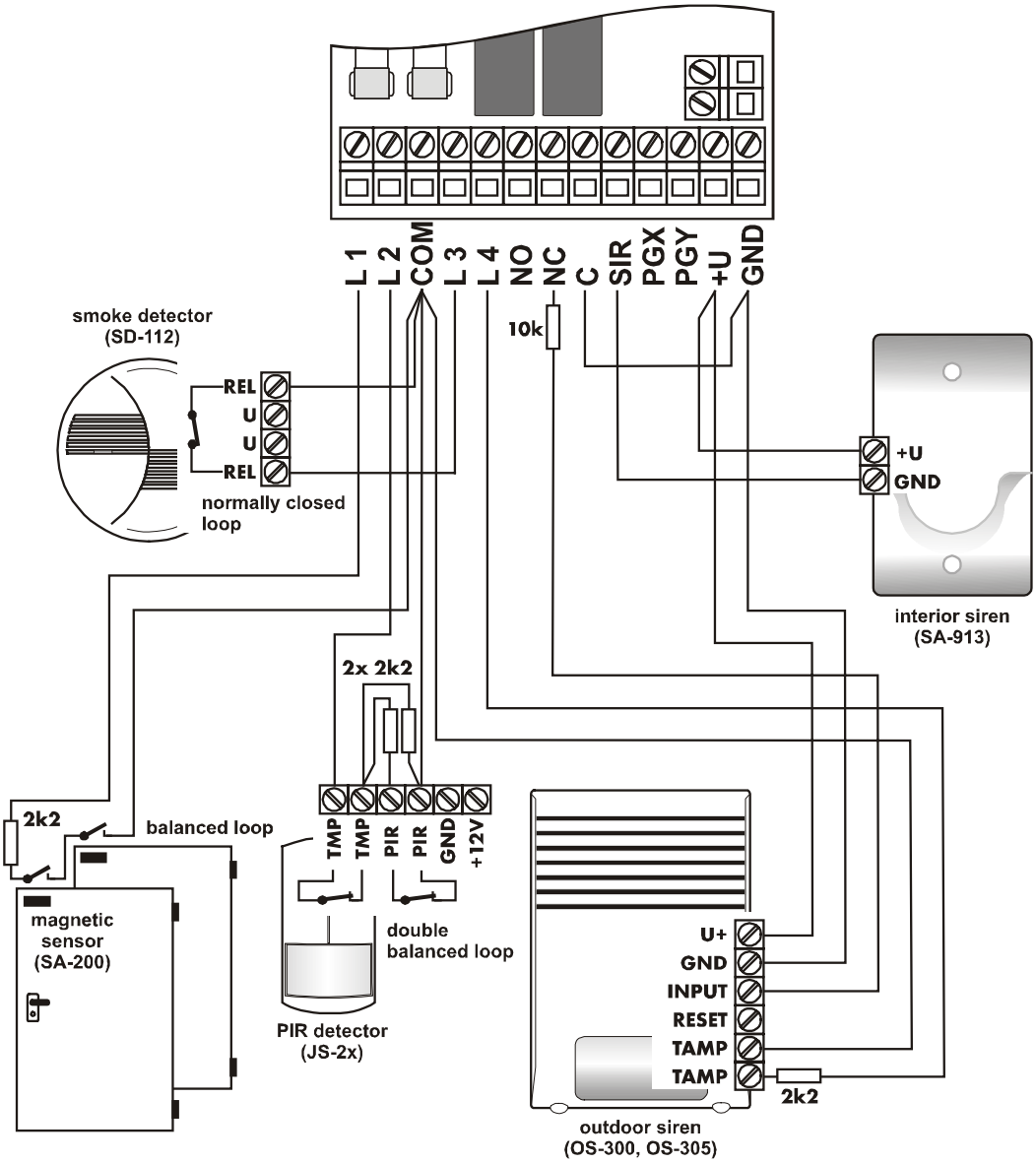
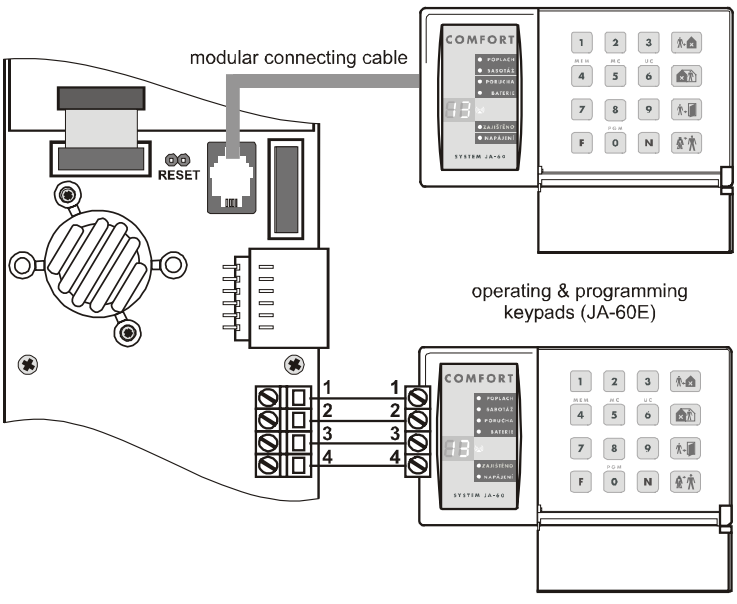


Fig. 1 – Wiring examples

6 The JA-60 keypad(s)



The system can be programmed and operated by JA-60E keypad(s). As a maximum, 4 keypads can be wired to the control panel. The keypads can either be wired by cables equipped with modular jacks or by standard cables to terminals 1234. The same numbered terminals (pins in the connectors) must be linked together. It is possible to combine arbitrary wiring with modular connectors and ordinary cables - see diagram. Modular jack cable should not be used for a distance longer than 10 meters.

The JA-60E keypad can also be connected remotely via the JA-60U modem.

When a control panel has a „R“ radio module, it can also be operated and programmed via a JA-60F wireless keypad(s). The wireless system can also be operated by remote controls RC-11, RC-22 & RC-60, as well as by a JA-60D wireless keypad. The control panel can have up to 8 wireless controllers.

It is also possible to operate and program the JA-63 system via a connected PC with ComLink software. The PC can be connected locally with or remotely, using a JA-60U modem (see section 17 and 18).

7 Installation of wireless items

If the control panel is equipped with a “R” radio module, it can work with all types of JA-60 wireless items and wireless UC output modules (see brief overview of items in section 21.1).

- **Detectors** – up to 32 wireless JA-60 detectors can be enrolled to the control panel (two detectors can be enrolled to each zone)
- **Keypads** and remote controls - up to 8 wireless controllers can be enrolled to the control panel (JA-60F and JA-60D keypads, RC-11 and RC-22 remote controls)
- **JA-60A Wireless siren** – one can be enrolled to A position, if more sirens requested they can also be enrolled to detectors positions
- **Wireless output modules UC-216 and UC-222** have relays, which copy the status of the control panel’s programmable outputs PgX and Pg Y. An unlimited number of the UC modules can be used with each system.
- **A JA-6x control panel can be enrolled as a subsystem** if more zones are required (Master & Slave architecture). The master control panel receives information from the sub control panel and it can also arm and disarm the subsystem panel if requested.

Follow the particular wireless item manual when installing. After you install the item to the desired location, leave it un powered and without its cover. The method of enrollment is described in section 10.1.

8 Back up battery installation

There is a space for a size 12V, 1.3 or 2.6Ah battery (battery size should corresponding to a desired backup period). The control panel recharges and checks the condition of the back up battery. If the system is powered from the battery for an extended time and the battery is nearly discharged, the control panel will first trigger a technical alarm and it will then disconnect the battery to prevent damage. After the main power is on again, the battery will be re-connected and will be recharged.

- insert the battery into the control panel
- connect the battery cables (red +, black -)

***Warning** - do not make any short connection of the battery terminals!*

9 First powering of the control panel

- Check that all cables are connected correctly
- Switch on the AC power – the self testing LED in the control panel will start to flash
- The JA-60E keypad will display a "P", confirming that the system is in the programming mode (ready for setting). If a wireless keypad JA-60F will be used in the system, it should be enrolled at first - see part 10.1.

***Note**: if „P“ is not displayed, the control panel is not in the factory default setting. Perform a Factory default reset. (See section 15).*

10 Control panel programming

Functions of the system can be customized. The most convenient programming method is via a connected PC using the Comlink software (see 17). Programming can also be performed manually from the keypad:

- If the control panel is not in the programming mode, open it (**entering F 0 SC** - SC = Service Code, factory default SC=**6060**) – The programming mode will be indicated by a „P“ on the LED display. This mode can only be entered when the panel is disarmed. In this mode, no alarm can be triggered. In the “P” mode, detectors and other accessories can be enrolled, the system parameters can be set up and the system can be tested.
- Any unfinished programming sequence can be terminated by pressing the N key.
- **To exit the programming mode**, press the N key („P“ will turn off). If any fault is indicated when you try to exit the programming mode see programming sequence 39x for more details.

List of control panel programmable parameters

Function	sequence	options	factory	note
Enrolling of detectors and controllers	**1**	**1**& **7** scroll, 2 erases item	-	**R** module
Hard-wired zone input setting	**60 nn xyz**	**nn**– zone, **x**– triggering, **y**– reaction, **s**- section	L1=delay L2=next d. L3=instant L4=tamper	
Exit delay	**20x**	**x** = 1 to 9 (x 10sec.)	30sec.	
Entrance delay	**21x**	**x** = 1 to 9 (x 10sec.)	30sec.	
Alarm duration	**22x**	**x** = 1 to 8 (min.), 0=10s, 9=15min	4min.	
Function of PgX output	**23x**	**x** = 0 to 8 (0-Chime, 1-Fire, 2-Arm, 3-Panik, 4-Alarm, 5-Door, 6-Home, 7-No AC, 8-By phone)	Chime	different when split
Function of PgY output	**24x**	**x** = 0 to 8 (0-Chime, 1-Fire, 2-Arm, 3-Panik, 4-Alarm, 5-Door, 6-Home, 7-No AC, 8-By phone)	Arm	when split different
Voice m. & tel. Numbers editable in the user mode	**25x**	**251 = YES 250 = NO**	NO	**X** module
Radio signal jamming regular testing	**26x**	**261 = YES 260 = NO**	NO	**R** module
Regular communication check enabled	**27x**	**271 = YES 270 = NO**	NE	**R** module
RESET enabled	**28x**	281 = YES 280 = NO	YES	
Subsystem arming enrollment	**290**	will enroll to sub-control panel as wireless controller		**R** module
Control panel teaching to a UC-2xx, master-system,...	**299**	will enroll as control panel		**R** module
No code requested for [Home], [Partial], [Exit], F4 & F9	**30x**	**301 = YES 300 = NO**	YES	
Partial (Home) arming enabled [Partial]	**31x**	**311 = YES 310 = NO**	YES	
Siren alarm enabled	**32x**	**321 = YES 320 = NO**	YES	
Exit delay audible indication enabled	**33x**	**331 = YES 330 = NO**	YES	
Partial arming exit delay audible indication	**34x**	**341 = YES 340 = NO**	NO	
Entrance delay audible indication enabled	**35x**	**351 = YES 350 = NO**	YES	
Arming & disarming chirp sounds enabled	**36x**	**361 = YES 360 = NO**	NO	
Siren in Disarm & Partial arming enabled	**37x**	**371 = YES 370 = NO**	YES	
Wireless siren alarm enabled	**38x**	**381 = YES 380 = NO**	YES	**R** module
Indication of system problems when arming	**39x**	**391 = YES 390 = NO**	NO	
Split control panel (A, B & C sections)	**690x**	**6901 = YES 6900 = N0**	NO	
Only first source of alarm is recorded	**691x**	**6901 = YES 6910 = NO**	NO	
Alarm triggered by opened zone when arming	**692x**	**6921 = YES 6920 = NO**	NO	only if **391**
Audible panic alarm	**693x**	**6931 = YES 6930 = NO**	NO	
Entering the programming mode by SC+MC/UC	**697x**	**6971 = YES 6970 = NO**	NO	
Addressing of wireless detectors to sections	**61 nns**	**nn**– zone n., **s**- section	1-10A 11-16B	**R** module
Addressing of user codes to sections	**62 nns**	**nn**– code n., **s**- section	all A	when split
Addressing of wireless controllers to sections	**63 nns**	**nn**– controller n., **s**- section	all A	**R** module
Automatic arming / disarming	**64nahhmm**	**n**- 0-9, **a**-action, **hh**-hours, **mm**-min.	all off	
Service Code changing	**5 nSC nSC**	**nSC = new Service Code**	6060	code 2x
User Mode entering	**6999**	**Goes to the User mode**	-	
Real time and date setting	**4 hh mm DD MM RR**		00 00 01 01 00	

10.1 Enrollment (teaching) of wireless items enter: 1

The wireless control panel (63KR or 63KRX) can enroll up to 32 wireless detectors (2 in each zone), up to 8 controllers (remote controls & keypads), wireless sirens and an additional JA-6x control panel as subsystem:

- **Press key 1** (while „P“ is displayed) to enter the enrolling mode. The control panel will display the next free position to enroll a detector.
    - **If no JA-60E keypad is used in the installation** and you need to enroll a wireless JA-60F keypad:
        - connect (short) the RESET pins on the control panel board (it will open the learning mode)
        - install batteries to the JA-60F keypad and wait until the keypad enrolls. Enrollment will be confirmed on the keypad.
        - disconnect the RESET pins and then use the keypad to enroll all the other items in following way
- **Use key 1 and 7 to scroll** (up and down) all control panel wireless positions – 1 to 16 (detectors) – c1 to c8 (controllers & keypads) – A (wireless siren) – J (sub control panel JA-6x). The display shows the position number while the Battery LED indicates if the position is occupied. The system will not allow enrollment of an item into a non-corresponding position (a detector can not be enrolled into a controller position etc.).
- **Detectors and keypads are enrolled** after their power is switched on (batteries are installed). A remote control is enrolled after both of its buttons are simultaneously pressed and held for 3 seconds. A subsystem control panel will enroll after sequence 299 is entered while it is in its programming mode.
- **Control panel confirms enrollment with a „beep“** (press F to get confirmation by a wired siren). The display will show the number of the enrolled item for 2 seconds and then it will display the next free position.
- **Second detector enrolment to a zone** – select the zone into which you want enroll the second detector. Press shortly key 5 (selects second position) and then install battery to the detector. Enrollment of the second detector will be indicated by the Fault LED. If there are two detectors in a zone, all indicators in this zone (alarm, tampering, low battery etc.) will be common for both enrolled detectors (for example, if any of the two detectors is tampered with, the zone will indicate tampering.).
- **To change the position of an enrolled item** - simply enroll it to the new selected position (the item will „move“). If you enroll an item to an occupied position, the former item will be deleted and only the new enrollment is valid. Normally only one item (detector, controller etc.) can be stored to each position.
- **Erase an enrolled item** by selecting the corresponding position and then press and hold key 2 for two seconds. The item will be erased (confirmed with a long beep). If you press and hold key 3, all enrolled controllers (remote controls and keypads) will be erased. Pressing and holding key 4 will erase all enrolled items (detectors, controllers, siren and the sub system). If two detectors were enrolled in a zone, both of them will be erased if you erase the zone's position.
- **The JA-60A wireless siren will** enroll (to position A) when its power is switched on. If you need to enroll a siren which is already powered and it is not possible to easily switch off its power, you can enroll it the following way: enter the enrolling mode and then enter the 6 digit siren production code (printed in the siren's manual). The control panel will "request" the siren to enroll. The siren will do that only if it has no current communication with any other control panel (This protects you from enrolling your neighbor's siren).
- **Multiple outdoor sirens or multiple subsystems enrolment** – enter 000000 while in enrolling mode. After this outdoor sirens and JA-6x subsystems can be enrolled to positions 1 to 16.
- **By pressing the button 8 in the enrolment mode the communication quality of the items can be checked** (LED indicator "battery" will start flashing). After receiving signal from the item the level of the signal is shown on the display from 0 to 10 (corresponding to 0-100% in the ComLink software). In this mode it is also possible to adjust level of audible indications by pressing the button F and scroll positions of the enrolled items by pressing buttons 1 and 7. Button N exits checking mode.
- **To exit the enrolling mode** press the **N** key

Note: if an item was not enrolled *after its batteries were installed, it is because the control panel recognized its radio signal as a weak one. Items are only enrolled if their radio signal has a level which guarantees reliable communication. Check the detector's batteries and try to enroll the problematic sensor once more. If it is not accepted by the control panel, you should change the location of the item. All items should be located 1 meter as minimum from the control panel.*

10.2 Hard-wired zone input setting *sequence:* 60 nn xys

If the hard wired L1 to L4 zones are used, their features can be programmed by entering:

60 nn xys

where: **nn** = zone number: 01 to 16

x = input triggering: 0 = off, 1 = Normally Closed, 2 = balanced loop (EOL resistor 2k2), 3 = double balanced loop (EOL resistors 2x 1k1)

y = reaction: 0 = Instant, 1 = Delay, 2 = Fire, 3 = Panic, 4 = Tamper, 5 = Next delay, 6 = Arming control

s = address to section, 1 = A, 2 = B, 3 = C (shared common section, which is armed only if both A and B sections are armed). If the control panel is not split, select s=1; if you select s=2 then this zone will be automatically bypassed within partial arming. For details about splitting see section 10.23.

Notes:

- If you will not use a particular input at all, you can switch it off completely with parametr x = 0

- Next delay input (y=5) provides entrance delay only if at the moment of its triggering the entrance delay has been in progress (activated before by any delayed input). If no delayed input is triggered before next delayed, the triggering will cause an instant alarm.
- Addressing of inputs to section C when the control panel is not split has the same effect as addressing to section B (i.e. automatic bypass while partial arming is used).
- If y=6 is programmed, then each triggering of this input changes arming status (arm – disarm – arm…) of the entire system or just the corresponding section if the system is split.

Example: to set zone 2 input as a balanced loop with an instant reaction, addressed to section A, enter: 60 02 201

Factory default setting: **L1** = delay, **L2** = next delay, **L3** = instant, **L4** = tamper

10.3 Exit delay — *sequence:* 2 0 x

To change the duration of the exit delay enter

20x (where **x** represents time in seconds x10). The delay can be selected from 10 to 90 seconds.

Example: to select an Exit delay duration of 20 seconds, enter 202

Factory default setting is 30 seconds

10.4 Entrance delay — sequence: 2 1 x

To change duration of the entrance delay enter:

21x (where **x** represents time in seconds x10). The delay can be selected from 10 to 90 seconds.

Example: To select entrance delay duration of 40 seconds, enter 214

Factory default setting: 30 seconds

10.5 Alarm duration — *sequence:* 2 2 x

The alarm duration can be selected from 1 to 8 or 15 minutes entering:

22x (where **x**=time in minutes for1 to 8, x=9 means 15 minutes and x=0 means 10 seconds)

Example: to select an alarm duration of 15 minutes, enter 229

Factory default setting is 4 minutes

10.6 PgX and PgY output functions — *sequences:* 2 3 x & 2 4 x

The control panel outputs PgX and PgY can have different functions, depending on parameter **x** in the corresponding sequence:

2 3 x – determines triggering of **PgX**
2 4 x – determines triggering of **PgY**

where x represents the following functions (non split system):

- **0 Chime** – triggered during the entrance delay (pre-alarm output)
- **1 Fire** – triggered by a fire alarm (by a smoke or a gas detector)
- **2 Arm** – activated when the control panel is armed (complete & partial arming)
- **3 Panic** – activated when a silent panic alarm is triggered
- **4 Alarm** – triggered by any audible alarm (except panic alarm)
- **5 Door** – activated for 5sec. after (F3) entering (electric door lock opening)
- **6 Home** – activated when the control panel is partially armed (Home arming)
- **7 No AC** – triggered by an AC power failure
- **8 Phone/F8** – output can be operated **remotely by phone** or by SMS (if this feature is supported by installed communicator) or locally **from the keypad** by F81 (ON) and F80 (OFF). If a code is requested to operate the system (see 10.13) then the F8x instruction should be followed by a valid user code.

If the system is split:

x	23x (PgX)	24x (PgY)
0	Alarm A	Alarm A
1	Alarm B	Alarm B
2	Chime A	Chime A
3	Chime B	Chime B
4	Arm A	Arm B
5	Door A	Door B
6	Panic A	Panic B
7	FIRE	No AC
8	Phone/F8	Phone/F8

Note: the control panel also wirelessly transmits the PgX and PgY signals. Wireless output modules UC-216 and UC-222 can be used to receive the signals (see 10.12). The function of the UC module output relays is determined by the 23x and 24x setting.

Example: the PgX will work as a Panic output when 233 is entered, PgY as Door output when 245 is entered.

Factory default setting: PgX=Chime, PgY=Arm

10.7

Recorded message and phone number editing in the user mode ***sequence:* 2 5 x**

The **U**ser mode, which is accessible with F 0 “Master Code”, is for bypass setting, system testing and battery replacement. This setting enables the user to change the voice message and telephone numbers of the built in dialer. If the changes are enabled, then programming sequences for number programming, voice message recording and dialer testing are accessible in the **U**ser mode. These settings have effect only when the control panel has a telephone communicator module.

options:

2 5 1 changes **enabled**

2 5 0 changes **disabled** (no dialer programming in the **U**ser mode)

Factory default setting: changes disabled

10.8 Radio signal jamming testing *sequence:* 2 6 x

When this function is enabled, the control panel will indicate trouble if the working band is jammed for more than 30 seconds. Jamming will trigger an alarm when the control panel is armed. Do not enable this testing if the control panel does not have a radio module.

options:

2 6 1 testing **enabled**

2 6 0 testing **disabled**

Note: in large cities and some other locations the system can be randomly jammed from time to time (near TV or radio station, GSM cell station etc.). In these cases the control panel can work without any problems because all important data is repeated, but the jamming test should not be enabled. The level of the signals and interference can be observed using the Comlink software (see17)

Factory default setting: disabled

10.9 Regular communication checking *sequence:* 2 7 x

The control panel will check communication regularly with all enrolled items (detectors, keypads, siren etc.) when this function is enabled. If communication is lost with any item, the control panel will indicate the fault of this item (when armed it will also trigger an alarm). Do not enable this checking if the control panel does not have a radio module.

options:

2 7 1 checking **enabled**

2 7 0 checking **disabled**

Note: in large cities and some other locations with a strong radio interference the communication can be jammed randomly. The control panel can detect such a strong interference as a temporary loss of communication with an item. Even in this case, the system is usually able to work without any problems because all important data is repeated, but the communication check should not be used.

Factory default setting: checking disabled

10.10 Reset enabled *sequence:* 2 8 x

The factory default reset (see 15) can be disabled. This way no unauthorized future programming of the control panel will be possible.

options:

2 8 1 reset **enabled**

2 8 0 reset **disabled**

Warning: if the Master or Service code is forgotten when the reset is disabled. The reset of the control panel will be possible only by the manufacturer.

Factory default setting: reset enabled

10.11 Arming control of a subsystem *sequence:* 2 9 0

A wireless master control panel receives event signals (alarms, tampering, faults, low battery) from a JA-6x subsystem if enrolled - see 10.1 a 10.12. This will cause the same kind of event on the master control panel and **J** will be indicated as the source of the event on the keypad.

The master and slave control panels can be either armed and disarmed as two independent systems or the slave system can follow the arming and disarming of the master. If the master should rule arming of the slave subsystem, make the following settings:

a. enroll a subsystem to the master's **J** position (see 10.1 and 10.12),
b. place the master panel into the programming mode (P is indicated),
c. enter the enrolling mode in the sub-control panel (pressing key 1 while in the programming mode)
d. enter 290 on the master control panel – this way the master will enroll to the slave sub-control panel as a wireless controller (to the first free position of c1 to c8)
e. turn both systems to standby mode and check that the subsystem will arm after the master control panel is armed (in 2 seconds). Check the same for disarming

Notes:

- *Master control panel generates wireless commands Arm and Disarm the same way as a remote control RC-11. The control panel transmits these commands only if it has a subsystem enrolled in its position J.*
- *The Arm command is generated when the master control panel is completely armed and also at the end of an alarm while the system remains completely armed (automatic alarm timeout). The Disarm command is generated when the master control panel is disarmed, when it is partly armed (home arming or one section arming if it is split) and also in the end of an alarm while the system is disarmed (manual termination of the alarm).*
- *The subsystem can also be operated by its other controllers (remote controls, keypads) if there are any. For better understanding you can simply imagine, that the master control panel is just another remote control..*
- ***Arming control** of the subsystem by the master control panel **can be disabled** by erasing the corresponding cN position in the sub-control panel. For example if the master control panel was enrolled to position c3, scroll to this position in the enrolling mode and holding key 2 will erase the master control panel as a controller.*

10.12 Enrollment of the control panel to a UC-2xx or to a master control panel *sequence:* 2 9 9

The wireless control panel can send data to output modules UC–216, UC–222 and UC-260 (see section 21). It can also work as a subsystem of another JA-6x.

Enter the enrolling mode of the **UC receiving device** and then enter **299** on the control panel. Note that the control panel must be in the programming mode. This enables the control panel to generate the enrollment signal.

If you want to enroll a **subsystem** to your control panel, enter the enrolling mode on the MASTER control panel (see 10.1.) and then enter sequence 299 in the programming mode of the sub control panel.

If the system is split, the sub control panel enrolls to the common shared section.

10.13 No code requested for  ,  ,  , (F1, F2, F3), F4, F8 & F9 *sequence:* 3 0 x

If this parameter is enabled, no code is requested for the functions listed above. When this parameter is disabled, these functions (keys) can be used only when followed by a code (Master or User) – see the following table:

function / setting	301	300
arming		**„code“**
partial arming		 **„code“**
door opening		 **„code“**
memory reading	**F 4**	**F 4 „code“**
appliance control	**F80, F81**	**F8 “code” 0** **F8 “code” 1**
message listening	**F 9**	**F 9 „code“**

„code“ = Master or User

Factory default setting: no code requested

Note: this feature is also selectable on the JA-60D wireless keypad and it is independent from the control panel setting.

10.14 Partial (Home) arming with - non split control panel *sequence:* 3 1 x

In partial arming, the control panel reacts only to detectors addressed to section A (see 10.2 and 10.28) and it ignores the triggering of detectors in section B or C (except smoke and gas detectors). Partial arming can be disabled with this sequence.

options:

3 1 1 partial arming **enabled**

3 1 0 partial arming **disabled**

Factory default setting: partial arming enabled

10.15 Hard wired siren alarm enabled *sequence:* 3 2 x

The SIR siren output is activated when any alarm is triggered (except silent Panic alarm). This siren indication can be disabled with this parameter.

options:

3 2 1 siren **enabled**

3 2 0 siren **disabled**

Factory default setting: siren enabled

10.16 Exit delay audible indication *sequence:* 3 3 x

The exit delay can be indicated by the "beeping" of the keypad (for the last five seconds, the beeping is faster). The audible indication can be disabled with this setting.

options:

3 3 1 indication **enabled**

3 3 0 indication **disabled**

Note: wireless indoor siren UC-260 also provides this indication (either following this setting or indicating no matter this setting)

Factory default setting: indication enabled

10.17 Partial arming exit delay audible indication *sequence:* 3 4 x

Partial arming with provides an exit delay for delayed reaction detectors. The exit delay for partial arming can be indicated by the "beeping" of the keypad (for the last five seconds the beeping is faster).

options:

3 4 1 indication **enabled**

3 4 0 indication **disabled**

Factory default setting: indication disabled

Note: when this indication is disabled, the confirmation of partial arming and disarming will automatically be silent, regardless of the 36x setting.

10.18 Entrance delay audible indication *sequence:* 3 5 x

The entrance delay can be indicated by a rapid "beeping" of the keypad. This indication can be disabled with this setting.

options:

3 5 1 indication **enabled**

3 5 0 indication **disabled**

Note: wireless indoor siren UC-260 also provides this indication (either following this setting or indicating no matter this setting). Setting is also valid fro partial arming if system is split.

Factory default setting: indication enabled

10.19 Arming and disarming chirps with wired siren *sequence:* **3 6 x**

The control panel can confirm on the SIR output arming (1 chirp), disarming (2 chirps), disarming with information in the memory (3 chirps), andbypass or not ready component when arming (4 chirps). This parameter sets chirps on.

options:

3 6 1 siren chirps **enabled**

3 6 0 siren chirps **disabled**

Factory default setting: siren chirps disabled

Note: setting of chirp sounds is valid even if the siren is disabled for alarms with parameter 320. Partial arming is always silent, if sequence 340 is selected. Chirp sounds can also be generated with the JA-60A wireless siren (self-contained setting in the wireless siren).

10.20 Siren alarm in Disarm & Partial arming *sequence:* **3 7 x**

The SIR output can be disabled for alarms during the Disarm & Partial arming of the control panel (while somebody is indoors). If the siren output is completely disabled for alarms with parameter 320, this setting has no effect.

options:

3 7 1 alarm in disarm & partial arming **enabled**

3 7 0 alarm in disarm & partial arming **disabled**

Factory default setting: enabled

10.21 Wireless siren alarm *sequence:* **3 8 x**

The wireless siren alarm function can be disabled with this parameter. This setting will have no influence on the outdoor wireless siren chirp sound function if enabled in the siren. This setting has effect only when the control panel is equipped with a radio module:

options:

3 8 1 siren **enabled**

3 8 0 siren **disabled**

Factory default setting: siren enabled

10.22 Indication of system problems when arming *sequence:* **3 9 x**

The system regularly checks the conditions of all items (detectors, keypads etc.). This setting ensures that the user will be warned with 4 rapid beeps after arming, if any component of the system is not ready for arming. Cause of the problem (for example permanently triggered detector, lost communication etc.) will remain displayed on the keypad. If the user ignores this warning, the system will arm after the exit delay, then the problematic item will be bypassed for this arming period. After disarming in such a mode, three beeps will be generated as well.

When the indication is not selected, the problematic item will be bypassed when arming with neither warning nor alarm.

If a permanently activated detector is deactivated during arming (for example your main door is not closed), the bypass of this detector will be canceled automatically and the detector will be ready to trigger an alarm after it is activated (if you close the door after the system is armed).

options:

3 9 1 warning **enabled**

3 9 0 warning **disabled**

Note: if this indication is enabled, the problems will also be indicated if there are any when leaving the programming or user mode.

Factory default setting: warning disabled

10.23 Control panel splitting *sequence:* **690 x**

The control panel can be split into 2 independent sections A and B, with a shared common area C. This way the system can be operated by two independent user groups. In fact the system in this mode works like two independent systems. If the system is split into sections with this setting, it is possible to address detectors (both wireless and wired), user codes and remote controls to the individual sections. Use the following sequences.

options:

6 9 0 0 no splitting (partial arming available in this mode)

6 9 0 1 splitting to sections A, B and common C (C is armed only when both A and B are armed)

Factory default setting: no splitting

10.24 Only first source of alarm is recorded *sequence:* **691 x**

When any item triggers the alarm 4 times in a row the system will bypass it until any other events occurs. But it is possible to set the limit at the incoming events so only the very first event during the entire alarm will be recorded. This function is useful especially if the system contains a GSM communicator in order to decrease quantity of the SMS messages. This setting is valid for all kinds of the alarm.

Options: **6 9 1 0** **All sources** of alarm are recorded

6 9 1 1 **Only first source** of alarm is recorded

Factory default setting: **All sources** of alarm are recorded

10.25 Alarm triggered by opened zone when arming *sequence:* **692 x**

If the "indication of system problems when arming" (see 10.21) is enabled, it is also possible to test the status of the detectors after expiring the exit delay. If any item is activated then in case of instant zone the alarm will be triggered immediately, in case of delay zone the entry delay will start.

Options: **6 9 2 0** **test disable**

6 9 2 1 **test enable**

Factory default setting: test disabled

10.26 Audible panic alarm sequence: **693 x**

For special cases it is possible to set the audible panic alarm.

Options: **6 9 3 0** audible panic alarm **disabled**

6 9 3 1 audible panic alarm **enabled**

Factory default setting: disabled

10.27 Entering the programming mode by SC+MC/UC sequence: **697 x**

If it is enabled then Master code or User code must follow the Service code in order to enter programming mode.

Options: **6 9 7 0** MC/UC must follow SC to open programming mode **disabled**

6 9 7 1 MC/UC must follow SC to open programming mode **enabled**

Example: If it is enabled then to enter the programming mode (SC 6060/ MC 1234) must be set: F0 6060 1234

Factory default setting: disabled

Note: it has no influence on the user mode entering (F0 MC)

10.28 Addressing of wireless detectors to sections *sequence:* **61 nns**

If the control panel is split (see 10.23) and is equipped with a radio module, the wireless detectors can be addressed to sections by entering:

61 nns

where: **nn** = wireless detector zone number: from 01 to 16

s = section: 1 = A, 2 = B, 3 = C (common section - it is armed only when both A and B are armed). If the control panel is not split, and s=2 is selected, this detector will be bypassed while partial arming.

Example: to address wireless detector zone number 3 to section A enter: 61 031

Factory default setting: detectors 1 - 10 are addressed to A, detectors 11 - 16 are addressed to B

10.29 Addressing of the user codes to sections *sequence:* **62 nns**

If the control panel is split (see 10.23), the user codes can be addressed to sections A or B by entering:

62 nns

where: **nn** = user code number: from 01 to 14

s =section: 1 = A, 2 = B

Notes:

- If the control panel is not split, this setting has no effect.

- Master code (MC) can not be addressed. If the system is split, the use of MC will arm all sections if no section is armed or it will disarm all sections if any are armed. If you want to operate only section A with master code, enter F1 MC and F2 MC for section B.

Example: to address user code number 4 to section A enter: 62 04 1

10.30 Addressing of wireless controllers to sections *sequence:* 63 nns

If the control panel is split (see 10.23) and is equipped with a radio module, the wireless controllers (RC-11, RC-22 and JA-60D) can be addressed to A or B section by entering:

63 nns

where: **nn** = number of the enrolled controller from 01 to 08 (c1 to c8)
s = section: 1 = A, 2 = B

Notes:

- If the control panel is not split, this setting has no effect
- For the JA-60F keypad this setting has no effect (its user codes are determined by 62 nns setting)
- The JA-60D keypad is effected the same way as RC-11 remote controls (is addressed to a selected section)

Example: to address controller number 5 to section A enter: 63 051

Factory default setting: all wireless controllers are addressed to section A

10.31 Automatic arming / disarming setting *sequence:* 64 nahhmm

The control panel can automatically arm and disarm for a requested period of a day. Up to ten instructions (time & action) can be programmed in the period of one day by entering:

64 nahhmm

where: **n** = instruction number from 0 to 9
a = action (see the actions' table)
hh = hours (from 00 to 23)
mm = minutes (from 00 to 59)

actions' table

a	no splitting	split system
0	no action	no action
1	arm all	arm all
2	disarm	disarm all
3	partial arming	arm A
4	partial arming	arm B
5	disarm	disarm A
6	disarm	disarm B

Notes:

- If any automatic action is selected, it will be preformed everyday at the programmed time, following the internal control panel clock.
- The automatic arming and disarming can be overridden manually anytime (by a user code or a remote control)
- If the control panel is in the requested arming mode before the action time, performance of the programmed action will not change the arming

Example: to program an automatic complete arming of the system at 21:15 everyday enter: 64 0 1 21 15

Factory default setting: all instructions are set for no action

10.32 New service code setting *sequence:* 5 nSC nSC

The Service Code can be used to enter the programming mode. A new Service Code must be entered twice in a row to avoid an error.

To change the code enter:

5 nSCnSC

where nSC is your new Service Code (four digits)

Example: to change service code to 1276 enter: 5 1276 1276

Factory default setting: service code is 6060

10.33 User Mode entering Sequence: 6 9 9 9

This sequence is used to switch from the Programming Mode to the User Mode, where you can set zones´ bypass (see User's manual). You can exit the User Mode by pressing the "N" button. The bypassed zones will remain active after the leaving the User Mode.

10.34 Real time and date setting *sequence:* 4 hh mm dd MM YY

The control panel has a built in real time clock. All events are stored to the event memory including the time of the event. The clock should be set after the installation is completed. Time Setting:

4 hh mm dd MM YY

where **hh = hours** (24 hr. cycle)
mm = minutes
dd = day
MM = month
RR = year

Example: on Jun. 30 2007 at 17:15 enter: 4 17 15 30 06 07

After the control panel is powered, its internal clock's default setting is: 00 00 01 01 00

Note: detail control panel event history can be viewed with a connected PC using Comlink software.

11 System testing

For testing **by installer**, the control panel should be in the programming mode - "P" indicated on the keypad's LED (F0 Service Code). Testing can also be done **by a user** in the user mode (confirmed by "U"). The user mode is accessible with the Master code. To open the user mode enter F 0 Master Code when the control panel is disarmed.

No alarm can be triggered in programming or user modes and any triggering of a detector (wireless or wired) will result in a "beep" (press F to select a loud "beep" generated by a wired siren) and the display will briefly show which zone was triggered. Enrolled wireless controllers, sirens and other items' signals will be similarly indicated.

- **Some detectors (JA-60P, JA-60N, JA-60B** etc.) have an extra testing mode, which is activated for 5 minutes after the detector's cover is attached (see manuals of the particular detectors). If the detector is in testing mode, it will indicate triggering locally with its LED, and it will also indicate the triggering on the control panel keypad's LED. Note that the JA-60P motion detector in normal mode (after 5 minutes testing mode) can not send next triggering information until 5 minutes after the previous triggering was sent (this period can be shortened to 1 minute - see setting of the JA-60P detector).
- **Triggering of a detector wired** to one of the L1 to L4 inputs is indicated on the control panel keypad's LED for about 2 seconds after the triggering. So, if a detector is permanently triggered for a longer period, it will not be indicated. If a double balanced input loop (2x 1k1) is used, then the control panel distinguishes triggering of the detector from tampering.
- **The best way of testing** is via a connected PC using the Comlink software (see section 17). In the service events window you will see a chronological record of all performed tests, including zone setting, quality of communication etc.

12 Voice & SMS messages setting

A control panel equipped with the X module can automatically send 2 voice and 5 short text messages (or dial a Pager) . The most convenient programming of the dialer is via a connected PC using the Comlink software (see section 17). Programming can also be performed manually from the keypad:

- Enter the programming mode (***F 0* Service Code**, factory default = 6060), indicated by „P“
- Any unfinished programming sequence can be terminated by pressing the **N** key.
- **To exit the programming mode, press the N** key („P“ will turn off). If any fault is indicated when you try to exit the programming mode, the control panel will inform you about the problem (see 10.22).
- Telephone numbers and messages can also be set up in the User Mode when enabled (see section 10.7)

List of the voice & SMS sending parameters

Function	sequence	options	factory d.	note
Dialing method	**90x**	**901 = tone 900 = pulse**	**tone**	valid also for CMS dialing
Triggering of the dialer with a Panic alarm	**91x**	**0**=nothing, **1**=voice1 + SMS, **2**=voice2, **3**=SMS only	**911**	
Triggering of the dialer with an Intruder alarm	**92x**	**0**=nothing, **1**=voice1 + SMS, **2**=voice2, **3**=SMS only	**921**	
Triggering of the dialer with a Fire alarm	**93x**	**0**=nothing, **1**=voice1 + SMS, **2**=voice2, **3**=SMS only	**931**	
Triggering of the dialer with a Tamper alarm	**94x**	**0**=nothing, **1**=voice1 + SMS, **2**=voice2, **3**=SMS only	**941**	
Triggering of the dialer with a Technical alarm	**95x**	**0**=nothing, **1**=voice1 + SMS, **2**=voice2, **3**=SMS only	**951**	
Telephone line checking enabled	**99x**	**990=NO 991=YES**	**NO**	
Store telephone numbers for voice message	**7xx..x F y**	**xx...x** = tel. number, **y** = memory 1 to 4, pause = F0	1: 2: 3: 4: 5:	
Automatic SMS sending	**7x..xF9y..yF7** **00F9F5**	**x..x**=SMS server number **y..y**= mobile phone number		
Erase telephone number	7F0Fy	**y** = memory 1 to 5, entering **7F0F0 erases all**		
Record voice messages (1 & 2)	mess. 1 enter **85** then push button on X module and speak (10sec.) mess. 2 enter **86** then push button on X module and speak (10sec.)			
Dialer testing	**89**			

12.1 Telephone numbers for voice message sending *seguence:* 7xxx....xxFy

Store telephone numbers for voice message by entering:

7 xx... xx F y

where **xx...xx** = telephone number
y = memory number from 1 to 4

A telephone number can have a maximum of 16 digits. A **pause** can be entered with **F0**

Example: to store tel. number 0 123456 to memory no. 2 enter: 7 0 F0 12345 F2

*Note: enter a pause (F0) after the last digit of a **number which is calling a mobile phone**. This way the number will be called only once and the dialer will not check the line signals (some mobile phone systems do not generate standard telephone line signals).*

To delete a telephone number enter:

7 F0 F*y*

where ***y*** is a memory number from 1 to 4
entering **7 F0 F0** will erase all tel. numbers, including the SMS settings

When activated, the dialer will disengage all other devices hooked up to the phone line. It will then, one by one, call all programmed numbers and play the user recorded message which corresponds to the event. If the dialer makes a successful connection to a programmed number, it will not call that number again. If the number is busy, the dialer will make 3 more attempts to call it. Empty tel. number memories are skipped. If all memories are empty, the dialer is completely disabled. If the dialer is programmed to also communicate with a monitoring station, the data will first be sent to the monitoring station..

Factory default setting: all telephone numbers are deleted.

12.2

Automatic SMS sending ***sequence:*** **7xxx....xxF5**

If Jablotron's SMS server service is provided in your country (check with your distributor), the following setting allows the control panel to send alarm text messages (SMS) automatically to a desired mobile phone:

7 xx…x F9 yy....y F7 00F9 F7zz..z F5

where:

xx…x = telephone number of the SMS server (check with your distributor if this service is provided in your country)
F9 = separator (recognition of server's reaction)
yy…y = mobile phone number (where the SMS should be sent to)
F7 = event code separator
00F9 = automatic event code – control panel will insert there a digital code representing the alarm (depends on setting in section 12.4)

F7 = ID separator

zz..z = optional ID number which will be sent as a part of the SMS (ending). ID distinguishes which alarm system sent the SMS). If ID is not required, do not enter

F5 = storing of the sequence to memory 5 (32 digits can be stored to memory 5 as a maximum - separators F9 and F7 takes only 1 digit each).

How the SMS server woks*: when activated, the control panel dials the SMS server. After the connection is established, it sends telephone number of the mobile phone, to which the SMS should be sent. Then the control panel specifies what happened by a digital code and in the end the ID number is transferred (if programmed). In this moment the SMS server makes corresponding text message and this message is sent to the GSM network.*

Example: If SMS server number is 483559876, SMS should be sent to number 606123456 and ID number of the installation is 41 enter :

7 483559876 F9 606123456 F7 00F9 F7 41 F5

Deleting of automatic SMS sending – to erase SMS sending enter:

7 F0 F5

Note: *memory 5 can also be used to dial a Pager instead of SMS sending.* ***To dial a Pager*** *enter* ***7 xx..x F9 zzz....z F5*** *where xx..x is number of the provider, zz…z is number of the pager and code of the message (check with a local Pager provider for details). Pause in the dialing can be entered with F0, * with F7 and # with F8. Pager dialing can be deleted with 7 F0 F5.*

Factory default setting: SMS sending (Pager dialing) is erased.

12.3 Voice message(s) recording ***sequence:*** **8x**

You can record two different voice messages (10 sec. each). Depending on the setting in section 12.4, a particular message will be sent under different situations. Recording of the messages:

a) **enter 85** on the keypad
b) **press and hold push button** on the X module
c) **speak** towards the module (max. 10 s)
d) **release the button**, message will play back

This results in the recording of message number 1. **To record message 2 enter 86** in step a)

If you prefer sending only one, but longer, message (20 sec.), record message by entering 84 in step a). By programming as described in section 12.4 you can specify which alarms will trigger the sending of a message.

Notes:

- *Make the messages brief and clear. The dialer repeats the message to each called number for 40 seconds.*
- *The voice messages are stored in non-volatile memory and can be changed when ever you want to by repeating the above steps.*
- *The existing messages can be played by momentarily pressing the push button on the X module (or by entering F9 while in stand by mode).*

12.4 Triggering of voice and SMS messages sending ***sequences:*** **9 y x**

With sequences 91x to 95x you can select which alarms will trigger the telephone dialer to call and what will be sent. Enter:

9 y x

where

y	***Alarm***
1	Panic – silent
2	Intruder
3	Fire
4	Tampering
5	Technical trouble

x	reaction
0	no reaction
1	voice1 and SMS
2	voice 2 only
3	SMS only

Notes

- *Final texts of alarm SMS are generated by the SMS server (providers computer) – based on the digital code sent by the alarm system (check with provider for more details)*
- *If only one long voice message was recorded by using code 84 as described in section 12.3, then this message will be sent when x=1 or x=2*
- *Voice messages are sent step by step to all telephone numbers programmed as described in section12.1*
- *SMS message is sent to a mobile phone number programmed as described in section 12.2*

Example: if the dialer should send an SMS and voice message 1 when intruder or panic alarm is triggered, voice message 2 in the case of fire and only an SMS in the case of technical alarm, enter: 911 921 932 943

Factory default setting: all alarms will trigger sending of voice message 1 and SMS (911, 921, 931, 941, 951).

12.5 Dialing method *sequence:* 9 0 x

Enter:

9 0 1 for **tone** dialing

9 0 0 for **pulse** dialing (this option is blocked for some countries)

Note: this dialing method setting is also valid for Central monitoring station communications.

Factory default: tone dialing

12.6 Telephone line checking *sequence:* 9 9 x

If this function is enabled, the dialer will check regularly if the telephone line is ready to make a phone call. If the line is not ready for more than 15 minutes, the keypad will indicate a telephone line failure (failure L). A non-working telephone line or a phone conversation or Internet connection longer than 15 minutes can cause a fault.

options:

9 9 1 checking **enabled**

9 9 0 checking **disabled**

Note*: this setting is also valid when the dialer is used for Monitoring station communications as well as remote PC access*

Factory default setting: checking disabled

12.7 Telephone dialer testing *sequence:* 8 9

After entering code **89** the dialer will call all programmed numbers and will play voice message 2. It will also send a SMS message if programmed. The telephone line signals will be audible from the control panel's built in speaker during the test (if the dialer is triggered by an alarm in normal operation, it will call silently).
If you prefer testing with voice message 1 enter code 88.
Testing can be terminated with the **N** key.

13 To enable a remote computer to dial in

When the user or installer wants to dial in to the installation from their computer or a remote JA-60E keypad via a JA-60U modem (see section 18), the following parameters should be programmed.
The most convenient programming is via a connected PC using the Comlink software (see 17). Programming can also be performed manually:

- **Enter the programming** mode when disarmed (***F 0*** **Service Code**, factory default 6060), indicated by a "P"
- Any unfinished programming sequence can be terminated by the **N** key.
- **To exit the programming**, press the N key ("P" will turn off).

Dialing in parameters

Function	sequence	options	factory d.
Incoming call reaction	**0 5 x**	0=never, 1= second call, 2-6 = after ring No. 2 - No.6	disabled
Remote access code (8 digits)	**0 7 xxxxxxxx**	any 8 digits code	00000000

13.1 Reaction to an incoming call *sequence: 05*

This sequence sets how the communicator will react to incoming calls on the telephone line. This setting is important for remote access.

0 5 x

x can be **0** - never answer

1 - answer after second call = after 1 or 2 rings are detected, there must be a pause of 10 - 45 seconds. The dialer will then answer on the very first ring of the second call. This setting can be used to bypass an answering or facsimile machine connected to the same line. This "Second Call" feature is supported by the Comlink software and also by the JA-60E keypad.

2 to **6** - answer after 2nd to 6th ring

Notes: Remote access connection can also be enabled by the alarm system user (regardless of the above setting) by entering 89 while in the user mode, when the phone rings. If you use another telephone set on the same telephone line, it should be switched to the tone dial mode.

Factory setting: 0 = never answer

13.2 Remote access code setting *sequence: 07*

In order to access the panel remotely, it is necessary to authorize the access with an 8-digit access code. This code is compared with the one programmed in the control panel. If the caller tries to access the panel with an other code, the connection will be terminated immediately. A wrong code alarm will be triggered on the control panel after the 5th unsuccessful attempt to dial in. Store your access code to the control panel by entering:

0 7 xxxxxxxx

x x . . . . . x - any 8 digits access code

Factory setting: 00000000

14 Central monitoring station communication setting

This part of the manual is intended only for specialists involved in monitoring. We recommend to use a computer equipped with Comlink program for complete setting of the monitoring station communication (see 17). Changes of the setting can also be performed manually using the keypad:

- Enter programming mode when disarmed (*F 0* Service Code, factory default 6060), indicated by a "P".
- To exit programming press the N key ("P" will turn off).

Central monitoring station communication parameters

Sequence	Description			Factory default setting	
0 001 xx to **0 198 xx**	Reporting codes table (see part 16) where: **x**= **0** – **9**, **F0 = A_h, F1 = B_h , F2 = C_h, F3 = D_h, F4 = E_h, F5 = F_h** if **00** is set, the event is not reported			00	For all events
0 2 xxxx	Account ID code (4 digits, for 3/1 and 3/2 formats the structure is 0xxx) **x** = **0** – **9** (hexadecimal codes can be used too - see above)			0000	
0 3 xy	Protocol **x**: **0** = Ademco Slow **1** = Ademco Fast **2** = Telemax **3** = Franklin **4** = Radionics 2300	 **5** = Radionics 1400 **6** = DTMF 2300 **7** = Surgard **8** = Ademco Express **9** = Contact ID	Format **y**: **0** = 3/1 (xxx R) **1** = 3/2 (xxx rc) **2** = 4/1/1 (xxxx Rn) **3** = 4/2 (xxxx rc)	90	Contact ID
0 4 x	Re-dialing pause, **x**= **1 – 9** (x 10 min.)			1	10 minutes
0 6 xx..xFy	CMS phone numbers **xx...x** to memory **y** (1 and 2), pause = F0				erased
0 9 6060	Communicator reset to factory default settings				

Dialing method (tone / pulse) and **telephone line checking** has a common setting with the voice & SMS message setting - see parts 12.5 and 12.6.

Notes:

Some of the protocols are not standardized and some manufacturers of Monitoring Station receivers use different parameters in some of their protocols. Therefore Jablotron cannot guarantee full compatibility with all Central Monitoring Station receivers.

If the connection with the Monitoring Station is not available, the events are queued in the communicator's memory and are transmitted in one burst as soon as the connection is established. All events are reported to the Monitoring Station in the same order as they happened.

Once communication has started, it can not be interrupted unless the control panel is switched to the programming or to the user mode. For example, if the user causes a false alarm and then cancels it, both events are sent to Monitoring Station.

Events occurring while the control panel is in the programming or user mode are reported to the Monitoring Station after the closing of these modes. (They are stored in the memory and reported together with reporting codes describing the change of operation modes.)

When the dialer is activated, the communication to the monitoring station has the highest priority (voice and SMS messages are sent later with lower priority). A User or Installer can interrupt the digital dialer communication by entering the User mode or Programming mode. Reset of the control panel has no influence to the digital communicator's settings (it is reported to the Monitoring station as an event).

The RESET of the digital communicator itself (sequence 0 9 6060), the change of the Monitoring Station's telephone numbers, the change of an account number code or the change of a format setting will erase all the reporting codes queued in the communicator's memory. However the events remain stored in the control panel's internal memory.

Jablotron recommends use of the MS-300 monitoring station with ComGuard SW.

14.1 Reporting codes setting *sequences: 00 and 01*

These sequences can be used to program the report codes for all possible events. Depending on the used protocol and format, different amounts of data should be entered. The complete report code programming table is shown in section 16. The setting sequence structure is as follows:

0 x x x r c

xxx = event number (from 001 to 198)

rc = report code (two digits). For 3/1 and 4/1/1 formats only the first digit of the report code is used (R). Codes should be entered in a hexadecimal format, with numbers higher than 9 beginning with the F key: ***A_h = F0 B_h = F1 C_h = F2 D_h = F3 E_h = F4 F_h = F5***

If the reporting code 00 is programmed, the event will not be reported to the Monitoring Station.

Notes:

- *Abbreviation "Rc" is used in the report code programming table for the major events group. Only the first digit of this group of codes is transmitted when formats 3/1 or 4/1/1 are used. Other formats use both digits of the "Rc" and "rc" report codes.*
- *The Contact ID (CID) is an automatic protocol. If you enter any report code other than zero for a major event (Rc), all events of this type will be transmitted automatically including all details regarding the event source. Internal structure of the CID protocol is shown in part 16.1. This protocol provides the most in-depth data for the monitoring station and its use is recommended by Jablotron.*
- *The Surgard protocol has 4/2 structure plus one more digit which is generated automatically (see 14.3)*
- *If the control panel is split and only one section is armed, then a partial arming report code is sent. If all sections are armed, a complete arming report code is sent. If the system was completely armed and only one section is disarmed, the disarming report code will be sent and then it will be followed by the partial arming report code.*
- *The pulse formats are not capable to report zero and numbers above 15. For this reason events in zone 16 or in a subsystem are reported to the Monitoring Station as events in zone 10. This means that from the point of view of the monitoring station zone 10 also covers zone 16 and the subsystem if used. This problem does not exist in the CID protocol.*
- *If the system is arming while there is a bypass, partial arming will be reported to the CMS (also stored to the internal memory)*

Factory setting: 00 for all events

14.2 Account ID code setting *sequence: 02*

This sequence is used for the alarm system identification by a Monitoring Station. The sequence structure:

02 x x x x

xxxx – account ID code (x are numbers from 0 to 9 or hexadecimals).

When using only three-digit codes (formats 3/1 and 3/2) enter a zero in the first position. The communicator will then ignore it (example - 0123)

Note: Changing of the account code erases the internal communicator's memory of non reported events and sends a „Reset" reporting code (051) to the Monitoring Station. If pulse formats are used, zero is transmitted as **A_h**

Factory setting: 0000

14.3 Protocol and Format setting *sequence: 03*

This sequence is used to select the communication protocol and format. Its structure is as follows:

03 x y

x - protocol (0 – 9, see table bellow)
y - format (0 - 3 see table on right)

Protocols						
x	**Name**	Hand-shake	Data	Kiss off	Speed	**format**
0	Ademco Slow *(Silent Knight)*	1400Hz	1900Hz	1400Hz	10bps	Next table
1	Ademco Fast	1400Hz	1900Hz	1400Hz	14bps	Next table
2	Telemax	2100Hz	1650Hz	2100Hz	10bps	Next table
3	Franklin	2300Hz	1800Hz	2300Hz	20bps	Next table
4	Radionics 2300	2300Hz	1800Hz	2300Hz	40bps	Next table
5	Radionics 1400	1400Hz	1900Hz	1400Hz	40bps	Next table
6	DTMF 2300	2300Hz	DTMF	2300Hz	DTMF	Next table
7	Surgard*	2300Hz	DTMF	2300Hz	DTMF	4/3
8	Ademco express*	Dual tone	DTMF	1400Hz	DTMF	4ID/2
9	Contact ID*	Dual tone	DTMF	1400Hz	DTMF	CID

* **fixed format**, "y" is arbitrary (0 is recommended)

Formats			
y	format	reports	structure
0	3/1	Major events only	xxx R
1	3/2	All events	xxx rc
2	4/1/1	Major events with autom. source identification	xxxx Rn
3	4/2	All events	xxxx rc

xxxx = account number
R = major event code (only first digit counts)
rc = detailed event code (two digits)
n = source identification (generated automatically)

Surgard protocol has structure: **xxxx E rc,** where E is a group identifier (generated automatically)

E	Event	Note
1	Fire	
2	Panic	
3	Alarm	General
4	Arming	Incl. Partial
5	Disarming	
6	Failure	Power failure, RF jamming …
8	Report	Enter/Exit service mode …
9	Restore	End of alarm, panic …
A	Test	24 hour test

Notes:

- *1/ Some Monitoring Station receivers do not support all formats.*
- *2/ Logic of the format marking - 4/2 means that an account code has 4 digits and an event report code has 2 digits.*
- *3/ Changing of a format erases the internal communicator's memory of non reported events and sends a "Reset" reporting code (051) to the Monitoring Station.*

Factory setting: 90 (Contact ID)

14.4 Re-dialing pause setting *sequence: 04*

If a dialer is triggered it attempts to make a connection (alternating between the primary and the backup telephone number). If it is not possible to make a connection after 8 attempts, a pause is initiated. After this pause the dialer will attempt again. If any event triggers the communicator during the pause, the pause ends immediately. The pause length can be set in the following way:

0 4 x

x – time multiplied by 10 minutes (from 1 to 9, example 3 = 30 minutes)

Factory setting: 1 = 10 min.

14.5 CMS phone number entering *sequence: 06*

Central monitoring station modem phone numbers can be stored by entering the following sequence:

0 6 x x .... x F y

xx...x – Central Monitoring Station phone number (up to 16 digits)
y is 1 for primary phone number memory
2 for back up phone number memory

Pause (3 sec.) can be inserted into the telephone number by entering **F0**. It is also possible to insert the ✱ tone by **F7** or the # tone by **F8** if requested for DTMF dialing.

Example: number 02 123456 as main Monitoring Station number is entered with 06 02 F0 123456 F1.

Phone number erasing

0 6 F 0 F y

y is 1 to erase the primary telephone number
2 to erase the back up telephone number

Note: Changing of a phone number erases the internal communicator's memory of non reported events and sends a "Reset" reporting code (051) to the Monitoring Station.

Factory setting: both numbers are erased

14.6 Digital communicator reset *sequence: 096060*

By entering this code the factory default settings of all parameters are restored in the digital dialer. All phone numbers, reporting codes, account codes etc. are erased. This reset doesn't effect the voice dialer's settings. The reset sequence is:

0 9 6060

Note: All communicator settings are stored in non-volatile memory and remain unchanged even after switching off the power supply.

15 Control panel factory default reset

If you forget the control panel codes or you have a control panel which is currently not under factory default settings, perform the following:

- disconnect the AC power and back up battery in the control panel and wait for 10 seconds.
- connect (short) the RESET pins on the main board
- leave the control panel cover open
- reconnect back up battery and the AC power
- within 1 minute disconnect the RESET jumper
- reset is confirmed with a "P" (panel is in programming mode)

Note: this procedure resets the factory default settings (see part 10). The Master code will be 1234, Service code 6060 and all user codes, wireless detectors & controllers will be forgotten. All telephone numbers for voice message and Pager dialing will be erased in the communicator. The reset will not erase event memory and information about the reset will be recorded there. The RESET pins can also be used to enroll a JA-60F wireless keypad (see 10.1).

Warning: if the Master code is forgotten when reset is disabled (with sequence 280), the control panel reset will be possible only by the manufacturer.

16 Central Monitoring station report codes table

A two digit report code **rc** (00 to FFh) can be set for every event. If 00 is programmed as a report code, that event will not be reported.

The major events group is marked by **Rc.** When formats 3/1 or 4/1/1 are used, only 16 of these major events are reported to the Monitoring Station. This makes it necessary to only program the **R** digits. The second digit does not count. Zero can not be used in the pulse protocols. For Contact ID protocol, program code 11 for major events (**Rc**) which you want to report and the system will generate all details regarding the event automatically including the events source details (see part 16.1).

N.	Event	*Code*
001	**Arming with remote control N.1**	**Rc**
002	Arming with remote control N.2	Rc
003	Arming with remote control N.3	Rc
004	Arming with remote control N.4	Rc
005	Arming with remote control N.5	Rc
006	Arming with remote control N.6	Rc
007	Arming with remote control N.7	Rc
008	Arming with remote control N.8	Rc
009	Arming with master code	Rc
010	Arming with user code N.1	Rc
011	Arming with user code N.2	Rc
012	Arming with user code N.3	Rc
013	Arming with user code N.4	Rc
014	Arming with user code N.5	Rc
015	Arming with user code N.6	Rc
016	Arming with user code N.7	Rc
017	Arming with user code N.8	Rc
018	Arming with user code N.9	Rc
019	Arming with user code N.10	Rc
020	Arming with user code N.11	Rc
021	Arming with user code N.12	Rc
022	Arming with user code N.13	Rc
023	Arming with user code N.14	Rc
024	**Partial arming**	**Rc**
025	**Quick arming without code**	**Rc**
026	**Disarming with remote control N.1**	**Rc**
027	Disarming with remote control N.2	Rc
028	Disarming with remote control N.3	Rc
029	Disarming with remote control N.4	rc
030	Disarming with remote control N.5	rc
031	Disarming with remote control N.6	rc
032	Disarming with remote control N.7	rc
033	Disarming with remote control N.8	rc
034	Disarming with master code	rc
035	Disarming with user code N.1	rc
036	Disarming with user code N.2	rc
037	Disarming with user code N.3	rc
038	Disarming with user code N.4	rc
039	Disarming with user code N.5	rc
040	Disarming with user code N.6	rc
041	Disarming with user code N.7	rc
042	Disarming with user code N.8	rc
043	Disarming with user code N.9	rc
044	Disarming with user code N.10	rc
045	Disarming with user code N.11	rc
046	Disarming with user code N.12	rc
047	Disarming with user code N.13	rc
048	Disarming with user code N.14	rc
049	**Entering of the programming mode**	**Rc**
050	**Exiting the programming mode**	**Rc**
051	**Communicator Reset**	**Rc**
052	**Initial AC powering**	**Rc**
053	**Alarm after initial AC powering**	**Rc**
054	**General battery trouble**	**Rc**
055	**General battery trouble end**	**Rc**
056	**Control panel battery trouble**	**Rc**
057	**Control panel battery trouble end**	**Rc**
058	**Zone alarm 1**	**Rc**
059	Zone alarm 2	rc
060	Zone alarm 3	rc
061	Zone alarm 4	rc
062	Zone alarm 5	rc
063	Zone alarm 6	rc
064	Zone alarm 7	rc
065	Zone alarm 8	rc
066	Zone alarm 9	rc
067	Zone alarm 10	rc
068	Zone alarm 11	rc
069	Zone alarm 12	rc
070	Zone alarm 13	rc
071	Zone alarm 14	rc
072	Zone alarm 15	rc
073	Zone alarm 16	rc
074	**Wrong access code alarm**	**Rc**
075	**Zone tamper 1**	**Rc**
076	Zone tamper 2	rc
077	Zone tamper 3	rc
078	Zone tamper 4	rc
079	Zone tamper 5	rc
080	Zone tamper 6	rc
081	Zone tamper 7	rc
082	Zone tamper 8	rc
083	Zone tamper 9	rc
084	Zone tamper 10	rc
085	Zone tamper 11	rc
086	Zone tamper 12	rc
087	Zone tamper 13	Rc
088	Zone tamper 14	Rc
089	Zone tamper 15	Rc
090	Zone tamper 16	Rc
091	Keypad tamper	Rc
092	Control panel tamper	Rc
093	Siren tamper	Rc
094	**Zone fault 1**	**Rc**
095	Zone fault 2	Rc
096	Zone fault 3	Rc
097	Zone fault 4	Rc
098	Zone fault 5	Rc
099	Zone fault 6	Rc
100	Zone fault 7	Rc
101	Zone fault 8	Rc
102	Zone fault 9	Rc
103	Zone fault 10	Rc
104	Zone fault 11	Rc
105	Zone fault 12	Rc
106	Zone fault 13	Rc
107	Zone fault 14	Rc
108	Zone fault 15	Rc
109	Zone fault 16	Rc
110	Keypad fault	Rc
111	Control panel fault	Rc
112	Siren fault	Rc
113	**Zone alarm end 1**	**Rc**
114	Zone alarm end 2	Rc
115	Zone alarm end 3	Rc
116	Zone alarm end 4	Rc
117	Zone alarm end 5	Rc
118	Zone alarm end 6	Rc
119	Zone alarm end 7	Rc
120	Zone alarm end 8	Rc
121	Zone alarm end 9	Rc
122	Zone alarm end 10	Rc
123	Zone alarm end 11	Rc
124	Zone alarm end 12	Rc
125	Zone alarm end 13	Rc
126	Zone alarm end 14	Rc
127	Zone alarm end 15	Rc
128	Zone alarm end 16	Rc
129	**Zone tamper end 1**	**Rc**
130	Zone tamper end 2	Rc
131	Zone tamper end 3	Rc
132	Zone tamper end 4	Rc
133	Zone tamper end 5	Rc
134	Zone tamper end 6	Rc
135	Zone tamper end 7	Rc
136	Zone tamper end 8	Rc
137	Zone tamper end 9	Rc
138	Zone tamper end 10	Rc
139	Zone tamper end 11	Rc
140	Zone tamper end 12	Rc
141	Zone tamper end 13	Rc
142	Zone tamper end 14	Rc
143	Zone tamper end 15	Rc
144	Zone tamper end 16	Rc
145	Keypad tamper end	Rc
146	Control panel tamper end	Rc
147	Siren tamper end	Rc
148	**Zone fault end 1**	**Rc**
149	Zone fault end 2	Rc
150	Zone fault end 3	Rc
151	Zone fault end 4	Rc
152	Zone fault end 5	Rc
153	Zone fault end 6	Rc
154	Zone fault end 7	Rc
155	Zone fault end 8	Rc
156	Zone fault end 9	Rc
157	Zone fault end 10	Rc
158	Zone fault end 11	rc
159	Zone fault end 12	rc
160	Zone fault end 13	rc
161	Zone fault end 14	rc
162	Zone fault end 15	rc
163	Zone fault end 16	rc
164	Keypad fault end	rc
165	Control panel fault end	rc
166	Siren fault end	rc
167	**Telephone line trouble**	**Rc**
168	**Telephone line trouble end**	**Rc**
169	**Control panel failure**	**Rc**
170	**End of control panel failure**	**Rc**
171	**Periodic test (24 hr. from last com.)**	**Rc**
172	**AC failure (in 30 min. after failure)**	**Rc**
173	**AC failure end**	**Rc**
174	**RF jamming**	**Rc**
175	**Wrong code alarm end**	**Rc**
176	**RF jamming end**	**Rc**
177	**Panic alarm from remote control N.1**	**Rc**
178	Panic alarm from remote control N.2	rc
179	Panic alarm from remote control N.3	rc
180	Panic alarm from remote control N.4	rc
181	Panic alarm from remote control N.5	rc
182	Panic alarm from remote control N.6	rc
183	Panic alarm from remote control N.7	rc
184	Panic alarm from remote control N.8	rc
185	Master code panic alarm	rc
186	User code panic alarm	rc
187	**Panic alarm end from rem. contr. 1**	**Rc**
188	Panic alarm end from rem. control N.2	rc
189	Panic alarm end from rem. control N.3	rc
190	Panic alarm end from rem. control N.4	rc
191	Panic alarm end from rem. control N.5	rc
192	Panic alarm end from rem. control N.6	rc
193	Panic alarm end from rem. control N.7	rc
194	Panic alarm end from rem. control N.8	rc
195	Master code panic alarm end	rc
196	User code panic alarm end	rc
197	**Subsystem panic alarm**	**Rc**
198	**Subsystem panic alarm end**	**Rc**

16.1 Internal structure of Contact ID protocol

The data in the CID protocol has following standardized structure:

XXXX 18 Q XYZ 01 CCC

where XXXX is the account code of the installation, 18 is the code identification (identical for all events), Q is a number from 1 to 3, XYZ is the event number, 01 is the subsystem number, CCC event source details (see the table below).

JA-63 event no.	Q XYZ	Event description	possible source in JA-63						
			C	S	c	A	J	L	d
058	1 110	Fire alarm		⨯			⨯		
113	3 110	Fire alarm end		⨯			⨯		
177	1 120	Panic alarm	⨯		⨯				⨯
058	1 120	Panic alarm from a detector		⨯					
197	1 120	Panic alarm in the subsystem					⨯		
187	3 120	End of the panic alarm	⨯		⨯				⨯
113	3 120	End of the panic alarm from a detector		⨯					
198	3 120	End of the subsystem panic alarm					⨯		
058	1 130	Intruder alarm in an instant zone		⨯					
113	3 130	End of the intruder alarm in an instant zone		⨯					
058	1 134	Intruder alarm in a delayed zone		⨯					
113	3 134	End of the intruder alarm in a delayed zone		⨯					
075	1 137	System tamper alarm	⨯		⨯	⨯	⨯		⨯
129	3 137	All system tampers OK	⨯		⨯	⨯	⨯		⨯
074	1 138	Wrong access code alarm	⨯		⨯			⨯	⨯
175	3 138	End of a wrong access code alarm	⨯		⨯			⨯	⨯
053	1 140	Alarm after powering of the control panel	⨯						
075	1 144	Detector tamper alarm		⨯					
129	3 144	All detector tampers OK		⨯					
094	1 300	Failure (blown fuse in control panel or other general failure)	⨯		⨯	⨯	⨯	⨯	⨯
052	3 300	Control panel powering	⨯						
148	3 300	No failure in the system	⨯		⨯	⨯	⨯	⨯	⨯
172	1 301	AC failure	⨯						
173	3 301	AC switched on	⨯						
054	1 302	Problem with power in an item			⨯	⨯	⨯		
056	1 302	Back up battery failure in the control panel	⨯						
057	3 302	End of the back up battery failure	⨯						
055	3 302	End of the problem with power in the item			⨯	⨯	⨯		
051	1 305	Reset	⨯					⨯	
049	1 306	Entering of programming or user mode	⨯		⨯				⨯
050	3 306	End of programming or user mode	⨯		⨯				⨯
058	1 330	Subsystem alarm					⨯		
167	1 354	Tel. line failure						⨯	
169	1 354	Failure of communication in the digital bus						⨯	
168	3 354	End of tel. line failure						⨯	
170	3 354	End of a communication failure in the digital bus						⨯	
174	1 355	RF jamming	⨯						
176	3 355	End of RF jamming	⨯						
094	1 380	Detector failure		⨯					
148	3 380	End of all detector failures		⨯					
094	1 381	Wireless item communication lost		⨯	⨯	⨯	⨯		
148	3 381	Wireless item communication reestablished		⨯	⨯	⨯	⨯		
054	1 384	Detector power problem		⨯					
055	3 384	End of the detector power problem		⨯					
026	1 401	Disarming	⨯		⨯				⨯
001	3 401	Complete arming	⨯		⨯				⨯
024	3 402	Partial (Home) arming	⨯		⨯				⨯
025	3 408	No code arming	⨯		⨯				⨯
171	1 602	Monitoring station communication testing (in 24 hr.)						⨯	

Event sources specification in the Contact ID protocol:

JA-63 source	mark	code CCC
Wireless sensor	**S**	001 to 016
Sensor		201 to 216
Controller	**c**	401 to 408
User code		501 to514
Control panel	**C**	701
Wireless siren	**A**	711
Sub control panel	**J**	721
Tel. Line	**L**	731
Digital bus	**D**	741

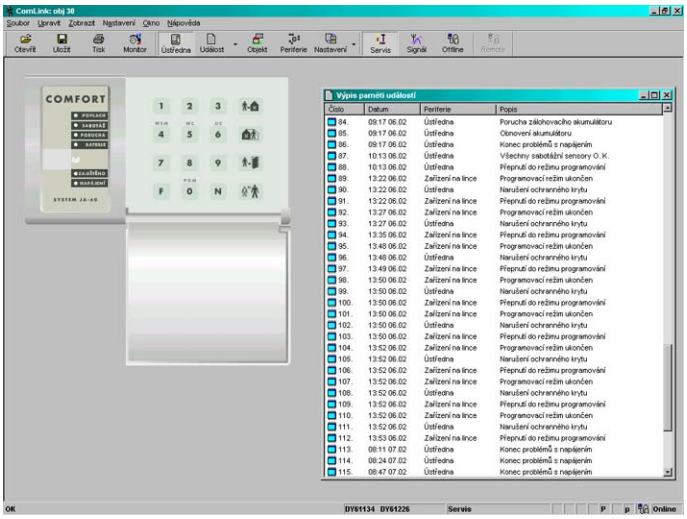
17 Personal Computer used with JA-63

The JA-63 system can be connected to a Personal Computer (PC) locally, using the PC-60A interface cable. It is also possible to dial into the system from a remote PC using the JA-60U modem (see section 18). Comlink software is designed for the Windows system.

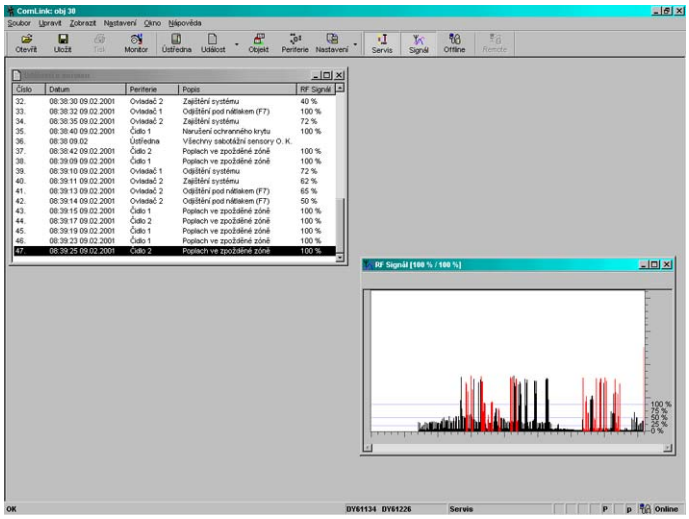
User can check and operate the JA-63 system easily via their PC, can read complete events memory with all details, can view the map of the installation (seeing topical triggering of the detectors) etc. However, the user can not change settings of the system.

Installer who has access rights can program the system, can check the communication quality of the items, can view the level of interference in the location etc. There is also a convenient tool to make a map of the installation, which includes a library of components.

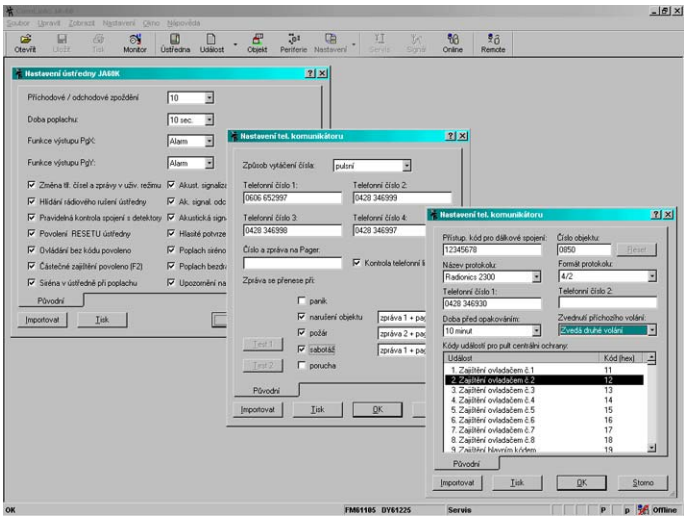
Depending on your access rights, the Comlink software will allow you to open the corresponding screens (see following examples). There is a comprehensive help file in the Comlink program.



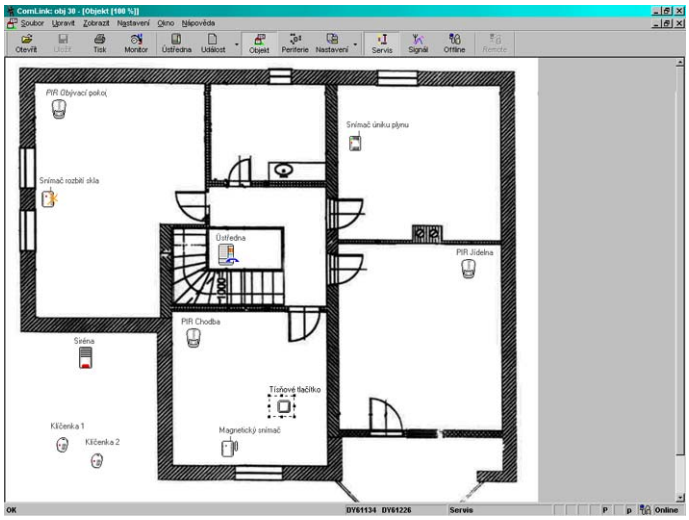
"virtual" control panel access & complete events list



item testing window & RF signal oscilloscope



programming dialogs



map of the system (shows current conditions in the house)

18 Remote access to the system

The JA-60U modem can be used for the remote connection of the JA-63 to a personal computer with Comlink software or a remote JA-60E keypad using a standard telephone line. It is necessary to know the remote control access code for the system (see 13.2).

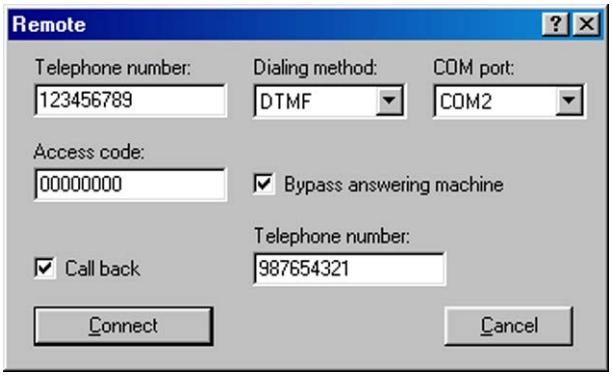
Details on how to use the JA-60E keypad remotely can be found in the JA-60E manual.

A personal computer connected remotely to the JA-63 works the same way as when it is wired directly to the JA-63 PC's output (see 17). Only downloading or uploading of extensive data (like event list downloading, digital communicator setting etc.) takes a slightly longer time compared to a direct PC connection to the control panel.

18.1 Establishing connection with a remote control panel by computer

Start Comlink SW on a computer equipped with a JA-60U modem. The dialing dialog requires the following data:

- telephone number of the called JA-63 control panel
- dialing method (tone or pulse)
- control panel's remote access code (must be identical as code programmed in the control panel - 8 digits)
- optional bypassing of answering machine (if this option was programmed in the control panel); if the connection can not be established, try to enter "space" after the last digit
- optional call back feature, if you want the JA-63 control panel to call your computer back (that way the end user's telephone will be charged for the remote access communication)



"Dialing in" dialog of the Comlink software

19 Recommended Professional installer basic rules

If you install the system for a customer, you should follow these rules:

- make a drawing of intended location of the items, keeping in mind proper protection for the intended area.
- if the customer requests reduction of the system (price reasons etc.), ask for a written confirmation that he does not want the particular items you recommended (to avoid blame and liability if poorly covered area is robed in the future)
- make a professional installation and do not forget to clean and be tidy.
- it is very important to explain to the customer all functions of the system, to teach to him or her how to program access codes, how to test the system and how to replace batteries in the items
- offer your regular assistance for testing and battery replacement (we recommend annually)
- make a written report signed by the customer, that the installation was finished properly and that she or he received your training on how to operate and test the system

20 Trouble shooting table

Problem	possible cause	solution
alarm after first powering	the control panel is not in factory default setting	perform a factory default reset
connected JA-60E keypad has no function	connecting cable does not connect the corresponding positions in the keypad and in the control panel (1-1, 2-2, 3-3, 4-4)	Check the colors of the cores in the cable and positions on each side
impossible to enroll a wireless item	location of the item is not suitable and the radio signal level is too low (too far away or an obstacle is in the way of communication)	change location of the item, (fix it in the new place temporary at first and then try it)
a fault is indicated on the keypad and it is beeping	check display for the reason of the trouble. Press key N to disable beeping. The trouble information is stored in the event memory and it can be reviewed entering F4 anytime in the future	check the reason of the trouble in user manual and fix it, or call the installer
telephone line failure is indicated and the phone works as normal	when you make a phone call longer than 15 minutes, it is interpreted by the system that the tel. line is not ready.	if this problem repeats, disable tel. line checking in programming mode
PIR movement detector repeatedly triggers alarms with no visible reason	check if there are: animals in the protected area (mice...), sudden changes of temperature or intense air circulation, movement of objects with temperature of about 37°C etc.	increase detector's immunity (internal setting), change location of the detector or use an optional sensor's lens
fault or alarm C is indicated	blown fuse in the control panel or radio communication jamming	PC with Comlink SW gives details
when activated, the tel. dialer calls a number multiple times	the telephone network does not use standard recognition signals and the dialer is not sure if the connection was successful or not	store F0 after the last digit of the problematic number
system does not communicate with connected PC	the PC-60A cable is not connected to the correct COM connector on the PC	check the connection or select the port number in SW manually
problem is not in this list	call installer or the distributor for advice	local hot line number:

21 Possibilities to extend the system

21.1 Extension of the system with a subsystem

An additional JA-6x control panel can be enrolled as a subsystem to the control panel (see 10.11.). Each system then can be operated either as an independent system, or the main control panel can arm and disarm the sub-control panel. Any event in the subsystem (alarm, tampering, failure or low battery) will trigger the same kind of event on the main control panel (the main control panel will display "J" as the event source). The main control panel will not indicate the number of the item which triggered the event, but this information is available on the subsystem's control panel.

Using this method, multiple level subsystems can be chained.

Warning: *never enroll the top level control panel as a subsystem of the lower level control panel. This would create endless circle for the data and such an alarm system chain would not work properly.*

21.2 Brief overview of parts suitable for the JA-63 system

The following description includes the basic assortment of accessories. Jablotron is systematically introducing new and improved items to the market. You can get the most current information from your distributor or you can visit Jablotron's Internet home page at: www.jablotron.com

21.3 Wireless items - can be used with a wireless version

JA-60N Magnetic door detector - is equipped with a magnet. Movement of the magnet triggers the internal sensor in the detector. It can trigger an Instant or Delayed intruder alarm and it also has built in tamper detectors. There are inputs for external sensors. It is powered with two AAA batteries, battery life time 1 year, radio communication distance 100m, designed for indoor use.

JA-60P PIR motion detector - triggers an Instant or Delayed intruder alarm when the movement of a human body is detected. It has built in tampering sensors and it uses digital processing of the signal for a high false alarm immunity. Coverage 12m/120°. Optional lenses (long corridor, pet zone) are available for this detector. It is powered with two AAA batteries, battery life time 1 year, radio communication distance 100m, designed for indoor use.

JA-60B Wireless glass break detector - its sensor covers an entire room (up to 9m), regardless of the number of windows. A dual technology detection method (air pressure and sound analysis) is combined with digital processing to guarantee high sensitivity to the breaking of all types of glass (Plate, Tempered, Laminated, Wired). It is powered with two AAA batteries, battery life time 1 year, radio communication distance 100m, designed for indoor use.

JA-60SR Ionisation smoke detector - The JA-60SR detects smoke and wirelessly transmits this information to a receiving unit (control panel). It also has a built in siren to warn people in the immediate vicinity. For testing purposes the detector is equipped with a testing button. You can also test it remotely using any audio/video remote control. It is powered with two AA batteries, battery life time 1 year, radio communication distance 100m, designed for indoor use.

JA-60SP Optical smoke detector - The JA-60SP detects smoke and wirelessly transmits this information to a receiving unit (control panel). It also has a built in siren to warn people in the immediate vicinity. For testing purposes the detector is equipped with a testing button. You can also test it remotely using any audio/video remote control. It is powered with two AA batteries, battery life time 1 year, radio communication distance 100m, designed for indoor use.

JA-60G Gas leak detector - triggers a Fire alarm when any combustible gas is detected (natural gas, city gas, propane, butane etc.). The detector is powered directly form the AC power network and it wirelessly transmits information to the control panel. The JA-60G has a built in siren and an output relay. The relay, for example, can be wired to an electrical valve to turn off the gas supply when a leak is detected. Radio communication distance 50m. Designed for indoor use.

RC-40 Remote control - combines two pairs of buttons (A&B and 1&2). It can be used to operate multiple wireless Jablotron devices. For example, one RC-40 can control your car alarm and your house alarm system or two independent partitions in a house alarm or up to 6 different devices when used with Jablotron UC receivers. It has a unique optional "keypad locking" feature. It is powered by a 6V battery and its working range is up to 30 meters.

RC-11 Remote control - this key chain tag sized controller can Arm and Disarm the system. It can also trigger a silent Panic alarm. It is powered by a 6V battery and its working range is up to 30 meters. The RC-11 can also be used separately to control UC receiving modules directly (pulse, latch or ON and OFF modes).

RC-22 Panic button - is a large size button, which can be easily attached to a selected location (under a desk, on the wall etc.). This button can be used to trigger a silent Panic alarm. The RC-22 can be enrolled to the control panel the same way as the RC-11 remote control. It has a working range up to 100 meters. The RC-22 can also be used separately to control UC receiving modules directly (pulse, latch or ON and OFF modes).

RC-60 Remote control – has two input terminals (A and B) and the tamper input. It can be used to arm and disarm the system remotely from any device providing switching contact output (for example a key operated switch). The RC-60 is powered with two AAA batteries.

JA-60D Wireless control keypad - can operate the system in a similar way as the system keypad (arming, disarming, no code arming, partial arming, door opening and under duress operation). It has its own Master code and one User code, which can be programmed independently from the control panel's codes. If the system is split, the keypad can be addressed to section A or B. It is powered with two AAA batteries, battery life time 1 year, radio communication distance 100m, designed for indoor use.

JA-60F Wireless keypad - can operate system in exactly the same way as the JA-60E wired keypad. It can also be used for programming and testing of the system. The alarm system's status is indicated by the LED indicators, the built in LED display and buzzer. Illuminated keys can be covered with a bottom - hinged cover. The keypad has TWO-WAY communication with the control panel and it can be enrolled as a controller (positions c1 to c8). Multiple JA-60F keypads can be enrolled to a single control panel. It is powered with four AAA batteries, battery life time 1 year, radio communication distance (open area, no interference) is about 40 meters, indoors the distance from the control panel should not exceed 30 meters. As an option the keypad can also be powered by a DC adapter (the keys are permanently illuminated in this case).

Wireless siren JA-60A is designated for outdoor use. It is powered from its own AC adapter and it has a built in back up battery. The siren wirelessly communicates with the control panel. It contains a high powered siren and a flashing light. Besides signaling alarms, it can also provide arming and disarming chirps. The siren has built in tamper detectors. Only one JA-60A siren can be used with each JA-63 control panel. The siren has class IP44 coverage and TWO-WAY communication with the control panel, radio communication distance 100m. An optional external antenna AN-01 can be used with the siren for an even better working range.

Wireless indoor siren UC-260 can be very easily installed– just plug it into a power 220V socket. It sounds when an alarm is triggered (110dB/1m) and it can also indicate exit/entrance delay warning sounds. The siren also works as a wireless doorbell and it can sound a chime sound if a particular detector is triggered. The UC-260 has 8 selectable acoustic signals and its loudness is also selectable. Multiple UC-260's can be used with a control panel.

Wireless outputs unit UC-216 is a receiver for signals from the JA-63 control panel. The unit has two output relays (X and Y, max. load 120V / 1A each). These relays have the identical functions as outputs PgX and PgY of the control panel. The unit requires external power from 12 to 24VDC or 15VAC. Multiple UC-216's can be used with a control panel and each UC-216 can receive signals from more than one control panel. The UC-216 can also be used directly with JA-60 wireless detectors or controllers.

Wireless output unit UC-222 is a receiver for signals from the JA-63 control panel. The unit has a power output relay (max. 250VAC / 6A). This relay has the identical function as output PgX of the control panel. The unit is powered directly from the AC power (230 VAC). Multiple UC-222's can be used with a control panel and each UC-222 can receive signals from more than one control panel. The UC-222 can also be used directly with JA-60 wireless detectors or controllers.

21.4 The digital bus items:

JA-60E Wire operated keypad - can be used to operate and program the system. It is connected to the control panel by a cable. Up to five keypads can be wired to a single control panel. The alarm system's status is indicated by the LED indicators, the built in display and built in buzzer. Illuminated keys can be covered with a bottom hinged cover. The keypad can also be used remotely with the JA-60U modem.

PC interface cable PC-60A - can be used to connect the control panel to a serial port (COM) on your computer. Suitable SW, ComLink, is provided on a floppy disk or you can visit Jablotron's Internet home page at: *www.jablotron.com* to download a free version of it. The software is a convenient way to setup the control panel, to supervise an on line system is, to read, view and store data from the event memory and to record other information about the system. The software can be installed under MS Windows system.

JA-60U modem – can be used with a computer or with a keypad (JA-60E) to access alarm system remotely. Both end user and installer can benefit from the remote access to the system. The JA-60U is supplied together with power adapter, PC interface cable and Comlink software. The JA-60E keypad can by plugged directly to the data connecter of the modem for remote operation with out a computer.

21.5 Wire operated items

SA-200, SA-201 Magnetic door sensors - can be used as door or window opening sensors. The built in reed contact opens when the magnet is more than 25mm far away.

JS-20 Movement detector - PIR sensor which uses sophisticated signal processing for a high false alarm immunity. Coverage 12m/120°. Optional lenses (long corridor, pet zone) are available for this detector. The detector has a high RF signal immunity, stand by consumption 10mA/12VDC.

GBS-210 glass break detector - its sensor covers an entire room (up to 9m), regardless of the number of windows. A dual technology detection method (air pressure and sound analysis) is combined with digital processing to guarantee high sensitivity to the breaking of all types of glass (Plate, Tempered, Laminated, Wired). It has stand by consumption 15mA/12VDC.

JS-25 detector – combines PIR sensor and glass break detector. This unique "two in one" solution provides 3 pairs of outputs (PIR, Glass Break, Tamper). The detector has a high RF signal immunity, stand by consumption 15mA/12VDC.

SD-112 Smoke detector - triggers a Fire alarm when smoke is detected. It also has a built in siren. A built in ionic chamber ensures high stability of the sensor. It has a stand by consumption of 5mA/12VDC.

GS-130, GS-133 Gas leak detectors - trigger a Fire alarm when any combustible gas is detected (natural gas, city gas, propane, butane etc.). The detector has a built in siren and an output relay. The relay, for example, can be wired to an electrical valve to turn off the gas supply when a leak is detected. Model GS-130 is powered directly form the AC power network and model GS-133 is powered from the control panel - 150mA/12V.

SA-105, SA-107 indoor sirens - are powerful ordinary piezo sirens with loudness in level of 120dB/1m, power consumption about 250mA/12V.

OS-300, OS-305 outdoor sirens - are double covered with backup power supply. External housing is made of a highly resistive polycarbonate. Siren has class IP44 coverage, built in DC to DC converter for optimal back up battery charging. Both models have loudness in level of 118dB/1m. Model OS-300 uses a magneto-dynamic sounder, OS-305 a piezo sounder. The siren uses balanced loop type trigger input for higher safety and it has a sophisticated tampering protection.

22 Control panel specifications:

Electrical

Power	230 VAC, max 0.1 A, supervised, class II
Backup battery	12 V, from 1.3 or 2.6 Ah, normal life time 5 years
Backup power output	13VDC, the max. permanent current is 0.4 or 1.2 A for max. 15 min (1 cycle per hour), self consumption of the control panel is 30mA
Hard-wired inputs	4 input zones, selectable triggering: NC, EOL resistor or Double EOL resistor
Zone reactions	selectable: instant, delayed, panic, fire, 24 hour, next delayed
Wireless zones**	16 zones (2 detectors can be enrolled to each = up to 32 detectors totally)
Working frequency**	433.92 MHz; digital hopping code; supervised communication
Keypads	max. 4 wired JA-60E keypads, max. 8 JA-60F wireless keypads** or RC-11 or JA-60D remote controllers **
Access codes	master code and 14 user codes. When system is split, codes, detectors and remote controls can be addressed to particular sectors
Wired outputs	Alarm relay dry contacts 1A/60V; programmable outputs PgX & PgY (Chime, Fire, Arm, Panic, Alarm, Door, Home, AC failure), siren output (12 V, 0.7 A)
Wireless outputs**	control panel transmits signals for siren and PgX, PgY data for UC-2xx receivers
Events memory	127 most recent events including date, time and detailed specification
Telephone communicator*	module 65X: digital communication to a monitoring station, 5 SMS messages or Pager dialing, 2 voice messages, modem communication with a remote PC (ComLink SW + JA-60U modem), remote keypad access with JA-60E and JA-60U
Monitoring station formats*	Contact ID, Ademco, Telemax, Franklin, Radionics, SurGard, DTMF2300, (198 reports codes)

* control panel equipped with telephone dialer JA-65X
** wireless control panel (JA-63KR, JA-63KRX)

CE

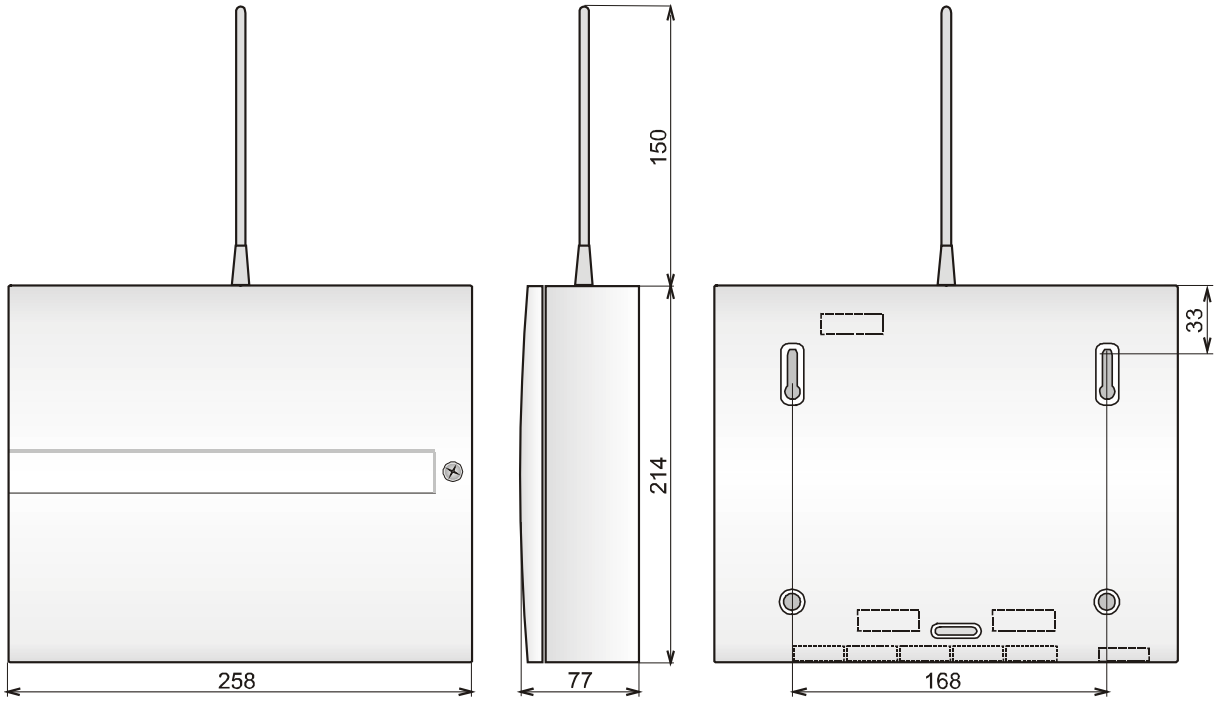
comply with	EN 50131-1, EN 50131-6
security grade	2 (low to medium risk)
environmental class	II indoor – general (-10 to 40°C)
safety	EN 60950, class II
EMC	ETS 300683
** radio characteristics	ETSI EN 300220

** can be operated according to ERC REC 70-03
* can be connected to analogue interfaces TBR 21/1998, EG 201 121 V1.13/2000, AS/ACIF S002/2001 (Australia)

Hereby, Jablotron Ltd., declares that this JA-63 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Original of the conformity assessment can be found at the web page www.jablotron.cz, section Technical support.

Note: *Dispose of batteries safely depending on the type of the batteries and local regulation. Although this product does not contain any harmful materials we suggest you to return the product to the dealer or directly to the producer after usage.*



dimensions (mm)