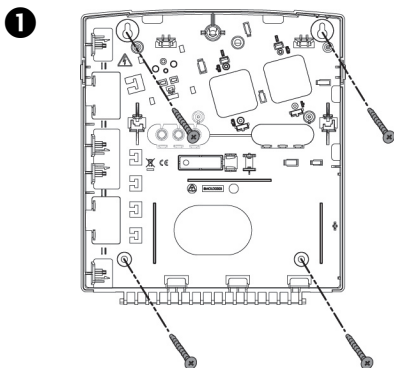


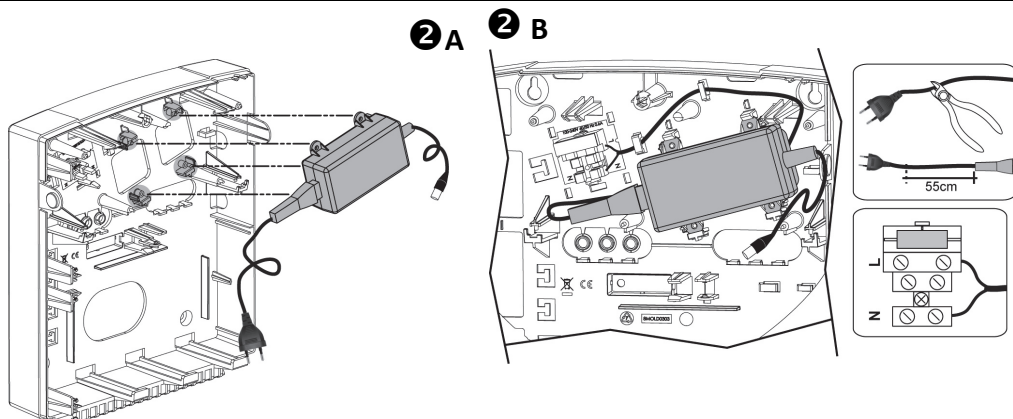


Quick Installation Guide LightSYS2

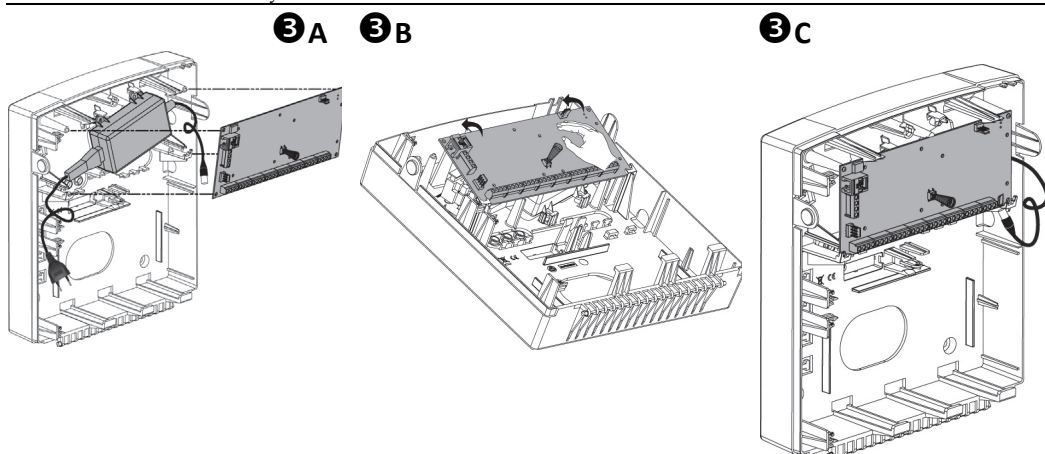
For detailed information please refer to the full
LightSYS2 Installation and Programming Manual
provided on our website: www.riscogroup.com



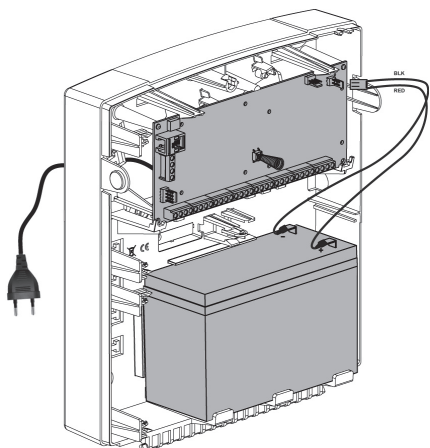
Note: For mounting the LightSYS inside a metal enclosure (RP432BM, RP432BM1) refer to the instructions supplied with the box.



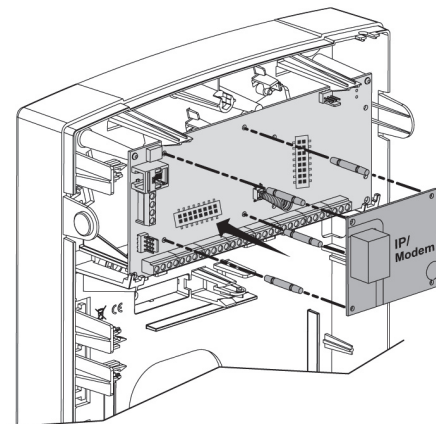
Note: 1.5A PS can be mounted inside either the plastic enclosure RP432B or the metal box RP432BM. 3A PS can be mounted only in the metal enclosure RP432BM1.



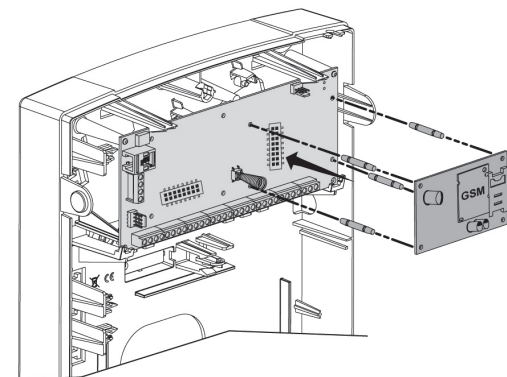
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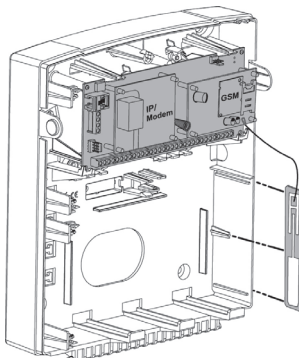
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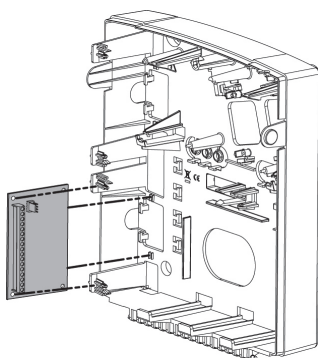


7



Note: For mounting GSM inside a metal enclosure, refer to the instructions supplied with the box

8



9

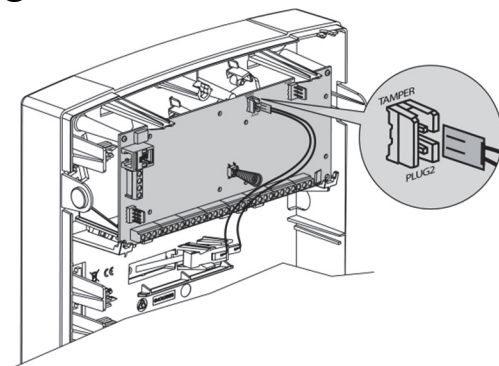


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Notes:

1. The parallel wiring system supports parallel connections from any point along the wiring.
2. The maximum wire run permitted is 300 meters (1000 feet) for all legs of the bus.
3. In case of bus communication problems, connect two 2.2K Ω resistors, one at each end of the data bus terminals, between the green and yellow wires.
4. **If connecting remote power supplies, do NOT connect the Red wire (+12v) between the Power Supply Unit and LightSYS.**
5. For long cable runs, please use the correct cable as stated in the *Installation Manual, Wiring appendix*.

1. Setting Bus Accessory ID Numbers

For most devices, a DIP switch number must be set to identify its ID category number.

Devices are split into 'Families'. Each 'Family' of devices has sequential identification numbers which are set by the DIP switches. Before setting power on, define each module's ID number by setting the dipswitches as follows:

ID	DIP switches				
	1	2	3	4	5
01	OFF	OFF	OFF	OFF	OFF
02	ON	OFF	OFF	OFF	OFF
03	OFF	ON	OFF	OFF	OFF
04	ON	ON	OFF	OFF	OFF
05	OFF	OFF	ON	OFF	OFF
06	ON	OFF	ON	OFF	OFF
07	OFF	ON	ON	OFF	OFF
08	ON	ON	ON	OFF	OFF
09	OFF	OFF	OFF	ON	OFF
10	ON	OFF	OFF	ON	OFF
11	OFF	ON	OFF	ON	OFF
12	ON	ON	OFF	ON	OFF
13	OFF	OFF	ON	ON	OFF
14	ON	OFF	ON	ON	OFF
15	OFF	ON	ON	ON	OFF
16	ON	ON	ON	ON	OFF

ID	DIP switches				
	1	2	3	4	5
17	OFF	OFF	OFF	OFF	ON
18	ON	OFF	OFF	OFF	ON
19	OFF	ON	OFF	OFF	ON
20	ON	ON	OFF	OFF	ON
21	OFF	OFF	ON	OFF	ON
22	ON	OFF	ON	OFF	ON
23	OFF	ON	ON	OFF	ON
24	ON	ON	ON	OFF	ON
25	OFF	OFF	OFF	ON	ON
26	ON	OFF	OFF	ON	ON
27	OFF	ON	OFF	ON	ON
28	ON	ON	OFF	ON	ON
29	OFF	OFF	ON	ON	ON
30	ON	OFF	ON	ON	ON
31	OFF	ON	ON	ON	ON
32	ON	ON	ON	ON	ON

Notes:

- Most accessories have four DIP switches, while bus detectors have five DIP switches
- IDs 9–32 are only available for bus detectors.
- *If a DIP switch is changed on any device, it is necessary to shut down the device's power and then re-power it.*

The first module in each category is defined as ID= 1.

Families that have sequential ID numbers are:

- Keypads (LCD, LCD with proximity and wireless keypad (both 1- and 2-way))
- Zone Expanders (8 zones expander, bus zone expander)
- Outputs (4 relay output expander, 8 open collector output expander, 2 relay output expander on 3A power supply, 2 relay output expander on Wireless zone expander, X-10 Outputs, again, both 1-and 2-way)
- Power Supplies (3A switching mode power supply)
- Bus Zones
- WL Zone Expanders

Notes:

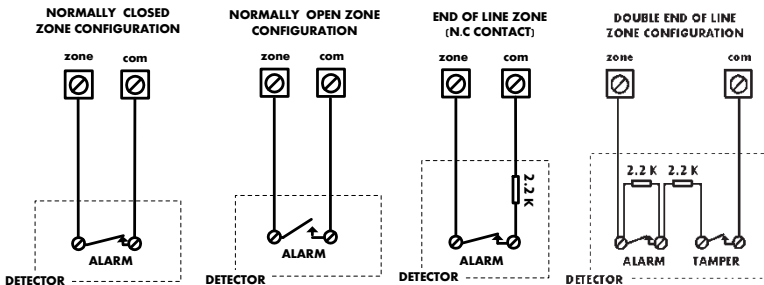
1. The main unit can support a maximum load of 1.4 Amp. If more current is required install additional power supply modules (3 Amp max.).
2. On 3 AMP supervised power supplies and on the wireless expander, there are two programmable outputs. These programmable outputs belong to the 'Output' family. These outputs have dedicated DIP switches that identify the OUTPUT ID.

Maximum number of devices possible:

	Total
Wired / BUS Expanders	3
BUS Zones	32
WL Zone Expanders	2
BUS Zones Expanders	4
Outputs Expanders	4
Keypads	4
1.5A or 3A Power Supply	4
BUS Sirens (ProSound / Lumin8)	4

2. Zone Inputs Connection

The following diagrams illustrate the various possible zone connections to the main unit or to the 8 wired zones expander.

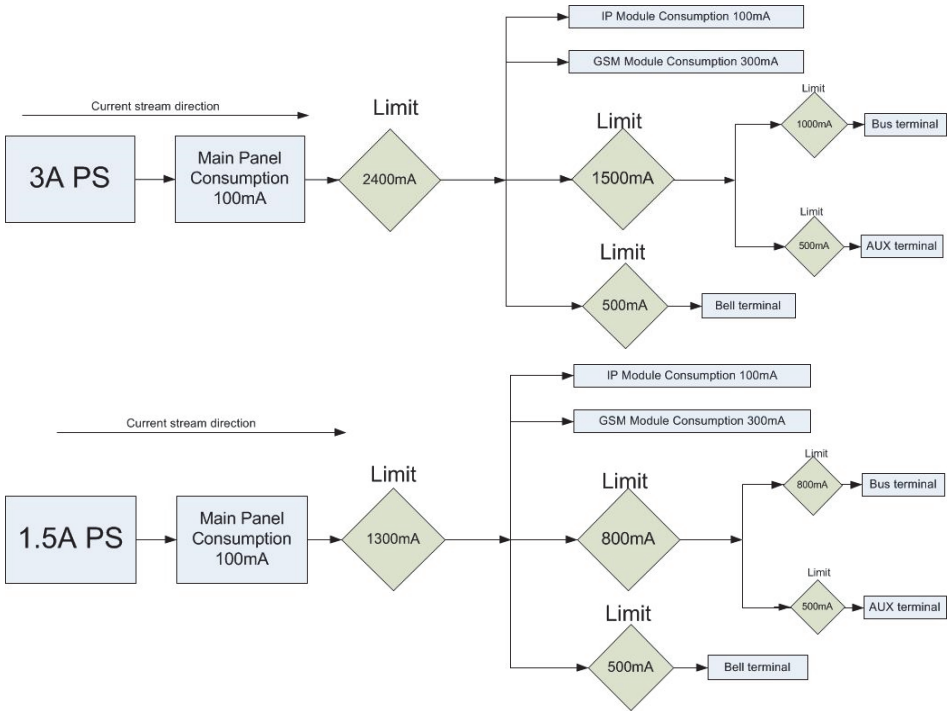


Notes:

1. For a zone with a tamper switch, you can use a double end-of-line resistor to save additional main panel connections.
2. It is recommended that you use an end-of-line resistor at the far end of each hardwired zone (16 x 2.2K resistors are supplied).
3. In the LightSYS you have the ability to define separately the end-of-line resistance of the zones on the main unit and of the wired zones for each eight-unit expander block (Quick key ②①③). Selection is done by the software with the following available options:

ID	EOL	DEOL	ID	EOL	DEOL
0	Customized		7	4.7K	4.7k
1	2.2K	2.2K (Default)	8	3.3K	4.7K
2	4.7K	6.8K	9	1K	1K
3	6.8K	2.2K	10	3.3K	3.3K
4	10K	10K	11	5.6K	5.6K
5	3.74K	6.98K	12	2.2K	1.1K
6	2.7K	2.7K	13	2.2K	4.7K

Maximum Current Flows



3. Wiring Auxiliary Devices

Use the **Auxiliary Power AUX (+) COM (-)** terminals to power PIRs, glass-break detectors (4-wire types), smoke detectors, audio switches, photoelectric systems and/or any device that requires a 12V DC power supply.

3A Note:

If the auxiliary outputs are overloaded (exceed 800/1500mA) and are shut down, you must disconnect all loads from the outputs for a period of at least 10 seconds before you reconnect any load to the auxiliary outputs.

4. Wiring Internal Bell

The **Bell/LS** terminal provides power to the internal siren. When connecting an internal sounding device, pay attention to the polarity.

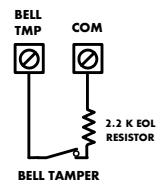
It is important to position the BELL/LS Dip Switch SW1 correctly. The position varies depending on the type of internal siren.

Note:

To avoid bell loop fault, if no connections are made to an internal siren, use a 2.2K Ω resistor in its place.

5. Wiring Bell Tamper

Connect the bell tamper to the BELL TMP and COM terminals on the main panel using 2.2K Ω resistors in serial.

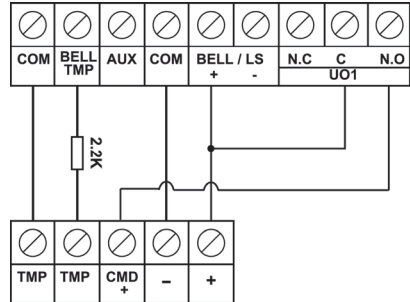


Important:

If you DO NOT use the terminal TMP BELL, remember to connect a 2.2K Ω resistor (Resistor colors: Red, Red, Red) between TMP and COM.

6. Wiring Programmable Output 1 to Activate Self-Power Devices

Programmable output 1 can be used to activate a self-powered siren or any other self-powered device.



7. Main Unit DIP Switch settings

DIP Switch SW1	Status
1: Bell	ON: Bell: For bell or electronic siren with a built-in siren driver. OFF (Default): For loudspeaker without a built-in sound driver.
2: Default	ON: Resets engineer, sub-engineer and grand master codes to their default factory values and omits main unit front tamper alarm. OFF (Default): Codes preserve their set values.
3: Extern - Back Tamper Omit	ON: Back tamper omit is in effect. Use this setting during programming and if no back tamper has been connected to PLUG 2. OFF (Default): No tamper omit is in effect
4: Intern – Front Tamper Omit	ON: Front tamper omit is in effect. Use this setting when the LightSYS is installed inside the metal enclosure RP432BM1. OFF (Default): No tamper omit is in effect

Connecting BUS Detectors

Up to 32 addressable bus detectors can be assigned to the LightSYS. Bus detectors can be wired to the main bus or to a Bus Zone Expander (BZE).

For full installation instructions refer to the instructions supplied with each bus detector.

Connecting BUS Detectors to the Main LightSYS BUS:

1. Set the bus detector ID number (1-32) using the detector's DIP switches.

Note:
For WatchOUT, LuNAR, WatchIN, BWare and Seismic set the switch that defines the detector operation mode to bus mode.

2. Wire the bus terminals AUX(RED), COM (BLK), BUS (YEL) and BUS (GRN) to the LightSYS Bus.

Note:
For maximum operation stability, it is best NOT to exceed a total 300 meters (1000 feet) of wiring from the bus detector to the LightSYS panel.

Connecting Bus Detectors using a Bus Zone Expander (BZE):

1. Set the BZE ID number (1-3) using the DIP switches SW1 1-3.
2. Set the BZE SW2-3 to **ON** position.
3. Wire the BZE terminals marked as **TO PANEL** to the LightSYS Bus.
4. Set the bus detector ID number (1-32) using the detector's DIP switches.

Note:

Do not repeat the same ID twice on the same BZE.

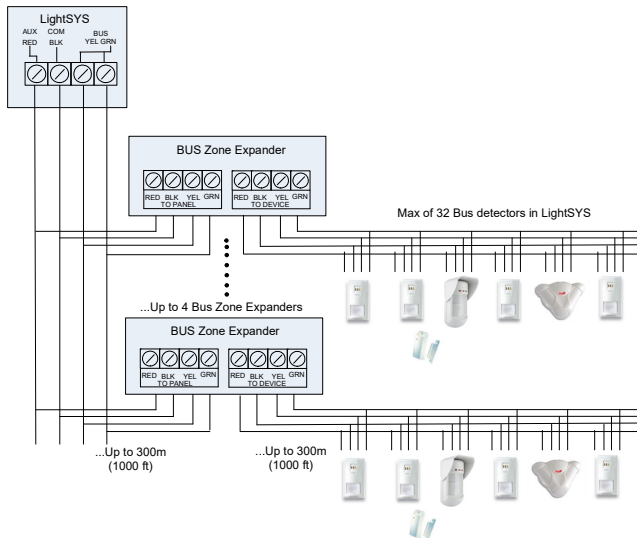
5. Wire each detector's bus terminals to the relevant BZE's terminals marked as **TO DEVICE**. (see figure below)

Note:

For maximum operation stability, it is best NOT to exceed a total of:

300 meters (1000 feet) of wiring from the BZE to the LightSYS panel.

300 meters (1000 feet) of wiring from the BZE to the last bus detector.



GSM Communication Module

The GSM Module provides voice and data communication on the LightSYS over the cellular network

1. Power down the LightSYS.
2. Plug in the GSM module to the LightSYS main board.
3. Insert the dedicated SIM card and, if required, enter the enabling PIN code or disable the SIM PIN Code in advance by placing it in a cell phone and disabling the code.
4. Attach the antenna plate and slide it into its right-wall housing. (See figure 7, page 3)
5. Power up the LightSYS. The green LED should flash for thirty seconds, indicating the network signal strength, and then steadily stay lit.

6. Perform manual setting for the GSM module. From the main engineer programming menu select [7 1 2 10]. Select Type GSM and press  to confirm.

Note:

To establish GPRS/3G/4G communication set up the APN (Access Point Name) and Email according to the details instructed by the cellular provider. (Quick programming key 5 1 2 2)

IP Communication Module

The IP module provides data communication on the LightSYS over the TCP/IP network.

1. Power down the LightSYS.
2. Plug in the IP module to the LightSYS main board.
3. Connect the incoming LAN cable in order to enable IP Communication. Make sure that the cable is connected to the network.
4. Power up the LightSYS and refer to the Programming IP section.
5. Perform manual setting for the IP module. From the main engineer programming menu select [7 1 2 1 1]. Select Type IPC and press  to confirm.

Note:

For IP communication set to dynamic IP (Quick programming key 5 1 3 1 1 1)

Programming

Keys Menu Navigation

This manual explains how to program the LightSYS from the default model 432KP keypad. The following table describes the uses of the keypad keys during programming:

①—⑩	1. To enter numeric values where required. 2. For quick key programming. Press the number keys to access a programming option. 3. To edit labels and names.
	To go back (up) / quit / don't save.
	Enter / Save (to move into the displayed menu or to save the data that you have changed).
 or 	Used to scroll through the menu listing.
	Used to toggle displayed menu options from 'N' to 'Y' and vice-versa.
	Used to increase or decrease selected screen digital values.

If you do not know where you are in the menu structure, press  repeatedly to return to the main menu.

Entering Text Descriptions (Labels):

Key ① = 1,"?!"-()@/:_+&*#
 Key ② = 2abcABC
 Key ③ = 3defDEF

Key ⑧ = 8tuvTUV
 Key ⑨ = 9wxyzWXYZ

Key ④ = 4ghiGHI
 Key ⑤ = 5jklJKL
 Key ⑥ = 6mnoMNO
 Key ⑦ = 7pqrsPQRS

Key ⑩ = 0
 Key  = Move cursor left
 Key  = Move cursor right
 Key  = Save

Programming Menu Concept

The LightSYS programming menu is a dynamic menu that adjusts itself to the system hardwired devices. For example, in order to see menu option regarding wireless zones or keyfobs, first you must add a wireless expander to the system.

Access Engineer Programming Menu

1. First Time Power Up

1. Disconnect all power from the main panel
2. Set SW1 – 2 (Default) to ON position.
3. Set tamper switches SW1 3,4 to omit unused tampers according to the relevant enclosure to prevent tamper alarm
4. Connect – power to the assembled mounted unit. The LightSYS panel – keypad initialization ensues for a period of minutes.
5. Press the  key.
6. Select language. Scroll through the options and press .

Note:

Changing the language can be done also in regular operation mode by pressing +  + ⑨ simultaneously

7. Enter the Engineer code (default: ①①①①) and press .
8. Correct the time and date and confirm by pressing .
9. The system automatically enters the automatic accessories settings process option.
10. Move to the section "*Identifying the connected devices*" as described below.

2. Enter Engineer Programming Mode

1. From the main display press .
2. Enter the Engineer code (default: ①①①①) and press .
3. Select [1] Programming and press .
4. You are now in Engineer Programming mode. Move to the section "*Identifying the connected devices*" described below

Identifying the connected devices

1. Automatic Setting

Note:

By default, when entering Engineer mode with the default DIP Switch 2 in ON position, the system will take you immediately to Auto Settings. If the keypad is already showing BUS SCANNING, skip to step 2 below.

1. Enter the programming key sequence ⑦①① (Install, BUS Devices, Automatic).
2. Press  to begin the automatic BUS SCANNING (the Auto Settings process) in which it identifies all the devices on the bus.
3. Verify that the keypad displays all the devices you have connected. If a device does not appear, ensure that you have given it a unique ID within its “family”.
4. Press  to accept what is being displayed, to progress through configuration screens and to advance on to the next device found.
5. Repeat steps 3 and 4 until the presence of all devices has been confirmed and all parameters configured.

Note:

1. When adding a zone expander you should define the zones expander resistance compatibility, depending on the detectors you intend to connect to the expander. By default the resistance is set to 2.2K for EOL and DEOL termination.
2. When adding a wireless expander, define the “Omit Box Tamper” as YES if the wireless expander is mounted inside the LightSYS housing and not in its own.

2. Bus Test

The bus test (Quick key ⑦①③①) sends multiple test commands to each device connected to the system to ensure reliable connectivity.

Press  to begin the automatic BUS TEST in which every device is tested to report if connections are 99% or higher.

Note:

If a low reading is experienced, check connections with the device and repeat the bus test.

Zones Attributes

The LightSYS supports up to 32 zones. Each zone can be defined to be a wired zone, a wireless zones or a bus zone. The attributes for each zone vary according to the zone’s type (wired, wireless or type of bus zone).

You can define the basic parameters for a zone using the “One By One” option or you can define all attributes using the zones category (Quick key ②①②).

1. From the main Engineer Programming menu select ②① (Zones, Parameters)
2. Select [One By One] and press .
3. Using the numeric keys, enter the desired zone number and press .

Important

The display next to the selected zone number defines the type of zone and its location in the system in the format XY:ZZ

X: Zone physical type (**E**=Wired zone, **W**=Wireless zone, **B**=Bus zone, **I**=Input zone)

Y: The expander ID number. "0" represent the main bus, for example:

E0:04 refers to wired zone 04 on the main board.

B0:15 refers to BUS zone 15 on the main BUS.

ZZ The serial zone number in the system (01-32)

4. Set the zones parameters as follows:

- **Labels:** Zone description text to give it a meaningful name. Use the numeric keys as described in section "Keys Menu Navigation" (see page 11)
- **Partitions:** Using the numeric keys, select or deselect the relevant partitions to which this zone will belong to and using the , ,  or , keys, select the partition groups. To confirm press .
- **Zone Type:** Using the Up/Down keys, select the required zone type and press .
- **Zone Sound:** Select the required zone sound while the system is set in Full Set, Part Set or Unset.

Note:

This determines if the zone will 'be silent', 'cause bell to activate', 'cause buzzer to activate', 'cause bell and buzzer to activate', 'create keypad bleep for chime' etc... when the zone is opened/causes an alarm condition.
'Buzzer' refers to the sound emitted from the keypad(s).

- **Zone Termination** (Only applicable for hard-wired zones). Using the Up/Down keys, select the required zone termination type (NO, NC, EOL, DEOL) and press .
- **Zone Response:** Using the Up/Down keys, select the required response time and press .
- **Advanced:** Includes advanced attributes for a zone such as supervision for wireless zones, bus zone parameters, forced setting and more. .

Wireless Zones

Each of the 32 zones in the LightSYS can be defined as a wireless zone.

Step 1: Allocate a Wireless expander

1. From the Engineer menu, select      (Install, Bus Device, Manual, WL Expander)
2. Set the receiver ID (1 or 2) and using , set the type to WM and press .
3. If the receiver is mounted inside the LightSYS box select Y to omit the box tamper. Press  and move to step 2.

Step 2: Calibrate the Receiver

For successful communication, strength of the signal should be higher than the noise threshold level, measured in a process termed *calibration*.

- 1. From the Engineer menu, select ⑦②① (Install, WL Device, RX Calibration)
- 2. Select the wireless expander and press .
- 3. Using the  key, choose [Y] (Yes) to 'Re-Calibrate' the Wireless expander and press  to confirm.

Explanation:

The calibration measurement above shows the amount of background 'noise' that the receiver can 'hear' on the same frequency as the RISCO wireless devices. This 'noise' could be neighboring devices of another system or other devices operating on the same frequency nearby. These are 'unwanted' signals that the LightSYS wireless expander must be told 'not to listen to'. The threshold (set above) is the absolute minimum signal strength needed to be heard from a wireless device in order for the receiver to effectively 'hear it'.

Step 3: Allocating Wireless Zones

Each wireless device must identify itself to the system receiver, in a process termed "enrollment". Enrollment can be performed by sending an RF signal from each device, or by entering the device's unique serial code into the system. Enrollment can be done locally using the keypad or remotely using the configuration software. The following steps describe quick enrollment by RF signal using a keypad.

- 1. From the Engineer menu, select ⑦②②① (Install, Wireless Devices, Allocate, By RF)
- 2. Using the numeric keys, enter the desired zone number and press .
- 3. The WL Receiver is in learn mode. Send a write message from your wireless zone as shown in the table below:

Wireless Device	Sending Write Message
Detector/Contact/Siren	Press and hold the tamper switch for 3 seconds.
Smoke Detector	Insert battery. Write message is sent automatically within 10 seconds.
Gas, CO detectors	Press and hold the test button for 3 seconds.
2 Panic Button Key fob	Depress both buttons for at least 7 seconds.
Key fobs	2-Way: Depress both buttons ( and ) for at least 7 seconds.
	1-Way: Depress the button () for at least 7 seconds.
2-Way Slim Keypad	Press and hold both buttons ( and ) for at least 7 seconds.

- 4. Repeat steps 2 to 3 until all required wireless zones have been enrolled.
- 5. Continue entering the wireless zones attributes section.(see page 13)

Bus Detectors

The following section describes the flow of adding bus detectors to the LightSYS. Bus detectors can be programmed to the main unit or to a bus zone expander.

1. Programming bus detectors on the main bus

Step 1: Adding Bus Detector to the Main Unit

Note:

If you have already performed Auto Settings, skip to Step 2 below: *Assign Bus Detectors to a Zone ID and set basic parameters.*

1. From the main engineer menu press ⑦①②①③ to access the bus Zone category.
2. Press  to move the cursor to the ID field.
3. Type the bus detector ID number as set by the detector's DIP switches (01-32)

Note:

The display "(x:yy) Type: None" represent the BUS detector location in the system. In the 0:yy designation, the 0 denotes that the bus detector is on the main unit and is not assigned to a bus zone expander. The yy represents the bus detector ID number (up to 32) as set by the detector's DIP switches.

4. Using the arrow keys move to the Type field. Use the  key to select the detector's type.
5. Repeat steps 2 - 4 for other bus detectors.

Step 2: Set Bus Zone Basic Attributes

Refer to section *Programming Zones Attributes* to define the zone parameters. (see page 13)

Step 3: Programming the Bus Detectors Advanced Parameters

1. From the main Engineer menu select [2] Zones > [1] Parameters > [2] By Category > [7] Advanced > [4] BZ Parameters .
2. Select the zone number that the bus zone was assigned to and press .
3. Configure the parameters for the relevant bus detector.

2. Programming Bus Detectors on a Bus Expander

Using bus expanders you can create a separate bus loop that is used only for the bus detectors connected to it. The separate bus loop increases the total system security in case a certain bus detector is sabotaged. Up to four bus expanders can be added to the LightSYS

Step 1: Adding the Bus Expander to LightSYS

Note:

If you already performed Auto Settings skip to Step 2 below: *Assign Bus Detectors to a Zone ID and set basic parameters.*

1. From the main engineer menu press ⑦①②①③ to enter the Bus Expander menu.
2. Using the arrow and numeric keys select a bus zone expander ID.
3. Using the arrow keys move to TYPE. Use the  key to select a BZE32 and press



Step 2: Adding Bus Detector

Refer to section *Step 1: Adding Bus Detector to the Main Unit* to assign a bus detector to the system.

Note

When the bus zone is connected to a BUS expander, you should define the *X* in the (*x:yy*) display as the BUS expander ID (1,2,3 or 4). The *yy* represents the bus detector ID number (up to 32) as set by the detector's DIP switches.

Step 3: Set Bus Zone Basic Attributes

Refer to section *Programming Zones Attributes* to define the zone parameters.

Note:

In the zone designation XY:ZZ the X represent the Bus Expander ID as set by its dip switches.

Step 4: Programming the Bus Detectors Advanced Parameters

1. From the main Engineer menu select [2] Zones > [1] Parameters > [2] By Category > [7] Advanced > [4] BZ Parameters .
2. Select the zone number that the bus zone was assigned to and press .
3. Configure the parameters for the relevant bus detector.

Communication Method

1. From the main engineer programming menu: 5) Communication menu > 1) Method.
2. Select each method (PSTN, IP and/or GSM) and define its parameters.

Note:

1. LightSYS's menus include only those communication modules installed on-board
2. To establish GPRS/3G/4G communication set up the APN (Access Point Name) and Email according to the details instructed by the cellular provider.
3. For IP communication set to dynamic IP (Quick key 5①③①①①)

Report to Alarm Receiving Centre

You can define up to three MS accounts and several associated parameters that define the nature of communication, event reporting and confirmation between the system and the MS.

1. From the main engineer programming menu select 5) Communication menu and select 2) MS.
2. Select the 1) Report type (Voice, SMS, IP/GPRS) for each MS and define its parameters.
3. Select 2) Account number and define an account number for each MS.
4. Select 3) Comm format to define the transmission format, SIA or Contact ID.
5. Go through the menus to program any other parameters for the communication with the alarm receiving centre.

Follow Me Destinations

Now that you have set up the methods for LightSYS to communicate with the MS and the owner, you can define the destinations to which event notifications will be sent. Up to 16 *follow me* destinations can be defined in the system.

1. From the main engineer programming menu: 5) Communication menu > 4) Follow Me.
2. Under 1) Define FM set each destination's:

Or

1. From your riscocloud log-in (p 21), click: **SETTINGS > Alerts > ADD NEW**
2. Enter recipient **Name**, choose the **Alert Language** and then the following:
 - Report Type (Voice (panel only), SMS, Email,)
 - Partitions: Specify the partitions that will initiate the Follow Me report due to a certain event that occurred in the assigned partitions
 - The events that will be sent, organized by category (possibly including Alarms, Set/Unset, Faults, GSM, Environmental, Miscellaneous)
 - The restore events that will be sent
 - The operations the user will be able to perform through remote connection via phone, SMS or the Cloud

Note:

The actual destinations (telephone numbers, email addresses) are not defined within the Programming menu.

General Settings

There are several system-wide parameters that define how the LightSYS works. All these parameters are set with default values that apply for most installations. If you wish to modify the default settings, go through the menus to program any other system parameter.

1. Main System Timers

1. From the main engineer programming menu select **1) System 1)Timers**
2. Select options 01 and 02 to define exit entry times.
3. Select option 03 to define siren duration time.
4. Scroll through the other options of the menu.

2. Set Up Users

As the engineer, you must set up the system's users. The owner (Grand Master) will be allowed to subsequently set their code.

1. From the main engineer programming menu select **4) Codes**.
2. Under the **1) User** option define for each user its authority level and the partitions it can control with his code.
3. Change the default engineer code under the option **3) Engineer**.

Keyfobs and 2-Way Slim Keypads

Each keyfob and keypad can be set up to perform different system functions and control different utility outputs. Up to eight keyfobs (1-way and 2-way) and four 2-way keypads can be enrolled in the system. The programming options vary according to whether the device is 1-way or 2-way. Each user can be assigned with a single keyfob.

Step 1: Allocating Keyfobs and Keypads

- Allocate and calibrate the devices as described in Wireless Zones section (page 14)

Step 2: Setting Keyfob Options [for both 1-way and 2-way keyfobs]

- a. From the installer (Programming) menu, select **8) Devices > 2) Keyfob > 1) Select User**
- b. Select the user that the keyfob belongs to. and then press .

- c. Use the arrow keys to scroll between menus and the  key to select menu options for the 1-way and 2-way keyfobs:

Options for the 1-Way Keyfob:

For each button (1-4), define its function, from the available options (see table below for a description of options). Use the respective “Quick key” to designate an option for each button:

- **Button 1 options** (⬇️): None, Set, Part Set, Group, PO
- **Button 2 options** (⬅️): None, Unset, PO
- **Button 3 options:** None, Set, Part Set, Group, PO, Panic
- **Button 4 options:** None, Set, Part Set, Group, PO

Description of 1-Way Keyfob Options		
Quick Key	Option	Description
⓪	None	Button disabled
➊	Set	The button is used for away (full) arming of the assigned partitions
➋	Unset	The button is used for disarming its assigned partitions
➌	Part Set	The button is used for stay (home) arming of the assigned partitions
➍	Group	The button is used for Group arming (Partial arming within a partition / area) of the assigned partitions
➎	PO	The button is used to operate a single programmable output
➏	Panic	The button is used to send a panic alarm

Options for the 2-Way Keyfob:

- **Serial Num:** displays the serial number
- **Masking:** enables user / keyfob authorization granularity per partition
- **Controls :** enables panic alarm
- **Code:** set the PIN Code for high security mode as per system or keyfob flag settings
- **PO Key (1/2/3):** normally “disabled”

Description of 2-Way Keyfob Options		
Quick Key	Option	Description
➎	Serial No	The identifying 11-digit number of the keypad (display only)
➏	Masking:	Specifies the partitions that are controlled by the specified keypad.
➐, ➑	Controls	Panic Enable: Disable/enable the issue panic alarm button
➒	PIN code	
➓	PO Key 1:	The button is used to operate a single programmable output
➑	PO Key 2:	The button is used to operate a single programmable output
➑	PO Key 3:	The button is used to operate a single programmable output

Step3: Setting Slim Keypad Options

From the engineer (Programming) menu, select **8) Devices > 1) Keypad > keypad 1, 2, or 3)**

- Select the user that the slim keypad belongs to, and then press .
- Use the arrow keys to scroll between menus and the  key to select menu options:

Available Options per Keypad Type:

Wired keypad :

- Label:** provide a meaningful name (see page xx for details)
- Partition assignment:** (in most cases this is left as 1)
- Masking :** enables user / keypad authorization granularity per partition
- Controls:** enables **emergency**, **multi-view**

Slim 2-way Wireless keypad:

- Label:** provide a meaningful name (see page xx for details)
- Partition assignment:** (in most cases this is left as 1)
- Masking :** enables user / keypad authorization granularity per partition
- Controls:** enables **emergency**, **exit beeps**
- Serial Number**
- Function Key > panic , MS Listen-talk, Disable**
- PO 1 – 3**

1-Way Wireless keypad :

- Label:** provide a meaningful name (see page xx for details)
- Partition assignment:** (in most cases this is left as 1)
- Masking :** enables user / keypad authorization granularity per partition
- Controls:** enables **emergency**
- Serial Number**

Exiting Programming Mode

- Set SW1 – 2 (Default) to OFF position.
- Close the main box in order to prevent Front Tamper Alarm.
- Press [*] repeatedly to return to 'Main Menu'.
- Press  >  to Exit and SAVE your settings.

Note:

The system will not allow exit from the Engineer mode if a 'Tamper' or 'System Fault' condition exists. Correct any tamper and/or system fault conditions before attempting to exit the Engineer mode.

Connecting the LightSYS2 to the Cloud

LightSYS2 enjoys seamless Configuration Software connectivity and can be configured to be constantly connected to a server, enabling user Smartphone applications. When connected to the server, the server handles all communication between the system, service providers and web users, enabling monitoring and control to be performed via the Web. The following table summarizes the LightSYS 2 communication and cloud connection capabilities as per installed communication modules:

System Configuration		Application Options and Connectivity Capabilities							
Comm. Module	Cloud Connect via	Configuration Software via Cloud	SynopsYS	IP Receiver & MS Reporting	Smartphone App	SMS Event Messages	SMS Control	Voice Event Messages & Control	Email Events
GSM/GPRS/3G/4G + PSTN	GPRS/3G/4G	Y	–	Y	Y	Y	–	Y	Y
GPRS/3G/4G + IP+ PSTN	GPRS/3G/4G	Y	–	Y	Y	Y	–	Y	Y
GPRS/3G/4G + IP+ PSTN	IP	Y	Y	Y	Y	Y	Y	Y	Y
IP + PSTN	IP	Y	Y	Y	Y	–	–	Y	Y

To enable cloud communication:

From the Engineer menu select: **1) System > 2) Controls > 3) Communication > 4) Cloud Enable [Y]**

Or

In the Configuration Software interface: Click **System > Communication Control tab > Cloud enable** checkbox

To establish IP network connection to the server using the IP or GSM/GPRS/3G/4G module:

From the Engineer menu select: **5) Communication > 5) Cloud**

Or

Select the Cloud Node and specify:

- 1) **IP Address:** The server IP address (riscocloud.com or that of your organization's server)
- 2) **IP Port:** The server port is set to 33000.
- 3) **Password** — The password for server access as provided by your provider (if required). This password MUST be identical to the Password defined in the Cloudserver. If Self-Registration is to be performed, do not change from the default.
- 4) **Channel:** Select IP Only or GSM Only depending on the communication module in the LightSYS. If GSM selected, APN Name must be entered in the GSM/GPRS menu.

Note:

When in Cloud mode, the settings defined through it are applied to all reporting channels (including MS communication and FM destination). If the cloud connection is lost/terminated and the LightSYS reverts to Back up mode, then the direct channel communication settings become active..

[For Configuration Software connection] **To configure the CS settings:**

In the Connection Settings node > Cloud area, specify:

1. **IP Address:** (as per above)
2. **Port:** (set to 34000)
3. **CPID:** System panel ID

User Definitions and System Operation

1. Instruct the user to define the actual user codes. Advise the user to change the default Grand Master code. Help the user enroll proximity tags.
2. Instruct the user on defining and editing the Follow Me destinations.
3. For Cloud mode connections, instruct users with smartphones to download the iRISCO App from the Apple App store or Android Play Store. Ensure that the connection between the App and the LightSYS is established.
4. Instruct the user on the following operations, performed from the keypad, keyfobs, smartphone or Cloud application:
 - Full Set
 - Part Set
 - Unset
 - Unset under duress
 - Send a panic event
 - Check the system status
 - Check the system status
 - Operate a programmable output
 - Use the voice menu for remote operation
 - Use SMS for remote operation

Testing the system

Before leaving the site, it is important to fully test the system. LightSYS has several testing tools that help you feel confident the system will operate optimally, including relieving any concerns you may have about the wireless communication.

From the Engineer menu, go through the tests under the 2) Testing menu:

- Main Unit noise level, buzzer, speaker and battery.
- You can test each device for communication and perform a battery test.
- For zones you can perform a Walk Test – during which you should receive a “TRIP” from each detector, (User Menu > Maintenance > Walk test).
- GSM signal strength.
- Perform a test to ensure follow me is working (User Menu > Follow Me > Test FM).

The system is now programmed and ready for use.

For more comprehensive and detailed instructions, please refer to the *LightSYS 2 Installation and Programming Manual (5IN2048)*.

For user functions, please refer to the *LightSYS 2 User Manual (5IN2052)*.

Technical Specifications

Main	Technical Information
Input Power:	AC/DC Adaptor 100-240V 50/60Hz 14.4V—1.5A or 3A PS
Current Consumption:	60 mA, typical / 70 mA, maximum
Rechargeable Standby Battery:	1.5A PS: 12 Volts up to 7 Amp-Hours (AH), typical 3A PS: 12 Volts up to 17 Amp-Hours (AH), typical
Power Outputs:	Auxiliary Power: 1.5A PS: Total current 800mA; Maximum Aux = 500mA; Maximum BUS (AUX RED) = 800mA 3A PS: Total current 1500mA; Maximum Aux = 500mA; Maximum BUS (AUX RED) = 1000mA Bell/LS (External): 12 Volts DC @ 500 mA, maximum
Programmable outputs:	UO1: Dry contact relay (24V, 1 Amps) UO2-UO4: 100 mA, opto relay
Main Box Dimensions	RP432B Polycarbonate (1.5A PS): 290 x 254 x 97 mm RP432BM Metal, small (1.5A PS): 264 x 299 x 80 mm RP432BM1 Metal, large (3A or 1.5A PS): 420 x 379 x 95 mm
Operating temperature	-10°C to 55°C (14°F to 131°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Expanders	Technical Information
LCD Keypad (RP432KP)	13.8V +/-10%, 48 mA typical/52 mA max
Proximity LCD Keypad (RP432KPP)	13.8V +/-10%, 62 mA typical/75 mA max
LCD Keypad (RP128KP)	13.8VDC +/-10%; 100 mA maximum
Proximity Keypad (RP128KPP)	13.8VDC +/-10%; 280 mA maximum
WL Panda Keypad (RW432KPP)	3V Lithium battery (x4), 9 µA standby / 150 mA max
Wired Panda Keypad (RP432KP02), Wired Panda Keypad with Proximity (RP432KPP2)	13.8VDC +/-10%; 30 mA typical / 180 mA max
8 zone expansion module	13.8VDC +/-10%; 25 mA, typical / 30 mA, maximum
Bus Zone Expansion	13.8VDC +/-10%; 20 mA, typical
Wireless Expansion module	13.8VDC +/-10%; 65mA maximum 868.6-868.7 MHz (narrowband in EU) or 433.92 MHz
4 relay output expansion module	13.8VDC +/-10%; 25 mA typical / 160 mA maximum 4 Form C (SPDT) Relays.; 5 A / 24V DC
8 transistor output expansion module	13.8VDC +/-10%; 25 mA typical / 40 mA maximum Open Collector, Active Pull-Down, 70 mA maximum
Proximity Key Reader	13.8VDC +/-10%; 70 mA, typical / 180 mA max
Digital Voice Module	13.8VDC +/-10%; 30 mA typical / 70 mA maximum
Plug In GSM/GPRS/3G/4G Module:	During Communication - 160mA; During Standby - 30mA
Plug In IP Module:	75mA maximum
Plug In Fast PSTN Modem	13.8VDC ±10%; 10 mA maximum
3A SMPS	Input: 16.5VAC@ 50VA (via transformer); Output: Aux: 3A@13VDC; Bell/Siren 1.7A@13VDC

Notes

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

EMC Compliance Statement

Hereby, RISCO Group declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 2014/30/EU. For the CE Declaration of Conformity please refer to our website: www.riscogroup.com.

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