LightSYS 2 Installation

Instructor Demonstration Manual

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LightSYS 2 – Installation Demonstration

Contents

Note:

The Installation demonstration requires the following preparations:

1. Control Panel – An installed and configured Control Panel with the required accessories.
    a. Assembled Main Panel with GSM/IP modules.
2. Accessories
    a. Keypad
    b. Wireless Device – One Wireless device of any kind.
3. Active 2.5G SIM Card (maximum).
4. Smartphone - Installed Smartphone Application.
5. PC – Required for demonstrating the Web Application.
6. IP Receiver Software – Provided by Risco, installed on instructor's PC.
7. Network connection to the internet.
8. Digital Receiver to test reports to MS.
9. One (1) LED to test Outputs in the system (advanced demonstration)
10. Hard Copy of the LightSYS 2 Quick Programming Setup manual.

Demonstration #1: Main Panel Installation

GSM Communication Module Test

1. Explain to the students that after installing the GSM Communication Module, the installer needs to perform a Communication Module Test.
2. **Note:** Explain to the students that every time they connect or disconnect a module in the system, the power to the system must be shut down.
3. Power down the LightSYS.
4. Insert the dedicated SIM card.
5. **Note:** Explain to the students that they can enable the SIM PIN code or disable the SIM PIN Code in advance, by placing it in a cell phone and disabling the code.
6. Power up the LightSYS.
7. Point out to the students that the PWR LED is on, indicating the GSM module has power.
8. Explain to the students, during the Power Up of the Module, that the GSM Module performs a communication test with the cellular provider.
9. Show the students that the PWR LED stays ON, and the GSM LED is flashing.
10. Explain to the students, the number of times the GSM LED turns ON indicates the network signal strength (Range of 0÷5).

First Time Power Up

1. Power down the LightSYS.
2. Set DIP switch 2 to ON.
3. Power up the LightSYS.
4. Point out to the students that the keypad will emit a long beep and all the lights on the Keypad should turn ON.
5. Press the  button on the keypad.
6. Select language. Scroll through the options and press  .
7. Enter the Installer code (default:①①①①) and press  .
8. Correct the time and date and confirm by pressing  .
9. Explain to the students that the system automatically enters the Auto Settings mode.

Enter Installer Programming Mode

1. Explain to the students that there are additional ways to enter the Installer Programming Mode and we will explain it in this section.
2. From the Main Display, press  .
3. Enter the Installer code (default:①①①①) and press  .
4. Select ① "Programming" and press  .
5. Explain to the students that they are now in Installer Programming mode and they can select Auto Settings mode.

Automatic Setting

1. Explain to the students that by default, when entering Installer mode with the default DIP Switch 2 in ON position, the system will take you immediately to Auto Settings.
2. Enter the programming key sequence ⑦①① (Install, BUS Devices, Automatic).
3. Press  to begin the automatic BUS Scanning (the Auto Settings process) in which it identifies all the devices on the BUS.
4. 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”.
5. Press  to accept what is being displayed, to progress through configuration screens and to advance on to the next device found.
6. Repeat steps 3 and 4 until the presence of all devices has been confirmed and all parameters configured.

BUS Test

1. Explain to the students that they need to perform a BUS test at the end of Automatic Setting.
2. Enter the programming key sequence⑦①③①.
3. The LightSYS sends multiple test commands to each device connected to the system to ensure reliable connectivity.
4. Press  to begin the automatic BUS TEST in which every device is tested to report the connection quality to the device. If the test result is 99% or higher, then there are no problems with the connections.
5. Explain to the students that in the case of low readings for BUS TEST, it is necessary to check connections with the device and repeat the BUS Test.

IP Communication Module Test

1. Explain to the students that after installing the IP Communication module, the installer needs to perform a Communication Module test.
2. **Note:** Explain to the students that every time they connect or disconnect a module in the system, the power to the system must be shut down.
3. Power down the LightSYS.
4. Connect the LAN cable to the module. Verify the cable is connected to the network.
5. Turn the LightSYS ON.
6. Enter the Programming menu using the Keypad.
7. Go to: Programming Menu → 5) Communication → 1) Method → 3) IP → 1) IP configuration → 1) Dynamic IP.
8. Set the IP communication as “Dynamic”.
9. Leave the Programming Menu and save the settings.

Exiting Programming Mode

1. Explain to the students that after finishing all the requirements in the Programming Mode, they need to perform the following.
2. Set DIP switch 2 to ON.
3. Close the Main Panel in order to prevent Front Tamper Alarm.
4. Press [*] repeatedly to return to ‘Main Menu’.
5. Press ⓪ to Exit and SAVE your settings.
6. **Note:** Explain to the students that it is not possible to exit the system from the Installer mode if a ‘Tamper’ or ‘System Trouble’ condition exists. Correct any tamper and/or system fault conditions before attempting to exit the Installer mode.

Demonstration #2: Wireless Device Enrollment

Receiver Calibration Test

1. Explain to the students that to perform the testing and installation of the wireless devices, a Wireless Receiver must be installed, connected to RISCO BUS and allocated to the system through Bus Scanning.
2. Enter the Programming menu using the Keypad.
3. Go to: Programming Menu → 7) Bus devices → 2) Wireless Devices →1) RX Calibration.
4. Perform RX calibration Test
5. Explain to the students that the number shown on the keypad indicates the amount of background 'noise' that the receiver can 'sense' on the same frequency as the RISCO wireless devices.
6. Remind the students that the Main Panel Receiver Calibration Test must be ≤ 40.
7. Confirm the new threshold if the measurement is within the tolerance, or repeat the test if the measurement is above the tolerance.

Wireless Device Enrollment

1. Go to: Programming Menu → 7) Bus devices → 2) Wireless Devices →2) Allocation → 2) By RF.
2. Select the receiver to be used for the registration mode.
3. Select category as Zone, Type numeric number "1".
4. Perform the Enrollment of the Wireless Device.
5. Explain to the students that the WL Receiver is in Learn Mode.
6. Send a write message from your wireless device by pressing the Wireless device tamper for 5 seconds until a confirmation beep is emitted from the Keypad.
7. Explain to the students that at this point the wireless device is enrolled and allocated to the selected Zone.
8. Leave the Programming Menu and save the settings.

Communication Test to Wireless Device

1. Explain to the students that after enrolling the device, we must confirm the Communication signal quality between the wireless device and the Receiver.
2. Go to: Programming Menu → Diagnostics →Wireless →Communication Test.
3. Show the displayed number to the students.
4. Explain to the students that the displayed number is the result of the last measurement performed after the last transmission (last detection or last supervision signal) of the selected device.
5. Additionally, explain that to receive an updated signal strength, you need to activate the detector prior to performing the Communication test.
6. Explain to the students that the Communication test result must be higher by 10 than the result of the Receiver calibration test to confirm the test as successful.
   (Example: if calibration test = **35**; the communication test to wireless device must be at least **45**).
7. Explain to the students that if the Communication test to the wireless device is successfully completed, the installer can now install the wireless device in the required location.
8. Leave the Programming Menu.

Walk Test to Wireless Device

1. Explain to the students that after installing the device, we must confirm the device is working properly after the installation.
2. Go to: Programming Menu → 2) Zones → 2) Testing → 1) Self Test.
3. Perform Self Test to the installed wireless device.
4. Simulate intrusion and show system behavior to the students.
5. Explain to the students that if the walk test is successful, the installation is done correctly and the devices are working properly.

Demonstration #3: Loud Speaker / Bell Timeout

Setting the Loud Speaker Timeout

1. Explain to the students that during this demonstration, we will change the default time for the Loud Speaker Timeout from 4 minutes (Default) to 3 minutes.
2. Enter the Programming menu using the Keypad.
3. Go to: Programming Menu → 1) System → 1) Timers →3) Bell Timeout.
4. Change the Settings from 4 minutes to 3 minutes.
5. Leave the Programming Menu and save the settings.

Demonstration #4: Ex/En Delay 1

Ex/En Delay 1

1. Explain to the students that during this demonstration we will change the Default settings for the Ex/En Delay 1 timer.
2. Enter the Programming menu using the Keypad.
3. Go to: Programming Menu → 1) System → 1) Timers →1) Ex/En Delay 1→1) Enter Delay 1.
4. Change the Settings from 30 seconds to 10 seconds.
5. Go to: Programming Menu → 1) System → 1) Timers →1) Ex/En Delay 1 →1) Exit Delay 1.
6. Change the Settings from 45 seconds to 5 seconds.
7. Leave the Programming Menu and save the settings.

Demonstration #5: Zones One By One

Zone 1 Configuration

1. Explain to the students that during this demonstration we will define Zone 1.
2. Enter the Programming menu using the Keypad.
3. Go to: Programming Menu → 2) Zones → 1) Parameters →1) One By One.
4. **Note:** Explain to the students, when using the One by One method, the listing of each zone's parameters is sequential.
   Once Zone 1 parameters have been programmed, they are followed by Zone 2, then Zone 3, and so on.
   To program one or more of the system's zones using the One by One method, changes made to any (or all) of the Zone parameters will NOT be recorded without going through the entire Zone One by One list.
5. Show the following display of the Keypad screen:
   ZONE ONE BY ONE
   ZONE#=01 (XY:ZZ)
6. **Note:** Explain to the students, the display next to the selected zone number defines the type of zone and its location in the system in the format XY:ZZ
   a. **X:** Zone physical type (E=Wired zone, W=Wireless zone, B=Bus zone, I=Input zone or single BUS zone expander)
   b. **Y:** The expander ID number. “0” represent the main bus.
   c. **ZZ:** The serial zone number in the system (01-32).
7. Set the parameters as follows:
   a. Set the Label of Zone 1 to "Kitchen".
   b. Set the Partition of Zone 1 to "1".
   c. Set the Zone Type of Zone 1 to "Exit/Entry".
   d. Set the Sound of Zone 1 at Arm to "Bell+ Buzzer".
   e. Set the Sound of Zone 1 at Stay to "Bell Only".
   f. Set the Sound of Zone 1 at Disarm to "Door Chime".
   g. Set the Termination of Zone 1 to "N/O".
   h. Set the Loop Response of Zone 1 to "Normal: 400 ms (milliseconds)".
8. Leave the Programming Menu and save the settings.

Demonstration #6: Zones Parameters by Category

Zones Re-Configuration

1. Explain to the students that during this demonstration, we will change the settings of the zones that have already been defined.
2. Go to: Programming Menu → 2) Zones → 1) Parameters →2) By Category →3) Type.
3. Set Zone 1 Type to "Instant".
4. Set Zone 2 Type to "Fire".
5. Set Zone 3-8 Type to" Not Used".
6. Go to: Programming Menu → 2) Zones → 1) Parameters →2) By Category →5) Termination.
7. Set Zone 1 Termination to "N/O".
8. Set Zone 2 Termination to "N/O".
9. Leave the Programming Menu and save the settings.

Demonstration #7: Outputs Demonstration – Advanced

Outputs Configuration

1. Explain to the students that during this demonstration we will test the outputs from the system.
2. Explain to the students that we will use a LED to verify output from the system.
3. Go to: Programming Menu → 3) Outputs → 2) Follow Partition → 4) Burglary Follow.
4. Set the parameters as follows:
    a. U01- Follow partition - Burglary Follow
    b. Partition 1
    c. Latch N.O.
    d. Activate after any and deactivate after any.
5. Arm the system.
6. Trigger zone 1 (defined as instant zone).
7. Connect a LED to UO1 terminals, between COM to N.O terminals to verify relay activated.

Demonstration #8: System Codes Change

System Codes Change

1. Explain to the students that during this demonstration we will change the User Code, Grand Master Code and the Installer Code.
2. Go to: Programming Menu → 4) Codes → 1) User.
3. Select user and press  .
4. Set partition and authority level as follows:
    a. Partition 1.
    b. Authority Level - "User".
5. Set the User Code to "8520".
6. Go to: Programming Menu → 4) Codes → 2) Grand Master.
7. Set the Grand Master Code to "4321".
8. Go to: Programming Menu → 4) Codes → 2) Installer.
9. Set the Installer Code to "1280".
10. Leave the Programming Menu and save the settings.

Demonstration #9: Monitoring Station Connection

Report Type

1. Explain to the students that during this demonstration we will change the Communication information for connection with the Monitoring Station.
2. Go to: Programming Menu → 5) Communication → 2) Monitoring Station → 1) Report Type → 1) Voice.
3. Select PSTN/GSM.
4. Explain to the students that in this method the system checks for the availability of the PSTN line. During regular operation mode, all calls and data transmission are carried out using the PSTN line. In the case of problems with the PSTN line, the line is routed to the GSM line.
5. Set the monitoring station telephone number 1 to "xxxxxxz".
6. Set the monitoring station telephone number 2 to "yyyyyyy".
7. **Note:** The Monitoring Station telephone number should be provided by the instructor, as defined by the instructor in the Digital Receiver.
8. Go to: Programming Menu → 5) Communication → 2) Monitoring Station → 1) Report Type → 2) IP.
9. Select IP/GPRS.
10. Explain to the students that in this method the panel checks for the availability of the IP network. During regular operation mode, all calls and data transmission are carried out using the IP network line. In the case of problems with the IP network, the report is routed to the GPRS network.
11. Set the relevant IP and Port numbers for the MS
    Note: The account number should be matched according to the requirements of the IP receiver software.

Accounts

1. Go to: Programming Menu → 5) Communication → 2) Monitoring Station → 2) Accounts.
2. **Note:** Explain to the students that the account number is the number that recognizes the customer at the monitoring station. We can define an account number for each monitoring station. These account numbers are the 6-digit numbers assigned by the central station.
3. Set the Account for partition 1 as "001144".
4. Set the Account for partition 2 as "002299".

Communications Format

1. Go to: Programming Menu → 5) Communication → 2) Monitoring Station → 2) Communication Format.
2. **Note:** Explain to the students that the Communication Format enables the system to contact the monitoring station in order to obtain details of the communication protocol used by the digital receiver for each account.
3. Set the Communication Format for telephone number 1 as "(Contact ID)".
4. Set the Communication Format for telephone number 2 as "(Contact ID)".
5. Leave the Programming Menu and save the settings.

Demonstration #10: Follow Me Configuration

Follow ME (Installer Menu)

1. Explain to the students that during this demonstration we will define the Follow Me features.
2. **Note:** Remind the students that the Follow me enables the reporting of system events to predefined follow me destinations using a voice message, SMS message or Email. Up to 16 Follow Me destinations can be defined in the system.
3. Go to: Programming Menu → 5) Communication → 4) Follow Me → 1) Report Type.
4. Set Follow me number 1 as follows:
    a. Report Type = SMS
    b. Partition = 1
    c. The Events can be selected freely.
    d. Restore Events can be selected freely.
5. Leave the Programming Menu and save the settings.

Follow ME (User Menu)

1. Go to: User Menu → Follow Me→ Define → Destination.
2. Set the telephone number.
3. Press OK.
4. Leave the User Menu and save the settings.

Demonstration #11: RISCO Cloud Mode - System Registration

Register with Risco Cloud

1. Go to www.riscocloud.com/register.
2. Enter your first and last name.
3. Enter your email address as Login Name.
4. Define a password (minimum of 6 characters and at least one digit) and confirm.
5. Enter the Panel ID.
6. Complete the registration form and click the Register button.
7. To complete registration, respond to the email message received on the email account you defined as Login Name.

Login to RISCO Cloud

1. Go to www.riscocloud.com.
2. Enter User Name and Password.
3. Enter Passcode.
4. Click the Enter button.
5. Go to the Alerts page and set the FM contact; one Email and one SMS notification.
6. Full Set the system.
7. Simulate intrusion and show the system behavior to the students.
8. Make sure the Alarm is notifying on intrusions and the FM contacts received the notification.

Smartphone App

1. Open the Smartphone App.
2. Repeat steps 2-4 and 6-8 from the "Login to RISCO Cloud" section.