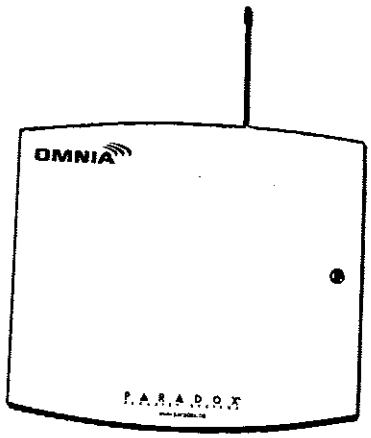
OMNIA™

Wireless Expansion Module V2.0



OMN-RCV3

Reference & Installation Manual

SPECTRA

DIGIPLEX™ PARADOX

DIGIPLEX EVC™

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1.0 Introduction

This manual details how to connect, program and operate the Omnia wireless expansion module when used in conjunction with a Spectra, Digiplex or DigiplexNE security system.

The Omnia module is availabie in either a 433MHz or 868MHz version. When connected to a Spectra system, the Omnia module allows you to add up to eight Omnia wireless transmitters, and up to eight fully programmable Omnia remote controls. When connected to a Digiplex or DigiplexNE system, the Omnia module allows you to add up to 16 Omnia wireless transmitters, and up to 16 fully programmable Omnia remote controls.

The Omnia module cannot be connected to the Spectra 1727 and 1759EX control panels.

1.1 What's New with Version 2.0

- Noise level test (refer to section 2.2 on page 5)
- Auto-detect transmitter check-in supervision time (refer to section 6.2 on page 18)

1.2 Technical Specifications

- Di-pole antenna
- Error Correction Algorithm
- Code-Hopping Technology
- Frequency: 433MHz or 868MHz
- Sensitivity: -120 dBm
- Current consumption: 50 mA
- Dimensions (no antenna): 15cm H x 16cm L x 3cm W (6in H x 6.5in L x 1.1in W)
- Operating temperature: 0°C to 49°C (32°F to 120°F)

- PGM outputs: 2 on-board PGM outputs:
  1 PGM form C relay output rated at 5A/28Vdc, N.O./N.C (+ 1 optional)
- Approvals: 433MHz c UL us LISTED CE FC IC

  868MHz CE !
  Compliant to all EU and EFTA countries except Greece according to RTT&E directives.
- Range (line of sight): Refer to the appropriate transmitter *Instructions*

Specifications may change without prior notice

1.3 System Features

- Auto-Panel Recognition
- Add up to 16 wireless transmitters
- Add up to 16 remote controls
- On-board anti-tamper switch
- Full system supervision (check-in, low battery and tamper)
- Transmitter signal strength indicator
- Transmitter battery life display (Digiplex/DigiplexNE only)

2.0 Installation

The following sections will detail how to mount and connect the Omnia module.

2.1 Location

The locations of the Omnia module and wireless transmitters affect the overall performance of the wireless system. In order to ensure the best possible signal reception, the following list of location criteria should be respected whenever possible:

- Select an installation site that is free of obstacles that reflect and absorb radio frequency (RF) signals, as well as interference that may distort signals. Avoid installation near or in the path of strong RF fields (i.e. neon lights, computers), and on or near metal objects, circuit breaker boxes, air conditioners, and heater ducts since they may cause interference and reduce the module's sensitivity
- Select a site that is not susceptible to drastic temperature changes
- Mount the Omnia module as central as possible to the proposed placement of the transmitters
- Mount the Omnia module as high as possible
- Avoid mounting the Omnia module in the basement as the range of the module is reduced when mounted below ground level. However, if it is absolutely necessary to mount the module in the basement, mount the module as high and as close to the underside of the first floor as possible
- Mount the Omnia module on a wall allowing at least 5cm (2in) around the module to permit adequate ventilation and heat dissipation

Refer to the appropriate Programming Guide for maximum allowable distances between the control panel and the Omnia module.

2.2 Noise Level Test

The Omnia module performs a test on power-up that verifies the noise level in the surrounding environment. If the environment is too noisy, the module's RX LED will illuminate (refer to Figure 2.2 on page 8) and will remain illuminated until the module is powered up again. In such cases, power down the Omnia module, change its location, and then power up. Repeat this procedure until the module's RX LED no longer illuminates. If all possible mounting locations have been tested and the environment is still too noisy, be aware that the wireless system may not function properly. The noise level test should be performed in conjunction with the signal strength test (refer to section 5.2 on page 13) to ensure optimal mounting locations for the Omnia module and transmitters.

When performing the noise level test, ensure that there are no transmitters that are powered-up.

2.3 Connections and Mounting

1. Using a screwdriver, remove the screw on the Omnia module's front cover and then remove the front cover.
2. Firmly screw the antenna into the connector marked ANT on the Omnia module (refer to Figure 2.1 on page 7).
3. Remove the printed circuit board (PCB) by applying outward pressure to the mounting clips (refer to Figure 2.1 on page 7) and then lifting the PCB.
4. Using a drill or screwdriver, punch out the four mounting holes on the back cover (refer to Figure 2.1 on page 7).
5. Align the six orientation holes (refer to Figure 2.1 on page 7) of the PCB with the six pins on the back cover and snap the PCB into place. If placed correctly, the antenna will lean directly over the groove in the back cover.
6. Temporarily mount the Omnia module in its proposed location (refer to section 2.1 on page 4) with masking tape or any other temporary adhesive.
7. Connect the Omnia module to the control panel's communication bus in a star or daisy chain configuration (refer to Figure 2.2 on page 8), and then power up.
8. Verify the environment noise surrounding the Omnia module (refer to section 2.2 on page 5).
9. Temporarily mount the transmitters in their proposed locations (refer to section 2.1 on page 4) with masking tape or any other temporary adhesive, insert the batteries and then close the transmitters' covers.
10. Program the system (refer to section 3.0 on page 9).

Do not cut, bend, or alter the antenna. Ensure that the electrical wires do not cross over the antenna when connected.

For Spectra systems, do not connect more than one Omnia module to the control panel. Omnia does not function with control panels that have a built-in wireless receiver, such as the Spectra 1759EX.

Figure 2.1: Mounting

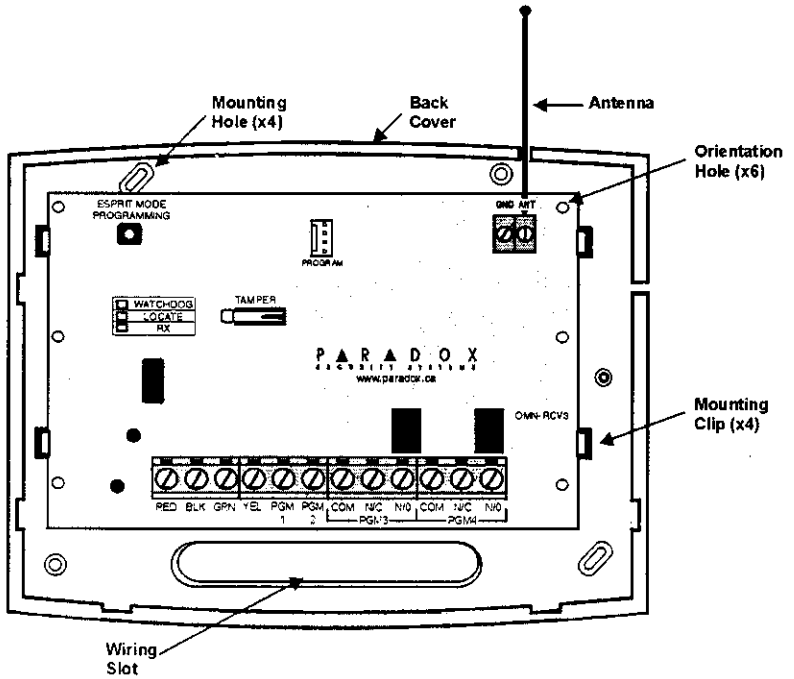
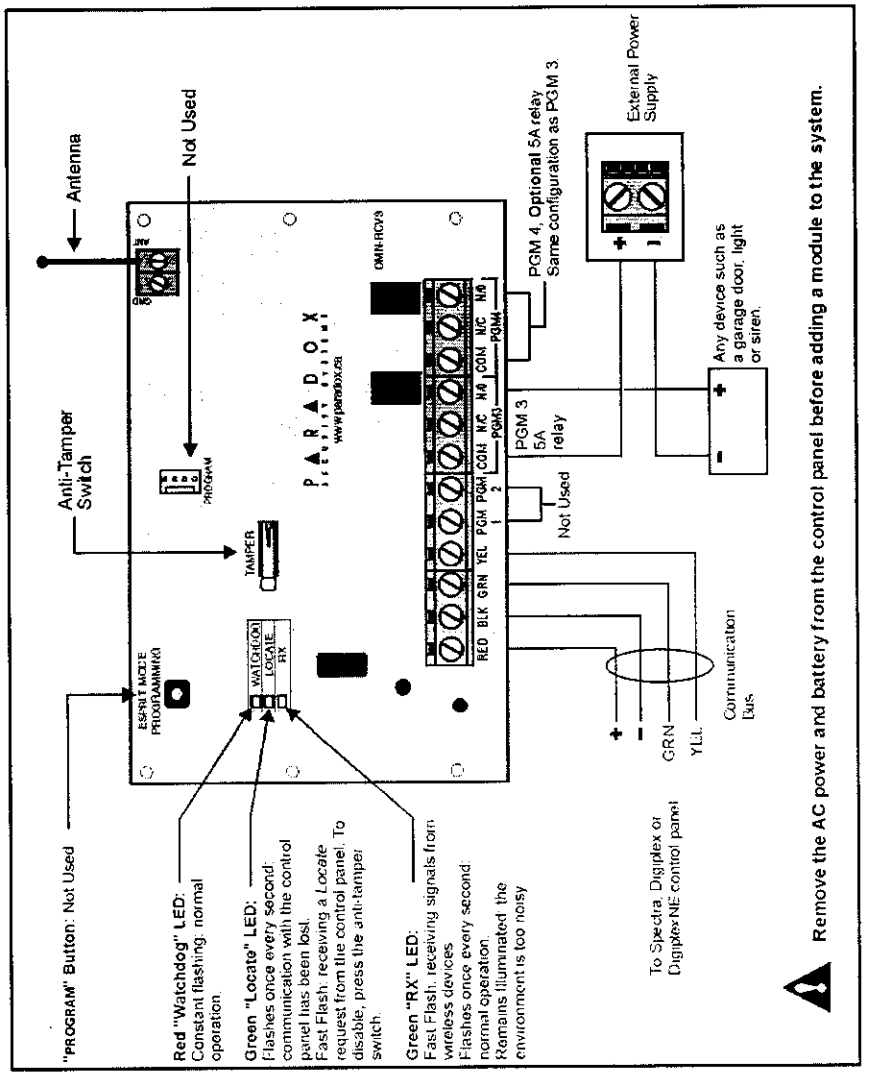


Figure 2.2: Connecting Omnia to the Control Panel



3.0 About Programming

The following steps must be completed in order to successfully install an Omnia module to a Spectra, Digiplex or DigiplexNE system.

1. Temporarily mount the Omnia module in its proposed location (refer to section 2.3 on page 6).
2. Assign the remote controls (refer to section 8.0 on page 22).
3. Assign the transmitters (refer to section 4.1 on page 11).
4. Wait for the control panel to be in "ready" mode (keypad's green "status" light will illuminate) and then open and close the transmitters' covers in order to ensure proper communication between the transmitters and the Omnia module.
5. Perform a signal strength test (refer to section 5.2 on page 13) for every transmitter to ensure the best possible mounting location.
6. Permanently mount the Omnia module and transmitters.
7. Program the zones in the Spectra, Digiplex or DigiplexNE control panel. Refer to the appropriate Spectra, Digiplex or DigiplexNE Reference & Installation Manual for instructions on programming the zones.

3.1 Spectra Programming

Omnia is programmed within the control panel's programming from any keypad connected to the system.

How to program.
1. Press the **[ENTER]** button.
2. Enter your **[INSTALLER CODE]** (default = 000000).
3. Enter the **[SECTION NUMBER]** you wish to program.
4. Enter the required **[DATA]**.

3.2 Digiplex and DigiplexNE Programming

Omnia's programming is done through the control panel's Module Programming Mode from any keypad connected to the system. Programming can also be done through the WinLoad software.

How to program.

1. Press and hold the **[0]** button.
2. Enter your **[INSTALLER CODE]** (default = 000000).
3. Enter section **[953]** (Digiplex) or **[4003]** (DigiplexNE).
4. Enter Omnia's 8-digit **[SERIAL NUMBER]**.
5. Enter the **[SECTION NUMBER]** you wish to program.
6. Enter the required **[DATA]**.

4.0 Transmitter Programming

For Spectra systems, up to eight transmitters can be assigned to each Omnia module. Digiplex and DigiplexNE systems support up to 16 transmitters.

The following tables display the interrelated transmitter sections:

Table 4.1: Interrelated Spectra Transmitter (Tx) Sections

Expansion Input #	Assign Tx to module	View Tx Signal Strength
1 ↓ 8	[601] ↓ [608]	[631] ↓ [638]

Table 4.2: Interrelated Digiplex/DigiplexNE Transmitter (Tx) Sections

Input #	Assign Tx to module	View Tx Signal Strength	View Tx Current Battery Life	View Tx Previous Battery Life
001 ↓ 016	[101] ↓ [116]	[601] ↓ [616]	[701] ↓ [716]	[801] ↓ [816]

4.1 Assign the Transmitters to the Omnia Module

SPECTRA: SECTIONS **[601]** TO **[608]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[101]** TO **[116]**

In Spectra systems, up to eight wireless transmitters can be assigned to an Omnia module. In Digiplex and DigiplexNE systems, up to 16 wireless transmitters can be assigned to each Omnia module.

The serial number is located on the inside of the transmitter, or you can use the View Unknown Serial Numbers feature (section 5.1 on page 12) to determine the transmitter's serial number.

For Spectra systems, do not assign detection devices from different modules to the same expansion input. For example, do not assign a wireless transmitter to section [601], then connect a detection device to input Z1 of the APR3-ZX8.

How to assign the transmitters to an Omnia module.

Spectra

Sections [601] to [608] represent expansion inputs 1 to 8 respectively. For example, section [601] is assigned to expansion input 1 and section [602] is assigned to expansion input 2.

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[601]** and **[608]**.
2. Enter the 6-digit serial number of the transmitter.

Note: To activate a transmitter, insert the batteries and close the cover.

Digiplex/DigiplexNE

Sections [101] to [116] represent inputs 001 to 016 respectively. For example, section [101] is assigned to input 001 and section [102] is assigned to input 002.

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[101]** and **[116]**.
2. Enter the 6-digit serial number of the transmitter.

Note: To activate a transmitter, insert the batteries and close the cover.

4.1.1 DELETE THE ASSIGNED TRANSMITTERS

SPECTRA: SECTIONS **[601]** TO **[608]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[101]** TO **[116]**

How to delete the assigned transmitters.

Spectra

The transmitters assigned in sections [601] to [608] are deleted in the same sections.

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[601]** and **[608]**.
2. Enter 6 zeros (000000) in place of the 6-digit serial number.

Digiplex/DigiplexNE

The transmitters assigned in sections [101] to [116] are deleted in the same sections.

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[101]** and **[116]**.
2. Enter 6 zeros (000000) in place of the 6-digit serial number.

5.0 Display Options

View the following transmitter information:

- A transmitter's unknown serial number
- A transmitter's signal strength
- A transmitter's current battery life (Digiplex/DigiplexNE only)
- A transmitter's previous battery life (Digiplex/DigiplexNE only)

5.1 View a Transmitter's Unknown Serial Number

SPECTRA: SECTION **[630]**

DIGIPLEX/DIGIPLEXNE: SECTION **[030]**

This feature will display the serial number of any Omnia transmitter on a keypad.

How to view a transmitter's serial number.

Spectra

In step 3 in section 3.1 on page 9:

1. Enter section **[630]**.
2. Press the anti-tamper switch on any Omnia wireless transmitter. When the signal has been received, the keypad will emit a confirmation beep ("Beep-Beep-Beep-Beep-Beep").

   On LED keypads: The serial number digits will appear one at a time by illuminating the corresponding LED light. To view the next digit press the **[ENTER]** button.

   On LCD keypads: The first 3 digits of the serial number will appear. Press the **[ENTER]** button 3 times to view the next 3 digits

Digiplex/DigiplexNE

In step 5 in section 3.2 on page 9:

1. Enter section **[030]**.
2. Press and hold the anti-tamper switch on the transmitter. The transmitter's serial number appears on the LCD screen under the words "View Data".

5.2 View a Transmitter's Signal Strength

SPECTRA: SECTIONS **[631]** TO **[638]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[601]** TO **[616]**

Once the transmitters have been assigned to the Omnia module, the signal strength of each transmitter can be verified in these sections. For Spectra systems, you can also use a keypad's beep sequence to determine a transmitter's signal strength (refer to section 5.2.1 on page 15).

After entering the desired section, ignore the first reading as it will not be accurate.

How to view a transmitter's signal strength.

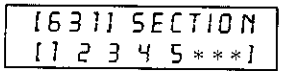
Spectra

Sections [631] to [638] represent the signal strength viewer for a specific transmitter. For example, section [631] is the viewer for the transmitter in section [601] and section [638] is the viewer for the transmitter in section [608].

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[631]** and **[638]**.
2. Press the transmitter's anti-tamper switch, or open the corresponding zone. A reading of two or less represents a very weak signal and the transmitter should be moved. A reading of three or higher is acceptable.

   On LED keypads: The keypad will illuminate numbers 1 to 8.
   On LCD keypads: The keypad will display from 1 to 8 characters on the screen. For example, in the figure below the LCD screen shows a signal strength reading of 5.



Digiplex/DigiplexNE

Sections [601] to [616] represent the signal strength viewer for a specific transmitter. For example, section [601] is the viewer for the transmitter in section [101] and section [616] is the viewer for the transmitter in section [116].

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[601]** and **[616]**.
2. Press the transmitter's anti-tamper switch, or open the zone assigned to the transmitter. The signal strength is represented by one to ten arrows that will appear on the LCD screen below the words "View Data". The numeric reading will appear to the right of the arrows. Three or less is a very weak signal and the transmitter should be moved. A reading of four or higher is acceptable.

5.2.1 Signal Strength Keypad Beep Tones (Spectra only)

You can also use Omnia's beep sequence feature to verify a transmitter's signal strength (refer to section 5.2 on page 13). When you press a transmitter's anti-tamper switch or open the corresponding zone, beep tones emanating from all the keypads connected to the communication bus will advise you of the transmitter's signal strength.

How to attain a transmitter's signal strength using the beep sequence.

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[631]** and **[638]**.
2. Press the transmitter's anti-tamper switch or open the corresponding zone.
3. Listen for the beep tones:

   If the signal strength is 1 or 2 = One beep
   If the signal strength is between 3 and 5 = Two beeps
   If the signal strength is between 6 and 8 = Three beeps

5.3 View a Transmitter's Current Battery Life (Digiplex/ DigiplexNE only)

DIGIPLEX/DIGIPLEXNE: SECTIONS **[701]** TO **[716]**

These sections allow you to view the amount of time, in weeks, a battery has been in a specific transmitter. However, if you replace the batteries in one of the transmitters, you can view the current battery life only after one week. Each section represents the current battery life reading of a specific transmitter. For example, section [701] is the actual battery life reading for the transmitter assigned in section [101], and section [716] is the reading for the transmitter assigned in section [116].

How to view a transmitter's current battery life.
In step 5 in section 3.2 on page 9:

1. Enter a section number between **[701]** and **[716]**.
2. The number value (001 to 255) in the chosen section represents the number of weeks the batteries have been inside the transmitter. For example, if the value is 006, the batteries have been in the transmitter for 6 weeks.

   Note: The current battery life will be available one week after the batteries are inserted into the transmitter.

5.4 View a Transmitter's Previous Battery Life (Digiplex/ DigiplexNE only)

DIGIPLEX/DIGIPLEXNE: SECTIONS **[801]** TO **[816]**

These sections allow you to view the amount of time, in weeks, the previous batteries in a specific transmitter lasted. The value will be saved one week after the new batteries are installed. For example, if you replace the batteries in one of the transmitters, you will be able to view the battery life of the previous batteries only after one week. Each section represents the previous battery life reading of a specific transmitter. For example, section [801] is the previous battery life reading for the transmitter assigned in section [101], and section [816] is the reading for the transmitter assigned in section [116].

How to view the previous battery life of the transmitters.
In step 5 in section 3.2 on page 9:

1. Enter a section number between **[801]** and **[816]**.
2. The number value (001 to 255) in the chosen section represents the number of weeks a transmitter's previous batteries lasted. For example, if the value is 012, the previous batteries lasted 12 weeks.

   Note: The previous battery-life value is saved, and made available, one week after the replacement batteries are inserted into the transmitter.

6.0 Supervision Options

The Omnia module offers a variety of supervision options that allows the module to monitor the status of the module, detectors, and door contacts.

6.1 Low Battery Supervision

SPECTRA: NO PROGRAMMING REQUIRED

DIGIPLEX/DIGIPLEXNE: SECTION **[001]**: OPTION **[1]**

For Spectra systems, there is no programing required for this feature. When the battery voltage of an Omnia wireless transmitter drops below a recommended level, its red LED will flash and it will transmit a signal to the Omnia module indicating that the voltage is low. The Omnia module will then send the report to the Spectra control panel, which will generate a trouble and can transmit the signal to the monitoring station (refer to the Spectra Reference & Installation Manual).

Please note that when connected to a Spectra control panel, the Wireless Transmitter Low Battery Supervision feature must be enabled.

For Digiplex and DigiplexNE systems, option [1] enables the Low Battery Supervision feature. When a transmitter's battery voltage drops below a recommended level, its red LED will flash and it will transmit a signal to the Omnia module indicating that the voltage is low. If this option is enabled, the Omnia module will transmit the signal to the control panel, which will generate a trouble and can transmit a report code to the monitoring station (refer to the Digiplex or DigiplexNE Reference & Installation Manual).

Please note that certain transmitters are not equipped with a red LED.

How to enable/disable low battery supervision.

In step 5 in section 3.2 on page 9:

1. Enter section **[001]**.
2. Enable or disable option **[1]**.

Option [1] **OFF**= Low Battery Supervision disabled (default)
Option [1] **ON** = Low Battery Supervision enabled

6.2 Check-In Supervision

SPECTRA: SECTION **[610]**: OPTION **[1]**

DIGIPLEX/DIGIPLEXNE: SECTION **[001]**: OPTION **[2]**

With check-in supervision enabled, the Omnia module waits for each of its assigned transmitters to send a status signal within a specified time period, which is set in the transmitter, to confirm their presence and functionality. The Omnia module automatically detects the check-in time period set in each of its assigned transmitters and if a transmitter has not sent a signal within that time period, the Omnia module will transmit a supervision loss signal to the control panel. The control panel can then generate a trouble, an alarm and/or can transmit a report code to the monitoring station (refer to the Spectra, Digiplex or DigiplexNE Reference & Installation Manual).

For UL installations, check-in supervision must be enabled (ON).

The transmitters can have different check-in time periods due to the Omnia module's Auto-Detect Transmitter Check-In Time feature.

How to enable/disable check-in supervision.

Spectra

In step 3 in section 3.1 on page 9:

1. Enter section **[610]**.
2. Enable or disable option **[1]**.

Option [1] **OFF** = Check-in Supervision disabled (default)
Option [1] **ON** = Check-in Supervision enabled

Digiplex/DigiplexNE

In step 5 in section 3.2 on page 9:

1. Enter section **[001]**.
2. Enable or disable option **[2]**.

Option [2] **OFF**= Check-in Supervision disabled (default)
Option [2] **ON** = Check-in Supervision enabled

6.3 Tamper Supervision

Omnia comes equipped with an on-board anti-tamper switch. If the Tamper Supervision feature is enabled and the Omnia module's cover is removed, the on-board anti-tamper switch (refer to Figure 2.2 on page 8) will be triggered. When this occurs, the Omnia module will send a tamper signal to the control panel. The control panel can then generate a trouble, an alarm and/or can transmit a report code to the monitoring station. For more information, refer to the Spectra, Digiplex or DigiplexNE Reference & Installation Manual.

6.3.1 ON-BOARD MODULE TAMPER SUPERVISION ZONE ASSIGNMENT (SPECTRA ONLY)

SPECTRA: SECTION **[615]**: 000 TO 008

Unlike when connected to a Digiplex/DigiplexNE system, an Omnia module that is connected to a Spectra system communicates a module tamper report through one of the module's expansion inputs. This feature determines the expansion input that will be used for the tamper supervision. When a tamper is detected on the module, the zone tamper report code will originate from the zone defined by the expansion input (001-008) you have programmed in section [615]. Entering 000 will disable the on-board anti-tamper switch. Please note that the corresponding zone must be programmed in the control panel (refer to the appropriate Spectra Reference & Installation Manual). For example, when you program 003 (expansion input 3) in section [615] of a Spectra 1728 panel with the ATZ feature enabled, and a tamper occurs on the Omnia module, the control panel will transmit the Zone Tamper report code as originating from zone 15.

If you enable Omnia's anti-tamper switch in section [615], the anti-tamper switch will occupy one of the expansion inputs. Therefore, you will have seven remaining expansion inputs instead of eight.

How to assign Omnia's anti-tamper switch to a zone.
In step 3 in section 3.1 on page 9:
1. Enter section **[615]**.
2. Enter an expansion input number between 000 and 008.
   000=Disabled (default)

6.3.2 ON-BOARD MODULE TAMPER SUPERVISION (DIGIPLEX/DIGIPLEXNE ONLY)

DIGIPLEX/DIGIPLEXNE: SECTION **[001]**: OPTION **[5]**

How to enable/disable the module tamper supervision.
In step 5 in section 3.2 on page 9:
1. Enter section **[001]**.
2. Enable or disable option **[5]**.
   Option [5] **OFF** = On-Board Module Tamper Supervision disabled (default)
   Option [5] **ON** = On-Board Module Tamper Supervision enabled

7.0 Programmable Outputs (PGMs)

The Omnia module comes equipped with four on-board PGM outputs. However, only PGMs 3 and 4 are used when connected to a Spectra, Digiplex or DigiplexNE control panel.

- PGM 1 and 2: Not used
- PGM 3: Form "C" relay output rated at 5A/28Vdc, N.O./N.C
- PGM 4: Optional form "C" relay output rated at 5A/28Vdc, N.O./N.C

7.1 PGM Connection

The PGMs are connected as detailed in Figure 2.2 on page 8.

7.2 PGM Activation

PGM 3 and PGM 4 are always enabled and are activated only through the Omnia remote control. Remote control button C (refer to Figure 8.2 on page 31) controls PGM 3, and button D controls PGM 4. Press the appropriate remote control button to activate the corresponding PGM. If the PGM deactivation mode is set to "Manually" (refer to section 7.3), the button used to activate the PGM will also be used to deactivate the PGM.

If remote control button C or D is programmed to perform another action (refer to section 8.3 on page 27), pressing the button will activate the PGM and perform the programmed action as well. For example, if button C is programmed to Regular arm the system, pressing button C will activate PGM 3 and Regular arm the system.

7.3 PGM Deactivation

SPECTRA: SECTION **[610]**: OPTIONS **[6]** AND **[7]**

DIGIPLEX/DIGIPLEXNE: SECTION **[001]**: OPTIONS **[6]** AND **[7]**

Once a PGM has been activated (refer to section 7.2 on page 21), options [6] and [7] determine how the PGM will deactivate. If the option is OFF, the activated PGM will automatically deactivate after two seconds. If the option is ON, the activated PGM can only be deactivated by pressing the appropriate button on the Omnia remote control (refer to section 7.2 on page 21).

How to set the PGM deactivation mode.

Spectra

In step 3 in section 3.1 on page 9:

1. Enter section **[610]**.
2. Enable or disable options **[6]** and **[7]**.

Option [6] **OFF** = PGM 3: Deactivates after 2 seconds (default)
Option [6] **ON** = PGM 3: Manually (press RC button C)

Option [7] **OFF** = PGM 4: Deactivates after 2 seconds (default)
Option [7] **ON** = PGM 4: Manually (press RC button D)

Digiplex/DigiplexNE

In step 5 in section 3.2 on page 9:

1. Enter section **[001]**.
2. Enable or disable options **[6]** and **[7]**.

Option [6] **OFF** = PGM 3: Deactivates after 2 seconds (default)
Option [6] **ON** = PGM 3: Manually (press RC button C)

Option [7] **OFF** = PGM 4: Deactivates after 2 seconds (default)
Option [7] **ON** = PGM 4: Manually (press RC button D)

8.0 Remote Control Programming

Depending on the system being used, the Omnia module supports up to 16 fully programmable remote controls without occupying any zones in the control panel. For Spectra systems, up to 8 remote controls can be assigned to an Omnia module. Digiplex and DigiplexNE systems support up to 16 remote controls for every Omnia module. The remote controls are programmed in three steps:

1. Assign remote controls to the Omnia module (refer to section 8.1 on page 23).
2. Assign remote controls to Users (refer to section 8.2 on page 26).
3. Program the remote control buttons (refer to section 8.3 on page 27).

The following tables display the interrelated remote control sections:

Table 8.1: Interrelated Spectra RC Sections

RC #	Assign the RC to module	Assign RC to User	RC Button Programming
1 ↓ 8	[721]/[731] ↓ [728]/[738]	[701] ↓ [708]	[711] ↓ [718]

Table 8.2: Interrelated Digiplex/DigiplexNE RC Sections

RC #	Assign the RC to module	View # of Assigned RCs	Assign RC to User	RC Button Programming
1 ↓ 8	[201] ↓ [208]	[040]	[301] ↓ [308]	[401] ↓ [408]
9 ↓ 16	[209] ↓ [216]	[041]	[309] ↓ [316]	[409] ↓ [416]

8.1 Assign a Remote Control to the Omnia Module

SPECTRA: SECTIONS **[721]** TO **[728]** / **[731]** TO **[738]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[201]** TO **[216]**

Remote controls are assigned to the Omnia module using the Automatic Learning method. For Spectra systems, up to eight remote controls can be assigned to an Omnia module. Depending on which Spectra control panel version you are using, the Automatic Learning method may differ. For Digiplex and DigiplexNE systems, up to 16 remote controls can be assigned to each Omnia module.

Remote controls that are assigned to the Omnia module do not occupy any zones in the Spectra, Digiplex or DigiplexNE control panel.

How to assign a remote control to an Omnia module.

Spectra (V1.23 or lower)

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[721]** and **[728]**.
2. Enter **[111111]**. A rejection beep will sound, and it will exit the section.
3. Press any button on the remote control twice, or until you hear three consecutive rejection beeps ("Beeeeeeeeeeeeeep").

Spectra (V2.0 or higher)

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[731]** and **[738]**.
2. Press any button on the remote control twice, or until the confirmation beep sounds ("Beep-Beep-Beep-Beep-Beep").

Digiplex/DigiplexNE

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[201]** and **[216]**.
2. Press any button on the remote control twice, or until the confirmation beep sounds ("Beep-Beep-Beep-Beep-Beep").

If a rejection beep is heard ("Beeeeeeeeeeeep"), or if you are having trouble assigning the remote control, the environment may be too noisy. Therefore, we recommend that you assign the remote controls before installing the detectors and door contacts.

8.1.1 View the Assigned Remote Controls (Digiplex/DigiplexNE only)

DIGIPLEX/DIGIPLEXNE: SECTIONS **[040]** AND **[041]**

Each remote control that is assigned to the Omnia module is given a remote control number (refer to Table 8.3 on page 29). The number of the assigned remote controls are viewed in sections [040] and [041]. This feature is especially useful when you wish to verify if the remote controls have been successfully assigned. The remote controls assigned to sections [201] to [208], that is remote controls 1 to 8, appear in section [040]. The remote controls assigned to sections [209] to [216], that is remote controls 9 to 16, appear in section [041]. After entering the corresponding section, values from 1 to 8 will appear, however depending on the viewing section, the values represent remote control 1 to 8 or 9 to 16. For example, if remote control 13 has been assigned, section [041] will show a 5.

How to view the assigned remote controls.

In step 5 in section 3.2 on page 9:

1. Enter section **[040]** or **[041]**.
2. The numbers corresponding to the assigned remote controls will appear. For example, the remote control assigned to section [203] will appear as "3" in section [040].

8.1.2 Delete an Assigned Remote Control

SPECTRA: SECTIONS **[721]** TO **[728]** / **[731]** TO **[738]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[040]** AND **[041]**

Delete a remote control that has been assigned to the Omnia module.

How to delete an assigned remote control.

Spectra (V1.23 or lower)

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[721]** and **[728]**.
2. Enter **[000000]**.

Spectra (V2.0 or higher)

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[731]** and **[738]**.
2. Press the **[FORCE]** button.

Digiplex/DigiplexNE

In step 5 in section 3.2 on page 9:

1. Enter section **[040]** or **[041]**.
2. Press the button on the keypad that corresponds to the remote control that you wish to delete. For example, to delete the remote control assigned to section [201], press the [1] button in section [040] until the "1" no longer appears on the screen.
3. Press the **[ENTER]** button.

8.2 Assign a Remote Control to a User

SPECTRA: SECTIONS **[701]** TO **[708]**: 001 TO 048

DIGIPLEX/DIGIPLEXNE: SECTIONS **[301]** TO **[316]**: 001 TO 255

Each remote control assigned to the Omnia module (refer to section 8.1 on page 23) must be assigned to a User Code. All User Codes are given a User Number from 001 to 048 (Spectra), 001 to 096 (Digiplex), or 001 to 255 (DigiplexNE). To assign a remote control to a user, enter the user number in the corresponding section.

For DigiplexNE systems, user codes 256 to 999 cannot be assigned to a remote control.

How to assign a remote control to a user.

Spectra

Sections [701] to [708] represent the remote controls assigned in sections [721] to [728] or [731] to [738] respectively. For example, to assign the remote control that was assigned in section [721] to a user, enter the appropriate user number in section [701].

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[701]** and **[708]**.
2. Enter a user number between 001 and 048.

Digiplex/DigiplexNE

Sections [301] to [316] represent the remote controls assigned in sections [201] to [216] respectively. For example, to assign the remote control that was assigned in section [201] to a user, enter the appropriate user number in section [301].

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[301]** and **[316]**.
2. Enter a user number.
   Digiplex = 001 to 096
   DigiplexNE = 001 to 255

8.3 Program the Remote Control Buttons

SPECTRA: SECTIONS **[711]** TO **[718]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[401]** TO **[416]**

Each remote control can be programmed to send a signal to the control panel to perform up to eight different actions (refer to Table 8.4 on page 31). Each digit in the designated sections represents a button or button combination (refer to Table 8.3 on page 29). When a user arms or disarms the system using the remote control, the control panel will arm or disarm **all** the areas assigned to the user code. For example, if you arm with a remote control whose user code is assigned to areas 1 and 3, the control panel will attempt to arm areas 1 and 3.

Remote control buttons C and D (refer to Figure 8.2 on page 31) automatically activate PGMs 3 and 4 respectively (refer to section 7.2 on page 21). If you program button C or D to perform another action, pressing the button will activate the PGM and perform the programmed action. For example, if button C is programmed to Regular arm the system, pressing button C will activate PGM 3 and Regular arm the system.

How to program the remote control buttons.

Spectra

Sections [711] to [718] represent the remote controls assigned in sections [721] to [728] or [731] to [738] (refer to section 8.1 on page 23). For example, the buttons for the remote control assigned in section [721]/[731] will be programmed in section [711].

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[711]** and **[718]**.
2. Enter the hexadecimal value (0 to D) of the desired options from Table 8.4 on page 31 in the appropriate space (refer to Table 8.3 on page 29).
3. Press the **[ENTER]** button to save and exit.

   Note: If you do not wish to program all the buttons or button combinations, press the **[ENTER]** button at any time to save and exit.

Digiplex/DigiplexNE

Sections [401] to [416] represent the remote controls assigned in sections [201] to [216] (refer to section 8.1 on page 23). For example, the buttons for the remote control assigned in section [201] will be programmed in section [401].

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[401]** and **[416]**.
2. Place the cursor under the digit of the button or button combination (refer to Table 8.3 on page 29) you want to program using the keypad arrow buttons. Enter the hexadecimal value (0 to F) of the desired option from Table 8.4 on page 31.
3. Repeat step 2 for every button or button combination.
4. Press **[ENTER]** to save and exit. The LCD screen will automatically switch to the next section for the next remote control.

   Note: If you do not wish to program all the buttons or button combinations, press the **[ENTER]** button at any time to save and exit.

The User Code assigned to the remote control (refer to section 8.2 on page 26) must have the same options enabled as the remote control. For example, if you enable the Force Arming button option, you must enable the appropriate Force Arming user option in the control panel. Also, if you enable any Panic button options, you must enable the Panic options in the control panel (refer to the appropriate Reference & Installation Manual).

In Spectra systems, to verify the remote control button programming using LED keypads, enter the desired section, press the [ENTER] key to enter display mode and then press [ENTER] once for every value. The LED hexadecimal indicators (refer to Table 8.5 on page 32) will illuminate one at a time as you press the [ENTER] key.

Table 8.3: Remote Control Button Programming

RC#	Spectra Section	Digiplex & DigiplexNE Section	RC Buttons (refer to Table 8.4 on page 31)
1	[711]	[401]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
2	[712]	[402]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
3	[713]	[403]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
4	[714]	[404]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
5	[715]	[405]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
6	[716]	[406]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
7	[717]	[407]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
8	[718]	[408]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D

Table 8.3: Remote Control Button Programming (cont'd)

RC#	Spectra Section	Digiplex & DigiplexNE Section	RC Buttons (refer to Table 8.4 on page 31)
9	-	[409]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
10	-	[410]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
11	-	[411]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
12	-	[412]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
13	-	[413]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
14	-	[414]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
15	-	[415]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D
16	-	[416]	___/___/___/___/___/___/___/___ A B C D A+B C+D A+C B+D

Figure 8.1: Remote Control Button Programming Example

```
416 MODULE DATA
(15)(00)(E0)(00)
```

In this example, the Omnia module is connected to a DigiplexNE control panel and the user is utilizing an LCD keypad. Button A is programmed to Regular Arm, button B is programmed to Disarm, and the button combination A+B is programmed to activate the PGM(s) according to the appropriate PGM Table (Utility Key 4). The other buttons and button combinations are not programmed.

Figure 8.2: Remote Control Button Identification

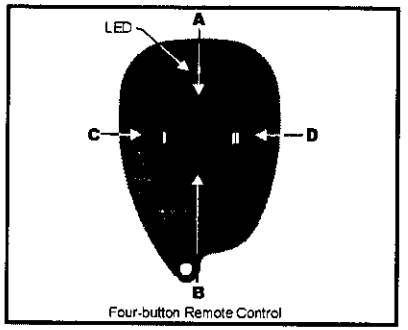


Table 8.4: Remote Control Button Options

Spectra	
[FORCE] = Button Disabled	[7] = Regular Arm and Disarm
[1] = Regular Arm	[8] = Panic 1 (Police)
[2] = Stay Arm	[9] = Panic 2 (Medical)
[3] = Instant Arm	[A] = Panic 3 (Fire)
[4] = Force Arm	[B] = Activates any PGMs that have Event Group #07 as their Activation Event*
[5] = Disarm	[C] = Activates any PGMs that have Event Group #08 as their Activation Event*
[6] = Disarm when there is no alarm	[D] = Activates any PGMs that have Event Group #09 as their Activation Event*
Digiplex/DigiplexNE	
[0] = Button Disabled	[8] = Panic 2 (Medical)
[1] = Regular Arm	[9] = Panic 3 (Fire)
[2] = Stay Arm	[A] = Smoke reset
[3] = Instant Arm	[B] = Utility Key 1*
[4] = Force Arm	[C] = Utility Key 2*
[5] = Disarm	[D] = Utility Key 3*

Table 8.4: Remote Control Button Options

[6]	= Stay/Instant Disarm	**[E]**	= Utility Key 4*
[7]	= Panic 1 (Police)	**[F]**	= Utility Key 5*

* Since Omnia PGMs 3 and 4 are always enabled and are activated only with Omnia remote control buttons C and D respectively (refer to section 7.2 on page 21), the PGM and Utility Key options pertain only to PGMs on other modules connected to the system. For Digiplex systems, refer to the PGM table (First Digit: 8) in the Digiplex Programming Guide. For DigiplexNE systems, refer to the PGM table (Event Group: 048) in the DigiplexNE Programming Guide.

Only arming and disarming functions were investigated by UL.

In Digiplex versions prior to 2.12, button choices [1] to [9] will only function with the System Master Code (Code 001).

8.3.1 Hexadecimal Values and Indicators

This section details how to enter hexadecimal values (1-F) using LCD and LED keypads, and how the keypads display the hexadecimal values.

Table 8.5: Spectra Hexadecimal Values & Indicators

Value or Action	What Do I Press?	Keypad Display		
		10-Zone LED	16-Zone LED	LCD
1 to 9	[1] to [9]	[1] to [9]	[1] to [9]	[1] to [9]
A	[0]	[0 (10)]	[10]	0
B	[STAY]	[STAY]	[11]	B
C	[BYP]	[BYP]	[12]	C
D	[MEM]	[MEM]	[13]	D
E	[TBL] / [TRBL]	[TBL]	[14]	E
F	[PG] / [FNC1]	[PG]	[15]	F
Exit Without Saving	[CLEAR]	[ENTER] flashes	[ARM1] & [STAY1] flash	"[ ] SECTION"

Table 8.5: Spectra Hexadecimal Values & Indicators

Value or Action	What Do I Press?	Keypad Display		
		10-Zone LED	16-Zone LED	LCD
Insert Blank Digit	[FORCE]	Displays next digit or next section		
Save Data	[ENTER]	Advances to the next section		

Table 8.6: DGP/DGP-NE Hexadecimal Values & Indicators

Value or Action	What Do I Press?	LCD Keypad Display
1 to 9	[1] to [9]	[1] to [9]
A	[STAY]	A
B	[FORCE]	B
C	[ARM]	C
D	[DISARM]	D
E	[BYP]	E
F	[MEM]	F
Exit Without Saving	[CLEAR]	"[ ] SECTION"
Save Data	[ENTER]	Advances to the next section

8.3.2 DELETE REMOTE CONTROL BUTTON PROGRAMMING

SPECTRA: SECTIONS **[711]** TO **[718]**

DIGIPLEX/DIGIPLEXNE: SECTIONS **[401]** TO **[416]**

How to delete a remote control's button programming.

Spectra

Sections [711] to [718] represent the remote controls assigned in sections [721] to [728] or [731] to [738] (refer to section 8.1 on page 23). For example, to delete the button programming for the remote control assigned in section [721]/[731], enter section [711].

In step 3 in section 3.1 on page 9:

1. Enter a section number between **[711]** and **[718]**.
2. Press the **[FORCE]** button once for every digit.

Digiplex/DigiplexNE

Sections [401] to [416] represent the remote controls assigned in sections [201] to [216] (refer to section 8.1 on page 23). For example, to delete the button programming for the remote control assigned in section [201], enter section [401].

In step 5 in section 3.2 on page 9:

1. Enter a section number between **[401]** and **[416]**.
2. Press the **[0]** button once for every digit.

9.0 System Reset

For Spectra systems, refer to "Hardware Reset" in the appropriate Spectra Reference and Installation Manual.

For Digiplex and DigiplexNE systems, performing a system reset will erase all the sections in the Omnia module's programming and set the following section to default settings:

Section #	Default Settings
[001]	Options 1 to 8 = **OFF**

How to reset the Omnia module when connected to Digiplex or DigiplexNE.

1. Press and hold the **[0]** button.
2. Enter the **[INSTALLER CODE]** (default=000000).
3. Enter section **[951]** (Digiplex) or **[4001]** (DigiplexNE).
4. Enter the Omnia module's 8-digit **[SERIAL NUMBER]**.

10.0 Programming Sections (Spectra)

Section	Description
[610]	Option [1]: Check-in supervision Option [2]: Future Use Option [3]: Future Use Option [4]: Future Use Option [5]: Future Use Option [6]: PGM 3 deactivation mode OFF = deactivates after 2 seconds ON = manually Option [7]: PGM 4 deactivation mode OFF = deactivates after 2 seconds ON = manually Option [8]: Future Use
[615]	On-board module tamper supervision zone assignment (000 to 008; 000 = disabled)
[630]	View a transmitter's unknown serial number
[601] to [608]	• Assign transmitters to the Omnia module • Delete the assigned transmitters (000000)
[721] to [728]	• (Spectra V1.23 or lower) Assign remote controls to the Omnia module • Delete the assigned remote controls
[731] to [738]	• (Spectra V2.0 or higher) Assign remote controls to the Omnia module • Delete the assigned remote controls
[701] to [708]	Assign the remote controls to users (001 to 048)
[711] to [718]	• Program the remote control buttons • Delete remote control button programming
[631] to [638]	View the transmitters' signal strengths

11.0 Programming Sections (Digiplex/DigiplexNE)

Section	Description
[001]	Option [1]: Low battery supervision Option [2]: Check-in supervision Option [3]: Future Use Option [4]: Future Use Option [5]: On-board module tamper supervision Option [6]: PGM 3 deactivation mode OFF = deactivates after 2 seconds ON = manually Option [7]: PGM 4 deactivation mode OFF = deactivates after 2 seconds ON = manually Option [8]: Future Use
[030]	View a transmitter's unknown serial number
[040] and [041]	• View the number of remote controls assigned to the Omnia module • Delete the assigned remote controls
[101] to [116]	• Assign the transmitters to the Omnia module • Delete the assigned transmitters (000000)
[201] to [216]	Assign the remote controls to the Omnia module
[301] to [316]	Assign the remote controls to users (001 to 255)
[401] to [416]	• Program the remote control buttons • Delete the remote control button programming
[601] to [616]	View the transmitters' signal strengths
[701] to [716]	View the current battery life of the transmitters
[801] to [816]	View the previous battery life of the transmitters