

Remote Wiegand Interface MG-WR1



Instructions

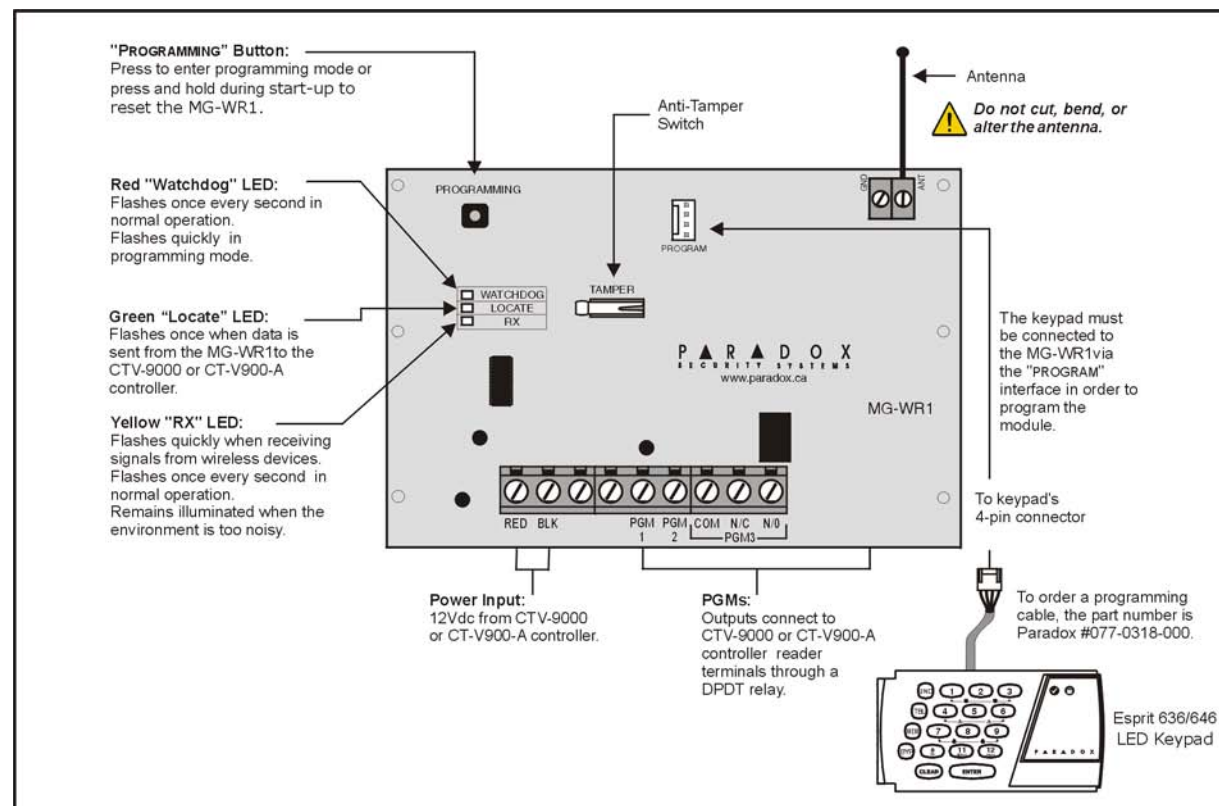


P A R A D O X
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MGWR1-E100
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Figure 1: MG-WR1 Overview



2. Press the "PROGRAMMING" button on the MG-WR1. The keypad beeps quickly five times.
3. Press [ENTER] on the keypad. The keypad beeps once.
4. Enter the [INSTALLER CODE]. (Default: **757575**). The keypad beeps quickly five times and the [ENTER] key flashes to let you know you are in programming mode.

Section [001]: Installer Code

Section [001] allows you to customize your installer code. To program the MG-WR1, you must be logged in as an installer. The default installer code is 757575.

Perform the following steps to program an installer code:

1. Ensure that you are in programming mode (see "Programming" on page 1).
2. On the keypad, enter programming section [001]. The keypad beeps quickly five times and the [ENTER] key remains illuminated until you complete this programming action.
3. Enter your new 6-digit [INSTALLER CODE]. The keypad beeps quickly five times and the [ENTER] key flashes to let you know you are still in programming mode.
4. To continue programming the module, enter programming section [001] to [004] or press the [ENTER] key to exit programming mode.

Section [002]: Family Code

Section [002] allows you to program a family code. A family code is used when generating card numbers and identifies which family a group of cards belongs to. You can program each remote to have its own family code to easily identify the events generated by the user of that remote. You can also assign the same family number, for example, to remote controls belonging to occupants of a particular condo to easily track and manage their generated events. The family code for the MG-WR1 can be any 3-digit value of your choice. The default family code is 000.

! To ensure that cards are generated using the family code you are creating, you must enable this programming option on the MG-WR1. See "Keypad Key [4]" on page 1.

Perform the following steps to program a family code:

1. Ensure that you are in programming mode (see "Programming" on page 1).
2. On the keypad, enter programming section [002]. The keypad beeps quickly five times and the [ENTER] key remains illuminated until you complete this programming action.
3. Enter a [FAMILY CODE]. (Default: **000**). The keypad beeps quickly five times and the [ENTER] key flashes to let you know you are still in programming mode.
4. To continue programming the module, enter programming section [001] to [004] or press the [ENTER] key to exit programming mode.

Section [003]: Options

Section [003] provides you with additional programmable options on the MG-WR1. You can configure how the MG-WR1 recognizes buttons pressed on the remote, set its communication format and configure its relay function. Refer to Table 1 on page 2 for a quick reference on keypad key settings.

Keypad Keys [2ND] and [1]

These keys set the MG-WR1's communication format. There are two communication formats to which the MG-WR1 can be set: 26-bit Wiegand and 40-bit Wiegand. The MG-WR1 should be set to the same communication format used by the CT-V900-A controller (see the *Centaur Reference Manual* for further information).

Perform the following steps to program the communication format:

1. Ensure that you are in programming mode (see "Programming" on page 1).
2. On the keypad, enter programming section [003]. The keypad beeps quickly five times and the [ENTER] key remains illuminated.
3. Depending on which communication format you would like to use, press the [2ND] and [1] keys on the keypad to turn them "ON" (illuminated) or "OFF" (not illuminated). See Table 1 on page 2 for a quick reference on keypad key settings.

26-bit Wiegand:

Keypad keys [2ND] and [1] are "OFF" (not illuminated).

40-bit Wiegand:

Keypad key [1] is "ON" (illuminated) and keypad key [2ND] is "OFF" (not illuminated).

4. Press the [ENTER] key to complete the programming action.
5. To continue programming the module, enter programming section [001] to [004] or press the [ENTER] key to exit programming mode.

Keypad Keys [2] and [3]

These keys determine the amount card numbers assigned to the remote as well as each card number's associated button or button combination used on the remote.

Perform the following steps to program the remote's button pattern:

1. Ensure that you are in programming mode (see "Programming" on page 1).
2. On the keypad, enter programming section [003]. The keypad beeps quickly five times and the [ENTER] key remains illuminated.
3. Depending on how you would like the MG-WR1 to recognize buttons pressed on the remote, press the [2] and [3] keys on the keypad to turn them "ON" (illuminated) or "OFF" (not illuminated). See Table 1 on page 2 for a quick reference on keypad key settings.

Each remote button has its own card number:

Keypad keys [2] and [3] are "OFF" (not illuminated).

Each remote button has the same card number except the panic button:

Keypad key [3] is "ON" (illuminated) and keypad key [2] is "OFF" (not illuminated).

Each remote button has the same card number including the panic button:

Keypad key [2] is "ON" (illuminated) and keypad key [3] is "OFF" (not illuminated).

4. Press the [ENTER] key to complete the programming action.
5. To continue programming the module, enter programming section [001] to [004] or press the [ENTER] key to exit programming mode.

Keypad Key [4]

This key enables/disables the MG-WR1's family number feature. With this feature enabled, the MG-WR1 uses the family number set in Section [002] (see "Section [002]: Family Code" on page 1) to generate card numbers. With this feature disabled, the MG-WR1 uses the remote's serial number as a default family code.

Perform the following steps to enable/disable the family number feature:

1. Ensure that you are in programming mode (see "Programming" on page 1).
2. On the keypad, enter programming section [003]. The keypad beeps quickly five times and the [ENTER] key remains illuminated.
3. Depending on how you would like the MG-WR1 to generate a family number, press the [4] key on the keypad to turn it "ON" (illuminated) or "OFF" (not illuminated). See Table 1 on page 2 for a quick reference on keypad key settings.
MG-WR1 uses the family code created in Section [002]:
Keypad key [4] is "ON" (illuminated).
MG-WR1 uses the remote's serial number as a family code:
Keypad key [4] is "OFF" (not illuminated).
4. Press the [ENTER] key to complete the programming action.
5. To continue programming the module, enter programming section [001] to [004] or press the [ENTER] key to exit programming mode.

Figure 2: MG-REM1 Remote Control



Keypad Keys [5] and [6]

These keys enable the MG-WR1's relay function. The relay can be programmed as a panic relay or a 2-door option relay. When the 2-door option is enabled, the MG-WR1 can control up to two access doors. When the panic relay is enabled, pressing buttons and on the remote will generate a panic alarm and activate the panic relay (see Figure 2 on page 2 for the location of the remote's buttons). The panic relay can be connected to an alarm device such as a siren or to an input of the CT-V900-A controller. See the *CT-V900-A Controller Installation Manual* for more information.

Perform the following steps to program the relay's function:

1. Ensure that you are in programming mode (see "Programming" on page 1).
2. On the keypad, enter programming section **[003]**. The keypad beeps quickly five times and the **[ENTER]** key remains illuminated.
3. Depending on how you would like to program the relay, press the **[5]** and **[6]** keys on the keypad to turn them "ON" (illuminated) or "OFF" (not illuminated). See Table 1 on page 2 for a quick reference on keypad key settings.

Relay is deactivated:

Keypad keys **[5]** and **[6]** are "OFF" (not illuminated).

Relay is used for the 2-door relay option:

Keypad key **[6]** is "ON" (illuminated) and keypad key **[5]** is "OFF" (not illuminated).

Relay is used as a panic relay:

Keypad key **[5]** is "ON" (illuminated) and keypad key **[6]** is "OFF" (not illuminated).

4. Press the **[ENTER]** key to complete the programming action.
5. To continue programming the module, enter programming section **[001]** to **[004]** or press the **[ENTER]** key to exit programming mode.

Figure 3: Connecting the MG-WR1 to the CT-V900-A Controller

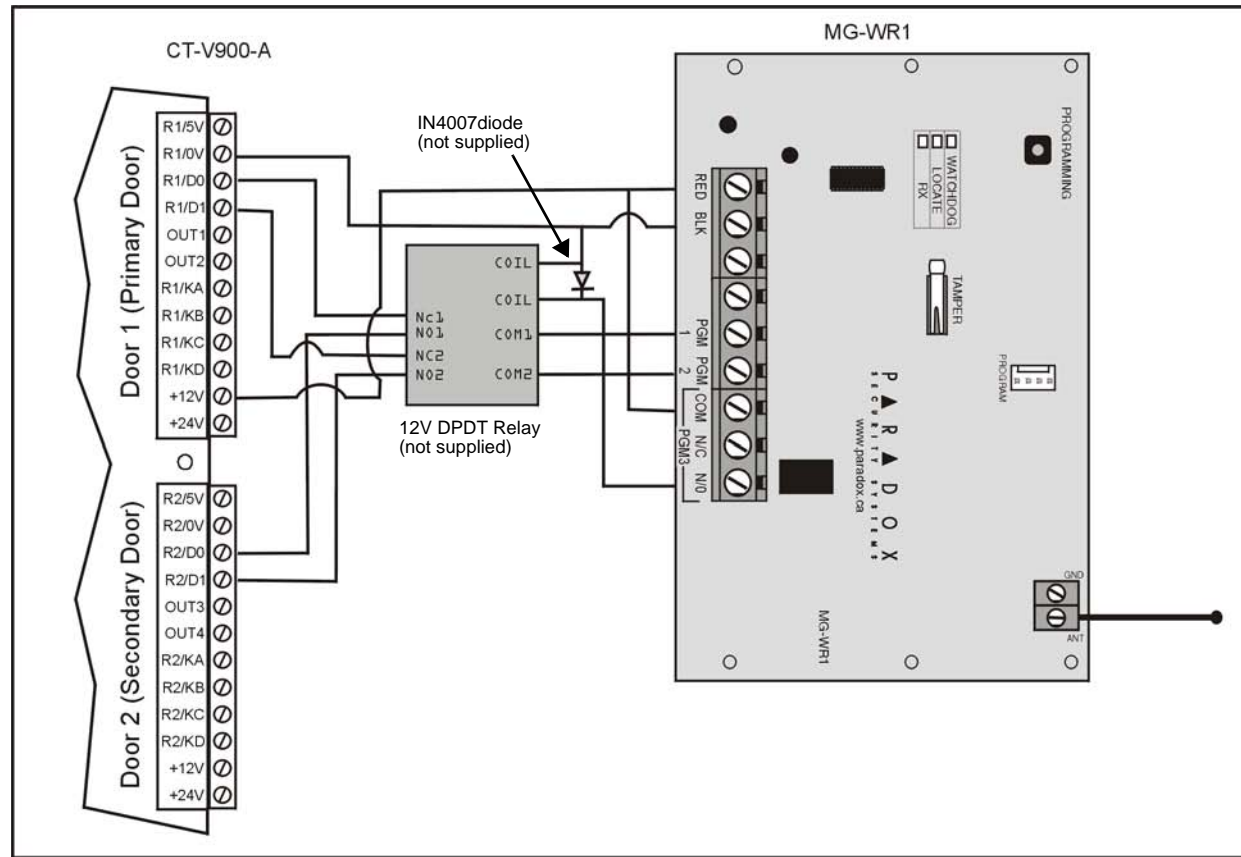
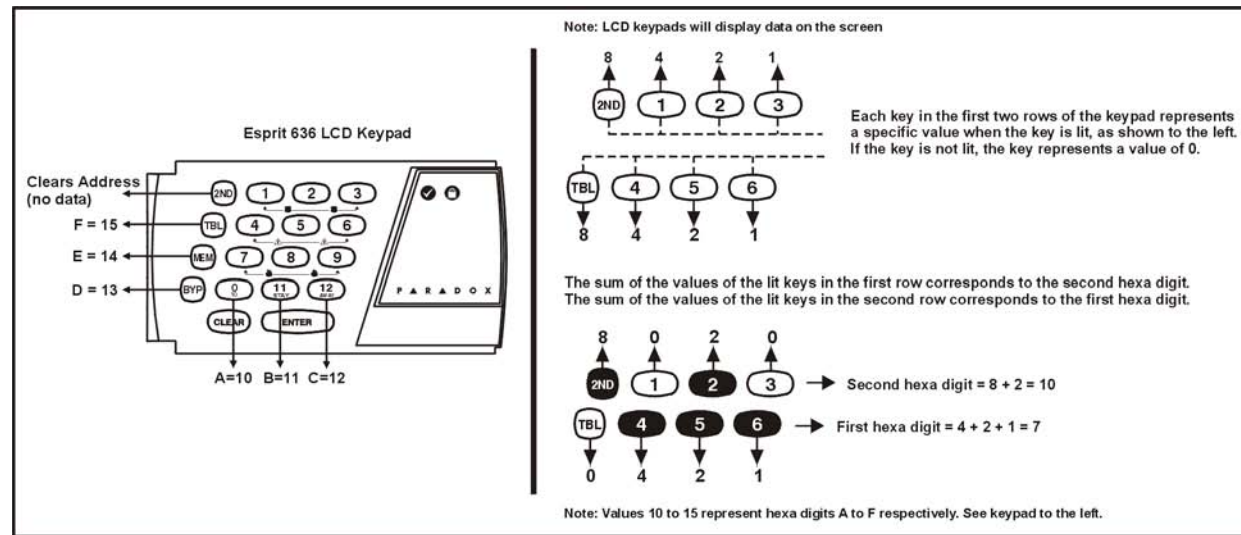


Figure 4: Hexa Programming



Hexa Programming

Section **[002]** (see "Section [002]: Family Code" on page 1) is programmed using the Hexa Programming method. Using this method, you can enter any hexadecimal digit from 0 - F where keypad keys **[1]** to **[9]** represent digits 1 to 9 respectively; the other keypad keys represent hexadecimal digits A to F as shown in Figure 4 on page 2. To program using the Hexa Programming method:

1. Ensure the keypad's 4-pin serial cable is connected to the "PROGRAM" interface on the MG-WR1. The keypad keys illuminate lightly.
2. Press the "PROGRAMMING" button on the MG-WR1. The keypad beeps quickly five times.
3. Press **[ENTER]** on the keypad. The keypad beeps once.

4. Enter the **[INSTALLER CODE]**. (Default: **757575**). The keypad beeps quickly five times and the **[ENTER]** key flashes to let you know you are in programming mode.
5. On the keypad, enter programming section **[002]**. The keypad beeps quickly five times and the **[ENTER]** key remains illuminated. The keypad will display the 2-digit data currently saved at this address (programming section). See Figure 4 on page 2.
6. Enter 2-digit data and do *not* press **[ENTER]**. The data is automatically saved.
7. To continue programming the module, enter programming section **[001]** to **[004]** or press the **[ENTER]** key to exit programming mode.

Table 1: Section 003 Options

Option	Keypad key ON/OFF*		Result
Communication Format	[2ND]	[1]	
	OFF	OFF	Wiegand 26 communication format
	OFF	ON	Wiegand 40 communication format
	ON	OFF	Reserved for future use
	ON	ON	Reserved for future use
Remote's Button Pattern	[2]	[3]	
	OFF	OFF	Each remote button has a different card number
	OFF	ON	Each remote button has same card number except panic button
	ON	OFF	Each remote button has same card number including panic button
	ON	ON	Reserved for future use
Family Code Selection	[4]		
	ON		Uses family code set in Section 002
	OFF		Uses remote's serial number as family code
Relay Function	[5]	[6]	
	OFF	OFF	Relay deactivated
	OFF	ON	Relay used for 2-door relay option
	ON	OFF	Relay used as panic relay
	ON	ON	Reserved for future use

*ON = keypad key is illuminated/ OFF = keypad key is not illuminated

SPECIFICATIONS

MG-WR1 Specifications		Remote Specifications	
Frequency	433MHz (MG-WR1) 868MHz (MG-WR186)	Frequency	433MHz, 868MHz
Formats	26-bit Wiegand, 40-bit Wiegand	Range	Max. 100m (300 ft.)
Operating Temperature	0°C to 49°C (32°F to 120°F)	No. of buttons	4
Dimensions	15cm H x 16cm L x 3cm W (6in H x 6.5in L x 1.1in W)	Functions	5
Power	12Vdc	Panic	Yes
Current	50mA		
Outputs	Wiegand Output		
2-door Option	Form "C" Relay output rated at 5A/28Vdc		
Panic Option	Form "C" Relay output rated at 5A/28Vdc		
Programming Keypad	Esprit 636 or 646 LED keypad		

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