

# Merlin® GRIFCO®

## COMMERCIAL ACCESS CONTROL RECEIVER MODEL STAR1000EVO

### APPLICATION

The STAR1000EVO is a high capacity single channel commercial access control receiver for commercial door openers, and dry contact triggered devices. The STAR1000EVO is compatible with Security+ 2.0™ remote controls and wireless keyless entries. The receiver capacity is 1,000 devices and can be any combination of remote controls and wireless keyless entries. The receiver is watertight according to IPX44 specification.

### INSTALLATION

1. Select a convenient location near the opener to be controlled by the receiver within "line of sight" of the intended transmitting location.

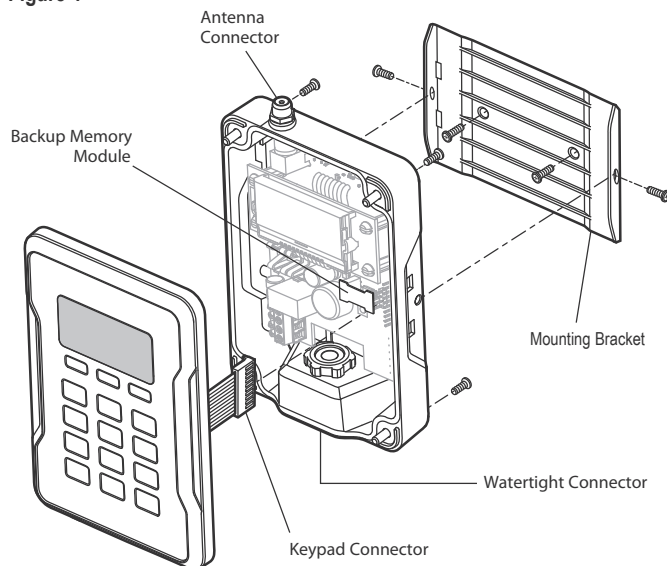
**NOTE:** Do not mount LCD screen in direct sunlight. Avoid mounting the receiver in a metal enclosure or near other wireless receiving or transmitting devices.

2. Mount the bracket to the desired surface with appropriate hardware (not provided) (Figure 1).
3. Remove the 4 (#8) screws on the back of the receiver and remove the faceplate. Unplug the keypad connector from the control board.  
**NOTE:** Be careful not to damage the keypad cable while removing the faceplate.
4. Make wiring connections (Figure 2). Refer to your gate or commercial door opener owner's manual for more specific information.
5. Reconnect the keypad connector to the board (labeled J9).
6. Secure the faceplate with the 4 (#8) screws previously removed.
7. Install the antenna provided.

**NOTE:** Use the optional ANT4X-1LM antenna extension kit (see page 4) to mount the remote antenna as high and far from metallic objects as possible for best radio range.

8. Snap the receiver onto the mounting bracket and secure with the (#8) screws provided.
9. Tighten the watertight connector to secure and seal the wiring.

Figure 1



### ⚡ ⚠ WARNING

To prevent possible SERIOUS INJURY or DEATH from electrocution:

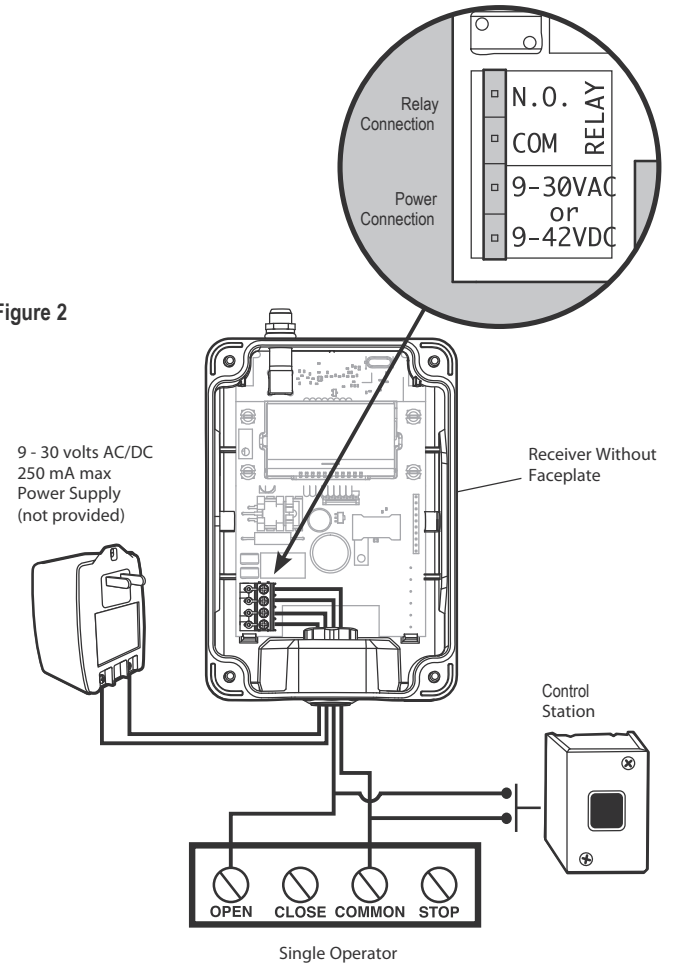
- Be sure power is NOT connected BEFORE installing the receiver.
- To prevent possible SERIOUS INJURY or DEATH from a moving residential gate, residential garage door or a commercial door:
- ALWAYS keep remote controls out of reach of children. NEVER permit children to operate, or play with remote control transmitters.
  - Activate gate or door ONLY when it can be seen clearly, is properly adjusted, and there are no obstructions to door travel.
  - ALWAYS keep residential gate, residential garage door or commercial door in sight until completely closed.
  - NEVER permit anyone to cross path of moving gate or door.

### ⚠ WARNING

To prevent possible SERIOUS INJURY or DEATH, the use of CONSTANT OPERATION on residential openers is PROHIBITED.

When a receiver is used to activate a commercial door opener, a reversing edge MUST be installed on the bottom of the door. Failure to install a reversing edge under these circumstances may result in SERIOUS INJURY or DEATH to persons trapped beneath the door.

Figure 2



## USER INTERFACE

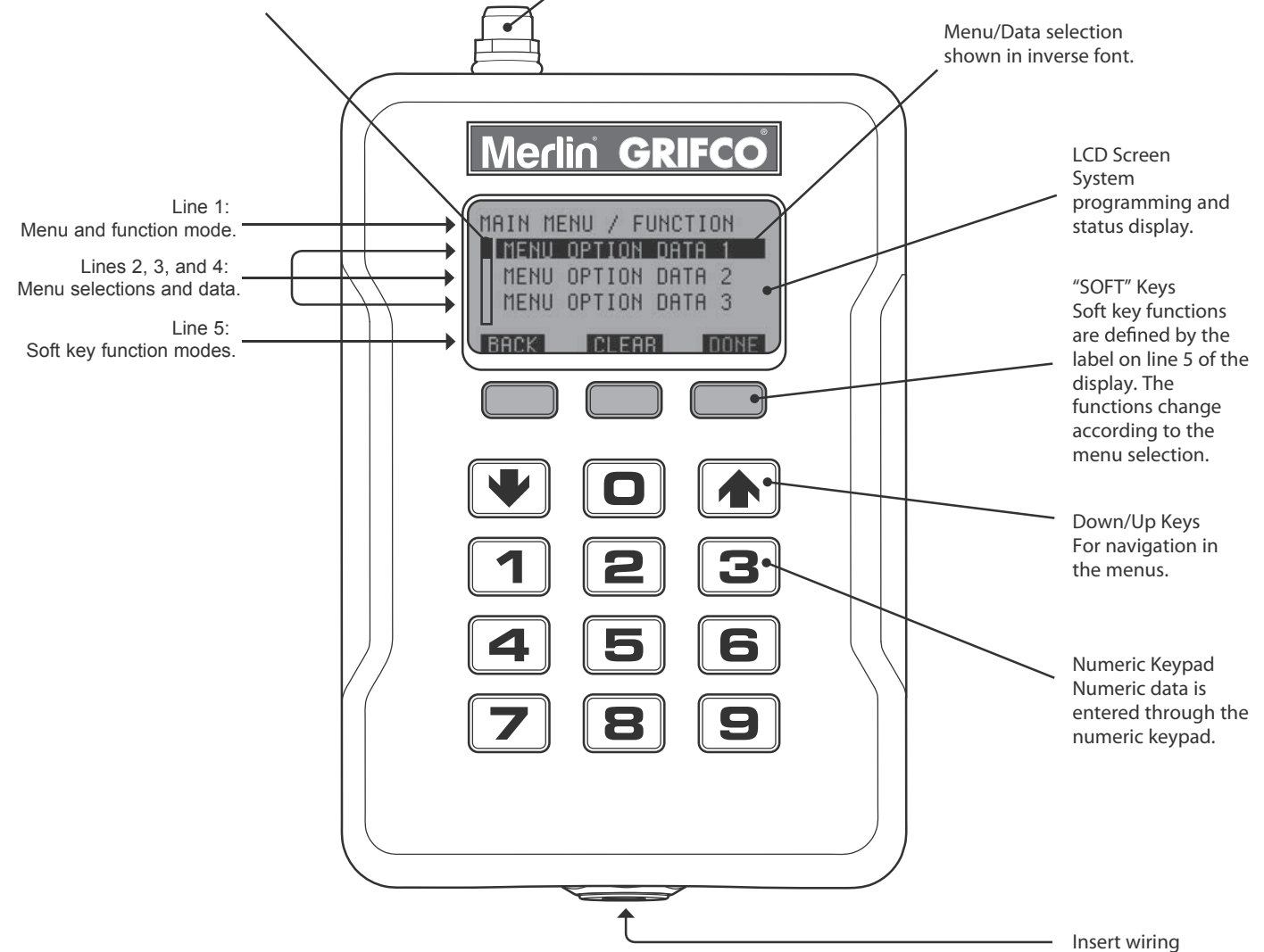
The STAR1000EVO user interface consists of a 22 character by 5 line LCD display, 3 “soft keys”, Down/Up arrows and a numeric keypad.

### Scroll Indicator

If more than 3 options exist, a scroll indicator appears on the left margin of lines 2, 3, and 4. The scroll indicator shows the relative position within the list.

Antenna Connection  
For the direct antenna or the antenna extension kit.

Menu/Data selection shown in inverse font.



## PROGRAMMING

The receiver has the ability to learn a combination of remote control transmitters and keyless entries up to 1,000 devices. See page 4 for a complete list of compatible accessories. Audible and visual warnings occur when the receiver capacity is exceeded. After 30 seconds of inactivity, the receiver times out and the Merlin® GRIFCO® logo is displayed. Select “UNLOCK” and enter the PIN to continue.

Initial PIN set up:

The PIN restricts access to authorized administrators only. If you omit this step, anyone will be able to program the receiver. Upon initial power up, the system firmware revision is displayed for 5 seconds followed by the Merlin® GRIFCO® logo. When a key is pressed, “CREATE PIN?” is displayed.

1. Press “YES” to create PIN. If the PIN is lost you may request a reset code by pressing “RESET”.
2. Enter a 6-digit PIN, and press “YES”; enter the 6-digit PIN a second time and press “YES” to program the PIN. If you make a mistake, press “CLEAR” to change your entry. To exit the enter PIN screen, select “BACK”.
3. When your 6-digit PIN is programmed correctly, the LCD display reads “KEYPAD UNLOCKED”. Select “OK” to continue to the Main Menu. After 30 seconds of inactivity, the receiver times out and the Merlin® GRIFCO® logo is displayed. Select “UNLOCK” and enter PIN to continue.

## PROGRAMMING COMMANDS

The table below describes the commands used to program the receiver.

MAIN MENU	COMMAND		DESCRIPTION
LEARN MENU	LEARN DEVICE		Program a device to the receiver.
	BLOCK LEARN DEVICE		Block program a range of devices to the receiver.
	LEARN TO LOC #		Program a device to a 4-digit number location.
DELETE MENU	DELETE DEVICE		Delete a specified device that has been programmed to the receiver.
	DELETE ALL DEVICES		Delete all programmed devices.
SUSPEND MENU	SUSPEND DEVICE		Temporarily disables the function of a specified device that has been programmed to the receiver.
	SUSPEND ALL DEVICES		Temporarily disables the function of ALL devices programmed to the receiver.
	UNSUSPEND DEVICE		Re-enable the function of a suspended device.
	UNSUSPEND ALL DEVICES		Re-enable the function of ALL suspended devices.
QUERY MENU	LOC # USED		Displays a range of used locations starting from a specified location.
	LOC # AVAILABLE		Displays a range of empty locations starting from a specified location.
	LOC # SUSPENDED		Displays a range of suspended locations starting from a specified location.
SETTINGS	CHANGE PIN		Change the 6-digit PIN number for the receiver.
	DEALER INFO		Display and edit the dealer 10-digit contact phone number.
	FIRMWARE VERSION		Displays the current firmware version.
	BEEP		Turn the audible feedback on or off.
	MEMORY	DUPLICATE MEMORY	Creates a memory backup. A backup memory module must be installed.
		RESTORE MEMORY	Restores a memory backup from a memory module. NOTE:Content of memory backup module will over-write any information already stored in the receiver memory.
	RELAY		Sets the relay activation time from .25 to 1 second.
	CONTRAST		Press Down or Up arrows to adjust LCD contrast.
	LANGUAGE		Sets menu language: English (Default), Spanish, and French.
	FACTORY DEFAULT		Reset receiver to factory default settings.

## DIAGNOSTICS

The receiver emits a series of audible beeps to signal programming and error events. The table at right lists all of the events and their audible notifications. The On/Off column indicates that the audible notification for the event may be disabled in the BEEP SETTINGS menu.

EVENT	AUDIBLE NOTIFICATIONS	ON/OFF
Key press	Single	YES
Successful Add	Double	
Successful Delete	Triple	
Successful Suspend	Double	
Successful Unsuspend	Double	
Master PIN entry error	Long	
Programming error	Long	
Location out of range	Long	
Generic Success	Double	
Generic Error	Long	
Received unknown Tx	Slow	YES
Received known Tx	Double	YES
Received known suspended Tx	Long	YES

## SPECIFICATIONS

System Capacity .....	1000 devices
Supply Voltage .....	9 - 30 Volts AC, 9 - 42 Volts DC
Operating Current .....	50 mA Maximum
Stand By Current .....	30 mA Maximum
Surge Suppression .....	6.0 kV Min
Operating Temp Range .....	-40 °C to +65°C @ 50% Rh, -40°F to +149°F @ 50% Rh
Storage and Shipping Temp Range .....	-40°C to + 85°C @ 50% Rh
Frequency .....	Narrow-band transmission on 3 simultaneous frequencies ( 433.30 MHz, 433.92 MHz, 434.54 MHz)
Relay Contact Rating .....	1 amp @ 24V AC/DC

## COMPATIBLE ACCESSORIES

Remote Controls .....	E945M, E950M, E943M, E940M (Merlin) & E945G & E943G (Grifco)
Keypads .....	E840M (Merlin), & E840G (Grifco)
Antenna Kit .....	.ANT4X-1LM
Power Supply .....	.POWADT-2

### **FOR TECHNICAL SUPPORT DIAL OUR TOLL FREE NUMBER:**

#### **AUSTRALIA CONTACT DETAILS:**

Merlin - Residential

Grifco - Commercial

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Lane Cove NSW 1595  
1800 638 234

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15 Dell Road  
West Gosford NSW 2250  
1800 GRIFCO  
1800 474 326

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#### **NEW ZEALAND CONTACT DETAILS:**

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