

# INSTALLATION INSTRUCTIONS

## Bridge

### Introduction

The Bridge is designed for use with apex control panels that are compatible with the ADEMCO 5800 series wireless. The receiver/bridge board combination, recognizes alarm, status and control messages from 5800 series transmitters operating at 345MHz.

The control panels's installation manual includes types of wireless zones that can be programmed and the procedure for programming transmitter's serial numbers.

### Wireless System Operation and Supervision

The receiver responds to status and alarm signals from wireless transmitters @ 345MHz within a nominal range of 200 feet, and relays this information to the Bridge. The Bridge converts the signal to a format that is compatible with the apex 4 wire bus.

Each alarm point transmitter sends a supervisory signal to the receiver every 70-90 minutes. If after 6 hours the receiver does not hear from a particular transmitter, a trouble condition will appear on the keypad and can be sent to the central station.

The receiver(s) is supervised by the Bridge and the Bridge is supervised by the control panel. If either device does not report within 2 minutes, a receiver trouble condition will appear on the keypad and can be sent to the central station.

Two identical receivers can be used to provide either a greater area of coverage, or to provide redundant protection. Be certain to set the receiver dip switches

**NOTE:** A 5800 series Receiver **MUST** be connected to the control panel via a Bridge Board. Connecting a 5800 series Receiver directly to the control panel may do irreversible damage to the receiver and/or control panel.

### Installation Advisories

1. The Bridge Board and/or receiver should not be installed in an area subject to environmental extremes of below freezing (such as an unheated warehouse) or extremely high temperatures (such as an attic).
2. Place the receiver in a high, centrally located area for best reception. Do not place receiver on or near metal objects. This will decrease the range and/or block transmissions. Do not mount receivers or transmitters in an attic, where extreme temperatures could prevent proper operation.
3. For maximum range, install the wireless receiver at least 10 feet from the control panel, Bridge, keypads, or any additional receivers to avoid interference from the microprocessors in these units.
4. Each receiver must be set to a different device address (1 or 2).
5. Using two Receivers does not increase the number of transmitters the system can support.

### Specifications

Physical:      Width:      6-1/2"(165mm)  
                          Height:      4-1/4"(108mm)  
                          Depth:      1-1/4"(32mm)

Electrical:      Voltage:      12VDC from Panel  
                          Current:      115mA

Wire Leads:	Apex bus	Ademco bus
Red:	+12VDC	Red: +12VDC
Green:	Data	Green: Data
White:	Busy	White: Busy
Black:	Ground	Black: Ground

Multiple Receivers:      Up to 2 WL500 receivers can be attached to a Bridge Board. Only 1 Bridge can be used per system

Compatibility:      5881M up to 16 serial numbers  
                          5881H up to 80 serial numbers

## INSTALLATION

The 5800 series Receiver must be wired to a Bridge Board. Wiring the 5800 series receiver directly to a control panel can do damage to both the receiver and control panel.

- Both the Receiver and the Bridge Board are designed for surface or concealed wiring.

### Concealed Wiring:

- Wires are routed through the rectangular opening at the rear of the receiver case.
- Remove the concealed wiring knockout in the lower right corner of the Bridge Board case.

### Surface Mount Wiring:

- Remove the knockout for surface wiring rectangle on the right edge of the receiver case.
- Use the surface wiring slot on the front of the case to pass wires to the Bridge Board.

- Mount the receiver and Bridge Board in the selected location. For greatest security use all four mounting holes for attaching the cases of both devices to the wall.
- Set the receiver's DIP switch to identify the receiver as receiver 1 or 2. See figure 1 below.
- Connect the 5800 series receiver to the Bridge Board. Be certain to follow proper color code and wire to the receiver side of the Bridge Board. If a second receiver is being used in the installation, it can be wired in parallel to the same receiver connection point. Note the blue wire is not used.
- Connect the Bridge Board to the Control Panel 4-wire bus. Be certain to follow proper color code. The Bridge Board can be wired directly to the control panel or daisy chained to any other 4-wire bus device in the system using no less than 24 gauge wire up to 50' and 22 gauge wire over 50'.
- Install the antennas in the *right-hand* terminals of the two terminal blocks at the upper edge of the circuit board. **NOTE:** Be certain to keep the antennas away from metal surfaces.
- Power the Control Panel. Watch the bus activity LED for constant flashing frequently interrupted by faster flashing. This indicates messages being sent and received on the four wire bus.
- Proceed with programming the control panel explained in the control panel's installation manual.
- Two LED's are used for diagnostic purposes. The Reception LED on the Bridge Board illuminates each time a valid transmitter signal is supplied to the control panel. On the 5800 series receiver is an interference LED that indicates the presence of strong radio signals that can affect wireless performance. If this LED is constantly illuminated the receiver needs to be relocated.
- Attach the 5800 series receiver and Bridge Board's covers and clean the work area.

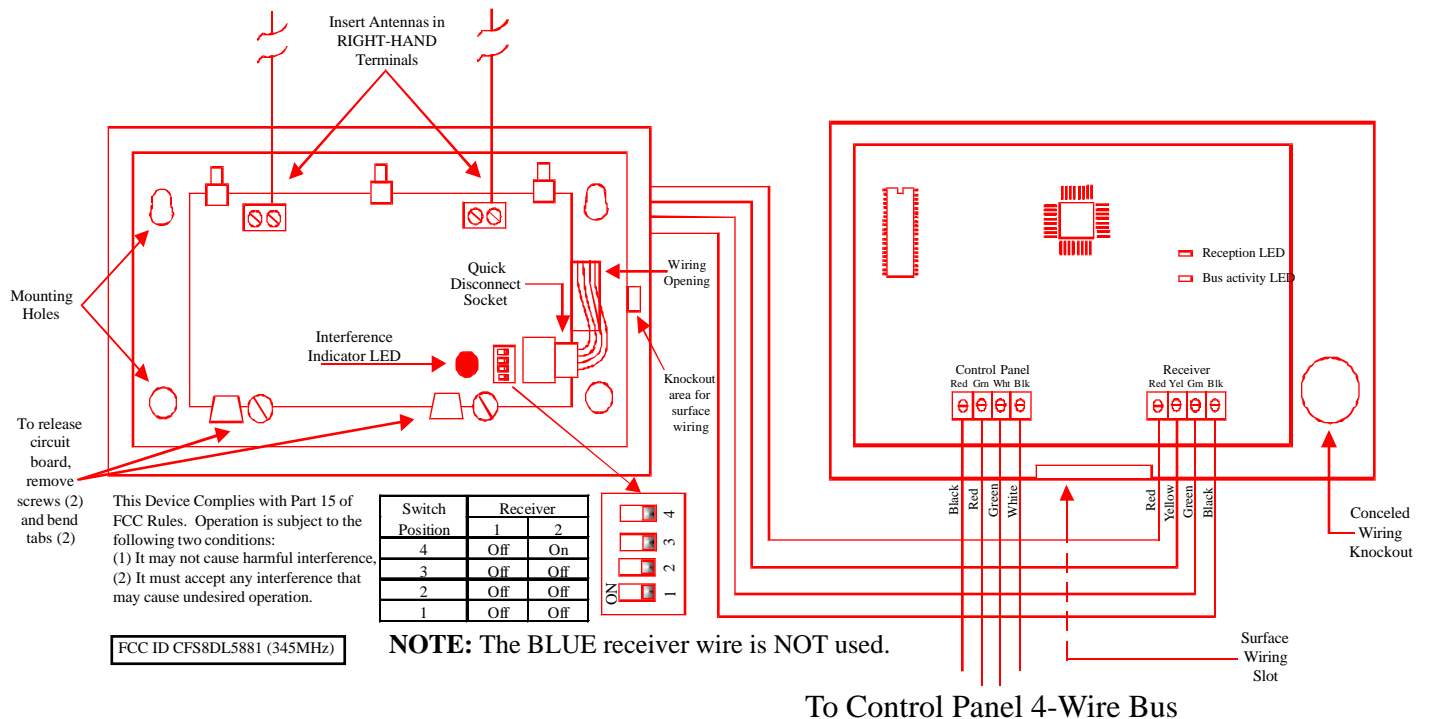


Figure 1: Installation of receiver and Bridge Board