SENTROL, INC

Wireless

Model 4710/4720 Wireless Gateways

Figure 1



Figure 2



GENERAL INFORMATION

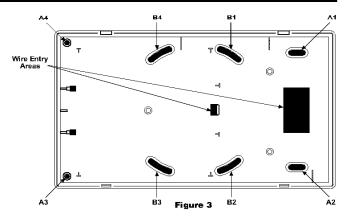
The Sentrol Model 4710/4720 Wireless RF Gateway is designed to be used with the Sentrol ZX family of Control Panels. The Wireless Gateway is installed external to the control and connects to the control's standard keypad bus.

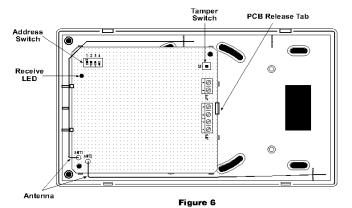
The Wireless Gateway accepts alarm, tamper, low battery and supervisory status signals from Sentrol's family of Wireless RF Sensor Transmitters and reports this information to the control. It also accepts commands from Sentrol's Wireless RF User Device Transmitters and reports these instructions to the Control Panel.

The 4710 Wireless Gateway can accept up to 8 RF Sensor Transmitters and up to 6 RF User Devices. It can be added onto the ZX200 as one for one "hardwire to wireless" zone replacement or added to the ZX400 as 8 "wireless expansion" zones.

The 4720 Wireless Gateway can accept up to 16 RF Sensor Transmitters and up to 12 RF User Devices. The ZX200 can only use one 4720 Gateway for up to 8 RF wireless zones.

The ZX400 can use one or two 4720 Gateways or a combination of one 4710 and one 4720 Gateway. Any of these configurations can provide up to 16 RF Wireless expansion zones.





INSTALLATION

Read this section completely before installing!

It is important to locate the Wireless RF Gateway in a location that obtains the best signaling performance between the gateway and all transmitters. This may require temporary mounting of each transmitter and the gateway until testing has been completed. The gateway can be located up to 1000 feet away from the Control Panel on #22AWG wire if required, for Fire use #184WG.

An optimum location would be central to all the planned RF transmitters although it is not necessary. The Wireless Gateway should be installed away from metal objects such as, metal walls, metal studs within a wall, power lines, metal duct work and metal piping. Avoid mounting the gateway near dimmer switches and electronic equipment such as TVs and VCRs. A good location is typically high on a wall near the ceiling. The gateway should be mounted horizontally as shown in Figure 1.

MOUNTING

Remove cover by depressing Cover Release Tabs shown in Figure 2.

Standard Surface Wall Mounting - mount to wall using Mounting Holes A1, A2, A3 and A4. (Refer to Figure 3).

Surface Wall Mounting To A Single Gang Electrical Box - mount to box using Mounting Holes A1, A2 or B1, B2. Use Mounting Holes A3 and A4 if additional support is needed (Refer to Figure 3).

Surface Wall Mounting To A Double Gang Electrical Box - remove circuit card by releasing the PCB Release Tab and removing the circuit card (Refer to Figure 6).

Mount to box using Mounting Holes B1, B2, B3, and B4. This mounting method can also be used if the electrical box is itself surface mounted (Refer to Figure 3).

Once the gateway is mounted, connect the gateway to the ZX Control's Keypad Bus and 24 Hour Tamper Zone (optional). Connect to the Terminal Blocks on the gateway (Refer to Figure 4 for Wiring Connections and to Figure 3 for Wire Entry Areas).

SYSTEM PROGRAMMING

Read this section completely before programming!

Programming of the RF Gateway is performed in 3 steps. The first step is to set the Gateway Address. If only one gateway is being installed it should be set to Address 1. If a second gateway is used (ZX400 Only) it should be set to Address 2. Refer to Figure 5 for the correct position for the gateway dip switches.

With the gateway address properly set, the cover can be replaced by hooking the top of the cover first and then snapping it closed.

The second step is to program the addresses (labeled on each device) of the RF Zone Devices and/or the RF User Devices into the RF Gateway using the Control Keypad. The programming instructions for these steps are contained in the Control Panel's Installation and Programming Manuals.

The third step is to program the selected zones of the control panel to be identified as "wireless". Also the wireless User Devices need to be programmed into the User Code area of the control. The programming instructions for these steps are also contained in the Control Panel's Installation and Programming Manuals.

Once all the above steps are performed, the control keypad should sound a TROUBLE tone. The keypad display will show "TROUBLE-RF Point Not Reporting" for each RF Zone. These conditions are cleared as each proper transmission is received from each wireless Zone Device.

If the TROUBLE condition does not clear then there is an error in programming of the gateway or control or the RF Gateway is not responding to the signal from the sensor.

TROUBLESHOOTING

RF Point Not Reporting - check RF Signal Strength at keypad (Refer to Keypad User Manual. This feature is not available in ZX200). If it reads "No Device" message, check Zone and Gateway Programming in control. Check Gateway Address switch setting. Check wireless device battery. Cause wireless device to transmit Alarm or Tamper condition (red RECEIVE LED on Receiver PCB will blink when signal transmitted) and recheck status.

RF Point Low Battery - replace device battery with only factory recommended type. Cause device to transmit Alarm or Tamper and recheck status.

RF Jam - a strong continuous RF signal of the same carrier frequency is interfering with gateways' ability to receive and decode signals. Check for run-away sensor or user devices by removing batteries of each device. If problem persists, try temporarily moving gateway a short distance from present location or move it a large distance to get away from source. If persistent RF Jamming problems exist it may not be a suitable environment for a wireless system.

Unable To Clear Alarm From Wireless Zone - If this occurs on Universal Transmitter, check operation of magnet and reed switch or, if used, the external loop. A quick check to determine possible cause would be to place J1 in "Reed Disabled" mode. If problem clears, check reed switch and magnet function. To check External Loop, J2 can be placed in the opposite mode used. If problem clears, check external loop functions.

SPECIFICATIONS

Case Dimensions: 0.98 x 4.55 x 7.48 inches

Operating Temperature: 0°C to 50°C (32°F to 122°F)

Color: Cloud white

Gateway Location: 1000 ft from Control Panel

Operating Voltage: +12 VDC Operating Current: 80 mA Typical System Frequency: 418 MH∠

Gateway Sensitivity: - 100 dBm minimum

Indoor Range: 200 ft Typical, with "Acceptable" signal level

Minimum Reference Level: - 79 dB

FCC COMPLIANCE

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID: A794720

INDUSTRY CANADA COMPLIANCE (Canada)

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

IC: 1455 102 734A



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