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INSTALLATION INSTRUCTIONS
CRN SmartSense7 WIRELESS SUBSCRIBER UNIT

WARNING: Failure to read and carefully follow these instructions may jeopardize subscriber security!

Changes Or Modifications Not Expressly Approved By The Party Responsible For Compliance Could Void The User's Authority To Operate The Equipment.

INSTALLATION GUIDELINES

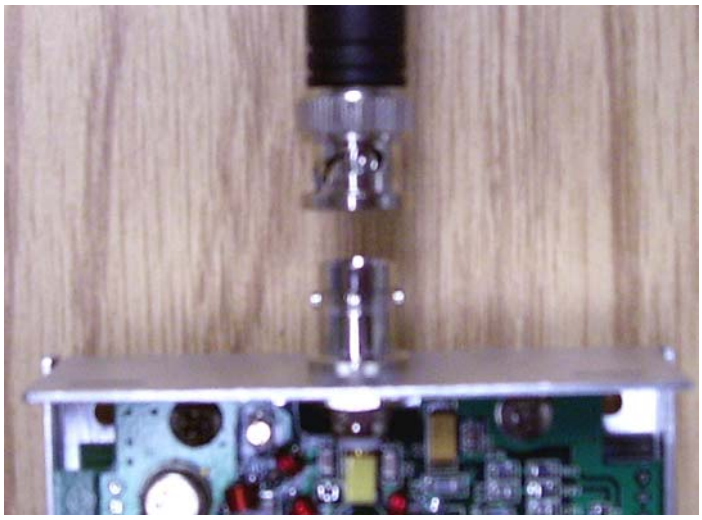
- Mounting locations can **ONLY** be selected based on RF performance, therefore, it is **HIGHLY** recommended that the installer follow the SELECTING A MOUNTING LOCATION section below **BEFORE** any wires are run to the alarm control panel.
- Generally, high locations are best. **DO NOT** mount radio in basement or below grade as unpredictable performance may result.
- Whenever possible, keep the transmitter in a climate controlled environment. Attics may reach extremely high temperatures in summer months. Unheated garages may reach extremely cold temperatures in winter months.
- Avoid locations within 3 feet of large metal objects (air conditioners, metal garage doors, etc.), AC power lines, and fluorescent light fixtures.
- A fair amount of care may be required to mount the unit so as to achieve an optimal RF path.
- Unlike smoke detectors, motion detectors, etc., these transmitters draw a substantial amount of current (approximately 1 Amp during transmit) and require a "clean" 12VDC power source, free from any AC ripple or "noise". Therefore, follow the instructions for POWER contained herein **EXACTLY!** Power the unit from a battery as shown. DO NOT power from the alarm control panel "AUX" power output or directly from a power supply. **DO NOT** vary from the Wiring Size Chart. Failure to properly power the unit may cause unpredictable performance over time.

SELECTING A MOUNTING LOCATION

- Install the antenna as shown in Section 1.
- Temporarily connect power to the transmitter from a ***fully charged*** 12V (4AH minimum) battery. **DO NOT** mount the transmitter at this time. Temporarily position the unit in the desired mounting location.
- To transmit a manual test code (code 0), press pushbutton S1 (bottom right corner of board). Each time S1 is pressed the LED (D6, just above the pushbutton) will light for approximately 1 second while the unit transmits. Confirm each manual test sent is received by calling the CRN Automated Signal Verification System or the Central Station, and verify each of the signals sent were received.

1 ANTENNA INSTALLATION

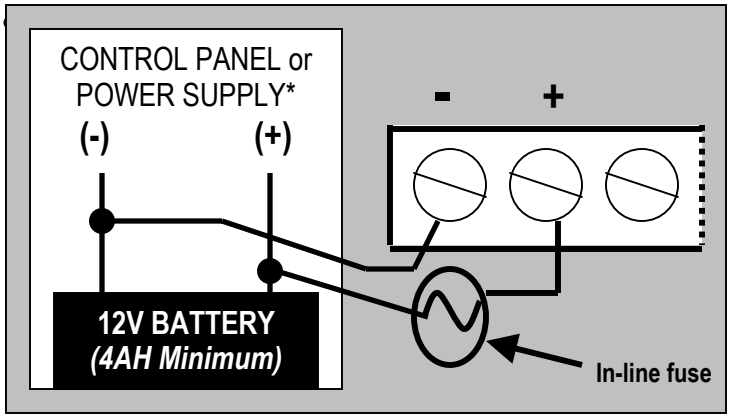
- Gently push Antenna BNC male connector onto Subscriber Unit BNC female connector. Twist Antenna BNC bayonet to lock Antenna onto Subscriber Unit.



NEVER POWER UNIT WITHOUT ANTENNA INSTALLED!

DAMAGE WILL RESULT!

2 POWER

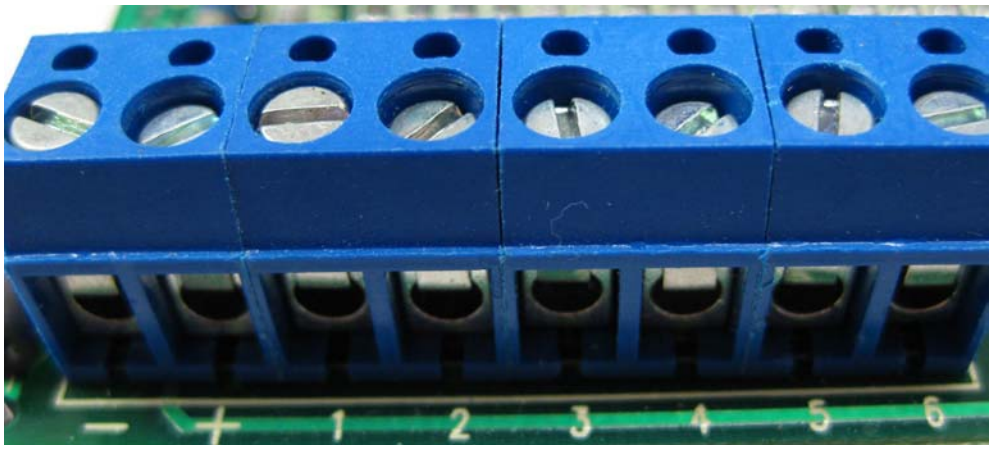


WIRE AS SHOWN ABOVE ONLY!
DO NOT POWER FROM "AUX" OUTPUT OR DIRECTLY FROM POWER SUPPLY!

WIRE SIZE CHART		
UP to 10 FEET	10 to 50 FEET	50 to 100 FEET
22 Gauge	18 Gauge	14 Gauge

* If a stand-alone power supply is used, the negative (-) terminal must be connected to the negative (-) terminal of the control panel. Failure to provide this common negative will prevent the input channels from being triggered.

3 WIRE INPUT CHANNELS (For Input 1 Only, Choose either **SmartSense** for Fire and Burg or **Direct Trigger,** Inputs 2, 3, 4, 5, & 6, use **Direct Trigger**)



For Inputs 2, 3, 4, 5, and 6

VOLTAGE TRIGGER: for ADEMCO and most other Alarm Control Panels w/ voltage trigger outputs **DO NOT CUT** RESISTOR R2, R3, R4, R5, OR R6 respectively Wire INPUT 2, 3, 4, 5, or 6 TO CONTROL PANEL "BELL **+**" or OTHER VOLTAGE (+4.5 to 14.5VDC) TRIGGER – UNIT WILL SEND CODE 2, 3, 4, 5, 6 respectively

GROUND TRIGGER: for DSC, NAPCO and most other Alarm Control Panels with electronic pull-to-ground trigger outputs *WITH POWER REMOVED*, **CUT** RESISTOR R2, R3, R4, R5, or R6 respectively CONNECT INPUT 2, 3, 4, 5, or 6 TO CONTROL PANEL "BELL -" (DSC) or "E-LUG" (NAPCO) OR OTHER PULL-TO-

Input 1 *ONLY*

SMARTSENSE TRIGGER

The Optional SmartSense feature allows for simple, one-wire connection for both FIRE and BURGLARY conditions. Since the SmartSense feature increases the channel integration delay from 1 second to 10 seconds, DO NOT use SmartSense feature for Burg Only installations.

VOLTAGE TRIGGER:

For ADEMCO, NAPCO, and other Alarm Control Panels with switched "BELL POSITIVE" terminals:

WITH POWER REMOVED, **CUT** RESISTOR R7 (SMART) CONNECT INPUT 1 TO CONTROL PANEL "BELL **+**" – UNIT WILL SEND CODE 7 FOR PULSATING VOLTAGE (Typically FIRE) and CODE 8 FOR STEADY VOLTAGE (Typically BURG)

GROUND TRIGGER:

For DSC and other Alarm Control Panels with switched "BELL NEGATIVE" terminals:

***WITH POWER REMOVED*, CUT** RESISTOR R7 **(SMART)** AND **RESISTOR R1**

CONNECT INPUT 1 TO CONTROL PANEL "BELL -" – UNIT WILL SEND CODE 7 FOR PULSATING GROUND (Typically FIRE) and CODE 8 FOR STEADY GROUND (Typically BURG). NOTE**: SMARTSENSE FEATURE DOES NOT WORK ON CONTROL PANELS WITH BUILT IN SIREN DRIVER, MUST HAVE VOLTAGE OUTPUT.**

OR

DIRECT TRIGGER

VOLTAGE TRIGGER:

For ADEMCO and most other Alarm Control Panels with voltage trigger outputs: DO NOT CUT RESISTOR R1

CONNECT CHANNEL 1 TO CONTROL PANEL "BELL **+**" or OTHER VOLTAGE (+4.5 to 14.5VDC) TRIGGER – UNIT WILL SEND CODE 1

GROUND TRIGGER:

For DSC, NAPCO and most other Alarm Control Panels with electronic pull-to-ground trigger outputs

WITH POWER REMOVED, **CUT** RESISTOR R1

CONNECT CHANNEL 1 TO CONTROL PANEL "BELL -" (DSC) or "E-LUG" (NAPCO) OR OTHER PULL-TO-GROUND TRIGGER – UNIT WILL SEND CODE 1

4 VERIFY INSTALLATION

- Confirm each input channel is triggered by control panel output by calling the CRN Automated Signal Verification System or the Central Station, and verify which sites are receiving the signals.