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

INTRODUCTION: The NNTSS4 is a Long Range Alarm Radio Transmitter for use on the NearNet Alarm Radio Network (see coverage map below). NearNet processors forward these radio signals to the Central Station via standard communicator techniques. The unit automatically communicates with the network at pre-selected intervals, and the network will generate and report a Communications Failure signal in the event that the network does not receive any of these supervisory test signals over a specified period.

INSTALLATION GUIDELINES
(Complete Installation Instructions Begin on Next Page)

- 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. While NearNet does not place restrictions on installers to reach a certain number of receive sites (see map below), it is always best to reach as many sites as possible to ensure reliable performance now and in the future.

- 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 on the reverse side.

- 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.

- Follow the MANUAL TEST (Section 3) instruction on the reverse side. Move the unit as required for reliable results. It is best to be received at more than one receive site, however it is acceptable to be received at only one receive site provided that 90% (9 out of 10) of signals sent are received.
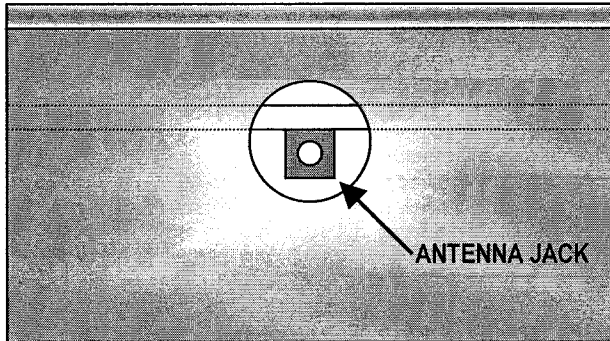

NORTH EAST ALARM RADIO NETWORK COVERAGE AREA

Map is not drawn to scale.

⚊ = NEARNET RECEIVING SITE

★ = PLANNED SITE
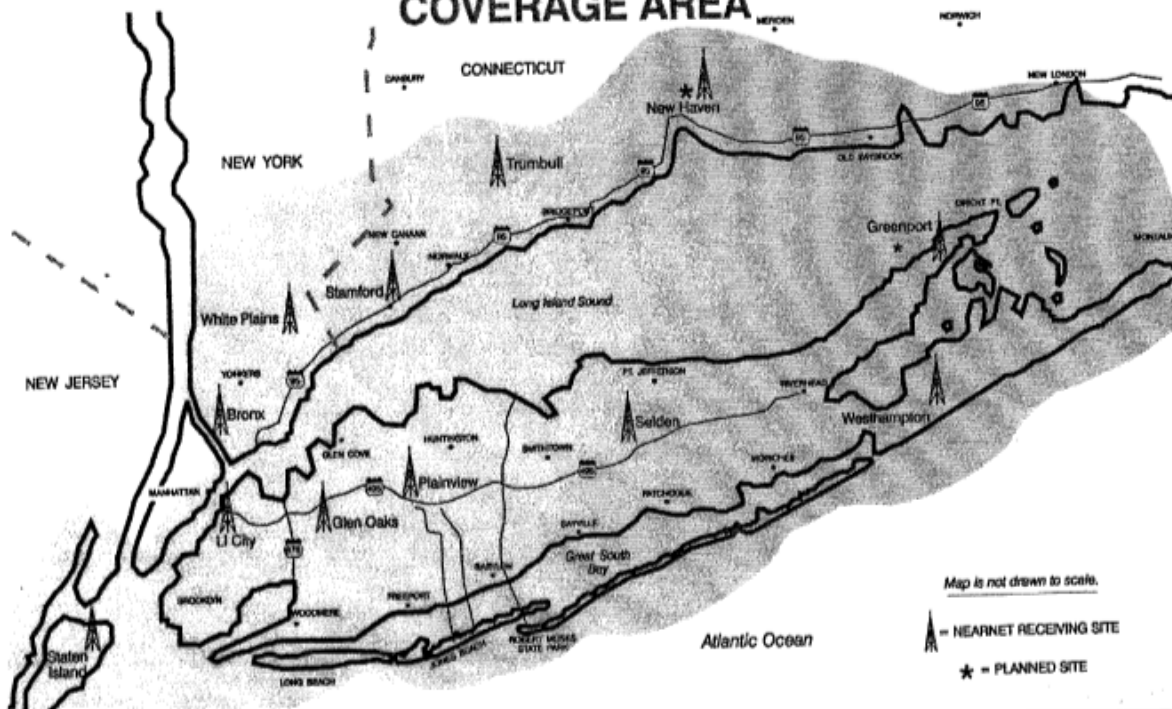
1 ANTENNA INSTALLATION

- Gently push antenna rod straight down into antenna jack until it stops.
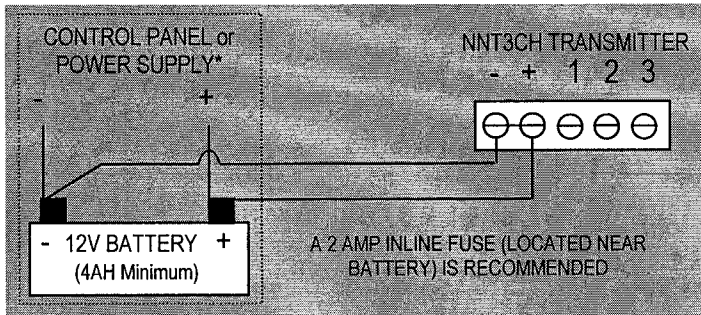- Slide grommet down antenna rod and snap into place in hole on top of transmitter case.

TRANSMITTER - TOP VIEW

ANTENNA JACK

***NEVER* POWER UNIT WITHOUT ANTENNA INSTALLED!!!
*DAMAGE WILL RESULT!!!***

2 POWER

- Connect 12VDC from battery as shown.

CONTROL PANEL or POWER SUPPLY*   NNT3CH TRANSMITTER
                                         - + 1 2 3

- 12V BATTERY +
(4AH Minimum)   A 2 AMP INLINE FUSE (LOCATED NEAR BATTERY) IS RECOMMENDED

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

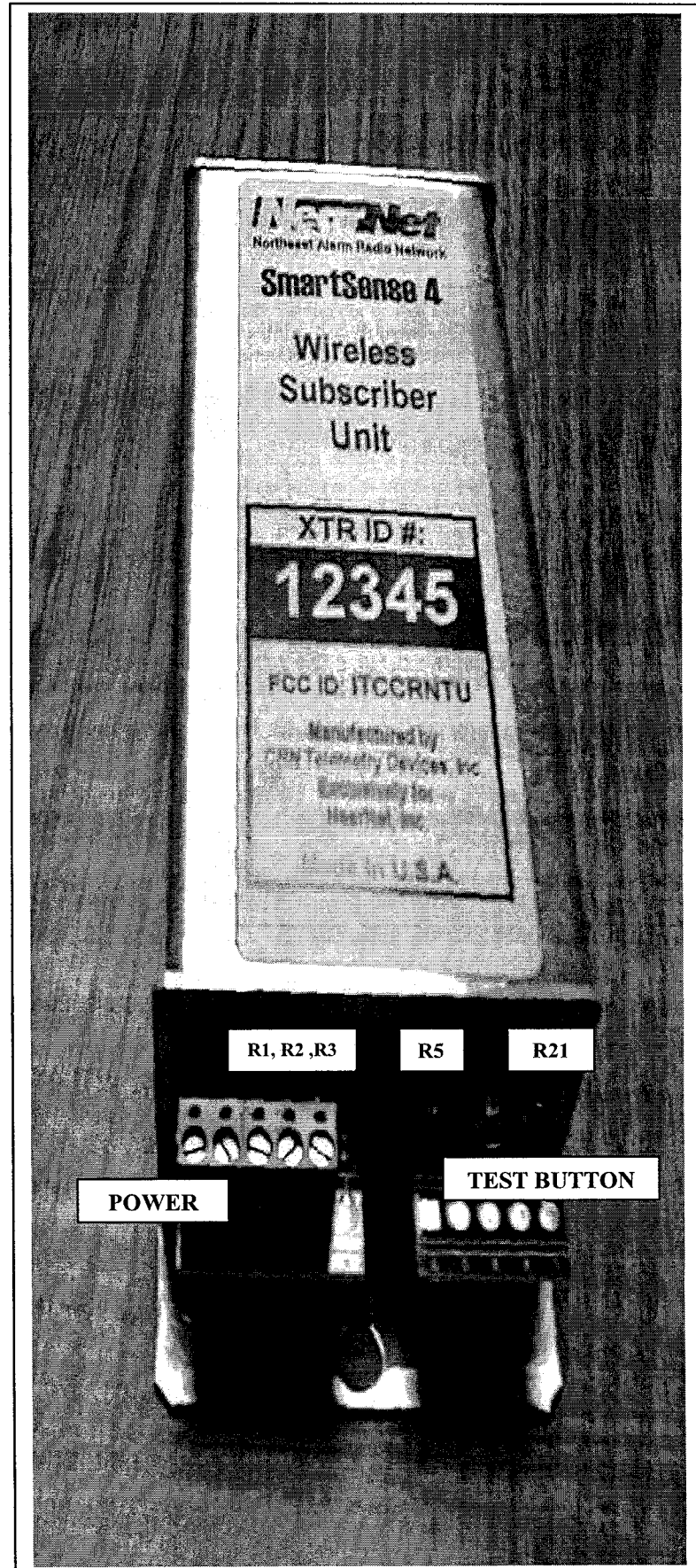| WIRE SIZE CHART		
UP to 10 FEET	10 to 50 FEET	50 to 100 FEET
22 Gauge	18 Gauge	14 Gauge

* 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 MANUAL TEST

- Send manual test (Code ∅) signals by pressing TEST BUTTON (S2). The LED will light for approximately 1 second each time a signal is transmitted. Call the NearNet Automated Signal Verification System at **(631) 736-7123 (select option 5)** to verify which sites are receiving the signals.

NearNet
Northeast Alarm Radio Network

SmartSense 4

Wireless Subscriber Unit

XTR ID #:

12345

FCC ID: ITCCRNTU

Manufactured by CRN Telemetry Devices Inc

USA

R1, R2 ,R3   R5   R21

POWER

TEST BUTTON

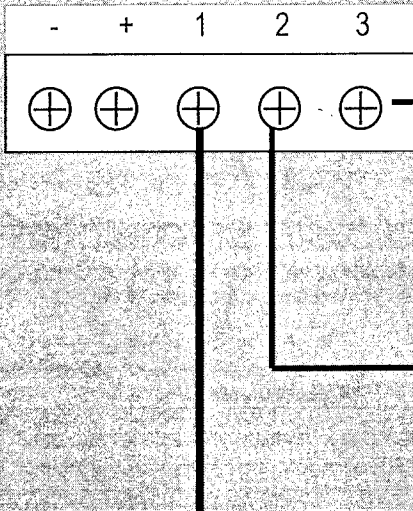## 4 SUPERVISORY TIMEOUT

The radio is programmed for **Daily Supervision**. The radio will send a code 0 every 5 hours, in the event that the network does not receive any of these supervisory tests over a calendar day, a communication failure will be sent.

5 WIRE INPUT CHANNELS (Choose either Smartchannel for Fire and Burg or Direct Trigger for Input 1 Only)

```
  -   +   1   2   3
 ⊕   ⊕   ⊕   ⊕ · ⊕
```

VOLTAGE TRIGGER: for ADEMCO and most other Alarm Control Panels w/ voltage trigger outputs **DO NOT CUT** RESISTOR R3 INPUT 3 TO CONTROL PANEL "BELL +" or OTHER VOLTAGE (+4.5 to 14.5VDC) TRIGGER – UNIT WILL SEND CODE 3
OR
GROUND TRIGGER: for DSC, NAPCO and most other Alarm Control Panels with electronic pull-to-ground trigger outputs *WITH POWER REMOVED*, **CUT** RESISTOR R3 CONNECT INPUT 3 TO CONTROL PANEL "BELL -" (DSC) or "E-LUG" (NAPCO) OR OTHER PULL-TO-GROUND TRIGGER – UNIT WILL SEND CODE 3

VOLTAGE TRIGGER: for ADEMCO and most other Alarm Control Panels w/ voltage trigger outputs **DO NOT CUT** RESISTOR R2 INPUT 2 TO CONTROL PANEL "BELL +" or OTHER VOLTAGE (+4.5 to 14.5VDC) TRIGGER – UNIT WILL SEND CODE 2
OR
GROUND TRIGGER: for DSC, NAPCO and most other Alarm Control Panels with electronic pull-to-ground trigger outputs *WITH POWER REMOVED*, **CUT** RESISTOR R2 CONNECT INPUT 2 TO CONTROL PANEL "BELL -" (DSC) or "E-LUG" (NAPCO) OR OTHER PULL-TO-GROUND TRIGGER – UNIT WILL SEND CODE 2

SMARTCHANNEL
SmartChannel will analyze Bell output to determine if trigger is Fire or Burg, and has a 7 second intergration delay.
VOLTAGE TRIGGER:
For **ADEMCO, NAPCO, and other Alarm Control Panels with switched "BELL POSITIVE" terminals**
WITH POWER REMOVED, **CUT** RESISTOR R5 (Cut/Smart) **DO NOT** CUT RESISTOR R1 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 R5 (Cut/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: WILL NOT WORK ON CONTROL PANELS WITH BUILD 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

All input channels send 5 signals when triggered, with a random delay between signals. LED will light for approximately 1 second each time a signal is transmitted.

6 VERIFY INSTALLATION

- Confirm each input channel is triggered by control panel output by calling the NearNet Automated Signal Verification System at **(631) 696-7496,** and verify which sites are receiving the signals. Note: The Central Station will not receive signals until the Transmitter Data Form is completed and faxed (see Step 7. below).

7 COMPLETE & SUBMIT PAPERWORK

- Complete the form on the back of this sheet and *fax it to the number shown on the top of the form.*