INTRODUCTION: The NNT-RF2 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.
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!*

2 **POWER**

- Connect 12VDC from battery as shown.

<table>
<thead>
<tr>
<th>WIRE SIZE CHART</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP to 10 FEET</td>
</tr>
<tr>
<td>22 Gauge</td>
</tr>
</tbody>
</table>

*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 Ø) signals by pressing TEST BUTTON (S1). The LED (D6) 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.
**4 SUPervisory Timeout**

The radio is programmed for Daily Supervision. The radio will send a code 0 every 7 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)

![Diagram of wire input channels]

**SMARTCHANNEL** *(NOTE: WILL NOT WORK ON CONTROL PANELS WITH BUILD IN SIREN DRIVER, MUST HAVE VOLTAGE OUTPUT)*

SmartChannel will analyze Bell output to determine if trigger is Fire or Burg, and has a 10 second integration delay.

**VOLTAGE TRIGGER:** For ADEMCO, NAPCO, and other Alarm Control Panels with switched “BELL POSITIVE” terminals

WITH POWER REMOVED, **CUT RESISTOR R7 (CUT/SMART)**. **DO NOT** CUT RESISTOR R1.

CONNECT INPUT 1 TO CONTROL PANEL “BELL +” – UNIT WILL SEND CODE 7 FOR PULSING VOLTAGE (Typ. FIRE) and CODE 8 FOR STEADY VOLTAGE (Typ. BURG)

**GROUND TRIGGER:** For DSC and other Alarm Control Panels with switched “BELL NEGATIVE” terminals

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

CONNECT INPUT 1 TO CONTROL PANEL “BELL -” – UNIT WILL SEND CODE 7 FOR PULSING GROUND (Typ. FIRE) and CODE 8 FOR STEADY GROUND (Typ. BURG)

**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) 896-7436, 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**

- Fax the completed data form to (631) 896-7943. Verify channels triggered by the control panel are received by the central station in accordance with the Data Form.
**NEARNET TRANSMITTER DATA FORM**

**TRANSMITTER ID #:**

COMPLETE FORM AND FAX TO (631) 688-7943. DATA WILL BE ENTERED INTO NEARNET SYSTEM MONDAY - FRIDAY, 9:00am - 4:30pm

### DEALER DATA

<table>
<thead>
<tr>
<th>DEALER NAME:</th>
<th>CONTACT PERSON:</th>
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<tbody>
<tr>
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<tr>
<td>ADDRESS:</td>
<td>TEL #: (<em><strong><strong>) -- -- -- FAX #: (</strong></strong></em>) -- -- --</td>
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<tr>
<td></td>
<td></td>
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<td>CITY:</td>
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### SUBSCRIBER DATA

<table>
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<tr>
<th>NAME:</th>
<th>DIGITAL DIALER FORMAT (3X14X1, 4X2, OR CID):</th>
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<tr>
<td>ADDRESS:</td>
<td>DIGITAL RECEIVER TELEPHONE #: (_____) -- -- --</td>
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<td>CITY: STATE: ZIP:</td>
<td>DIGITAL ACCOUNT #: (4-DIGITS MAXIMUM)</td>
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<td>TELEPHONE #: (_____) -- -- --</td>
<td>NOTES:</td>
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### DIGITAL RECEIVER DATA

**SMARTSENSE SIGNAL DOWNLOAD INFORMATION (CHECK ONE COLUMN ONLY)**

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<tr>
<th>ALARM TRANSMITTER</th>
<th>TRANSMITTER PULSED FORMAT CONTACT ID</th>
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<tbody>
<tr>
<td>CONDITION CHANNEL #</td>
<td>CODE</td>
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<tr>
<td>SMARTEST channel</td>
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<td>SMARTCHANNEL Typically FIRE</td>
<td>7</td>
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<tr>
<td>SMARTCHANNEL Typically BURG</td>
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<tr>
<td>SUPY TEST FAIL</td>
<td>69</td>
</tr>
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</table>

* FOR DEALER NOTIFICATION ONLY. A SUPERVISOR TEST FAIL CODE WILL BE GENERATED BY THE NEARNET SYSTEM AND SENT TO THE DIGITAL RECEIVER IF NO SUPERVISORY TEST SIGNALS WERE RECEIVED FOR THE SPECIFIED PERIOD.

**DEALER SIGNATURE:**

**DATE:**

**NEARNET SUBSCRIBER AGREEMENT**

**BACKUP SECURITY** - It is understood and agreed: The service provided is that of wireless, radio backup to an alarm system's telephone line based digital dialer. The NEARNET SUBSCRIBER acknowledges that there are certain unavoidable limitations in providing radio signal services and such limitations are inherent with such systems. There is no guarantee, or warranty to the SUBSCRIBER that by subscribing to this service the SUBSCRIBER's security system will function as intended. This service is being provided upon the express understanding and condition that provider is not an insurer or guarantor of the performance of any security system and that it has expressly denied and disclaimed any representations or intent on the part of the provider that the service meet any specific standard for a security system. The costs of this service are based solely on the value of the service and are unrelated to the value of the SUBSCRIBER's premise. Insurance, if any, shall be obtained by SUBSCRIBER. It is recognized that radio interference may affect the transmission of a SUBSCRIBER's signal to receiving sites or occasion and that damage could occur to receiving site(s) or other related equipment that could temporarily result in the absence of service. Additionally, during routine maintenance to receiving equipment, service may be temporarily interrupted. Such routine maintenance and calibration will be performed at times which will effect the smallest number of users and will be limited to the shortest possible period of time. To this extent the SUBSCRIBER assumes and accepts such risk and the consequences of such and agrees to hold the provider, its employees, and agents harmless for all claims, lawsuits and losses which claim and/or lawsuit is brought or sustained by parties or entities other than the parties to this agreement. This provision shall apply to all claims, lawsuits or damages caused by the provider's negligent performance, whether active or passive and to all claims based upon defects in design, installation, maintenance, monitoring, operation or non-operation of the system, whether claims be based upon negligence, active or passive, warranty, or strict product liability on the part of the provider, its agents, servants or employees.

**LIABILITY LIMITATION** - The SUBSCRIBER recognizes that there can be no guaranty that signals from the SUBSCRIBER's transmitter will result in successful downloading to the CENTRAL STATION and that provider will NOT HAVE ANY LIABILITY FOR ANY LOSS WHATSOEVER, INCLUDING BUT NOT LIMITED TO PROPERTY DAMAGE, PERSONAL INJURY, FLOOD, ETC. RESULTING FROM A CLAIM THAT THE NETWORK DID NOT PROVIDE WARNING. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, OTHER THAN THOSE SPECIFIED WITHIN. IN NO CASE SHALL THE PROVIDER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE NEGLIGENCE OR FAULT OF EITHER OR BOTH OF THEM. In consideration of the SUBSCRIBER's assumption of risks as provided herein and the limitation of service to be provided by the provider, and the limitation of liability set forth in this agreement, the SUBSCRIBER further agrees and contracts to limit the total liability of the provider to a maximum of $250.00 for any and all claims per SUBSCRIBER. If the SUBSCRIBER wishes the provider to assume a limited liability in lieu of the liquidated damages as hereinafter set forth, SUBSCRIBER may obtain from the provider a limitation of liability by paying an additional monthly service charge. If SUBSCRIBER elects to exercise this option, a rider shall be attached to this agreement setting forth the terms, conditions and the amount of the limited liability, and the additional monthly charge. Such rider and additional obligation shall in no way be interpreted to hold the provider as an insurer.

**RIGHTS TO ASSIGNEES/SUBCONTRACTORS** - Provider shall have the right to assign this agreement to any other person, firm or corporation without notice to the SUBSCRIBER and shall have the further right to subcontract any installation, monitoring, network, repair service or other services which it may perform. The SUBSCRIBER acknowledges that this Agreement, and particularly those paragraphs relating to the provider's maximum liability, limitation of liability, and third party indemnification, is made for the benefit of and are applicable to any assignees and/or subcontractors of the provider and they bind the SUBSCRIBER with respect to said assignees and/or subcontractors with the same force and effect as they bind the SUBSCRIBER to the provider.

**SUBSCRIBER TERMINATION** - As space on the provider's allocated frequencies is a tangible, finite asset, SUBSCRIBERs may be removed from the Network and thereby cease monthly service costs by no longer using a portion of that asset and eliminating transmitted signals from the premise only. The provider shall cease billing any SUBSCRIBER upon written certification from the Alarm Dealer that the SUBSCRIBER transmitter has been disabled, and confirmation that no radio communications from the SUBSCRIBER have been received by the Network. To accomplish this, the SUBSCRIBER authorizes the Alarm Dealer and/or the provider to enter the SUBSCRIBER's premise to permanently disable the transmitter.

**SUBSCRIBER ACCEPTANCE:**

**DATE:**