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GEMC-WL-WD2

Commercial / Residential Window / Door Transmitter with Rear Tamper

INSTALLATION INSTRUCTIONS

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GENERAL DESCRIPTION

The GEMC-WL-WD2 is a 2-point window/door transmitter designed for use in Napco Gemini C-Series wireless systems, and with Napco's GEMC-RECV series wireless receivers (see WI1682). When used with the supplied magnet, the transmitter functions as a window/door sensor. Terminals are provided for supervised external contacts so that one or more additional contacts may be used in conjunction with, or instead of, the internal reed switch. A jumper (J1) allows the use of external contacts (such as UL Listed door/window magnets or ball contacts, fire alarm pull stations, thermal detectors, waterflow tamper

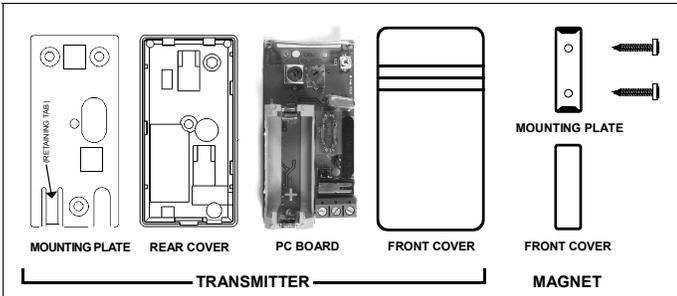


Fig. 1. GEMC-WL-WD2 Component Parts

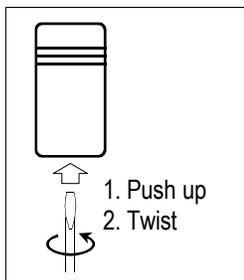


Fig. 2. Open the case

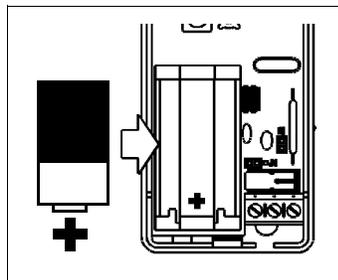


Fig. 3. Installing the battery

switches, etc.), instead of the internal reed switch within the same room (maximum 20' wire length for Burglary installations, maximum 3' wire length for Fire installations*; 22-18AWG) for Fire and Burglary sensors. In addition, the GEMC-WL-WD2 includes a rear tamper to protect against the removal of the transmitter from the wall.

The GEMC-WL-WD2 is powered by a 3-volt lithium battery that will power the transmitter for up to 5 years. When battery voltage drops below normal, a low-battery report will be sent to the receiver (replace battery with a Duracell 3V lithium battery DL123A, Varta/Power-One model CR123A or Panasonic CR123A only; use of another battery may present a risk of fire or explosion).

Each transmitter has a unique factory-programmed code (printed on the battery holder and also on the rear case) that distinguishes itself to the receiver. (Note: See control-panel instructions for entering this six-digit hexadecimal code and its checksum digit into the panel; be sure to enter all numbers and/or letters, including leading zeros, if any).

Note: When connected for use with a Fire system, and a fire condition sends a fire alarm signal, this signal will be sent until the condition clears.

SPECIFICATIONS

Electrical Ratings

Input Power: Powered by a 3-volt lithium battery. Two zone inputs.

Loop voltage: 3V nominal

180K End of line resistor part #: EOL180K (for loop 1 only)

Use only one device when used with Fire initiating devices.

Maximum Zone Wiring Length: 20 feet maximum for Burglary installations, 3 feet maximum for Fire installations* (#18-22 AWG)

Maximum Loop Resistance: 300 ohms

Operating Frequency: 319.5Mhz

Maximum Distance from Receiver: Up to 1000 feet, depending on local environment

INSTALLATION

Note: The transmitter and magnet may be mounted in any position with no degradation in performance. Thus, if a left-handed reed switch is required, the unit may be mounted upside down. However, for reference purposes in this text, the transmitter will be considered oriented with the antenna at the top, as shown in these illustrations.

- Remove the cover.** Remove the GEMC-WL-WD2 transmitter cover by inserting a small screwdriver into the slot at the bottom and twisting while applying upward pressure. See Fig. 2 below.
- Insert the battery.** Observe battery polarity. Insert battery with positive (+) terminal toward terminal block. See Fig. 3. The battery will not make contact if inserted backwards.
- Identify transmitter parts.** Refer to Fig. 4.
- Select transmitter location.** Avoid mounting the transmitter near the floor. Low level mounting can reduce transmission range and may subject the transmitter to damage.
- Remove transmitter and magnet mounting plates.** Transmitter: Use a small screwdriver to push in retaining tab (Fig. 6) and slide cover upward. Magnet: Insert small screw driver into slot at either end of magnet cover. Push in and twist to pop off cover. If using external contacts, skip to Step 7.
- Attach mounting plates.** **Note:** While use of the transmitter mounting plate is recommended, mounting holes in the rear case allow mounting without the plate. Use #6 flat-head screws to affix the mounting plates, observing alignment marks shown in Fig. 6. Mount the magnet within 1/2" from the transmitter. Place the tamper spring that emerges from the transmitter rear cover into the top of the oval hole in the transmitter mounting plate. Move the transmitter down until it snaps onto its mounting plate; snap the magnet onto its mounting plate. For internal contacts, skip to Step 9.
- (For external contacts only).** Install contact or sensor and transmitter mounting plate (if used). Mount the external contact or sensor as described in its instructions. For recessed wiring, drill an access hole for the wire.
- (For external contacts only).** Connect to terminals. Connect two wires from an external sensor having normally-closed contacts (or a normally-closed loop) to Point-1 (Terminals 1-2). Similarly, if required, connect a sensor (or loop) to Point-2 (Terminals 2-3).
- Complete transmitter setup.** Install Jumper J2 (see Fig. 4) to enable the holdoff timer (after triggering, unit waits 3 minutes before retriggering). For example, if used on doors in heavy traffic areas, this will prevent multiple alarms and thus conserve battery life. **Note:** If J2 is installed, both points will be delayed 3 minutes before retriggering. If internal reed switch is used, remove Jumper J1 (see Fig. 4) and short Point-1 (Terminals 1-2). An external contact may be connected to point 2.
- Close the transmitter case.** Close the case by engaging the hooks at the top, then snap the bottom together.
- Program the panel.** Enter (a) the zone number to which the transmitter will be mapped; (b) the 6-digit ID code with checksum digit; and (c) the wireless point number. Refer to the programming instructions for the control panel and keypad in use. **Note:** In UL burglary installations, program the burglary alarm output for all protective devices.

*In Fire installations, leads extending from the GEMC-WL-WD2 located within 7 feet of the floor must be run inside the wall or protected by conduit, etc.

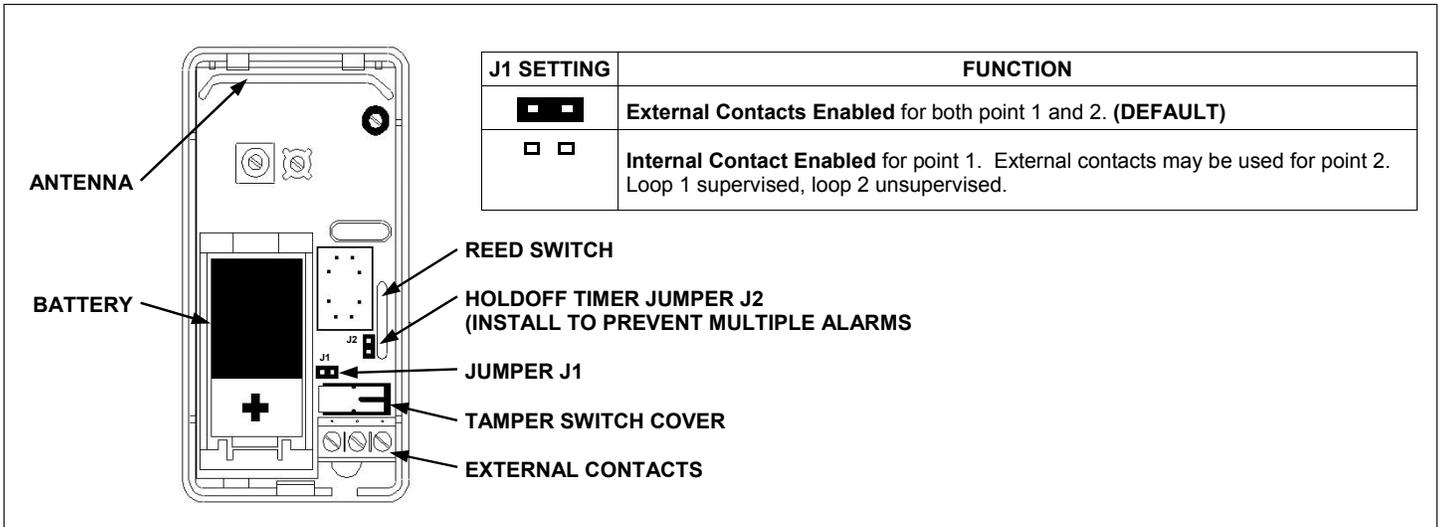


Fig. 4. Location of Parts

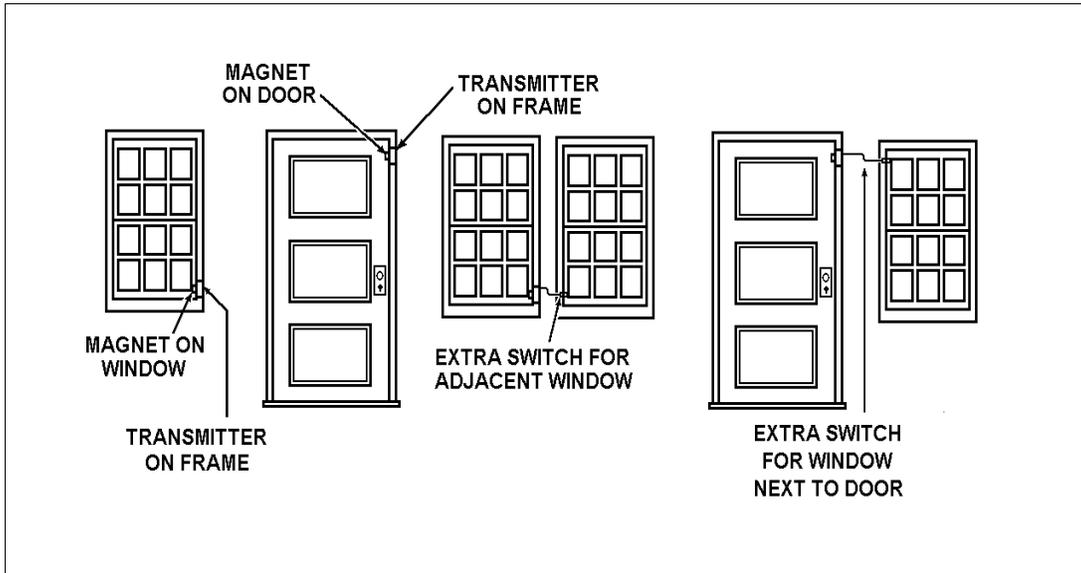


Fig. 5. Typical Transmitter Locations

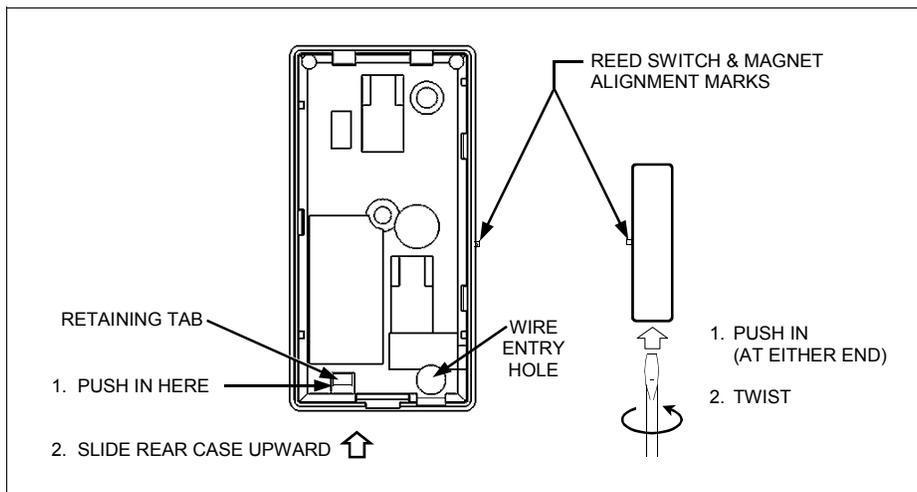
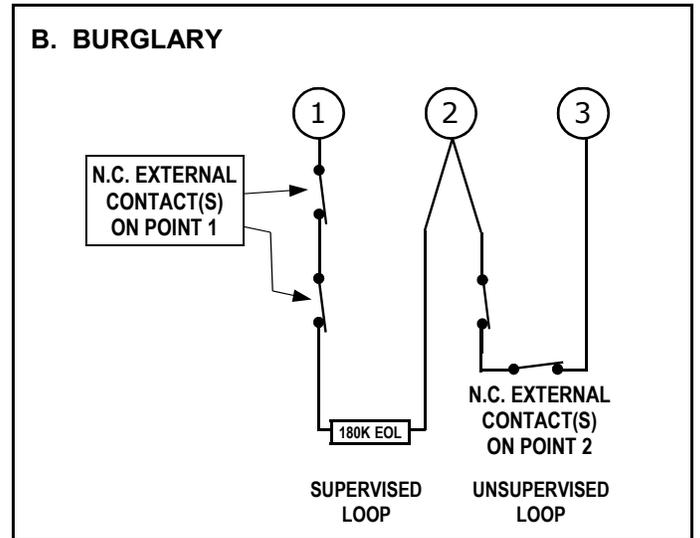
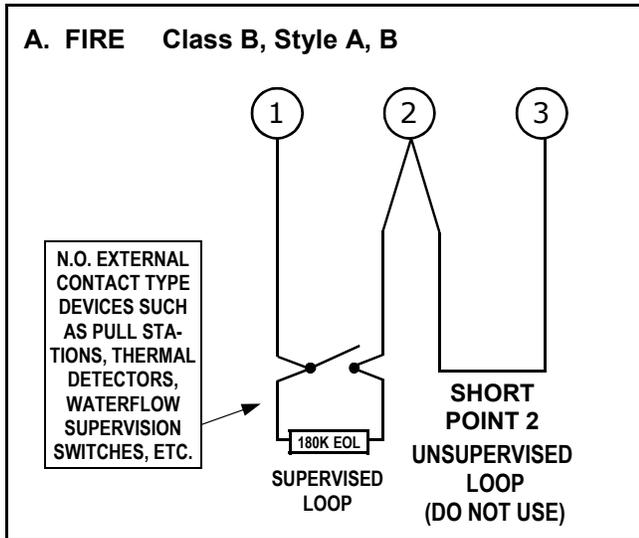


Fig. 6. Removing Mounting Plate and Magnet Cover

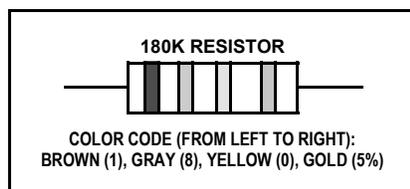
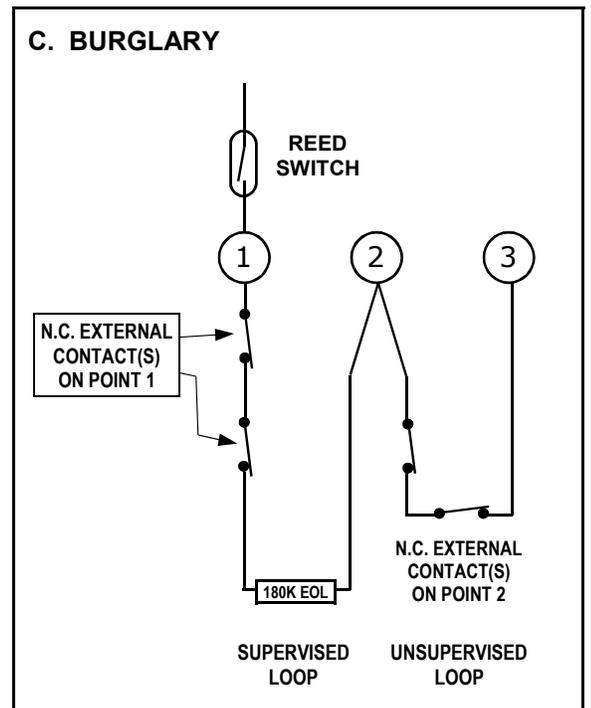
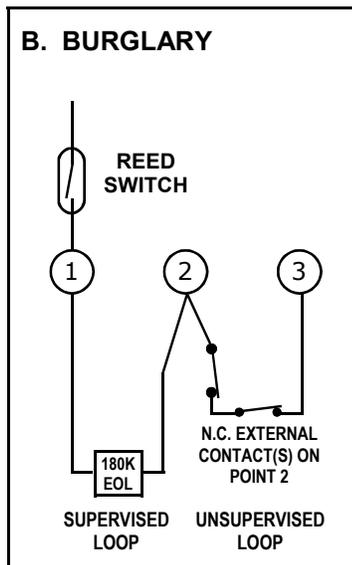
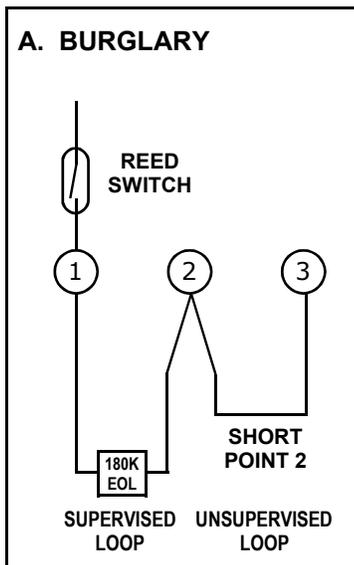
WIRING

The GEMC-WL-WD2 may be wired in any of the following configurations; refer to the diagrams below: **Note:** For Commercial and Residential Fire installations, only ONE initiating device may be connected to this transmitter (only normally open contacts used for Fire). For Commercial Burglary installations, multiple initiating devices may be used as long as the devices all serve the same function (i.e. door, window, motion, etc.).

1.	J1 JUMPER INSTALLED	FUNCTION
		External Contacts Enabled for both point 1 and 2. (DEFAULT)



2.	J1 JUMPER <u>NOT</u> INSTALLED	FUNCTION
		Internal Contact Enabled for point 1. External contacts may be used for point 1 or point 2.



- Notes:**
- Caution:** Changes or Modifications not approved by Napco may void the user's authority to operate the equipment.
 - This device may not cause interference.
 - This device must accept any interference, including interference that may cause undesired operation of the device.
 - Only loop 1 is supervised.

NAPCO LIMITED WARRANTY

NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for *thirty-six months* following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

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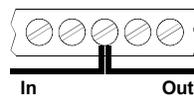
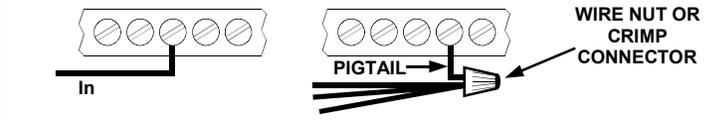
NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

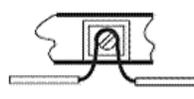
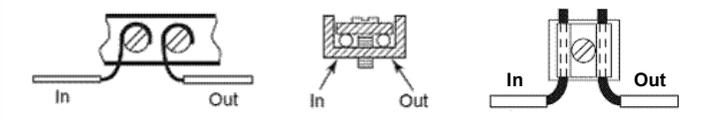
Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

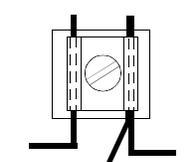
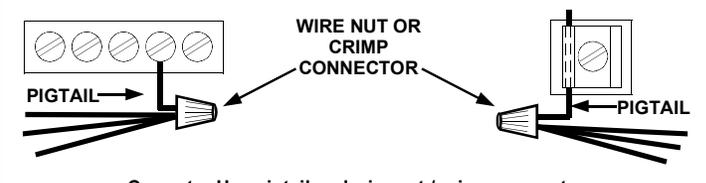
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IMPORTANT WIRING METHODS

 <p>For single-conductor terminal blocks (like the type shown at left), to terminate more than one conductor to a terminal, use the wiring methods shown at right:</p>	 <p>In</p> <p>Out</p> <p>Incorrect</p>	 <p>In</p> <p>PIGTAIL</p> <p>WIRE NUT OR CRIMP CONNECTOR</p> <p>Correct -- Single incoming and/or pigtail with wire nut / crimp connectors</p>
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 <p>For "barrier" type terminal blocks (like the type shown at left), to terminate two conductors to a terminal, use the wiring methods shown at right:</p>	 <p>Incorrect</p>	 <p>In</p> <p>Out</p> <p>In</p> <p>Out</p> <p>In</p> <p>Out</p> <p>Correct -- Separate incoming and outgoing conductors</p>
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<p>To terminate more than two conductors or conductors of different wire sizes to a terminal, use the "pigtail" type wiring method as shown at right. Use insulated wire for the pigtail, and firmly secure the conductors to the pigtail using an appropriate wire nut or crimp connector for the number and gauge of conductors used.</p>	 <p>Incorrect</p>	 <p>PIGTAIL</p> <p>WIRE NUT OR CRIMP CONNECTOR</p> <p>PIGTAIL</p> <p>Correct -- Use pigtail and wire nut / crimp connector</p>
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