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## GEM-TRANS2 Window/Door Transmitter INSTALLATION INSTRUCTIONS

WI747C 5/06

# GENERAL DESCRIPTION

The GEM-TRANS2 is a 2-point window/door transmitter designed for use in Napco GEM-series wireless systems. When used with the supplied magnet, the transmitter functions as a window/door sensor. However, terminals are provided for normally-closed external contacts so that one or two additional devices may be used in conjunction with, or instead of, the internal reed switch. A jumper option is provided to allow a normally-open external contact to be used. This allows the use of one external contact instead of the internal reed switch.



Fig. 1. GEM-TRANS2 Component Parts



Fig. 2. Opening the case

Fig. 3. Installing the battery

The GEM-TRANS2 is powered by a 3-volt lithium battery, which 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 DL123A or Varta/Power-One CR123A only).

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).

# 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.

- 1. **Remove the cover.** Remove the GEM-TRANS2 transmitter cover by inserting a small screwdriver into the slot at the bottom and twisting while applying upward pressure. See Fig. 2 below.
- 2. **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.
- 3. Identify transmitter parts. Refer to Fig. 4.
- 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.
- 5. **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.
  Mount the magnet within " from the transmitter. Snap transmitter and magnet onto their mounting plates. For internal contacts, skip to Step 9.
- 7. (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.
- 8. (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).
- 9. 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 thereby 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.
- 10. Close the transmitter case. Close the case by engaging the hooks at the top, then snap the bottom together.
- 11. **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.







Fig. 5 Typical Transmitter Locations



Fig. 6 Removing Mounting Plate and Magnet Cover

### WIRING

The GEM-TRANS2 may be wired in any of the following configurations. Refer to the following diagrams:







#### Notes:

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

## NAPCO SECURITY 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.

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