

# **GE Interlogix**

# Dialog Telephone Interface Module

Installation Instructions

www.GE-InterlogixSecurity.com

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# **PRELIMINARY**

# Preliminary 10/4/02

# **Product** Summary



The Dialog Telephone Interface Module (DTIM) is a battery operated communication link between the security system control panel and the central monitoring station. The DTIM receives radio signals from the panel, then uses the phone line to report security system events to the central monitoring station.

The DTIM provides added security by separating the telephone interface from the panel. If the panel is damaged during a break-in or fire, the DTIM can still report to the central monitoring station.

The DTIM is a supervised device that transmits supervisory signals every hour for the panel to receive. When the battery is low, the module transmits a low battery signal.

The DTIM does not have a backup power supply. Therefore, the battery must be replaced within 7 days when a low battery condition occurs to ensure that system events can be reported. If the battery is allowed to completely drain, the panel identifies the DTIM as being in a supervisory (non-working) state, which prevents system events from being reported.

# Tools and Supplies Needed

- Phillips screwdriver
- Mounting Hardware (included)
- Ty-wrap and Cover Screw for UL Listed installations (included)

## Installation

This section describes guidelines for installing the DTIM, programming, testing, mounting, and phone line connections.

## Installation Guidelines

- Before permanently mounting to a wall, test the DTIM from the desired location to ensure communication with the panel. This means you must first add (learn) the DTIM into panel memory, then perform a sensor test.
- Mount the module within 100 feet of the panel, but not closer than 10 feet to another DTIM or the panel.
- Always mount the DTIM in the upright vertical position.
- The DTIM can be connected to a standard analog (loop-start) phone line, with or without digital subscriber line (DSL) service.

The DTIM cannot be used on digital or PBX phone lines, which are designed only for digital type devices that operate anywhere from 5 volts DC and up. The DTIM uses an analog modem and does not have a digital converter, adapter, or interface to operate with such systems.

- When connecting the DTIM to a standard analog phone line, it is recommended that you install an RJ-31X jack (CA-38A in Canada) ahead of all phones and other devices on the line for full line seizure. This allows the DTIM to take control of the phone line when an alarm occurs, even if the phone is in use or off-hook. It also provides customers with a quick disconnect in case the DTIM malfunctions, allowing them to use their phone.
- For UL Listed installations, mount the RJ-31X jack within 5 feet of the DTIM.

# Programming—Adding the DTIM to Panel Memory

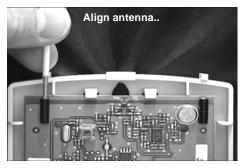
#### Note

We recommend learning the DTIM into Allegro panels as zone 1, since zone 1 is set up to learn into Group 36 automatically and has pre-programmed sensor text for the DTIM (PHONE MOD-ULE).

The DTIM uses a 3-2-1 tamper switch activation sequence for learning, which causes the LED to blink in a corresponding 3-2-1 sequence. You must wait for the LED to turn off after each flash sequence before releasing the tamper switch (see Figure 2).

## To learn the DTIM into the panel:

1. Remove the DTIM cover and install the antennas (see Figure 1).



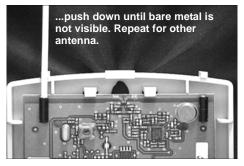


Figure 1. Antenna Installation

#### Note

Antennas must be installed for learning.

- 2. With the system disarmed, enter program mode at the Allegro panel by pressing B + CODE.
- 3. Press ▼ twice and # twice. The Allegro display shows ZONE 01 TRIP.
- 4. Locate the DTIM tamper switch and LED (see Figure 2 at left).

## Important!

**Timing is the key to success** with step 5. Read the complete step before you begin to help ensure successful programming. Do not wait more than 1 second between tamper switch activations in step 5. If you wait too long, the LED will not flash and you must start over. Also, do not release the tamper switch before the LED is done flashing or you must start over.



Press 3 times, holding the tamper switch down on the third press until the LED flashes 3 times, then release after the third flash.

Immediately press 2 times, holding the tamper switch down on the second press until the LED flashes 2 times, then release after the second flash.

Immediately press and hold until the LED flashes 1 time, then release the tamper switch.

6. Exit from program mode.

# Tamper Switch

Figure 2. Tamper Switch and LED Locations

# Testing DTIM Transmitting Range

The following describes the basic steps for testing transmitting range from the DTIM to the panel. For complete testing instructions, see the panel installation instructions.

## Note

Be sure to attach the cover onto the DTIM before testing wireless communications.

- 1. Place the DTIM in the desired location.
- 2. Put the Allegro panel into sensor test mode. The panel piezo should sound 7 8 beeps. This indicates good reception from the DTIM to the panel.
- 3. If you hear fewer than 7 beeps, test the DTIM in different locations. Mounting locations should be limited to areas where the panel responds with 7 8 beeps.
- 4. To retest transmitting range after relocating the DTIM, press ★ then # at the Allegro panel and listen for 7 8 beeps.
- 5. Exit from test mode after determining acceptable locations.

## Mounting

After finding an acceptable mounting location (based on testing), mount the DTIM as described.

You must be free of static electricity before handling circuit boards. Touch a bare metal surface or wear a grounding strap to discharge yourself.

- 1. With the cover off, place the DTIM at the desired location and mark the mounting holes (see Figure 3 at left).
- 2. Make holes in the wall for anchors at the marked locations.
- 3. Insert wall anchors where necessary, then use two #6 screws to secure the DTIM to the wall.

# Wiring a Phone Line to the Module

Connect the DTIM ahead (or in front) of all other phones, answering machines, computers, or any other devices on the phone line. This allows the DTIM to take over (seize) the phone line, even if another device on the line is in use.

An RJ-31X (CA-38A) jack should be installed when wiring for full line seizure. This lets the user quickly and easily disconnect the DTIM from the phone line in case the DTIM disables the phone line due to a malfunction.



For UL Listed systems, the RJ-31X jack must be mounted within 5 feet of the DTIM.

- 1. Run a 4-conductor cable from the TELCO block to the RJ-31X (A in Figure 4).
- 2. Connect the 4-conductor cable wires to the RJ-31X (B in Figure 4).
- 3. Disconnect the Green and Red premises phone jack wires from the TELCO block and splice them to the 4-conductor cable Black and White (or Yellow) wires (C in Figure 4). Use weatherproof wire connectors for these splices.
- 4. Connect the 4-conductor cable Green and Red wires to the TELCO block TIP (+) and Red to RING (-) posts (D in Figure 4).
- 5. Insert the 8-conductor phone cord plug into the RJ-31X jack (E in Figure 4).
- 6. Remove the right knockout on the DTIM plastic, feed the 4-conductor phone cord plug through it and connect the plug into the DTIM phone jack (Figure 5 at right).

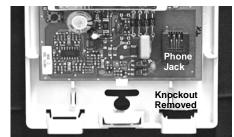
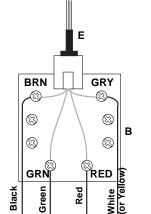


Figure 5. Knockout and Phone Jack Locations

Figure 3. Mounting Hole Locations



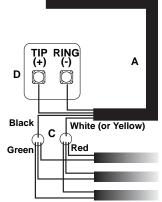


Figure 4. RJ31X Phone Wiring

## **Phone Test**

After connecting the phone line to the DTIM, conduct a phone test to verify reports are made to the central monitoring station. The following steps describe the basic steps for conducting a phone test. Refer to the specific panel installation instructions for complete details.

## Note

You must conduct a phone test whenever the DTIM battery is replaced.

- 1. Call the central monitoring station to inform them you are testing the system.
- Make sure the panel has the correct account number and central station receiver phone number programmed.
- 3. Enter the appropriate phone test command for the panel used in the system.
- 4. Contact the central monitoring station when you are finished testing.

# Installing the Battery Ty-wrap and Cover Screw (UL Listed Installations Only)

After installation, programming, and testing are completed install the Ty-wrap around the battery and battery holder. Cut off any access.

Secure the cover with the cover screw by installing it through the cover push tab.

# Troubleshooting

#### Note

Disconnect the phone line from the DTIM before servicing.

## No Dial Tone

If there is no dial tone at on-site phones after wiring the RJ-31X jack, use the following to find the cause.

- Wait 2 minutes and try again. The DTIM may be busy trying to report to the central station.
- Check the DB-8 cord connections at the module and RJ-31X jack. Replace the cord if necessary.
- Disconnect the DB-8 cord from the RJ-31X jack. If the phone still doesn't work, the problem
  is in the RJ-31X jack wiring. Check the RJ-31X jack wiring and TELCO block wiring.
  Replace the RJ-31X jack if necessary.
- Perform a phone test after troubleshooting the phone line (see your panel installation instructions for phone test procedures).

## Constant Dial Tone

If a constant dial tone prevents you from using the phone, there may be one or more polarity-sensitive phones on the premises. Reverse the phone wires connected to the brown and gray wire terminals on the RJ-31X jack.

# No System Response

If the system does not respond in sensor test (as described in the panel installation instructions), try the following:

- Change the antenna position. Best range is achieved by inserting the antenna into the wall.
- Check that the DTIM battery is installed.
- Check the DTIM for a dead battery. Replace the battery if necessary.
- Use an RF Sniffer (60-401) to verify that the DTIM is transmitting.
- Verify that the DTIM was added (learned) into panel memory correctly.

## **Trouble Condition**

- The tamper switch may have been tripped. Check that the cover is securely in place.
- The DTIM battery may be low. Check the battery, replace if necessary and conduct a phone test.

# Module Supervisory

- If the panel indicates a DTIM supervisory condition, use an RF Sniffer (60-401) to verify that
  the DTIM transmits when the tamper switch is pressed. If it does not transmit, check the battery and replace it if necessary.
- If the sniffer indicates that the DTIM is transmitting, it may be out of panel receiving range.
   Use the sensor test to verify that the DTIM is within panel range. If necessary, test the DTIM from other locations until an acceptable location is found.

# **Specifications**

Compatibility: ...... Allegro<sup>TM</sup>

Wireless Range ...... 500 feet open-air (nominal)

Power Source: ............ 3.6 V AA Lithium Battery

Storage Temperature: .... -30° F to 140° F (-34° C to 60° C)

Operating Temperature: 32° F to 120° F(0° C to 49° C)

Maximum Humidity: ... 90% relative humidity, noncondensing

Dimensions: 4.6" (12 cm) W, 6.6" (3 cm) H, 1.20" (17 cm) D

US Patents 4,855,713 and 4,864,636

# **Notices**

#### FCC Part 15 Information to the User

Changes or modifications not expressly approved by Interlogix, Inc. can void the user's authority to operate the equipment.

## FCC Part 15 Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

- ☐ Increase the separation between the equipment and receiver.
- Connect the affected equipment and the panel receiver to separate outlets, on different branch circuits.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Part 15 ID No. B4Z-786A-DTIM

## **ACTA Part 68**

This equipment complies with Part 68 of the FCC Rules. Located on this equipment is a label that contains, among other information, the FCC registration number and the ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

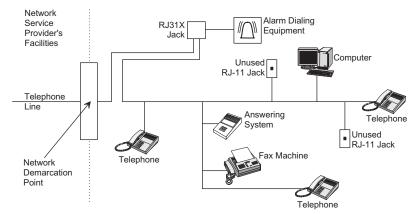
### FCC Part 68 Registration No. B4ZAL01B46059

The REN is used to determine the maximum number of devices that may be connected to your telephone line. Excessive RENs on a telephone line may result in devices not ringing in response to an incoming call. In most areas, the sum of all device RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements as adopted by ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compliant modular jack that is also compliant. See the Installation Instructions for details.

Alarm dialing equipment must be able to seize the telephone line and place a call in an emergency situation. It must be able to do this even if other equipment (telephone, answering system, computer modem, etc.) already has the telephone line in use. To do so, alarm dialing equipment must be connected to a properly installed RJ31X jack that is electrically in series and ahead of all other equipment attached to the same telephone line. Proper installation is depicted in the following diagram. If you have any questions concerning these instructions, consult your local telephone company or a qualified installer about installing an RJ31X jack and alarm dialing equipment for you.

## **Customer Premises Equipment and Wiring**



If this equipment causes harm to the telephone network, the telephone company may temporarily disconnect your service. If possible, you will be notified in advance. When advance notice is not practical, you will be notified as soon as possible. You will also be advised of your right to file a complaint with the FCC.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. You will be given advance notice in order to maintain uninterrupted service.

If you experience trouble with this equipment, please contact the company that installed the equipment for service and/or repair information. The telephone company may ask you to disconnect this equipment from the network until the problem has been corrected or you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

## **Declaration of Conformity (DoC)**

GE Interlogix, Inc. declares that the model no. 60-879-95R is in conformity with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **Canada Notice**

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

For your protection, make sure that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together.

Do not attempt to make connections yourself. Contact the appropriate electrician or electric inspections authority.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop that is used by the device to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the LNs of all the devices does not exceed 100. Load Number: 0.2B AC

The term "IC:" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

IC: 867A 786DTIM

"AVIS: - L´étiquette du ministère des Communications du Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme a certaines normes de protection, d´exploitation et de sécurité des réseaux de télécommunications. Le ministère n´assure toutefois pas que le matériel fonctionnera a la satisfaction de l´utilisateur.

Avant d´installer ce matériel, l´utilisateur doit s´assurer qu´il est permis de le raccorder aux installations de l´enterprise locale de télécommunication. Le matériel doit également etre installé en suivant une méthod acceptée de raccordement. Dans certains cas, les fils intérieurs de l´enterprise utilisés pour un service individuel a ligne unique peuvent etre prolongés au moyen d´un dispositif homologué de raccordement (cordon prolongateur téléphonique interne). L´abonné ne doit pas oublier qu´il est possible que la conformité aux conditions énoncées ci-dessus n´empechent pas le dégradation du service dans certaines situations. Actuellement, les enterprises de télécommunication ne permettent pas que l´on raccorde leur matériel a des jacks d´abonné, sauf dans les cas précis prévus pas les tarrifs particuliers de ces enterprises.

Les réparations de matériel homologué doivent etre effectuées pas un centre d'entretien canadien autorisé désigné par le fournisseur. La compagne de télécommunications peut demander a l'utilisateur de débrancher un appareil a la suite de réparations ou de modifications effectuées par l'utilisateur ou a cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise a la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'éau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissment. - L'utilisateur ne doit pas tenter de faire ces raccordements lui-meme; il doit avoir recours a un service d'inspection des installations électriques, ou a electricien, selon le cas".

Une note explicative sur les indices de charge (voir 1.6) et leur emploi, a l'intention des utilisateurs du matériel terminal, doit etre incluse dans l'information qui accompagne le materiel homologué. La note pourrait etre rédigée selon le modèle suivant:

"L'indice de charge (IC) assigné a chaque dispositif terminal indique, pour éviter toute surcharge, le pourcentage de la
charge totale qui peut etre raccordée a un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit
bouclé peut etre constituée de n'import somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100."

L	'Indice	de charg	e de cet	produit es	st	



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