

Dialog Telephone Interface Module Installation Sheet

Description

The Dialog Telephone Module (DTIM), model number 60-879-95R, 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, and then uses the phone line to report security system events to the central monitoring station.

The DTIM provides added security by separating the telephone 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.

Note: The DTIM does not have a backup power supply. Therefore, the battery must be replaced within seven 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 (nonworking) 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, and then perform a sensor test.

- Mount the module within 100 ft (30 m) of the panel, but not closer than 10 ft. (3 m) 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 a system.
- When connecting the DTIM to the phone line, we recommend 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 ft. (1.5 m) of the DTIM.

Adding the DTIM to panel memory

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.

Antennas must be installed and the DTIM should be at least 10 ft. (3 m) from the panel for learning.

Note: The Allegro panel assigns the DTIM to Group 30 automatically and assigns preprogrammed sensor text (PHONE MODULE) for it.

To learn the DTIM into an Allegro panel:

1. Remove the DTIM cover and install the antennas. Align each antenna and push down until bare metal is not visible (see Figure 1 on page 2).

2. With the system disarmed, enter program mode at the Allegro panel by pressing 8 + CODE.
3. Press the down arrow twice and the # key twice. The Allegro panel display shows "ZONE XX- TRIP".
4. Locate the DTIM tamper switch and LED (see Figure 1 below).
5. Press and release the DTIM tamper switch as follows:

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

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

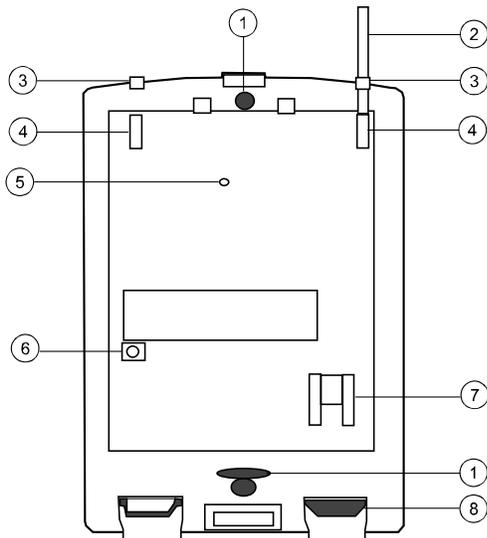
Immediately press and hold, then wait for the panel to beep once indicating it learned the DTIM. Release the tamper switch.

Timing is the key to success with this step. Do not wait more than one second between switch activations. If you wait too long, the LED will not flash and you must start over. Do not release the tamper switch before the LED is done flashing or you must start over.

6. Exit from program mode.

Refer to the Allegro documentation for more information on programming the DTIM with an Allegro panel.

Figure 1: DTIM



- | | |
|-------------------|---------------------|
| 1. Mounting hole | 5. LED |
| 2. Antenna | 6. Tamper switch |
| 3. Antenna guide | 7. Phone jack |
| 4. Antenna holder | 8. Knockout removed |

To learn the DTIM into a Simon (v4.1 or newer) panel:

1. Remove the DTIM cover and install the antennas. Align each antenna and push down until bare metal is not visible.
2. Press Add. The panel announces, "Select from Main Menu".
3. Press Sensor/Remote. The panel announces "Press button on sensor".
4. Locate the DTIM tamper switch and LED (see Figure 1 above).

5. Press and release the DTIM tamper switch as follows:

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

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

Immediately press and hold, then wait for the panel to beep once indicating it learned the DTIM. Release the tamper switch.

Timing is the key to success with this step. Do not wait more than one second between switch activations. If you wait too long, the LED will not flash and you must start over. Do not release the tamper switch before the LED is done flashing or you must start over.

6. Press Sensor/Remote repeatedly until you hear the name or item you want to use (for example, "Phone communication module"). Each name may be used more than once.
7. Press Done when you hear the desired name. The panel announces "Use numbered keys to enter sensor group".
8. Enter the two-digit sensor group (08 or 36). The panel announces the sensor group and the first available sensor number, then prompts you to press Done to accept.
9. Press Done. The panel confirms programming by announcing the sensor number, name, and group.

Refer to the Simon documentation for more information on programming the DTIM with a Simon panel.

Testing DTIM transmitting range

The following section describes the basic steps for testing transmitting range from the DTIM to the panel. For complete testing instructions, refer to the panel's documentation.

Note: Be sure to attach the cover on to the DTIM before testing wireless communications.

To test the DTIM transmitting range:

1. Place the DTIM in the desired location.
2. Put the panel into sensor test mode.

For Allegro panels, the panel should sound 7 to 8 beeps and display "SENSOR XX—PHONE MODULE". This indicates good reception from the DTIM to the panel.

For Simon 3 panels, the panel should sound one beep. This indicates good reception from the DTIM to the panel.

If you hear fewer than seven beeps for Allegro panels and no beeps for Simon panels, test the DTIM in different locations. Mounting locations should be limited to areas where the panel responds with the appropriate number of beeps. You may get less than the appropriate number of beeps if a neighboring Allegro or Simon panel is in a downloading session.

3. To retest transmitting range after relocating the DTIM (or after a neighboring system is finished downloading), you must exit and re-enter sensor test mode at the panel.
4. Exit from test mode after determining acceptable locations.

Mounting

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

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

To mount the DTIM:

1. With the cover off, place the DTIM at the desired location and mark the mounting holes (see Figure 1 on page 2).
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.

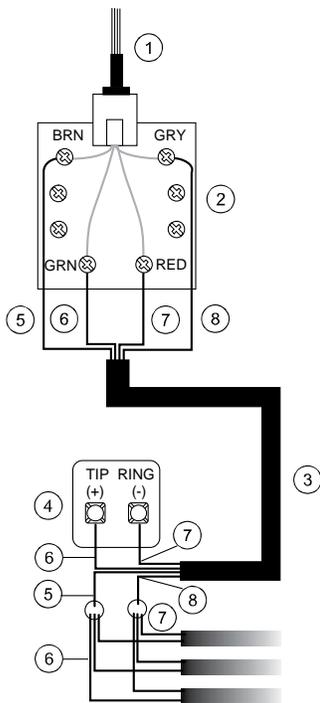
Note: For UL Listed systems, the RJ-31X jack must be mounted within 5 ft. (1.5 m) of the DTIM.

To wire a phone line to the module:

1. Run a four-conductor cable from the TELCO block to the RJ-31X (see Figure 2 on page 4).
2. Connect the four-conductor cable wires to the RJ-31X.
3. Disconnect the green and red premises phone jack wires from the TELCO block and splice them to the four-conductor cable black and white (or yellow) wires. Use weatherproof wire connectors for these splices.
4. Connect the four-conductor cable green wire to the TELCO block TIP (+) post and connect the red wire to the TELCO block RING (-) post.
5. Insert the 8-position phone cord plug into the RJ-31X jack.
6. Remove the right knockout on the DTIM plastic (See Figure 1 on page 2), feed the 6-position phone cord plug through it, and connect the plug into the DTIM phone jack.
7. Check all phones on the premises to make sure you hear a dial tone and can dial out. If a dial tone exists, but you cannot dial out, see "Constant dial tone" on page 4.

Note: Do not push excess phone cord up inside the DTIM housing and over the circuit board.

Figure 2: Wiring



- | | |
|-------------------------|----------------------|
| 1. Phone cord plug | 5. Black |
| 2. RJ-31X jack | 6. Green |
| 3. Four conductor cable | 7. Red |
| 4. TELCO block | 8. White (or yellow) |

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 documentation for complete details.

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

To perform a phone test:

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

Battery Ty-wrap and cover screw installation

This section is required for UL Listed installations only.

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

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

Troubleshooting

No dial tone

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

- Wait two 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 (refer to you panel documentation for phone test procedures).

Note: Disconnect the phone line from the DTIM before servicing.

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 documentation), try the following:

- Make sure 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 (remove and replace the DTIM cover to cause a transmission).
- Verify that the DTIM was added (learned) into panel memory correctly.
- Relocate the DTIM to a different location.

Trouble condition

- If the panel indicates a tamper condition for this device, check that the cover is securely in place and that the spring is on the tamper switch.
- If the panel indicates a low battery condition for this device, replace the DTIM battery and conduct a phone test.
- If the panel indicates a phone failure condition for this device, make sure the phone line is connected.

Module supervisory

If the panel indicates a DTIM supervisory condition, use an RF Sniffer (60-401) to verify that the DTIM transmits when the cover is removed and replaced. 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

Power source	3.6 V AA lithium battery
Wireless range	500 ft. (152 m) open-air (nominal)
Dimensions (W x H x D)	4.0 x 6.25 x 1.0 in. (10 x 16 x 2.5 cm)
Compatible panels	Allegro, Simon 3 version 4.1 and higher
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Humidity	90% RH, noncondensing
Storage environment	
Temperature	-30 to 140°F (-34 to 60°C)

Certification and compliance

FCC Part 15 information to the user

Changes or modifications not expressly approved by UTC Fire & Security 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.

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

IC: 867A-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. B4Z-AL01B46059

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. 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 shown separately 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 is

use. To do so, alarm dialing equipment must be connected to a properly installed RJ-31X jack that is electrically in series and ahead of all other equipment attached to the same telephone line. If you have any questions concerning these instructions, consult your local telephone company or a qualified installer about installing an RJ-31X jack and alarm dialing equipment for you.

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 services provided by the telephone company. Connection to party lines is subject to state tariffs.

Declaration of Conformity (DoC)

UTC Fire & Security declares that the model number 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 expended 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 connected to a telephone loop 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: 0.3B (AC)

The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met. IC: 867A 12000

Contact information

www.utcfireandsecurity.com or www.interlogix.com

For customer support, see www.interlogix.com/customer-support

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