



SIGNALING DEVICE ALSO SUITABLE FOR USE
AS A BURGLAR ALARM SYSTEM ACCESSORY

AES 7067 IntelliTap-II Digital Dialer Interface

A Supplemental Alarm Reporting Device

① PHYSICAL INSTALLATION

• The 7067 IntelliTap-II is mounted inside the AES Subscriber Unit.

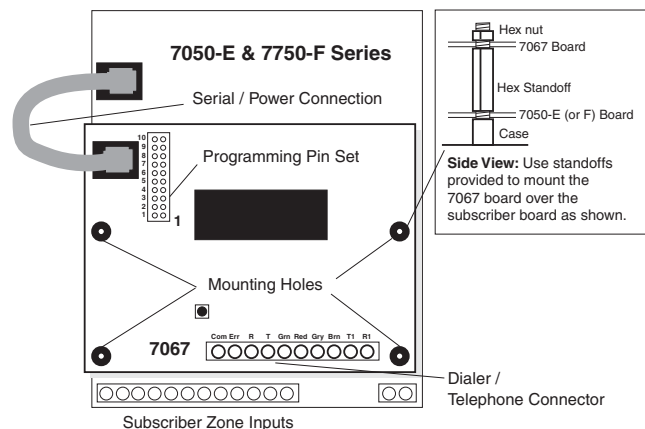


Figure 1: Installation into 7050-E and F-Series

PHYSICAL INSTALLATION of 7067 in an AES Subscriber Unit

The Tap is installed inside the subscriber unit.

For 7050-E or 7750-F Subscriber Unit: See Figure 1

- Remove four (4) lower nuts holding main board inside box. Save the nuts.
- Install 4 standoffs (provided) in place of nuts, securing the subscriber unit circuit board and providing a mount for the "TAP". Do not overtighten.
- Mount TAP board on standoffs. Secure the board with the 4 nuts removed earlier.
- Earth ground should be connected to lower right terminal.
- Install 6 wire modular cord between Tap and subscriber main board.

For 7450 Subscriber Unit: The IntelliTap board is mounted to the inside of the cover with double-back adhesive tape. Install the 6 wire modular cord between the Tap and the subscriber board.

For 7450-XL Subscriber Unit: The IntelliTap board is mounted on standoffs to the predrilled holes on the plate inside the case. Install the 6-wire modular cord between the Tap and the subscriber board.

NOTE: The 7067 IntelliTap-II must be mounted inside subscriber enclosure. Also, a separate output of the alarm panel must be used to activate one zone of the AES subscriber unit on alarm.

SPECIFICATIONS

I/O - Connections:

- RS-232 data link to 7750-F, 7050-E, or 7450-XL
- Incoming Telephone Line
- Phone Output from Alarm Panel • House Phone

Indicators: Green LED, ON when phone line relay engages
Red LED - Status, Blink=Normal; Steady=Error

Off when receiving call; blinks during data transfer

Formats Supported • 3+1, 4+1, 4+2 • Contact ID / Point ID
Controls: • 1 Reset Switch • Jumper Pins for Programming
Size: 3.9x5x1.2" (9.8x12.7x3cm)

Mounting: Inside subscriber unit case;

Power Req: 12V, primary and backup power provided by AES Subscriber Unit

Current: Typical: 50ma (no load on ERR output), Maximum: 320ma (with max load on ERR output)



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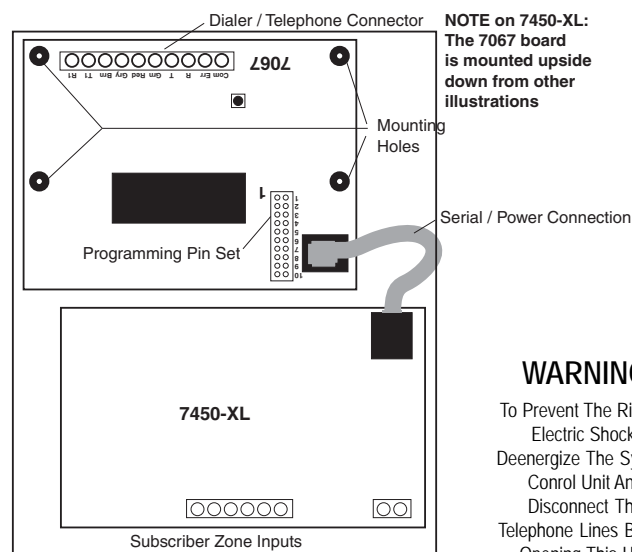


Figure 2: Installation into 7450-XL

HOW IT WORKS

The AES Model 7067 IntelliTAP-II is a supplemental reporting interface for an AES Subscriber Unit. The Tap II controls the incoming telephone line, and provides phone line simulation for maximum alarm panel compatibility. It retrieves panel data in Contact ID or 4+2 formats from the built-in communicator of an alarm panel. The TAP acts as a digital receiver and gives the proper responses to the alarm panel. The alarm panel only has to tone dial a selected phone number for the TAP to respond and receive the event. The TAP forwards the dialer data to the central station through an AES•IntelliNet Radio Data Network.

More Features

- Use with or without a phone line attached.
- **Telephone Line Cut Detection:** The TAP can monitor for telephone line cuts. In the event of a line cut, the Tap will simulate line voltage and dial tone so that the panel can convey alarm data to the AES subscriber unit in the event of an alarm.
- **Alternate Reporting Trigger -** The Tap also has an output to activate an alternate communication device if the radio subscriber unit is off the network.

COMPATIBILITY

Alarm Panel Compatibility: The TAP works with many alarm panel's digital communicator or dialer output that is programmable for either 3+1, 4+1, 4+2, Contact ID or Point ID formats, with tone dialing capability. In a line cut situation, the Subscriber ID number is used. In addition to the Tap, at least one alarm panel output must be connected to a zone of the AES Subscriber Unit.

Radio Subscriber Unit Compatibility: The TAP is an accessory for the AES model 7050-E, 7750-F, 7450 Radio Subscriber Units with Version ESB/SUB 1.71 or later.

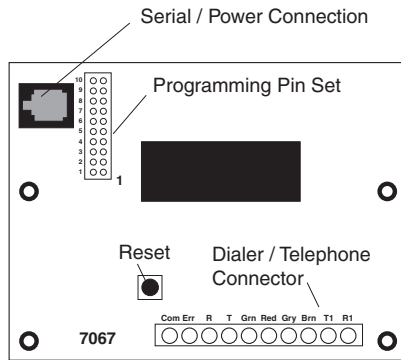
Central Receiver Compatibility: 7000/2, 7000/1, 7099, 7701/Net77, 7703, and Keltron RF7300 receivers will accept TAP packets. Some earlier versions may require an upgrade. Refer to the section on central stations at the end of this manual. Note that the receiver's automation output sends dialer information from the alarm panel, including the alarm panel ID number. In a line cut the Subscriber ID number is used.

Note: The automation output will send Contact ID information from the alarm panel, including the panel ID number. The AES Subscriber Unit ID is sent in a line cut situation.

WARNING: Test this system periodically for proper operation. AES assumes no responsibility for this equipment's failure to operate. AES's sole responsibility is to repair or replace any AES device found to be defective during the warranty period.



**Figure 3:
Component
Locations**



DIALER FORMAT SELECTION -

See Figure 3 and 4

IMPORTANT NOTE: The central receiver offers Radionics 6500 and Ademco 685 outputs for automation. If you wish to use the Contact ID format for the AES•IntelliTAP, it is strongly recommended that you use the Ademco 685 format for the alarm automation output from your AES receiver.

A single jumper **MUST** be installed on position 1, 2 OR 3

- Contact ID (CID) format = Jumper on 1 only
- 3+1, 4+1, 4+2 format with 1400 Hz answer tone = Jumper on 2 only
- 3+1, 4+1, 4+2 format with 2300 Hz answer tone = Jumper on 3 only

Note: For 3+1, 4+1, 4+2, program your alarm panel for a "single line" data format, with data range 0-9, B-F,

IMPORTANT: Alarm Panel MUST be programmed for TONE dialing only.

Program the alarm panel to dial with matching parameters.

How it Works: The TAP tries other answer tones if the selected format does not produce a response from the alarm panel:

- If 1400 Hz is selected, then 2300 Hz will also be attempted.
- If 2300 Hz is selected, then 1400 Hz will also be attempted.
- If Contact ID (CID) is selected, CID answer tones are tried 4 times, then both 2300 Hz and 1400 Hz are attempted.

NOTE: The Tap will accept signals from the alarm panel **ONLY** if the **Subscriber Unit is enrolled in the network, and has available buffer to accept the signal from the Tap.**

PROGRAM PHONE NUMBER INTO THE TAP AND ALARM PANEL -

Refer to Figures 3 + 4

Select Phone Number and Program Alarm Panel

You must select which phone number the TAP-II is to respond to. Select either (3-5-*) or (5-5-5).

Program "3-5-*" telephone number - Factory default setting, preferred setup) Install jumper on position 5. Program the alarm panel to dial 3-5-*. (Refer to alarm panel manual for how to enter a * "star" character).

Program "5-5-5" telephone number - Remove jumper on position 5. Program the alarm panel dialer phone number with the digits 5-5-5. During a reported event, the phone line is quiet after the 5-5-5 is dialed as it waits for more digits. During this period, the TAP provides an answer tone, signalling to the alarm panel to transmit its data, and then kisses it off. The control panel then hangs up the line. Test the setup - see next page.

Note: Program the alarm panel for Tone/DTMF dialing. Pulse dialing will NOT work.

**Figure 4:
Programming
Jumpers**

	Position with jumper in place
	Position with no jumper
#	Function
10	not used
9	not used
8	Jumper for No Phone Line option†
7	Line Cut Monitor: 1 minute delay*†
6	Line Cut Monitor: 2 minute delay*†
5	Phone Number: • Jumper = 3-5-* (Factory Default) • No Jumper = 5-5-5
4	not used
3	3+1,4+1,4+2 Format, 2300 Hz handshake
2	3+1,4+1,4+2 Format, 1400 Hz handshake
1	Contact ID Format first, then 4+2 format

* For 3 minute delay - jumpers on 6 and 7
† If there is a jumper on 8, there can be NO jumpers on 6 or 7

LINE CUT MONITOR PROGRAMMING

Refer to Figures 3 + 4

The TAP can detect and report a telephone line cut. The TAP determines that the line is cut when the voltage across terminals 1 and 2 drops below approximately 2.5 volts for a programmable period of time. The line cut function is enabled and its parameters are set using jumpers 6 and 7 (see figures 1+2).

- **Line cut monitor:**
 - with 1 minute delay = Jumper on 7 only
 - with 2 minute delay = Jumper on 6 only
 - with 3 minute delay = Jumpers on 6 AND 7 only
- **No Phone Line Used, and No Line Cut Monitor = Jumper on 8 only**
- **Push Reset Switch on 7067 after setting jumpers.**
- **The line cut function can also be used to supervise the line between the alarm panel and the subscriber unit. See page x in this manual for details.**

Figure 5:
Typical Wiring Diagram with Phone Line Attached

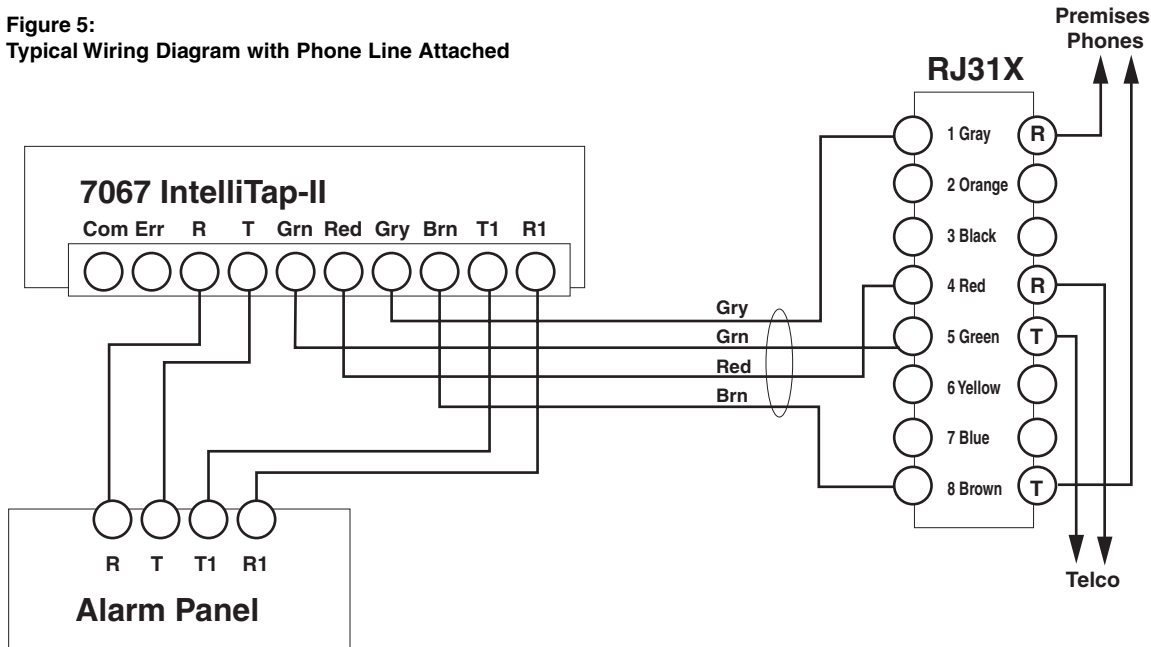
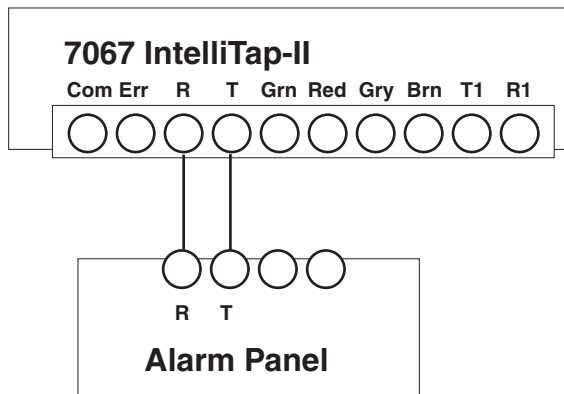


Figure 6:
Typical Wiring Diagram with NO Phone Line Attached



IMPORTANT: BEFORE TESTING, notify the central station that a test is in progress for this account.

IMPORTANT!

CONNECT A ZONE ON THE SUBSCRIBER UNIT

At least one output of the alarm panel must be connected to the AES Subscriber Unit when using the TAP. The Tap is a supplemental reporting device.

The activated zone serves as a general alarm. The alarm monitoring screen should comment that additional information should follow and what action to take if it does not. If the alarm panel has enough outputs you can send general alarms for more specific clarification, such as General Fire, Burglary, Panic, etc.

The backup zone activation is immediate, and will likely activate faster than the TAP, which must wait for the alarm panel to go through the dialing process.

Note that the ID of the AES Subscriber Unit will be sent with the zone input signal; the ID of the alarm panel will be sent with the TAP signal.

"Err" Error / Fault Output -

Open collector output on Output Block position marked "Com Err".

If the subscriber is "off" the network, the subscriber will not accept data from the TAP. The TAP detects the problem. It will not accept messages from the alarm panel dialer attempts. During this condition, the TAP activates the "Err" output to annunciate the problem to another device.

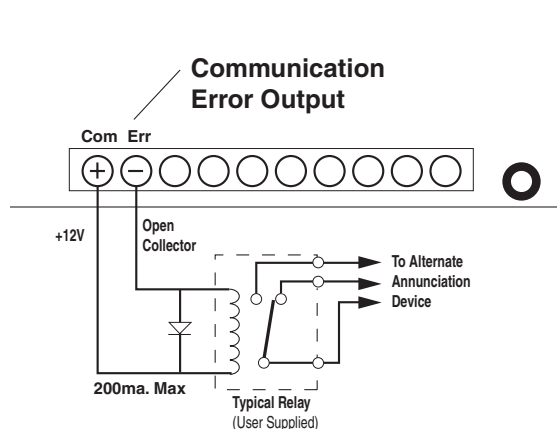
The "Err" Output is Activated when:

- After 3 unsuccessful attempt to communicate with the AES Radio Subscriber Unit.
- Memory failure on the TAP module.
- If the subscriber is off the network, or the subscriber buffer is full

The "Err" Output is De-Activated when:

- The output deactivates on the 4th try.
- Reset of TAP module
- A new dialer call from the alarm panel.
- The subscriber returns to the network, or the subscriber buffer is cleared.

Figure 7:
Typical Wiring Diagram for Comm Error Output



Programming Guide.**Jumper position 4:**

This position is not used and is reserved for future use.

Jumper position 5:

This selects the telephone number the IntelliTap II is looking for to initiate an answer and begin communication with the alarm panel. The IntelliTap will answer any phone number with 3 or more digits during a line cut condition.

The selected number with a jumper in 5 is " 3 - 5 - * "

The selected number with no jumper in 5 is "5 - 5 - 5"

No jumpers in 6, 7 or 8:

Phone simulator never comes on. An attached telephone line is disconnected during communication between panel and Tap, also applying voltage to the panel's phone line connection and disconnecting phone interference. Tap does not send line cut message. This acts like original IntelliTap with a built in phone line disconnect relay. It disconnects a connected phone line during communication. Panel must dial the selected Tap number for Tap to answer. IntelliTap II will not respond to just any phone number if the phone line is cut. The panel must be able to blind dial the selected number, hear the answer tone and generate the message.

Note 1: This is not usable for DSC, Caddx, new Ademco or other panels that require a phone line voltage or dial tone to communicate.

Note 2: This is OK for a panel that will blind-dial without voltage to Ring & Tip. Examples of this type of panel are DMP XRSuper6 and Napco GEM-P9600.

Jumper in 7, No jumpers in 6, or 8:

A jumper in 7 selects one-minute phone line cut detection. This will introduce the built in phone line simulator when the IntelliTap II detects a voltage below 2.5 volts for 1 minute on terminals labeled Grn and Red of J3. A line cut message is generated. Restore is immediate and will reset the time to 1 minute as well as generate a restore line message. During a phone line cut the Tap will answer any phone number with 3 or more digits dialed by the panel. During phone line not cut the Tap will only answer the selected number as set by jumper 5.

Jumper in 8, No jumpers in 6 or 7:

A jumper in 8 selects no phone line is to be connected. This mode forces a line cut condition, but will not generate line cut/restore messages. This will always introduce the built in phone line simulator. Never connect terminals labeled Grn and Red of J3 to a telephone line. During this forced line cut, the Tap will answer any phone number with 3 or more digits dialed by the panel.

Jumper in 8, any jumper in 6 and or 7: (Illegal setting)

Illegal setting **DO NOT USE** especially with a phone line connection. Jumpers in 6 and 7 select phone line cut times and a jumper in 8 selects no phone line. This produces a conflict. The IntelliTap II is not expecting a phone line connection. It causes erratic operation of relays and phone simulator. Line cut and restores are sent erratically.

AES LIMITED ONE YEAR OWNER WARRANTY

We warrant AES products to be free from defects in material and workmanship for one (1) full year from date of purchase.

At no cost to the original purchaser for parts or labor, AES will repair or replace any part or parts which are judged defective under the terms of this Warranty.

Defective products must be returned to AES directly, provided they are properly packed, postage prepaid. Or exchange may be made through any authorized direct factory representative for any products which are judged defective under the terms of this Warranty.

This Warranty is in lieu of all other Warranties expressed or implied and of all other obligations or liabilities on the part of AES. This Warranty does not apply to any product or any part thereof which has been repaired or altered outside our factory in any way to affect its stability or reliability, or which has been subjected to misuse, negligence or accident, or which has had the serial number effaced or removed. Neither shall this Warranty apply to any product which has not been installed, applied or used in strict accordance with our instructions.

AES Corporation cannot be aware of, or responsible, for the differing values of property to be protected by its alarm reporting systems. The above Warranty is given in lieu of all other Warranties, either expressed or implied, including a Warranty of fitness for a particular purpose, and manufacturer shall not be liable for any defect, incidental or consequential, loss or damage arising out of the failure of the product to operate. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

SERVICE PROCEDURE: Contact AES Corp. at 978-535-7310 (fax 978-535-7313) to receive a Return Authorization Number and instructions for shipping the unit to the AES service center.

Jumper in 6, No jumpers in 7, or 8:

A jumper in 6 selects two-minute phone line cut detection. This will introduce the built in phone line simulator when the IntelliTap II detects a voltage below 2.5 volts for 2 minutes on terminals labeled Grn and Red of J3. A line cut message is generated. Restore is immediate and will reset the time to 2 minutes as well as generate a restore line message. During a phone line cut the Tap will answer any phone number with 3 or more digits dialed by the panel. During phone line not cut the Tap will only answer the selected number as set by jumper 5.

Jumpers in 6 and 7, No jumpers in 8:

A jumper in 6 and 7 selects three-minute phone line cut detection. This will introduce the built in phone line simulator when the IntelliTap II detects a voltage below 2.5 volts for 3 minutes on terminals labeled Grn and Red of J3. A line cut message is generated. Restore is immediate and will reset the time to 3

Jumper position 9:

This position is for debug mode. This is only for use by AES. A jumper in this position may cause the IntelliTap to not function,

Jumper position 10: (not labeled on the board)

This position is not used and is reserved for future use.

UL / cUL Compliance Notes

- Only Contact ID format has been evaluated by UL.
- The 7067 IntelliTAP unit has been investigated by UL for Supplemental Use Only.
- The 7067 IntelliTAP unit must be mounted inside the AES Subscriber Unit.

The 7067 IntelliTAP unit has been evaluated to the following Standards:

USL:

UL 609 (10th ed) - Local Alarm Units and Systems
 UL 365 (4th ed) - Police Station Connected Burglar Alarm Units and Systems
 UL 1610 (2nd ed) - Central Station Burglar Alarm Units
 UL 864 (8th ed) - control Units for Fire-Protective Signaling Systems

CNL:

CAN/ULC-S527-M87 (1st ed) - Standard for Control Units for Fire Alarm Systems (amend 1995)
 ULC Subject C1023-1974 (1st ed) - Preliminary Standard for Household Burglar Alarm System Units
 CAN/ULC-S545-M89 (1st ed) - Standard for Residential Fire Warning System Control Units (amended 1995)
 CAN/ULC-S303-M91 (1st ed) - Standard for Local Burglar Alarm Units and Systems
 CAN/ULC-S304-M88 (1st ed) - Standard for Central and Monitoring Station Burglar Alarm Units
 ORD-C1076-1986 (5th ed) - Proprietary Burglar Alarm Units and Systems

Electrical Rating: 12VDC nominal

Current: **Typical: 50ma** (no load on ERR output)
 Maximum: 320ma (with max load on ERR output)

FCC IDENTIFICATION AES IntelliTAP-II Model 7067

This unit complies with FCC Part 68 as of date of manufacture. FCC# 51WUSA-32157-SP-N • Ringer Equivalence: 0.5B Jack: Barrier Block

• FCC COMPLIANCE

NOTE: 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 harmful 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 the receiver; Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; Consult the dealer or an experienced radio/TV technician for help. CAUTION: Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

• CANADIAN COMPLIANCE

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of Industry Canada. Cet appareil numérique respecte les limites de bruits radio électriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictés par l'Industrie Canada.