

MD12 Modem

INSTALLATION INSTRUCTIONS v1.1

Introduction

The DSC modem is a communication device designed to enable computer terminals—through use of an RS-232 port—to communicate via telephone lines with the DSC line of downloadable security systems. The modem is compatible with the DSC proprietary formats (110 Baud, 300 Baud, and 625 Baud).

Status Lights

The LED indicators on the top of the modem indicate the following:

Power (ON)	Red
Transmitted Data to control panel (TX)	Green
Received Data from control panel (RX)	Red

Connecting to the Computer

Do not apply power until all connections are made and verified. An improper connection may damage your computer or modem.

NOTE: For Finland, Norway and Sweden, the computer used must be an Approved, Class II (ungrounded, powered via a CEE 7/16 AC outlet); for other countries, the computer must be connected to a AC outlet with a protective earth ground connection. The outlet of the MD12 transfer-modem must be positioned near the equipment and be easily accessible.

The MD12 provides computer interface via a standard DB25 female connector. Use a DB25 serial cable to connect the MD12 to the computer's serial port.

Connecting to a Telephone Line

On the modem, there are two 4-pin connections. The 4-pin connector marked 'Phone' is for an optional telephone. The connector marked 'Line' is for the incoming telephone line from the wall connector. When the modem is in communication, the optional telephone connection will be automatically disconnected for the duration of the communication.

Jumper Settings

JP1 selects the pulse dialling option: ON = North America, OFF = Europe

Parts

- One DSC Modem
- One 230 Vac/50Hz to 12 Vac-1A Power Supply (Europe) or
- One 120 Vac/60Hz to 12 Vac-1A Power Supply (North America)
- One 4-pin telephone cable

Specifications

Baud Rate	110, 300 and 625 bps
Parity	None
Power Requirements	8 data bits, no parity, 1 stop bit
Dialling	12 Vac, 150mA
Operating Temperature	Touch Tone Dialling (DTMF) or Pulse Dialling
	0 - 40°C, 32 - 110°F

NOTE: The MD12 Modem is intended to be installed and operated by service persons only or equivalent (i.e. persons having appropriate technical training and the experience necessary to be aware of hazards to which that person may be exposed in performing a task and of measures to minimize the risks to that person or other persons). This equipment is intended for temporary connection to a telecommunication network during the course of installation, maintenance or repair of DSC systems that are connected to a telecommunication network. Never install the equipment and/or telephone wiring during a lightning storm! Make sure the cables are laid in such a way that accidents cannot occur; connected cables must not be subject to excessive mechanical strain. This manual shall be used with the Installation Manual of the alarm control panel. All the instructions specified within that manual must be observed.

Limited Warranty

Digital Security Controls warrants that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment. The foregoing warranty shall apply only to the original buyer, and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Digital Security Controls. Digital Security Controls neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product. In no event shall Digital Security Controls be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation of this product. Important Information: Changes or modifications not expressly approved by Digital Security Controls could void the user's authority to operate this equipment.

FCC Compliance Statement

CAT 1/10: Changes or modifications not expressly approved by Digital Security Controls could void your authority to use this equipment. 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. 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 the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/television technician for help.
- The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 044-000-003-4-4.

IMPORTANT INFORMATION

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by the ACTA. On the side of this equipment is a label that contains, among other information, a product identifier in the format USAAAL01TXXXX. If requested, this number must be provided to the Telephone Company.

Product Identifier: USF53CAN-308T-DT/E USCOC Jack RA-31X

Telephone Connection Requirements

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 adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

Ringer Equivalence Number (REN)

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed 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 21, 2001, the REN for this product is a part of the product identifier that has the format USAAAL01TXXXX. The digits represented by 00 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.

Incidence of Harm

If this equipment MD12 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC, if you believe it is necessary.

Changes in Telephone Company Equipment or Facilities

The telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the Telephone Company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

Equipment Maintenance Facility

If trouble is experienced with this equipment MD12, for repair or warranty information, please contact the facility indicated below. If the equipment is causing harm to the telephone network, the Telephone Company may request that you disconnect the equipment until the problem is solved. This equipment is of a type that is not intended to be repaired by the end user.

DSC, c/o APL, Logansport 757 Douglas Hill Rd., Lithia Springs, GA 30122

Additional Information

Connect to pay line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment MD12 does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

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Usage

The MD12 is compatible with DLS-1 V6.2 and higher, DLS-2 V1.30, and all other subsequent DSC DLS Windows downloading software packages. Refer to the DLS Manual/Help File for modem communication instructions and computer configuration requirements.

Special Dialling Commands

The dialling modifier commands shown below may be programmed into the phone number to set special dialling functions.

Dialling Modifier	Description of Function	Example
.	Pause	9 5551234
W	Wait for Additional Dial Tone	*70W5551234

User/Installation Notes for New Zealand

- PTC200 General Warning:** The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.
- PTC200 8.1.3 (2) 8.1.4 (b) & 8.2.1 Automatic Call Setup:** Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specifications:
 - There shall be no more than 10 call attempts to the same number within any 30 minute period for any single manual call initiation, and
 - The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next call attempt,
 - Automatic calls to different numbers are spaced such that there is not less than 5 seconds between the end of one call attempt and the beginning of another.
- PTC200 8.1.7 (b) User Instructions (automatic call set-up):** This equipment shall not be set up to make automatic calls to Telecom's 111 Emergency Service.
- PTC200 7.5.1 General operation (ringer sensitivity and loading):** This device only responds to Distinctive Alert cadence(s) DA1 and DA2.
- Installation**
 - The register S7 (Wait for carrier after answer) default value shall be set to 90 seconds.
 - For connections to the telephone sockets use only approved telephone cables that terminate with a 'BT' type of plug (adapter from RJ11 to BS6312 is required for MD12).

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