



MD12 Modem



INSTALLATION INSTRUCTIONS

Software Version 1.1

Introduction

The DSC modem is a communication device designed to enable computer terminals—through use of an RS232 port—to communicate via telephone lines with the DSC line of downloadable security systems.

The modem is compatible with the DSC proprietary (110 baud, 300 baud, and 625 baud) formats.

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

Connection to Computer

DO NOT apply power until all connections have been made and verified. Improper connection may damage your computer or modem.

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

Connection to 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 dialing option:
ON = North American, OFF = European.

Power Supply Requirements

12 V_{AC}, 150mA

Parts

- 1 DSC modem
- 1 12 V_{AC} 600mA power supply
- 1 4-pin telephone cable

Specifications

- Baud Rate:** 110, 300 and 625 bps
- Parity:** 8 data bits, no parity, 1 stop bit
- Dialing:** Touch Tone dialing (DTMF) or Pulse dialing
- Power Requirements:** 12 V_{AC}, 150mA
- Operating Temperature:** 0 - 40 °C, 32 - 110 °F

Usage

Note: The MD12 can only be used with DLS-1 v6.2 and later, and is properly supported with DLS-2 v1.30. Please refer to the DLS manual for modem communication instructions and computer configuration requirements.

Special Dialing Commands

The following dialing modifier commands may be programmed into the phone number to send the modem special dialing functions.

Dialing Modifier	Description of Function	Example
,	Pause	9,5551234
R	Switch to Reverse Mode	5551234R
W	Wait for additional Dial Tone ..	*70W5551234
!	Flash Hook	!5551234

Limited Warranty

Digital Security Controls Ltd. 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 Ltd. 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 Ltd. 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 is and shall be in lieu of any and all other warranties, whether expressed or

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In no event shall Digital Security Controls Ltd. 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 or failure of this product.

Important Information: Changes or modifications not expressly approved by Digital Security Controls Ltd. could void the user's authority to operate this equipment.

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Digital Security Controls Ltd. 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. 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:

- Re-orient the receiving antenna.
- Increase the separation between the equipment and 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/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 # 004-000-00345-4.

IMPORTANT INFORMATION

This equipment complies with Part 68 of the FCC Rules. On the side of this equipment is a label that contains, among other information, the FCC registration number of this equipment.

NOTIFICATION TO TELEPHONE COMPANY Upon request, the customer shall notify the telephone company of the particular line to which the connection will be made, and provide the FCC registration number and the ringer equivalence of the protective circuit.

MD12 FCC Registration Number: F53CAN-30487-DT-E
Ringer Equivalence Number: 0.5B

TELEPHONE CONNECTION REQUIREMENTS Except for the telephone company provided ringers, all connections to the telephone network shall be made through standard plugs and telephone company provided jacks, or equivalent, in such a manner as to allow for easy, immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that, if the plug connected thereto is

withdrawn, no interference to the operation of the equipment at the customer's premises which remains connected to the telephone network shall occur by reason of such withdrawal.

INCIDENCE OF HARM Should terminal equipment or protective circuitry cause harm to the telephone network, the telephone company shall, where practicable, notify the customer that temporary disconnection of service may be required; however, where prior notice is not practicable, the telephone company may temporarily discontinue service if such action is deemed reasonable in the circumstances. In the case of such temporary discontinuance, the telephone company shall promptly notify the customer and will be given the opportunity to correct the situation.

ADDITIONAL TELEPHONE COMPANY INFORMATION The security control panel must be properly connected to the telephone line with a USOC RJ-31X telephone jack.

The FCC prohibits customer-provided terminal equipment be connected to party lines or to be used in conjunction with coin telephone service. Inter-connect rules may vary from state to state.

CHANGES IN TELEPHONE COMPANY EQUIPMENT OR FACILITIES The telephone company may make changes in its communications facilities, equipment, operations or procedures, where such actions are reasonably required and proper in its business. Should any such changes render the customer's terminal equipment incompatible with the telephone company facilities the customer shall be given adequate notice to the effect modifications to maintain uninterrupted service.

RINGER EQUIVALENCE NUMBER (REN) The REN is useful to determine the quantity of devices that you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices that you may connect to your line, you may want to contact your local telephone company.

EQUIPMENT MAINTENANCE FACILITY If you experience trouble with this telephone equipment, please contact the facility indicated below for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

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