



# DLM-4 Downlook Still-Frame Video Transmission Module

Software Version 1.1

INSTALLATION INSTRUCTIONS

## Specifications

### Features

- 4 image storage
- Programmable image capture speed
- Camera supervision
- Rotary feature
- Test picture

### Power

- 10.5 - 16.0Vdc; 300mA @ 12Vdc

### Video

- 1V-P-P NTSC- or PAL-compatible camera or video source
- Transmits 1 frame in approximately 10 to 12 seconds

## Mounting the Panel

If the DLM-4 is to be used with a security system, install and test the security system according to the manufacturer's instructions. For convenience, install the DLM-4 module close to the security system's control panel.

Remove the printed circuit board and mounting hardware from the cardboard packaging. It is recommended that the DLM-4 be mounted in its own cabinet (DLC1). Before attaching the cabinet to the wall, press the four nylon mounting studs into the raised mounting holes from the back of the cabinet.

Mount the cabinet securely to the wall. It is recommended that appropriate wall anchors be used when securing the panel to drywall, plaster, concrete, brick or other similar surfaces.

Press the DLM-4 onto the four mounting studs.

## Power Requirements

The DLM-4 can be used with a variety of DSC and Sur-Gard alarm control panels or digital communicators. Refer to the individual control panel for power connections.

## Terminal Connections

Refer to the individual control panel or communicator for terminal connections.

## Video Connection

The DLM-4 provides for one direct video connection from an NTSC or PAL camera or video source: a single BNC post provides for this.

The DLM-4 may be extended to additional cameras using the DLM-7 module; connection of the DLM-7 to the DLM-4 is by a 10 pin ribbon cable. The single video input on the DLM-4 is not used when the DLM-7 is connected.

All cameras should be installed prior to connection to the DLM-4/DLM-7. Correct installation, alignment and lens will provide for maximum results on the Downlook system.

## Dip Switch Settings

The DLM-4 has 8 dip switches which will allow for the following options.

1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

- Not used
- on - P16 function
- on - - Test picture
- on - - - Camera trouble output
- on - - - - Rotary feature (1 image capture per camera, up to 4 cameras)
- on - - - - - 2 second delay between images
- on - - - - - 1 second delay between images
- on- - - - - 1/2 second delay between images

## Image Capture Speed (switch 1-2-3)

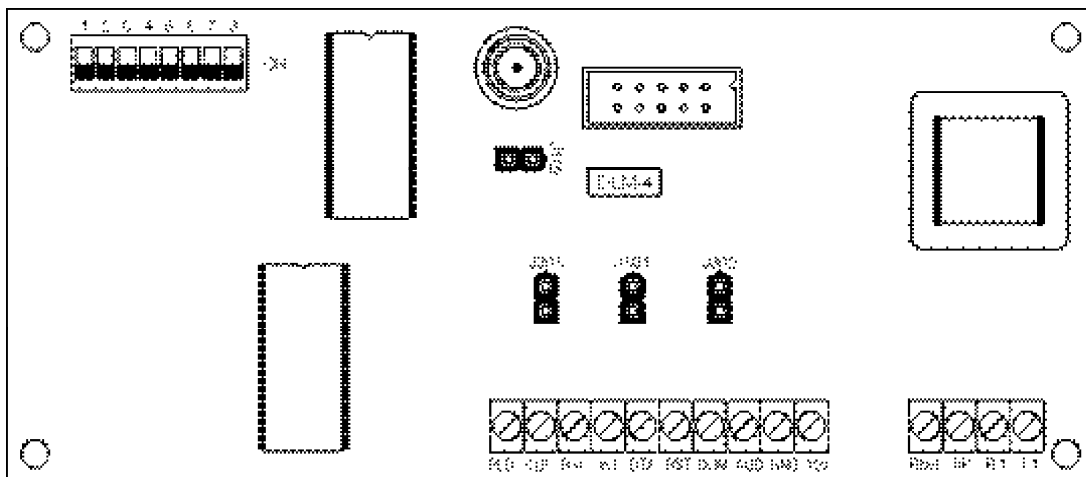
As the DLM-4 will capture and store up to four images dip switches are provided for the selection of when these images will be captured. Dip switch 1-2-3 provide for a time space to be placed between each image capture.

The time for the first image to be captured is set in the control panel or communicator (at the time of the alarm condition or up to 9.9 sec after). The capture time of the second, third and fourth image is set on the DLM-4.

Switch 1 will provide for a 1/2 sec space, switch 2 for 1 sec and switch 3 for 2 seconds. A combination of all 3 switches will provide for up to 3 1/2 sec space.

The selected time will apply to the time space between image 1 to 2, 2 to 3, 3 to 4.

**Do not remove Jumpers - J102, J303, J301, J302.**



### Rotary Feature (switch 4)

The rotary feature provides for the DLM-4 to capture 4 images from up to 4 cameras using the DLM-7 expansion module. Switch 4 when turned on instructs the DLM-4 to capture one image from camera 1, move to camera 2 for the second image and camera 3 and 4 for the next two images.

If only two cameras are connected to the DLM-7 the capture will be camera 1, camera 2, camera 1, camera 2. If three cameras 1, 2, 3, 1 for the four images. A maximum of 4 pictures should be programmed in the control panel if the rotary feature is enabled.

**NOTE: This feature will be overridden by panels using the PLD connection (PC1664, PC16LC, DSC8400).**

### Camera Trouble Output (switch 5)

The DLM-4 provides for camera supervision of the single video input on the DLM-4 and the extended inputs on the DLM-7. Once the camera(s) are connected and power is applied, removal of a camera will result in the I/O terminal on the connector strip switching to ground. The switched output can be connected to the alarm control panel for communication of video loss to the Central Station.

### Test Picture (switch 6)

The test picture option can be used when the transmission equipment is in place but the camera(s) have not been installed and it is important to verify communication to the station.

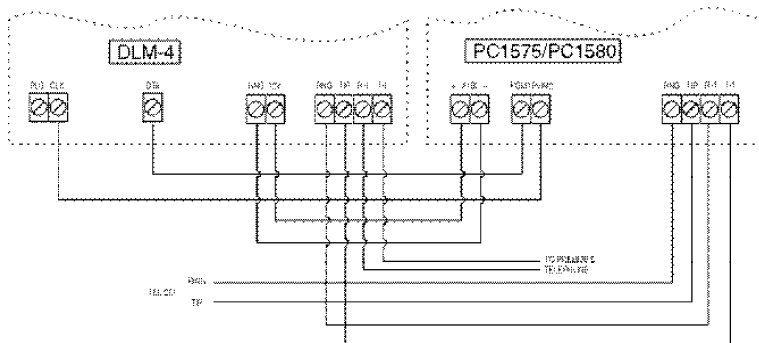
Switch 3 when turned on will provide for the transmission of the test screen with the alarm condition.

### P16 Function (switch 7)

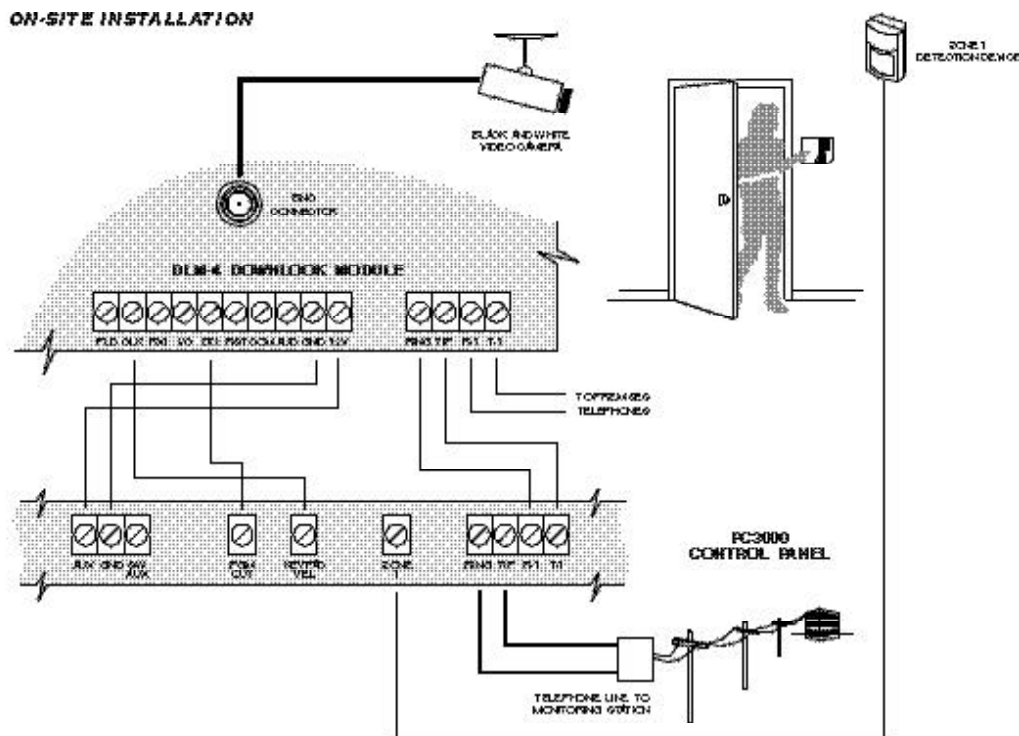
Switch 7 must be turned on when used with a P16 control panel and programmed for zone to camera operation. Do not turn on if using the rotary feature.

### Hook-up Diagrams

- DLM-4 with PC1575



- DLM-4 with PC3000





## 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 defect 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 implied and of all other obligations or liabilities on the part of Digital Security Controls Ltd. This warranty contains the entire warranty. Digital Security Controls Ltd. 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 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.

**WARNING:** Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

### FCC Compliance

**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.

**FCC Registration Number:** F53CAN-32103-DM-N

**Ringer Equivalence Number:** 0.4B

**USOC Jack:** RJ-11C

**Facility Interface Code:** N/A

**Service Order Code:** N/A

**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. Interconnect rules may vary from state to state.

**Changes in Telephone Company Equipment of 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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