down look

Automated Still-Frame Video Transmission System

VIDEO

Integration - Verification - Confirmation

from

DSC Security Products *and* **SUR-GARD**

Introduction
to
Downlook Video System

The Downlook system is the first fully integrated Video and Alarm transmission system to utilize standard alarm control Panels and Central Station Receiver.

The Downlook system provides for the transmission of video images over standard telephone lines or a cellular connection.

Communication of the video images takes place with the communication of the event information, video images can be sent with: alarm conditions - holdup - opening and closings - equipment failure, etc.

The Downlook Video Transmission Module can be connected directly to one of the following DSC, Partner or Sur-Gard alarm panels or Communicator.

Power 832	Partner P832	DSC 1575	DSC 1580	PC 3000	DSC 8400
SG - P16	SG - P1664	Partner P16	Partner P1664	SG - DC1664	Partner P600

The Downlook Video Receiving Module connects directly to the Sur-Gard MLR2* Digital Central Station Receiver. One Video receiver module works with one Digital receiver line.

Communication is over standard phone lines and not expensive or prohibitive Data lines.

The Downlook video system can be easily added to an existing location by simply changing the alarm panel or adding an interface communicator. Existing video cameras can be utilized as Downlook does not require special cameras. Simply taking a video output from a looping switcher or monitor will provide the required video.

Video Compression and Transmission is produced by the DLM-4/DLM-4L module, Video receiving is provided by the MLRV-A Module with PC storage, printing and retrieval via the Downlook Grabber Board and Downlook PSA software.

Downlook is the leading Video Integration - Verification - Confirmation system, designed specifically for the security industry and utilizing standard security equipment for the capture, program, communication and display of video.

Visual Verification is the most accurate method of determining if the information communicated to a Central Station is correct. Providing Video Verification to a Central Station can result in the maximum response by the emergency services and can help in the reduction of false alarms.
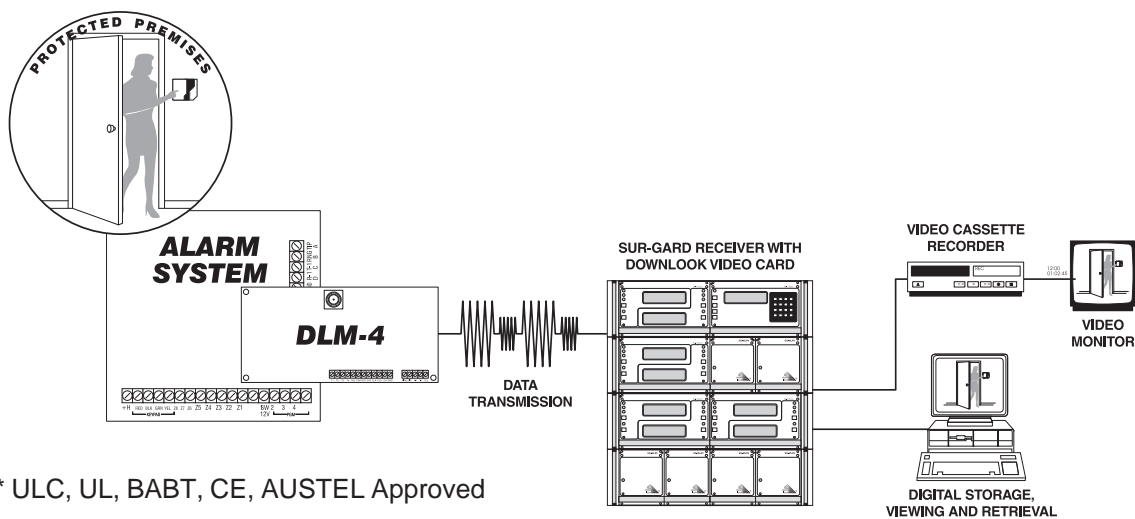
* ULC, UL, BABT, CE, AUSTEL Approved

DLM-4/DLM-4L
Video Transmission Module

The DLM-4 is the video capture, compressor and transmission module and must be used on all Downlook applications, the DLM-4 connects to one of the listed Alarm Panels, Communicator or with the DLM-4L onto the Power 832 - 5108L Module.

One single BNC post provides for a direct single video connection with 75 ohm termination.

The DLM-4 can capture and store 4 video pictures and transmit those images when instructed to do so by the Alarm panel or communicator. Time of first image capture is programmable in the control panel and the time spacing between additional captures is fully programmable on the DLM-4 by way of dip switches.

A programmable time for first image capture allows for the flexibility of Downlook activation from Infrared detectors, Door contacts, Hold up buttons and glass break detectors.
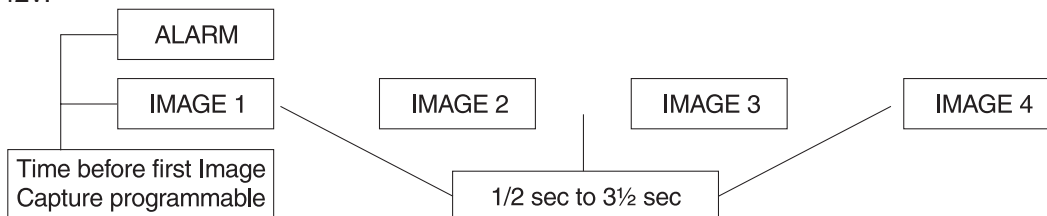
A rotary feature provides for alternate image capture for up to four cameras.

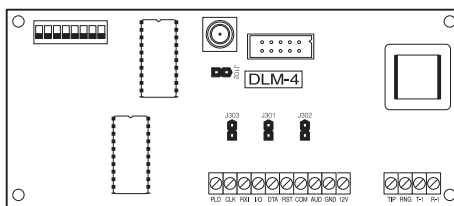All DLM-4L function and features are programmed into and provided by the Power832 control panel.

E.g. If used with two cameras, on a common alarm condition the first image will be taken by camera one, second by camera two, third by camera one, fourth by camera two.

Dip switch selection provides for a switched output on camera supervision, after the cameras are connected and power applied disconnection of a camera or loss of video signal will result in the output changing state.

No Video adjustment or calibration is required. Power requirements are 10.5 - 16 VDC; 300ma @12V.

```
  ┌─────────┐
  │  ALARM  │
  └─────────┘
  ┌─────────┐      ┌─────────┐      ┌─────────┐      ┌─────────┐
  │ IMAGE 1 │      │ IMAGE 2 │      │ IMAGE 3 │      │ IMAGE 4 │
  └─────────┘      └─────────┘      └─────────┘      └─────────┘
┌──────────────────┐   ┌──────────────────┐
│ Time before first │   │  1/2 sec to 3½ sec │
│ Image Capture     │   └──────────────────┘
│ programmable      │
└──────────────────┘
```

Downlook DLM-4 Module

256 × 256 Pixels and 256 Grey Scales

- Output for video trouble / loss
- Automatic NTSC / PAL
- Rotary capture feature (1-2-3-4)
- Expandable to 7 cameras with DLM-7
- Expandable to 8 cameras with Power832

- 1 camera or video input
- 4 image capture & storage
- Programmable capture spacing DIP switch set 1/2 sec - 3½ sec
- Video supervision of all cameras

POWER 832
with
# 5108L Video Matrix Module
and DLM-4L

Add Video or Video Verification to the DSC Power 832 Control with the 5108L Module. Up to 8 camaras to be added to the 832 control with the 5108L Module.

The 5108L is also an 8 zone expansion module for use on the 832 Control, adding the 5108L not only provides for Video verification but expands the alarm panel by 8 zones.

Only one 5108L can be added to the Power 832, additional zone expansion can be achieved with the 5108.

Connection of the 5108L to the 832 is made on the 4 wire keybus. Programming of the 5108L is in the 832 program. A Video Matrix program provides for a single alarm zone or group of alarm zones, up to the 32 alarm zones available on the 832. One or all of the alarm zones can initiate a single camera or a selection of up to four cameras.

The 5108L has 8 BNC input connections and 1 output BNC. The video output provides for the video connection with the DLM-4L Video transmitter module, also a 4 wire connection is used for the power and data to the DLM-4L.
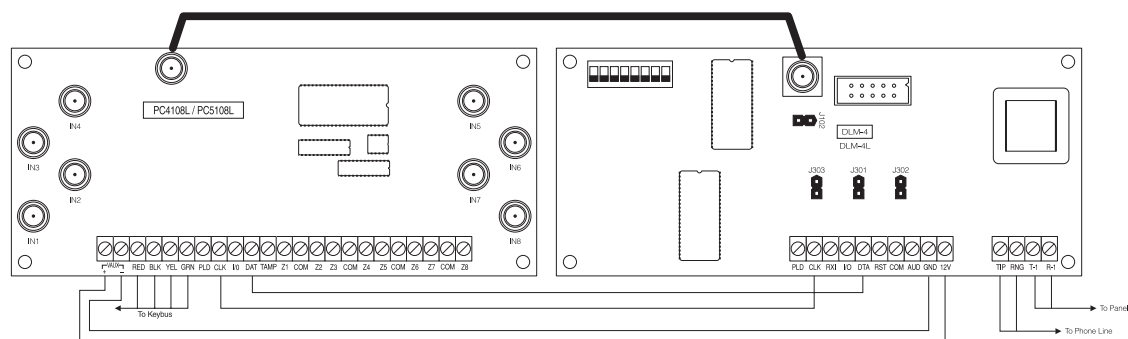
	T	C	T	C	T	C	T	C
[01] Zone 1 Alarm/Tamper								
[02] Zone 2 Alarm/Tamper								
[03] Zone 3 Alarm/Tamper								
[04] Zone 4 Alarm/Tamper								
[05] Zone 5 Alarm/Tamper								
[06[Zone 6 Alarm/Tamper								
[07] Zone 7 Alarm/Tamper								
[08]Zone 8 Alarm/Tamper								

T = Time   C = Camera

First image capture time and capture spacing time is programmed into the Power832 and is in 100ms increments to a maximum of 9.9 seconds.

Event	TC	TC	TC	TC
Pre-Trigger				

Pre-Trigger Events are available with the Power 832 and 5108L. The 4 image capture can be used to see events before the alarm condition. A camera or cameras with programmable time spacings can be selected to continually capture images, on an alarm any of the four image spaces available on the DLM-4L which have not been used for the pre-triggers will be filled with the new images.

DSC PC1575 & PC1580
with
DLM-4

The DSC PC1575 & PC1580 Alarm Control Panel has the ability for the DLM-4 Video transmitter Module to be directly connected.

The DLM-4 has a single BNC Video input for one camera or Video source. The 1575-1585 allows for image capture from any of the 6 zones.

The Downlook program is built into the 1575-1580, this allows for a selection of alarm zones for video initiation, time space before first image capture and number of images to be captured and transmitted by the DLM-4.

A simple four wire connection adds Video Verification to this six zone alarm panel.
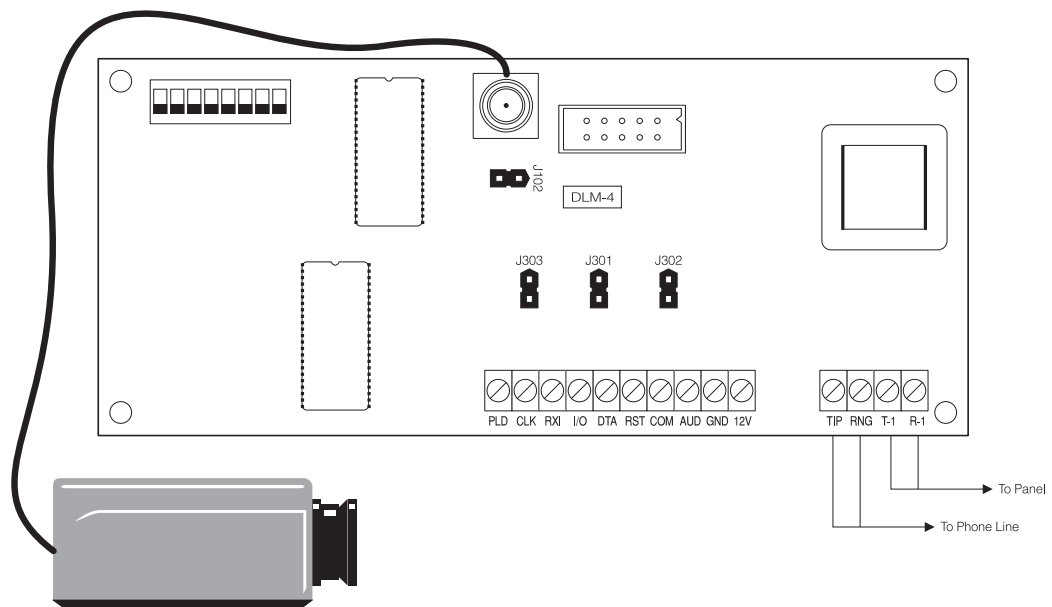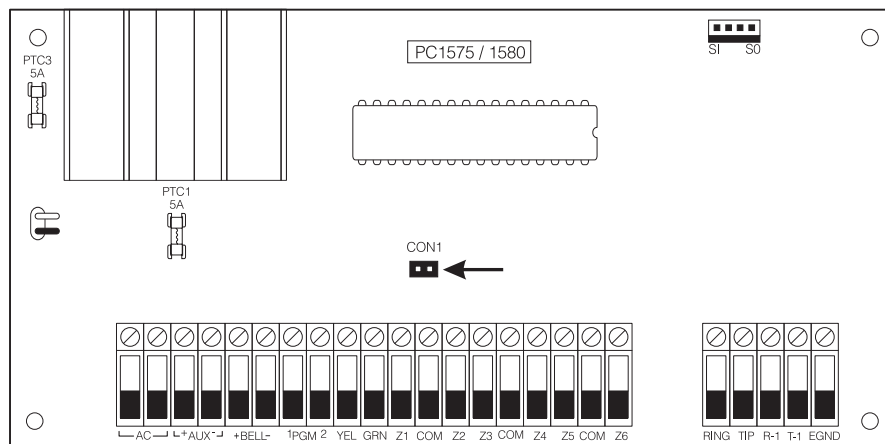
DSC 8400
with
DLM-4 and DLM-7

DSC8400 DL Digital Communicator

The DSC8400 DL Digital Communicator allows the Downlook System to be connected to an existing Alarm Control Panel or to be used as a stand alone unit. The control panel may be an existing DSC product not specifically designed for use with Downlook, or it may be an alarm system from another manufacturer.

The DSC8400 DL is an 8-channel communicator with Normally-Open or Normally-Closed Trigger Inputs. Downlook information is programmed directly into the DSC8400 DL along with account and alarm information using a DSC PC2550RK keypad.

Other alarm panels will be able to activate the DSC8400 DL from outputs, such as bells or sirens. When interconnecting with another control panel, it is recommended that a separate telephone line be used for the Downlook transmissions; this will prevent communication clashes between the control panel's alarm reporting and Downlook communication.

DLM-7 Camera Selection Module

The DLM-7 connects to the DLM-4 Downlook Module to add multiple-camera operation to a Downlook system. The DLM-7 allows up to 7 cameras to be installed on the premises. As alarms are generated, the DLM-7 will activate the camera assigned to the zone in alarm and the DLM-4 will begin to capture video images.

The DLM-7 does not require a power supply; a simple connection links the unit to the DLM-4, and camera connections are made using standard BNC connectors.

PS-3085

The PS3085 is a 3 Amp 12V$_{DC}$ power supply designed for use with the DSC8400 DL. The PS3085 requires a 16V$_{AC}$ transformer. The PS3085 features:
- AC Failure Detection
- AC Failure Output
- Low Battery Detection

DLC-1 CABINET

UP TO 7
CCD CAMERAS

DLM-7

1 CCD
CAMERA

DLM-4

8400DL ALARM
CONTROL PANEL

UP TO 7
INPUTS

PS3085

DSC8400DL stand alone or with
existing alarm control panel

TELEPHONE

CENTRAL STATION
WITH DOWNLOOK
RECEIVERS

TELEPHONE

Existing alarm
control panel
with or without
communicator

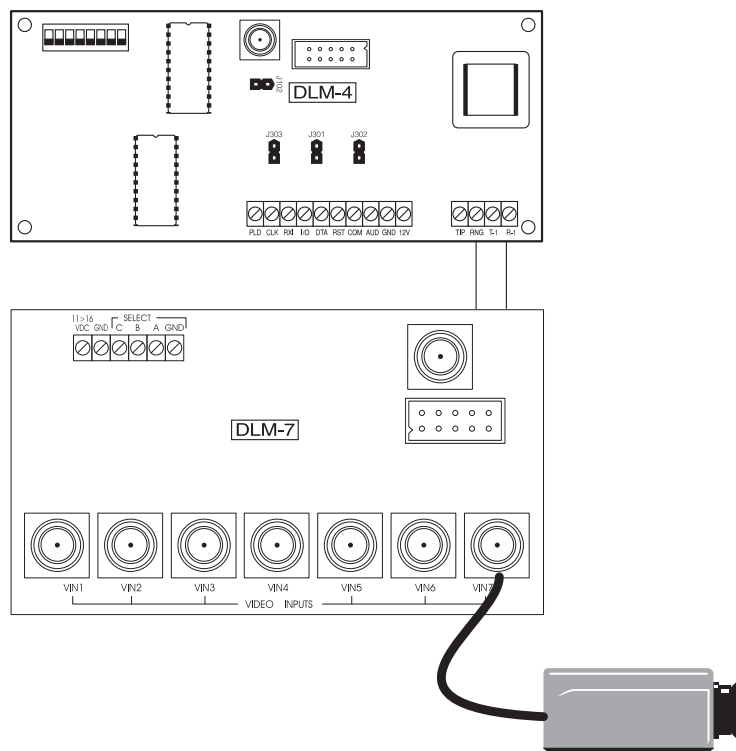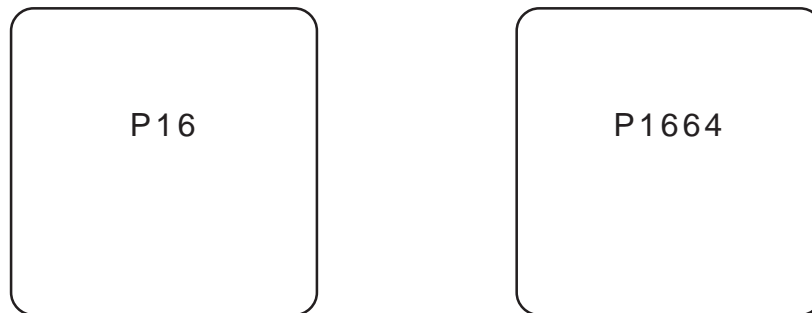down look
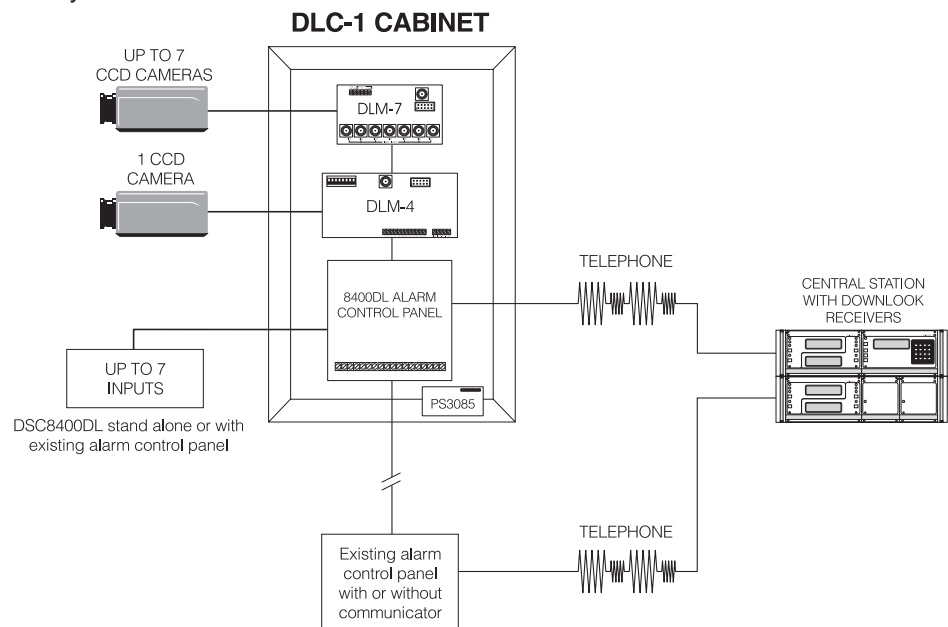
P16 and P1664
with
DLM-4 and DLM-7

The P16 and the P1664 Alarm Control Panels can incorporate Video verification by means of the DLM-4 in a single camera requirement or to 7 cameras with the addition of the DLM-7.

The P16 and P1664 are 16 zone alarm panels with the P1664 having expandability to 64 zones.

The Downlook program is built into both panels and provides for any alarm zone or group of alarm zones to initiate a camera. Time space before first image capture, Video on test signal, Video on open and closings and number of video images to a maximum of 8 is available.

The DLM-4 is added to the Alarm panel with a 5 wire connection.

Note: The P16 and P1664 are not a distributed alarm panel in the United States and are only available as a Partner Product. Due to regulations these products are not available in all Countries.

P16

P1664

DLM-4

J303 J301 J302

PLD CLK RXI I/O DTA RST COM AUD GND 12V   TIP RNG T-1 R-1

11>16 SELECT
VDC GND C B A GND

DLM-7

VIN1   VIN2   VIN3   VIN4   VIN5   VIN6   VIN7
VIDEO   INPUTS

down
look

MLRV-A
Automated
Video Receiver Module

The Automated MLRV-A Video Receiver Module provides for the receiving of video images over the regular telephone lines following the Event information.

One MLRV-A module connects to and works with one Digital Receiver line (DRL2A).
The MLRV-A can only connect to and work with the Sur-Gard MLR2 Multi Line Receiver.

The MLR2 Receiver is a two line receiver expandable to 14 lines, each receiver line, if required can have the MLRV-A module, if expanded to a maximum number additional power must be taken into consideration.

The MLRV-A can be housed in one of two expansion cages available, the MLRXV or MLR2XV, both are 19" rack mount and should be located in the same cabinet as the MLR2 receiver. A four wire connection must be made between the MLRXV or MLR2XV backplane board and the back plane board of the DRL2A.

The Automated MLRV-A provides for two outputs, a Coaxial video output off a BNC post and PC output by a 25 pin video bus and 9 pin data bus. The MLRV-A can be set for video out, PC out or both.

Video images transmitted to the video monitor and PC also include the Account code, time and date and the camera number with amount of images to be sent.

Two set's of dip switches in the MLRV-A provide for several options when viewing the video on a Video monitor, they allow for large or small account code, flashing information and how long it will stay on the screen. The options are only applicable to the video monitor, on the PC the Downlook software will display all images with extended account information.
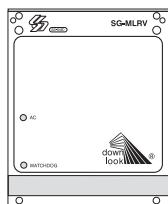
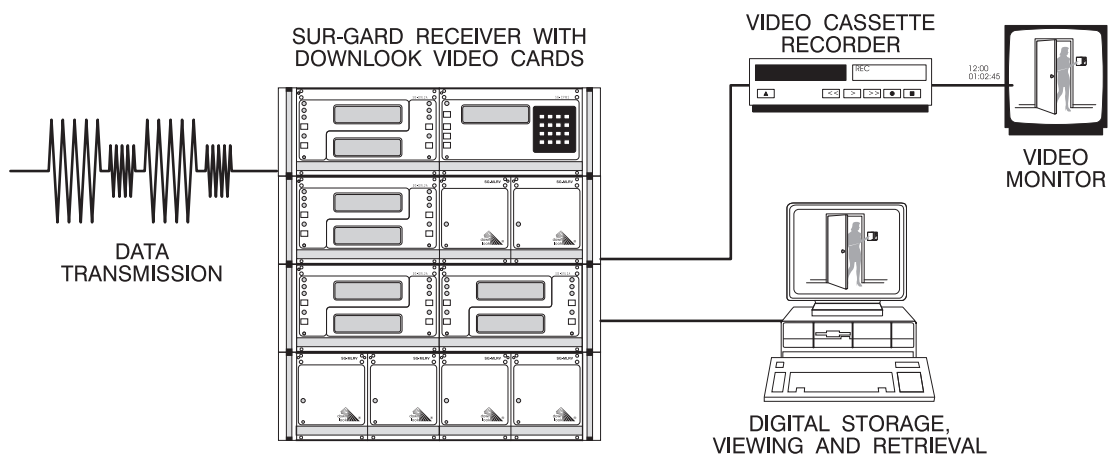**MLRV-A
Receiver
Module**
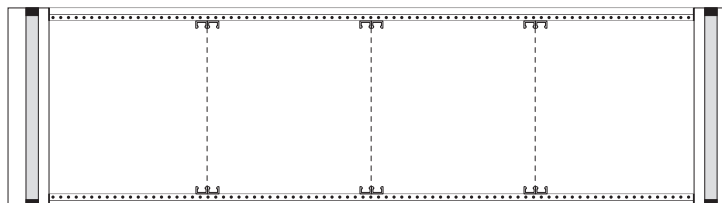
MLRXV Card Cage
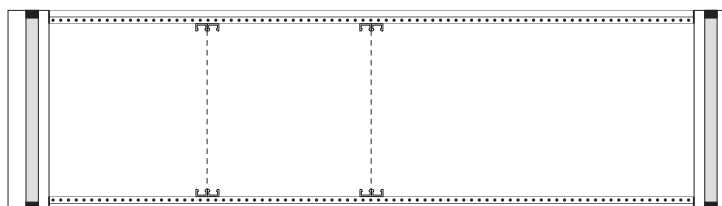
MLR2XV Card Cage

MLR2
Digital Receiver
with
MLRV-A

- The Sur-Gard MLR2 Digital Receiver with DRL2A Software Version 1.63L upwards supports Downlook receiver operation.

SUR-GARD RECEIVER WITH DOWNLOOK VIDEO CARDS

VIDEO CASSETTE RECORDER

DATA TRANSMISSION

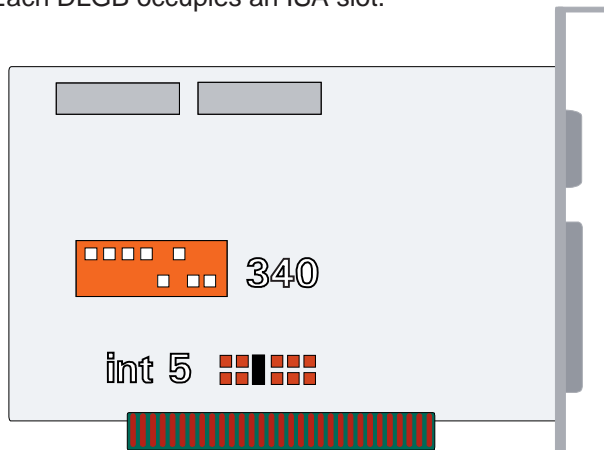VIDEO MONITOR

DIGITAL STORAGE, VIEWING AND RETRIEVAL

DLGB
Downlook Grabber Board

To input the Downlook Video into a PC it will be necessary to have a DLGB card, one DLGB works with one MLRV-A receiever module.

A standard 486 or Pentium PC will be required, up to 4 DLGB cards can be placed into one PC.

Each DLGB occupies an ISA slot.

Two cables are connected from the Downlook Interface card to the DML5A backplane.

A 25-pin cable for the pictures and a 9-pin cable for the serial communication.

Both cables can have a maximum length of 30 meters (100 feet).

These cables are not supplied with the Downlook Interface.

PSA v 1.00
Software

Downlook PSA software allows for video images to be displayed, saved, retrieved, printed and managed on a standard PC.

A 486 or Pentium with a least 8 Meg of ram must be used, it is advised other than DOS, Windows 3.11 or Windows 95 no other program should run with the Downlook PSA as a conflict of software could exist.

All functions on the software can be accessed by the use of a mouse or by a touch screen monitor.

The complete software and all individual icons and commands can be password protected.

Up to 8 images can be viewed at a time on one screen and each image can be expanded to full size, Picture receive and hold windows provide flexibility.

A stay on line feature allows for automatic request of additional images, this is an on-off feature to allow for continuing viewing of a location. This feature is only available with the Power832 and 5108V module.

The PSA software is provided with the DLGB, the Downlook Grabber Board.

Downlook: Your Choice for Video Alarm Reporting

- *Integrates with alarm control panel*

- *Reliable Slowscan video communication*

- *Transmits video images over any distance*

- *Transmission over standard telephone lines*

- *Uses same communication path as alarm signals: telephone link or cellular network*

- *High quality images:*
    - *256 × 256 pixels*
    - *256 grey scales*

- *Open system architecture*
    - *Uses any black and white CCD camera*
    - *Connects with existing video systems*
    - *Connects with Quad systems*

- *Up to 8 cameras per system*

- *Programmable number of images: 1 to 8 images per camera*

- *Delay before capture: Time delay before capture of video image is programmable from 01 to 99 × 100 ms*

- *Image capture on opening and closing*

- *Programmable capture rate*

- *Integrates with Sur-Gard Central Station Receiver*

- *Low cost*

For more information, contact your Authorized DSC Distributor. Contact DSC for the Distributor closest to you.