



# Digital Video Recorder CCTV Systems

Store level operating instructions

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# I. Description

The CCTV system in this store uses a new type of recorder, a Digital Video Recorder (DVR). This system does not use videotape and does not require any daily attention beyond visually checking that it is running. The DVR is always recording, even while watching playback.

The DVR records the video from all cameras on an internal hard disk allowing very high quality images to be recorded and saved for up to a month before they are recorded over. Also, with digital recording the image quality will not degrade with time as it does with a VCR. DVR's are only possible now because of the size of hard disks that are now available. During normal recording, approximately two gigabytes of data is written each day.

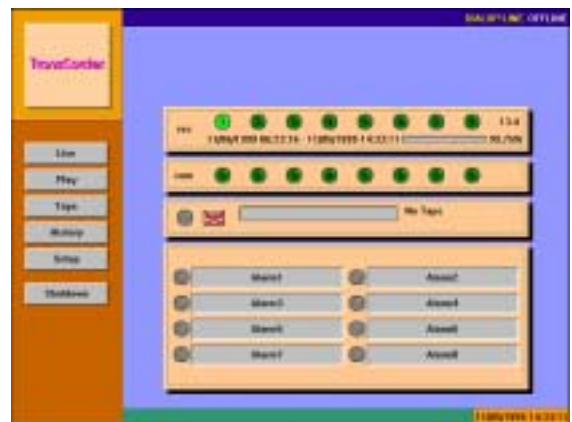
# II. Normal Operation

During normal day-to-day operation, the DVR requires little attention. Our suggestion is that you only look to see that it is running.

## **Recording:**

There is nothing required by the operator for recording. If the DVR is running, it is recording.

The record indicator on the main screen shows which cameras are being recorded. This will be sequencing rapidly through all of the camera channels. If the channels are not sequencing, this is an indication of a possible problem.



## Viewing Modes:

During normal use, the cameras can be viewed in several configurations on the DVR screen.


To view live video, click on

Live


The live screen will now be displayed showing all of the cameras in the store. This is the mode the DVR should be in most often. The video displayed on the live screen has no effect on how the cameras are being recorded.

The function bar at the top of the screen provides the different options for viewing.



 The SPOT button will cause the live display to show one large picture in real-time surrounded by the remainder of the pictures. To change the large picture, simply click on any of the small pictures.



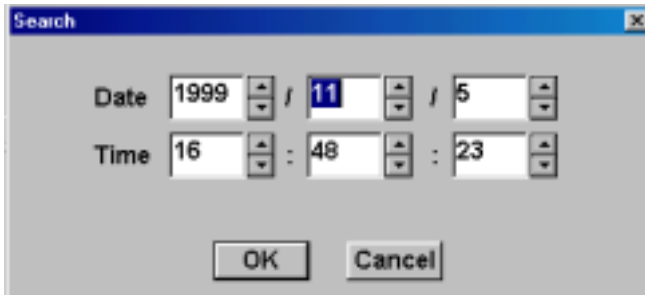
 The Lock button will remove the control bar causing the configuration to be locked. This will prevent unauthorized personnel from playing with the recorder. To unlock the picture, right click anywhere and input the operator password.



The channel view buttons turn the cameras on and off on the live display. The cameras are recording regardless of these settings.

## Playback:

From the main screen, click on the playback icon. Once the playback screen appears, left click on the search button of the playback bar on the bottom of the screen. This will open a search window where you will use the mouse to click in the time and date you are looking for. Click on OK and the DVR will display the proper image. Now press the Play button to begin playback.



As the video begins to play, a single camera can be viewed by left clicking on the image. To go back to split screen, right click anywhere. Use the playback controls just as you would a VCR front control.



When finished viewing, click the X at the top to return to the main screen. From there, click Live to return to live view.




The second method of storing images on the floppy disk is to write an AVI file. An AVI file is a file format that will play a short movie clip on any Windows 95 computer. A single floppy disk is capable of storing up to 45 seconds of video from one camera in a format anyone can use.

To make a video clip (AVI file), using the playback functions as before, locate the footage to be kept and press stop. Insert a blank 1.44 floppy disk and click on the icon marked AVI. Follow the instructions on the screen. When prompted to do so, begin playback as normal. For best results, begin in full screen mode on the camera showing the needed information. Any video shown on the screen will now be copied and converted to a standard AVI file on the floppy disk. When the disk is full, the DVR will notify you that the file is closing. Remove the disk and close the AVI window. If more time is needed, insert another disk and repeat the process.

### Travan Backup Tape:

Travan is a type of backup tape that has become very common with computer users. This tape drive is built in to the DVR and will store as much as 4 gigabytes, or approximately 4 days of data. There is a tape backup program in the DVR under the main screen that will allow selective copying or restoring of any period of time from the hard drive.

### To backup video files to the Travan tape for storage:

From the main screen, click on the  button.

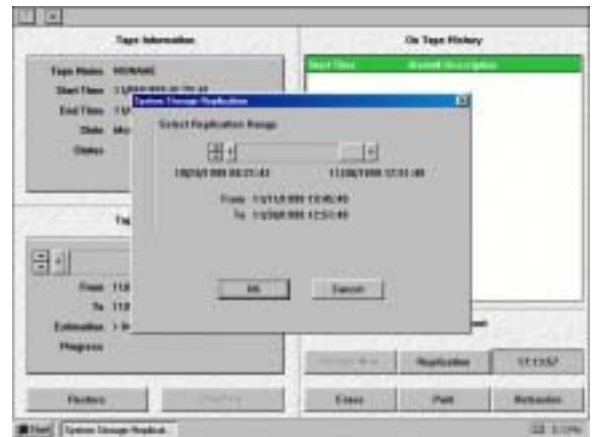
This will open the tape manager screen.

If there is a tape in the DVR, the tape manager screen will display the contents of the tape and information about the tape. From this screen, video files can be copied from the DVR to the tape, or reloaded to the DVR from the tape for viewing.



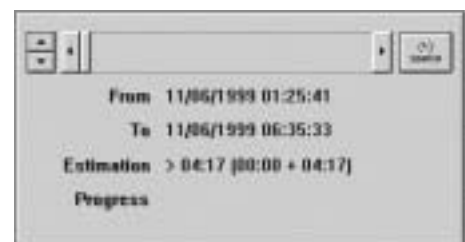
Click on the Replicate button:

This will bring up a window that shows all of the video footage stored on the hard drive. Use the mouse to adjust the "From:" and "To" times by clicking on the up/down and left right arrows. Click "OK" and the DVR will begin the backup. Keep in mind that the tape will only hold four days so do not select more than four days. When the backup process is finished, remove the tape from the DVR, write the time and date of the footage on the tape and store it in its case.



**To restore video footage from the Travan tape to be viewed:**

From the tape manager screen, click on the search button on the tape restoration box. This will bring up a window where the day and time you are looking for can be selected. After entering the time and date, click on OK and the scale on the tape restoration box will move to that time. Use the up/down and left/ right arrows to adjust the time and duration to be restored. Click on the "Restore" button. When the restoration is finished, click on the "Play" button. This will return the playback screen and you will now be able to play the restored video. The restored video will remain in memory until the tape manager screen is closed. If you need to review the video again after closing the tape manager screen, you will need to follow the restoration process again.



When finished, close the tape manager screen by clicking on the X button at the top.