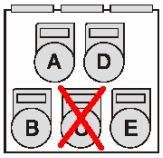
LSM-XT / maXS - Drive Disconnections

If a customer experiences Drive Disconnections, a LOG file should be saved and sent to EVS for each time a drive disconnects. This will allow EVS to evaluate and resolve the problem for the customer.

Drive Disconnection

When one disk of the video raid array has sustained errors, the Multicam application automatically disconnects the disk and uses the parity disk to rebuild the missing data and provide the video and audio data blocks to the application. The operator can continue working with only 4 disks and the message "**!Dsk**" on the monitoring.

If the Multicam software is exited and restarted without the RAID array being rebuilt, the following message is blinking in RED during the Boot:
"SCSI Controller #C disconnected in operation !".
When entering the Multicam, another message appears:




```
1 Video disk disconnected.  Exit Multicam and
  run Hardware Check to rebuild Video RAID.
     ESC : Exit          Enter : Continue
```

The operator can select [ENTER] and operate normally on 4 disks or select [ESC] to exit the Multicam software and return to the EVS Menu to run a Hardware Check. This process is described below.

Hardware Check

From EVS [F9] Maintenance Menu, select the "**Hardware Check**" option. This allows the operator to identify the faulty disk. The end of the hardware check screen looks like the following:

```
|                DISK A     DISK B     DISK C     DISK D     DISK E
|  Board #1       READY      READY     NO DISK     READY      READY
|  Primary defect  XXXX       XXXX       XXXX       XXXX       XXXX
|  Grown Defect       0          0          0          0          0
|  Capacity of board # 1 : XX.X GBytes or XXXXXX blocs of 512 Kbytes
|  Init board # 1 :  XXXXXX blocks of 512 Kbytes  Audio:ON DiskUse: 90%
|  Loading Tables …
|  Please wait …
|  HCTS Initialized
================================================================================
  <ALT-L> Get LOG                                          <ALT-Q> Quit
```

After the Hardware Check completes, a rebuild alert will appear if a Drive is currently disconnected prompting the user to choose an option:

```
              REBUILD YOUR SYSTEM ?
 SCSI Controller #C disconnected in operation !
Do you want to REBUILD your system on 5 disks ?
          [Y]es   [N]o   [C]lear Clips
```

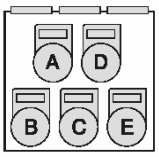
The following paragraphs describe the options that the user can select.

REBUILD SCSI ARRAY

```
REBUILD YOUR SYSTEM ?
SCSI Controller #C disconnected in operation !
Do you want to REBUILD your system on 5 disks ?
[Y]es  [N]o  [C]lear Clips
```

The operator has 3 options from this prompt:

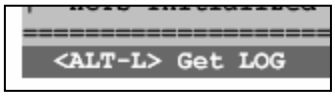
YES – will begin rebuilding the RAID array again onto 5 disks (**NOTE**: if a disk has failed and needs to be replaced, you should perform this prior to activating the REBUILD process otherwise an error will occur)



Rebuild time takes about 1h for 5x18GB disks, 2h for 5x36GB disks, 4h for 5x73GB disks. A progress bar shows the rebuild status.

NO – skip the rebuild and continue operating on 4 drives with normal operation

Note: If you suspect that the drive disconnection in operation was not due to a severe disk failure, but perhaps the server being too quick to disconnect a drive, you MUST run a hardware check immediately after ending the session during which the disk was disconnected and run a hardware check.



Do NOT rebuild the RAID, select NO and then press [ALT]+[L] keys to generate the log file C:\SCSI.LOG, The VGA screen will prompt the user at the end of the Hardware Check.

COPY the SCSI.LOG file to a floppy disk and send this file to EVS for detailed analysis.

Clear Clips – to clear all the contents of the video disks and work on 5 drives immediately.
If you do not need to retrieve the clips, you do not need to rebuild the RAID. In this case, select “Clear All Clips” when the message with this option appears in the Hardware Check. The 5 drives will be available immediately.

For further details regarding this process and the Multicam systems, please refer to the Technical Reference Manual for the product family.

Tech_Ref_LSM-XT_2.6_030728_EN.pdf