

Subject: DR8/DR16 Version 2.32  
Date : 5 November 1997

DR8/DR16 V2.32 588040 bytes, (402390 bytes compressed) checksum 1C73

#### Changes from V2.30

- \* Fix bug which caused misoperation of REMOTE bus after the following sequence:
  - Record on MASTER and SLAVE
  - Switch off all record tracks on MASTER
  - Next time, PLAY is pressed on MASTER, SLAVE drops into record.
- \* Fix bug which prevented PLAY key being used to drop out of record when tracks were armed SLAVE machines but not on the MASTER.
- \* Correct state of VALIDITY bit on multi AES/EBU digital option board.
- \* Fix bug which prevented multiple record tracks being selected simultaneously from GPIs in MAG mode
- \* Add code from DD8 to correctly set up mode page 0 on SEAGATE or CONNER drives during disk format. This vendor unique page includes a bit which controls the drives UNIT ATTENTION response. If this bit is set to 1, the drive does not produce a UNIT ATTENTION after power-up. This is \*VERY\* dangerous for our system if the drive is mounted in a removable caddy as the DR will not detect a disk change and may corrupt the disk by writing the wrong directory to it.
- \* Fix bugs which caused incorrect handling of protocol replies from slave machines to master on REMOTE bus.
- \* Fix bug which prevented CMD\_DATA replies from slave machines being correctly transmitted from MIDI output.
- \* Fix bug which caused 80 excess bytes to be returned with CMD\_DATA replies from slave machines.
- \* Fix bug which prevented [LastPacket] flag being set correctly in protocol replies from Slave machines via the REMOTE bus.
- \* Fix bug which caused PLL UNLOCK message to be shown on MASTER machine after protocol reply from slave machine via REMOTE bus which was greater than 300 bytes in length.
- \* Fix further bug which could result in buffered data replies from slave machines being all zero bytes.
- \* Add subframe style selection to CMD\_ALTSTATUSSENSE.

```
typedef struct
{
    BYTEu Channel;
    BYTEu Type;
```

```

        BYTEu Style;          /* Display style, TIME_... */
        BYTEu SubStyle;       /* Sub frame style, TIMESUB_... */
    } CMD_ALTSTATUSSENSE_MSG;

```

- \* Fix bug which caused hangup if invalid sub-frame timecode display style was selected.
- \* Fix bug which caused REM\_ERROR messages to be shown after sending certain protocol commands via REMOTE bus to slave machines.
- \* Fix bug which prevented protocol commands intended to be sent to all connected machines via REMOTE bus to be passed correctly to slave machines. This affected commands generated from the front panel, AKAINET, SCSI-B interface or VGA option board.
- \* Increase frequency at which protocol commands are sent via REMOTE bus to slave machines.

These changes were found necessary to ensure correct operation with DL16 when multiple faders are moved at the same time. DL16 was transmitting messages at a rate greater than they could be output to REMTOTE bus causing message queues to overflow.

Also, DL16 is sending multiple protocol messages without waiting for replies:

```

i.e      CMD_MIXER_LEVEL  (Reply flag clear)  ---> DR
          CMD_ALTSTATUSSENSE (Reply request)  ---> DR      --+
          CMD_MIXER_LEVEL          ---> DR          |
          CMD_MIXER_LEVEL          ---> DR          |
          CMD_TIMESENSE           <--- DR          --+

```

In theory, this is okay, but it would be better for DL to wait for replies before transmitting further messages (particularly when messages are intended for onward transmission to SLAVE machines via the REMOTE bus).

- \* Fix potential bug which could have caused error in unpacking of nibbled MIDI data.
- \* Fix bug in MIDI and SCSI-B protocol handling which could cause the final 2 bytes of 8 byte messages to be corrupted. This was reported on the DL16 when a CMD\_GOTOBBC message sometimes located to clock 112 after switching to machine 2 and back to machine 1 again.
- \* Extra code to overcome limitation in Superview V1.00 that caused the board to timeout if fitted in a SLAVE machine and communications with the MASTER machine were not established within 1 minute after power-up.

\* End of file \*