## 2.7 DEGRADED OPERATION

This Section describes the extent to which the A810 tape recorder can be operated in the event of a malfunction in one of the assemblies.

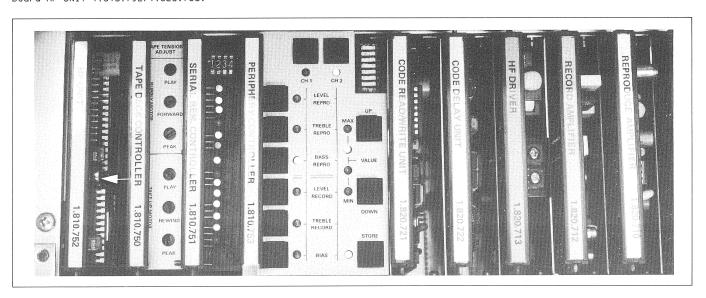
- "Dograded operation" is not possible if
- One or serveral supply voltages are failing
- If the control for the spooling motors or the capstan motor is defective.

#### Important:

A defective tape recorder should only be operated in emergencies and be forwarded to an authorized service location as soon as possible.

Should one of the following error messages appear when the recorder is switched on (except EE 01, EE 02, and EE 03 on the LC display or EEE01, EEE02, and EEE03 on the LED display; refer to 2.7.1!), switch the recorder off, wait a few seconds, and switch it on again. If the error message disappears, normal operation can be resumed (the error may have been caused by fluctuations or transients in the line voltage during the initialization of the microprocessor).

Normal operation may also be restored by reinitializing the microprocessor by pressing the RESET key located below the lower front panel on the circuit board MP UNIT 1.810.752/1.820.780.



 ${\sf Error}$  messages can be cleard by pressing TRANS <br/>  ${\sf REDUCED}{\gt}$  and  ${\sf STOP}$  , however they may reappear after a certain time.

# 2.7.1 Error messages appearing on the tape timer display

## EE 01 (LCD) or EEE01 (LED):

Data error in RAM; is only displayed when the recorder is switched on or after a RESET.

To keep the recorder operational, the standard audio parameters permanently stored in the machine program are loaded into the amplifiers. Record and reproduce mode are still possible, however minor deviatins from the guaranteed technical data may occur because of the changed audio parameters.

A test recording should be made.

Also check the stored locate addresses.

The tape recorder must eventually be recalibrated or the audio parameters stored on tape must be reloaded. (Refer to Section 4.2.)

- EE 02 (LCD) or EEE02 (LED):
  Occurs only during calibration. Refer to 4.2.1.7.
- EE 03 (LCD) or EEE03 (LED):
   A data error has been detected during the cyclic testing of the RAM.
   Same effect and remedy as for EE 01!

### Important:

The error messages EE(E)01, EE(E)02 and EE(E)03 are cleared after the recorder is switched OFF and ON or after RESET. It should be remembered, however, that the standard audio parameters will be loaded!

- EE 04 (LCD) or EEE04 (LED):
- EE 05 (LCD) or EEE05 (LED):
  Failure of a supply voltage. No operation is possible. Check the secondary fuses and the supply voltages. Exception: failure of the 5.6 V supply.
- EE 06 (LCD) or EEE06 (LED):

  Error in the transmission of data when reading saved audio parameters from tape. Repeat the read operation (refer to 4.2.7).
- EE 07 (LCD) or EEE07 (LED): Error in the transmission of data when saving audio parameters on tape. Repeat save operation (refer to 4.2.7).
- EE 08 (LCD) or EEE08 (LED):
   Error in the comparison of the saved audio parameters with the data
   stored in RAM (refer to 4.2.7).
- EE 14 (LCD) or EEE14 (LED):
   Master panel not plugged in (BUS CONNECTOR BOARD).
- EE 15 (LCD) or EEE15 (LED):

  Data transmission error (in conjunction with serial remote port).
- EE C1 (LCD) or EEEC1 (LED): Failure in audio channel 1. Recording on channel 1 is inhibited by the microprocessor. Reproduction of channel 1 or recording and reproduction on channel 2 are still possible.
- EE C2 (LCD) or EEEC2 (LED): Failure in audio channel 2. Recording on channel 2 is inhibited by the microprocessor. Reproduction of channel 2 as well as recording and reproduction on channel 1 are still possible.
- EE C3 Time code channel defective.
- EE Ei (LCD) or EEEEi (LED):
   (i = 1, 2, 3, or 4) data error in one of the EPROMs 1, 2, 3, or 4.
   Further operation of the recorder is not possible if this error occurs during the power-on sequence of the recorder.
   If the error occurs after the recorder has been switched on: mount a tape (with trivial content). Check functions such as play, record (also the SAFE function!) and spooling. Check braking action (loop formation!).
   The recorder can be put into operation if no apparent problem is found, however the service agency should be notified as soon as possible.

## OTHER MESSAGES OF THE TAPE TIMER DISPLAY

b0 b0 (LCD) or b0b0b (LED): This value is displayed while the audio parameters are being read from tape.

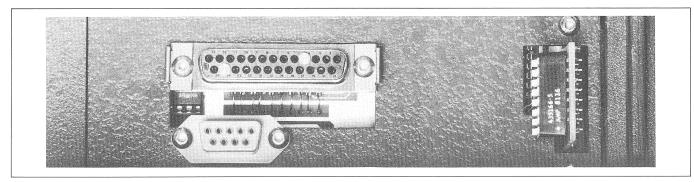
- bb bb (LCD) or bbbbb (LED):

  Acknowledgment for correct reading o
  - Acknowledgment for correct reading of the audio parameters from tape. All data have been stored in RAM.
- CO CO (LCD) or COCOC (LED):
  - This value is displayed while the audio parameters are being saved on tape.
- CC CC (LCD) or CCCCC (LED):
  - Acknowledgment for correct copying of the audio parameters to tape. All audio data have been recorded thrice.
- dO dO (LCD) or dOdOd (LED):
  - This value is displayed while the audio parameters stored on tape  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +$
- dd dd (LCD) or ddddd (LED):
  - Acknowledgment that the audio parameters recorded on tape have been successfully compared with the data stored in RAM.

### 2.8 OPERATION WITH SERIAL REMOTE CONTROLLER

With the latest version of the serial remote controller (1.810.751), the recorder can be interfaced to a terminal (RS 232) and the audio parameters can be saved on tape.

Changeover between RS 232 and parameter saving is effected with the program switches on the address PCB.



# 2.8.1 Data protection

The audio parameters stored in RAM can be copied to magnetic tape via the 9-pin connector for serial remote control, or new audio parameters can be loaded into the recorder (refer to Sections 4.2.7 and 4.2.8).