ScreenMaster SM1000, SM2000 and SM3000
Paperless recorders
Replacing the battery

1 Introduction

This publication details the replacement of the battery (B11845) fitted to the main board of ScreenMaster SM1000, SM2000 and SM3000 paperless recorders. The procedure must be carried out by a trained technician.

The battery is non-rechargeable and its only function is to supply power to the recorder’s real-time clock when the recorder is isolated from the power supply. It can supply power to the clock for a minimum of 1.5 years before replacement is required.

2 SM1000 and SM2000

Removing the main board

CAUTION
The recorder is vulnerable to electrostatic damage. Wear an anti-static strap or dismantle the recorder on an anti-static workbench.

Remove the main board as follows:
1 Isolate the recorder from its power supply.
2 Remove the recorder from its case – see Figure 1.

Note. Refitting is the reverse of removal.

Figure 1 Removing the recorder from its case
…2 SM1000 and SM2000

…Removing the main board

3 Remove the chassis top cover and PCB locking bar – see Figure 2.

Figure 2 Removing chassis top cover and PCB locking bar
4 Remove the main board – see Figure 3.

Note. Refitting is the reverse of removal.

Lift each end of the connection locking bar carefully and disconnect the display flex-circuit from the main board – see Note 1

SM2000 only – disconnect the touchscreen from the main board – see Note 2

SM1000 only – disconnect the membrane switch connector from the main board

SM1000 only – disconnect the inverter connector from the main board

Withdraw the main board from the chassis

Notes.
1. To disconnect the display flex-circuit, it may be necessary to remove the I/O module board in Slot D (if fitted).

2. SM2000 main boards manufactured before March 2005 have a 4-pin touchscreen flexi-circuit and a 4-pin connector block. Main boards manufactured from March 2005 onwards are fitted with a 6-pin connector block. When reconnecting the touchscreen flex-circuit to a main board equipped with a 6-pin connector block, ensure it is connected to the 4 pins nearest the front of the recorder.

Caution. When fitting a main board, ensure it locates correctly in the lugs on the chassis base.

Figure 3 Removing the main board
…2 SM1000 and SM2000

Replacing the battery
Replace the battery as follows:
1 Replace the battery – see Figure 4.

Note. Ensure the battery positive terminal faces the rear of the recorder.

Figure 4 Replacing the battery

2 Refit the main board – see Figure 3.
3 Refit the PCB locking bar and chassis top cover – see Figure 5.

Figure 5 Refitting the PCB locking bar and chassis top cover

3 SM3000

Removing the main board

CAUTION

The recorder is vulnerable to electrostatic damage. Wear an anti-static strap or dismantle the recorder on an anti-static workbench.

Remove the main board as follows:
1 Isolate the recorder from the power supply.
2 Remove the recorder from its case – see Figure 6.

Note. Refitting is the reverse of removal.

Figure 6 Removing the recorder from its case

4 Refit the recorder to its case – see Figure 1.
5 Restore the recorder’s power supply.
6 Set the date and time – see Section 6.4.3 in the SM1000 User Guide (IM/SM1000) or Section 4.4.3 in the SM2000 User Guide (IM/SM2000).
3 Remove the main board – see Figure 7.

Note. Refitting is the reverse of removal.

Caution. When fitting a main board, ensure it locates correctly in the lugs on the chassis base.
3 SM3000

Replacing the battery
Replace the battery as follows:
1 Replace the battery – see Figure 8.

2 Refit the main board – see Figure 7.
3 Refit the recorder to its case – see Figure 6.
4 Restore the recorder’s power supply.
5 Set the date and time – see Section 6.4.1. of the User Guide (IM/SM3000).
4 Notes