SM500F
Field mountable paperless recorder

Color processor board replacement

This instruction is applicable only to instruments manufactured after October 2016

Measurement made easy

1 Introduction

This publication details replacing an SM500F paperless recorder’s color processor board. The procedure must be carried out by a trained technician. The contents of the replacement kit are shown in Table 1.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part number</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor board assembly</td>
<td>SM500/0215</td>
<td>1</td>
</tr>
<tr>
<td>Battery</td>
<td>B12454</td>
<td>1</td>
</tr>
<tr>
<td>Screw</td>
<td>B12406</td>
<td>6</td>
</tr>
<tr>
<td>Windows licence</td>
<td>B12423</td>
<td>1</td>
</tr>
<tr>
<td>This publication</td>
<td>IN/RandC/004-EN</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1  Color processor board assembly replacement kit SM500/0736

Tools required
- No. 2 Pozidriv screwdriver
- T8 Torx driver

2 For more information

Further information is available from: www.abb.com/recorders

or by scanning these codes:

https://www.abb.com/recorders
3 Processor board replacement

**NOTICE – Property damage**
The recorder is vulnerable to electrostatic damage. Wear an anti-static strap or place the instrument on an anti-static workbench.

1. Disconnect the recorder from the power supply.

2. Referring to Fig. 3.1, unlock the door with the key \( A \), press release catch \( B \) and open the door.

![Fig. 3.1 Opening the door](image)

3. Referring to Fig. 3.2, remove 6 Torx screws \( C \) securing the door assembly rear cover and remove the rear cover.

![Fig. 3.2 Removing the rear cover](image)

4. Referring to Fig. 3.3:

   4.1 Disconnect processor board flexi-cable \( D \), display flexi-cable \( E \) and keypad membrane cable \( F \) from the processor board and lift out and discard the processor board.

5. Position the new processor board in the door housing and reconnect keypad membrane cable \( F \), display flexi-cable \( E \) and processor board flexi-cable \( D \).

6. Referring to Fig. 3.2, refit the door assembly rear cover and secure using 6 Torx screws \( C \).

7. Close and lock the door.

8. Restore the recorder’s power supply.
4 Entering the recorder's serial number

1. Locate the serial number label on the outside of the recorder and note the serial number.

   ! IMPORTANT (NOTE) The format of the serial number is either */*****/* or 3K21**********.

2. Access the configuration level as described in Section 6 of the User Guide (IM/SM500F).

3. Access the 'Common' configuration level and select the Setup tab. Use the ↑ and ↓ keys to select the 'Options enabled' parameter and press Enter.

4. Select any option from the list box and press Enter.

5. Use the ↑ and ↓ keys to select the button next to the 'Serial number' field. Press the → key and using the displayed keypad, enter the recorder’s serial number noted at step 1.

6. Repeat steps 4 and 5 to enter software option security codes in the security code field for each option as required.

7. Exit the configuration level as described in Section 6 of the User Guide (IM/SM500F), saving the configuration as the 'Current Configuration'.

8. Reset archiving as described in Section 5.2 of the User Guide (IM/SM500F).