1 Introduction

This publication details the upgrade of a 4670 turbidity system to a 4690 system (for use with 7998 sensors). The system is upgraded by replacing the EPROM and the procedure must be carried out by a trained technician.

The replacement EPROM kit options are shown in Table 1:

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard (1 analog output)</td>
<td>7998 040</td>
<td>1</td>
</tr>
<tr>
<td>(containing EPROM part no. 46903000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional analog output</td>
<td>7998 041</td>
<td>1</td>
</tr>
<tr>
<td>(containing EPROM part no. 46903001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modbus®</td>
<td>7998 042</td>
<td>1</td>
</tr>
<tr>
<td>(containing EPROM part no. 46903002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modbus® + Net Tap</td>
<td>7998 043</td>
<td>1</td>
</tr>
<tr>
<td>(containing EPROM part no. 46903003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This publication (supplied with each kit) –</td>
<td>INF11/066–EN</td>
<td>1</td>
</tr>
<tr>
<td>4670 to 4690 turbidity system upgrade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 EPROM kit options
3 EPROM replacement

Wall-mount transmitter

**WARNING**
Remove all power from supply, relay and any powered control circuits and high common mode voltages before accessing the EPROM.

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

1 Isolate the transmitter from the power supply.

2 Referring to Figure 1:
   a Slide cover 1 down, pull out slightly and slide off.
   b Release 4 captive screws 2 and remove protection cover 3.
   c Remove 2 screw caps 4 (if fitted).
   d Remove 6 front panel screws 5 and remove front panel 6.

3 Referring to Figure 2:
   a Locate EPROM 7.
   b If required, remove personality module 8.
   c Remove EPROM using extraction tool.
   d Using EPROM insertion tool, position replacement EPROM carefully in socket ensuring notches in EPROM and socket 9 are aligned and that EPROM pins locate correctly in the holes in the socket.
   e Press EPROM fully home.
   f Refit personality module 8 (if removed at step 2).

4 Referring to Figure 1:
   a Refit front panel 6 and secure with 6 front panel screws 5.
   b Refit 2 screw caps 4 (if fitted).
   c Refit protection cover 3 and secure with 4 captive screws 2.
   d Refit cover 1.

5 Restore the power supply to the transmitter.

6 Configure the transmitter – see Section 4, page 3.
Panel-mount transmitter

**WARNING**
Remove all power from supply, relay and any powered control circuits and high common mode voltages before accessing the EPROM.

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

1. Isolate the transmitter from the power supply.
2. Referring to Figure 3:
   a. Release captive screw ①.
   b. Remove transmitter ② from its case.

![Figure 3](image_url)  
**Figure 3** Removing the transmitter from its case

3. Referring to Figure 4:
   a. Locate EPROM ③.
   b. Remove EPROM using extraction tool.
   c. Using EPROM insertion tool, position replacement EPROM carefully in socket ensuring notches in EPROM and socket ④ are aligned and that EPROM pins enter the holes in the socket.
   d. Press EPROM fully home.

![Figure 4](image_url)  
**Figure 4** Replacing the EPROM – panel-mount transmitter

4. Referring to Figure 3, refit transmitter ② to its case and secure with captive screw ①.
5. Restore the power supply to the transmitter.
6. Configure the transmitter – see Section 4.

4 Completion

Referring to the User Guide (IM/4690–EN):
1. Select the sensor type – see Section 8.3.
2. Calibrate the sensor – see Section 7.