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 Tables 1.1 to 1.4:

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPROM</td>
<td>46903000</td>
<td>1</td>
</tr>
<tr>
<td>Information publication – 4670 to 4690 turbidity system upgrade</td>
<td>INF11/066–EN</td>
<td>1</td>
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</table>

Table 1.1 Standard (1 analog output) 7998 040

<table>
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<tr>
<td>EPROM</td>
<td>46903001</td>
<td>1</td>
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<tr>
<td>Information publication – 4670 to 4690 turbidity system upgrade</td>
<td>INF11/066–EN</td>
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Table 1.2 Additional analog output 7998 041

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<tr>
<td>Information publication – 4670 to 4690 turbidity system upgrade</td>
<td>INF11/066–EN</td>
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Table 1.3 Modbus® 7998 042

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<td>EPROM</td>
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<td>1</td>
</tr>
<tr>
<td>Information publication – 4670 to 4690 turbidity system upgrade</td>
<td>INF11/066–EN</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1.4 Modbus® + Net Tap 7998 043

2 Tools required
- No. 2 Pozidriv screwdriver
- EPROM extraction tool
- EPROM insertion tool
3 EPROM replacement

3.1 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 Fig. 3.1:
   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 Fig. 3.2:
   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 Fig. 3.1:
   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.
3.2 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 Fig. 3.3:
   a. Release captive screw ①.
   b. Remove transmitter ② from its case.

![Fig. 3.3 Removing the transmitter from its case](image)

3. Referring to Fig. 3.4:
   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.

4. Referring to Fig. 3.3, 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.