

# 4690 series

## Turbidity systems

### 4670 to 4690 turbidity system upgrade

## 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:

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

**Table 1 EPROM kit options**

## 2 Tools required

- No. 2 Pozidriv screwdriver
- EPROM extraction tool
- EPROM insertion tool

### 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.

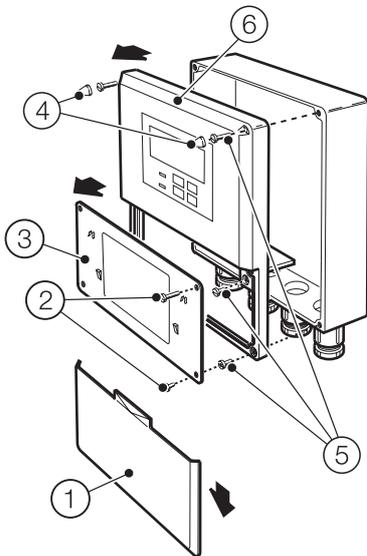


Figure 1 Removing the front cover – wall-mount transmitter

- 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).

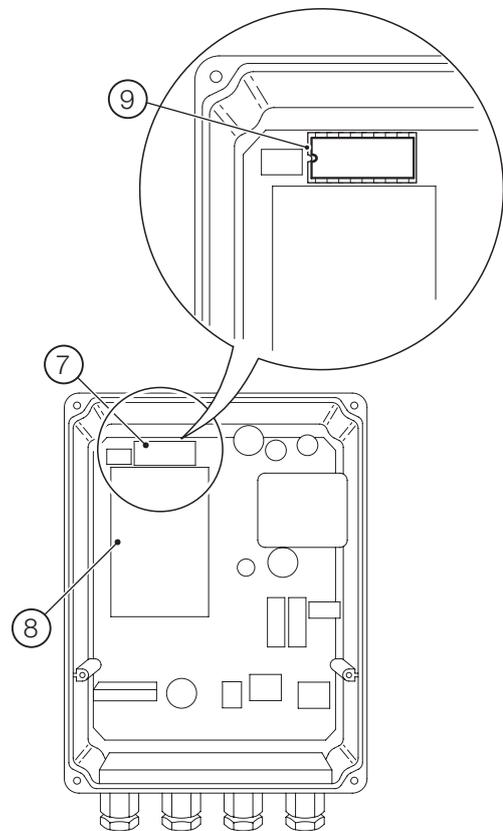


Figure 2 Replacing the EPROM – wall-mount transmitter

- 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.

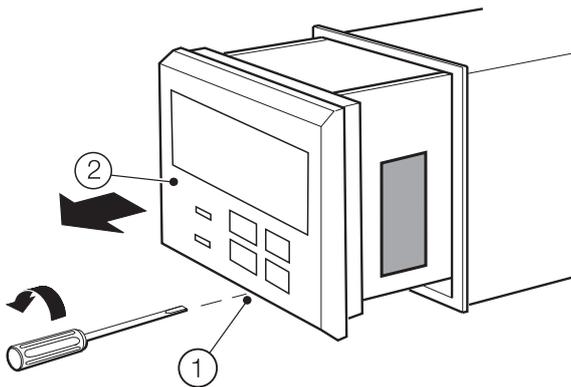


Figure 3 Removing the transmitter from its case

- 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.

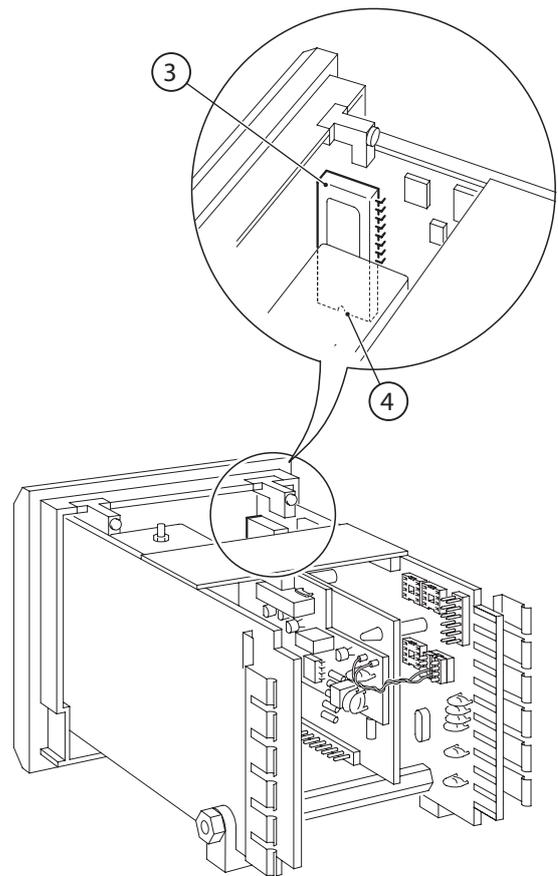


Figure 4 Replacing the EPROM – panel-mount transmitter

- 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.

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