

# **USER MANUAL**

## PCB replacement guide

Ixx24-AF





#### 2 Introduction

This document describes how to replace the print circuit boards (PCB) in an Ixx24-AF unit from Val Controls.

#### **IMPOTRANT**

The Boards a delivered as pairs of PCBs which must not be interchanged, as the boards has been calibrated during the production at Val Controls.

If the unit was burned due to wrong wiring it is important to fix the wiring before swapping out the PCB

## 2.1 Required tools

- Slot screwdriver
- Double-slot screwdriver
- 7 mm hexagon nut driver



### 3 PCB replacement procedure

1 Disconnect power from the unit

Remove the lid of the unit

2 Unfasten the 4 cross screws in the board below the display.

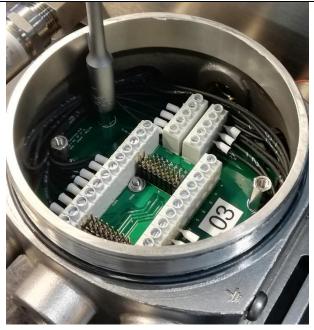
Unfasten the first screw one turn, then move on to the next and start over after number 4 and keep going until all screws are free. This is to avoid stress on the board.

Do not unfasten the screws in the front plate.



Gently remove the top PCB and expose the bottom PCB with the terminals

Unfasten the four spacers with a 7 mm hexagon nut driver



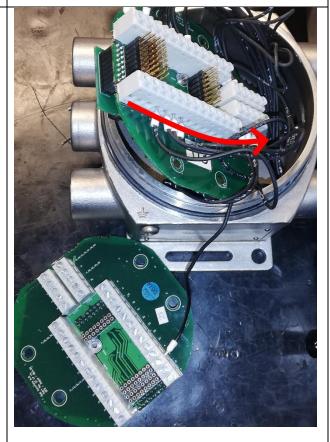


4 Remove the button PCB from the Ex D enclosure by tilting it as shown on the picture



Move one wire at the time from the old PCB to the new PCB, starting from terminal 1 towards terminal 6

Follow the direction of the arrow.

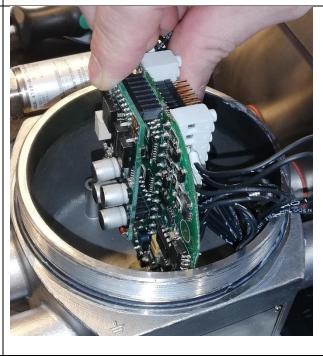




6 Continue moving wires from terminal 46 towards terminal 26

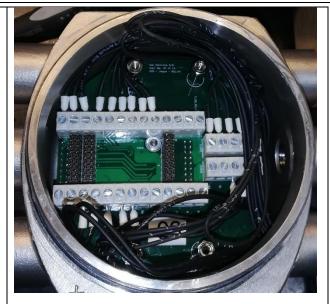


7 Gently position the new PCB in the Ex D enclosure by tilting it

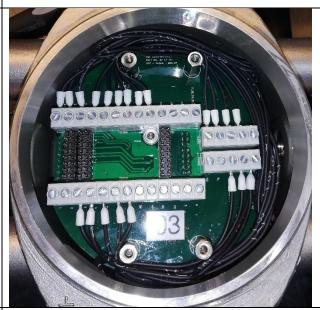




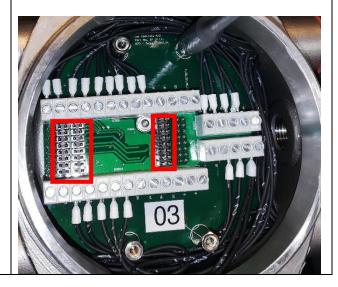
8 Mount the four spacers



9 Position the wires in the Ex D enclosure as shown. Make sure there are no wires above the terminals and sockets



Ensure the 3 board connecters are positioned in the sockets and pushed all the way in





Position the new top PCB with the screws 11 just above the spacers Gently turn one screw at the time until it is properly connected to the spacer 12 Use a plastic pen, to gently push on the soldering to ensure the board stackers are correctly positioned in the sockets 13 Tighten each screw a little and move on to the next and continue until the four screws are tightened