
**INSTALLING RPA0909 F3200/ NDU/ RDU AS4428.1
CONTROLLER REPLACEMENT BOARD****1 General**

The RPA0909 F3200 AS4428.1 Controller Replacement Board may be used as a replacement board for the 1931-111-1 F3200 Controller used in an AS4428.1 style F3200 standard panel, F3200 networked panel, network display unit (NDU) or RDU. It cannot be used in AS1603.4 style panels as the LEDs do not line up with the keyboard. (RPA0804 is the replacement board for AS1603.4 systems).

1.1 F3200/ NDU software

The RPA0909 comes with F3200/NDU Software SF0286 V4.04 fitted. However, any version of F3200/NDU AS4428 software (V3.XX onwards) may be installed in the RPA0909 by following the instructions below.

1.2 RDU software

RDU software V5.XX provides AS4428.1 operation and RDU Mk1 V2.XX does not, so only RDU V5.XX software (or later) can be fitted to a RPA0909 controller.

2 Requirements

- a) The technician should be familiar with F3200. For the optional procedure 4.1(a) below, the technician should be familiar with upload/download of databases to / from F3200, and should have a laptop with a terminal program.
- b) Field change-over kit
RPA0909 PCB Assembly, 1931-111-1, F3200 Controller, V4.04, Repaired

3 Preliminary

- a) Arrange with the building owner/occupants that the system will be "down" for a period of time.
- b) Before commencing note down any existing isolates and faults on the system and have these verified by the client.
- c) Isolate the system from the brigade. Disconnect/isolate any extinguishing, warning systems; ancillary shutdowns, etc.
- d) If replacing the Controller Board as per PBG0162, check the board has a serial number in the range given in that product bulletin.

4 Changeover

Follow the instructions below, which depend on the product and version of software fitted in the board being replaced. NOTE: Use anti-static (ESD) precautions when handling the controller board and ICs.

4.1 F3200 /NDU SF0286 V4.xx

Either

- a) Save the panel database to disk and verify the saved file as described in **LT0256 Issue 1.10 F3200 Programming Manual** section 2.3.4. (Assuming your laptop runs Windows, use a terminal emulator such as Wincomms or Hyperterminal.)
Ensure LK7 is in the WRITE PROTECT position
Power the panel down, and remove the controller board.

Set the links on the replacement board according to the accompanying literature LT0330 (which should be the same as the links on the board being replaced), except for LK7 WRITE PROTECT which should be in the WRITE position.

Fit the replacement board to the panel, power it up, and load the configuration from disk as described in **LT0256 Issue 1.10 F3200 Programming Manual** section 2.3.5. Exit from Programming mode and place LK7 in the WRITE PROTECT position.

OR

b) Ensure LK7 is in WRITE PROTECT position.

Power the panel down, and remove the controller board.

Remove U2 from the board being replaced and fit it to the replacement board (in place of the IC already there). This will transfer the software and configuration from the old board to the new board.

Set the links on the replacement board according to the accompanying literature LT0330 (which should be the same as the links on the board being replaced).

Ensure LK7 is in the WRITE PROTECT position on the replacement board

Fit the replacement board to the panel.

Power up and carry out the finalising steps in 5.

4.2 F3200 / NDU / RDU Software SF0423 V5.xx or F3200/NDU Software SF0222 V3.xx

Ensure LK7 is in WRITE PROTECT position.

Power the panel down, and remove the controller board.

Remove U2 and U3 from the board being replaced and fit them to the U2 and U3 positions respectively of the replacement board (removing the IC already in the U2 position).

Set the links on the replacement board according to the accompanying literature LT0330 (which should be the same as the links on the board being replaced).

Fit the replacement board to the panel.

Ensure LK7 of the replacement board is also in the WRITE PROTECT position.

Power up and carry out the finalising steps in 5.

5 Finally

- a) When the panel is powered up check that it has the correct configuration by viewing (at least) the System name.
- b) De-isolate all zones, then isolate any zones that were isolated before and need to be isolated now (as per the note you made earlier). Reconnect or de-isolate all extinguishing systems, warning systems, ancillary shutdowns, etc.
- c) Reconnect the system to the brigade and test the brigade connection.
- d) Check that any faults present on the system after completing the upgrade match the pre-existing faults present on the panel prior to commencing the upgrade.
- e) Taking full anti-static precautions place the removed F3200 Controller board assembly to the packaging the replacement board was supplied in.
- f) Return it to Tyco Safety Products.
- g) Notify the building owner/occupants that the system is on line and working.