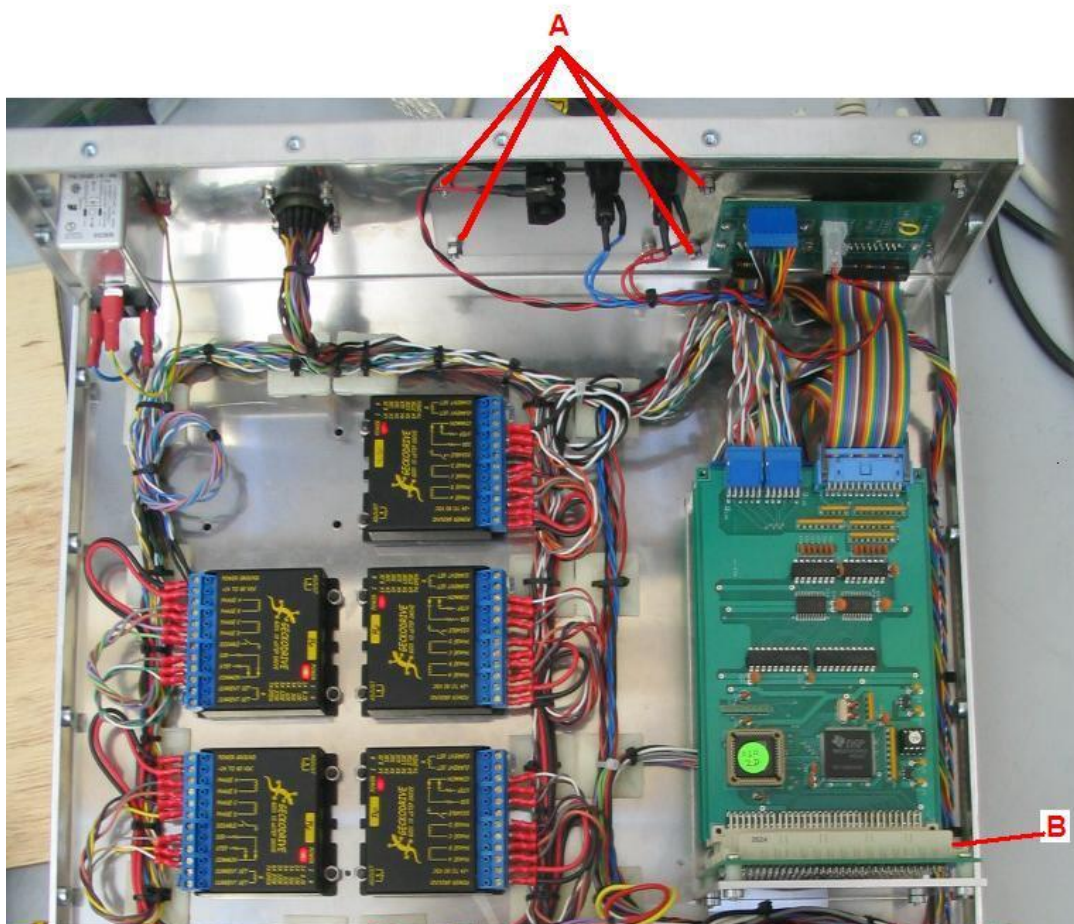


Instructions for fitting and using the multi-function I/O card Mk2 (11-48A)

With power off and the power lead disconnected please remove the cover. There are a lot of screws because the spacing is necessary to meet FCC and EC EMC (electro-magnetic interference) regulations.

You will need to remove the rear blanking panel shown below **A**



Remove the two screws holding the top PCB and insert the two tapped pillars provided. Next fit the new board in the spare socket (3rd one up), **B**. Use the screws from above to secure the new board.

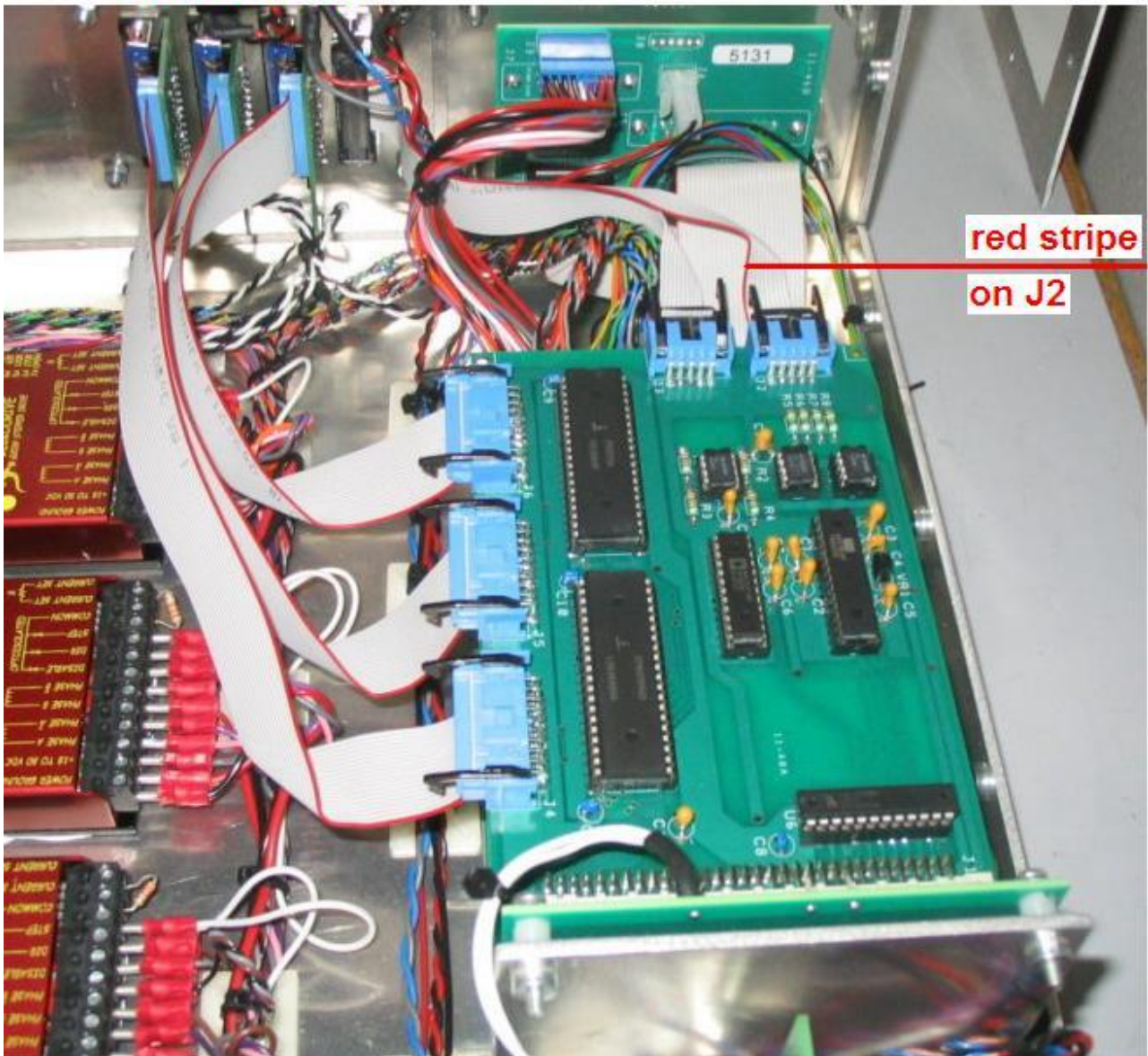
The new board has 4 connectors. From left to right
QB,QC QA,RB RC,RA Analog

Multi-function board 11-48A

See below picture of board fitted. As you can see the Analog connectors AN to J2 and J3 pass behind a cable from the CPU card to the rear panel. Therefore you will need to unplug the two connectors at the rear of the new card, pass them behind the existing wiring and back on to the card.

Disconnect all 4 cables and fit the rear panel with screws provided as shown.
Refit cables as shown. The strip with the red trace is J2 and the other strip is J3.

QQ QR RR AN



If you have any version of ROBOFORTH V10 (type HERALD) you will need to install ROBOFORTH V10.7 from the enclosed disk. Do this as follows:

1. Select cold start and press reset
2. In ROBWIN click file, load binary
3. enter 3 values: 0 4000 5E00
4. enter file name R17V107.RAM
5. when it has loaded enter ROBOFORTH
6. enter PSAVE to write the new ROBOFORTH to flash memory.
- 7. quick test digital**
8. enter PROGPIA
9. enter HEX 55 QA OUT
10. QA IN X. (X with a dot means print in hex) – you should get 55 back.
- 11. quick test analog**
12. insert a 25w D socket in the connector AN and connect an output to an input, pins 2 to 8.
13. Enter a value (max 4095) DACA
14. enter 0 ADC . (read and print channel zero) you should see same value plus/minus a tolerance. Repeat with other values.
15. Now download your robot calibration file as follows
16. click file, load binary, 0 9C00 100, file name R17Cxxx.SIG.RAM
17. enter USAVE
18. Replace the lid.