

## RTM500 Interface Card Technical Advice Note 1

In November 2014 a new **Issue 4** of the RTM500 Interface Card hardware was released that incorporates some important changes and improvements over the previous **Issue 3** version, as follows:

- Separate 24v ac & 24v dc supply connections as per standard backplane connections, whereas on Issue 3 both ac and dc were connected on the same pins.
- Separate open and close for detect outputs on each of the four channels in line with standard backplane connections, whereas on Issue 3 either open or close could be provided but appeared on both pins of each channel output connections.

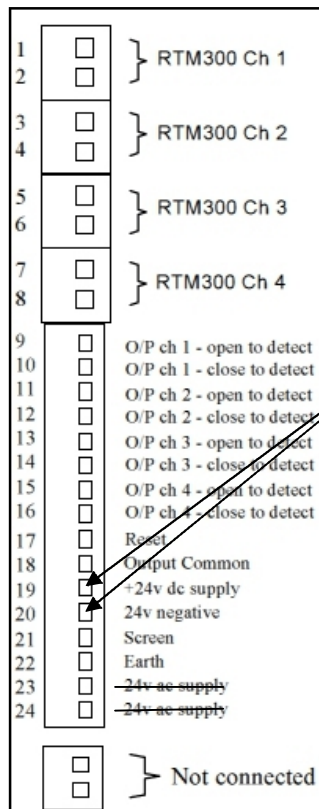
### **1. Issue 3 RTM500 24v ac and 24v dc Supply Connections**

Issue 3 RTM500 Interface Cards can be powered by either a 24v ac or 24v dc power supply, but inputs for both supplies must be connected to pins 19 & 20 of the standard backplane connections.

If a 24v ac supply is to be used and is already connected to pins 23 and 24 of an existing standard backplane, then these must be moved up to pins 19 and 20 to power an RTM500 Card at Issue 3.

For traffic controllers with Intelligent Backplanes, pins 19 and 20 are always used and the Issue 3 RTM500 Card will obtain power in this way irrespective of controller type or manufacturer.

#### **Standard Detector Backplane**



**For Issue 3 RTM500 Interface Cards**

24v dc connection: **+24v dc to pin 19 & -24v dc to pin 20.**

24v ac connection: **24v ac to pin 19 & 24v ac to pin 20.**

## 2. Issue 4 RTM500 24v ac and 24v dc Supply Connections

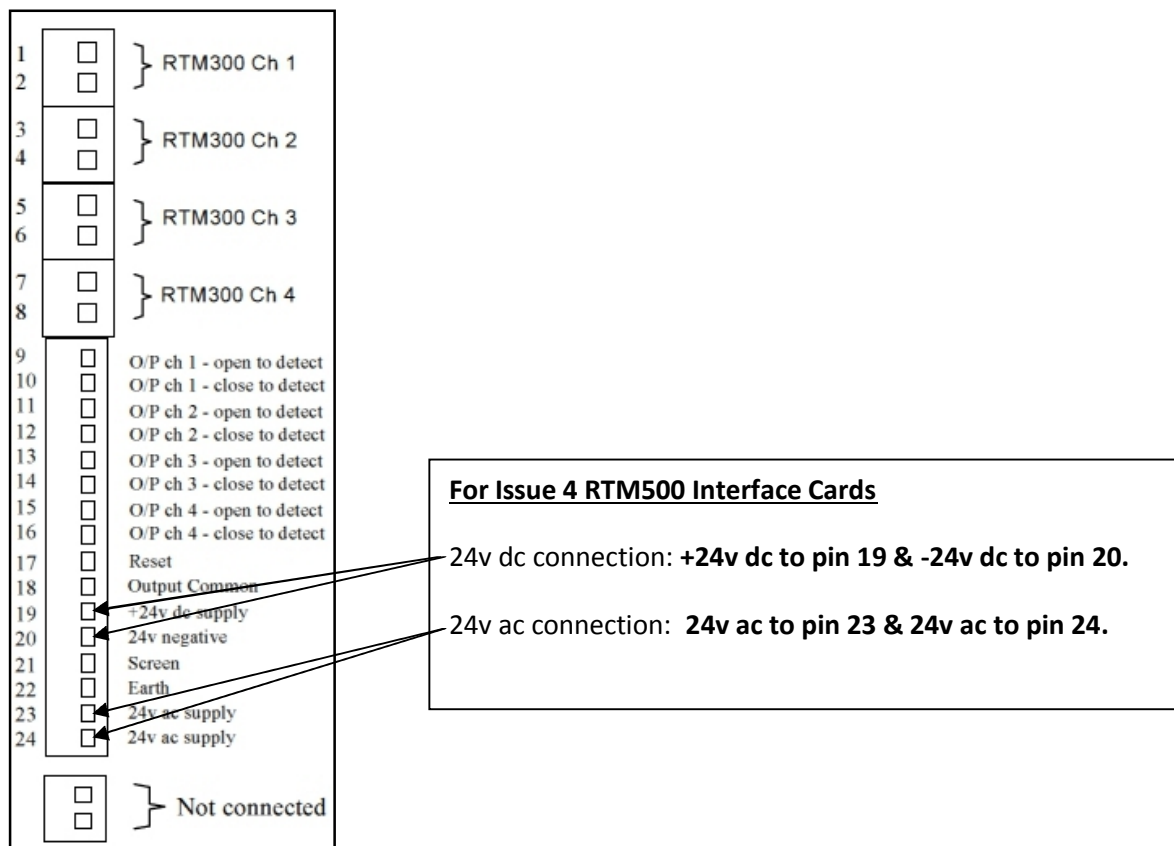
Issue 4 RTM500 Interface Cards can be powered by either a 24v ac or a 24v dc power supply but they are connected on separate inputs; 24v dc is connected to pins 19 and 20 and 24v ac is connected to pins 23 and 24 as per the standard backplane connections.

### IMPORTANT

If an Issue 4 RTM500 Interface Card is to replace an existing Issue 3 RTM500 Card which is being powered from a 24v ac supply through pins 19 and 20 of the standard backplane, then the 24v ac input must be moved down and connected to pins 23 and 24 of the existing standard backplane.

For traffic controllers with Intelligent Backplanes, pins 19 and 20 are always used and the Issue 4 RTM500 Card will obtain power in this way irrespective of controller type or manufacturer.

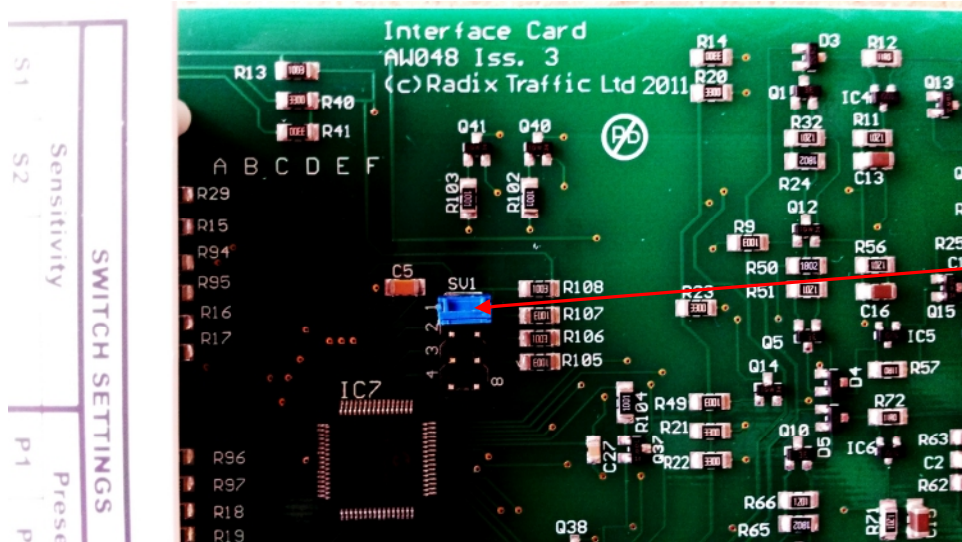
### Standard Detector Backplane



## 3. Issue 3 RTM500 Detect Output Connections

For Issue 3 RTM500 Interface Cards the same output, either open for detect or close for detect, is provided on both of the output connection pins for each of the four channels of the standard backplane. The default is close to detect with no jumper fitted at position 1 (top row of pins) at SV1 on the interface card.

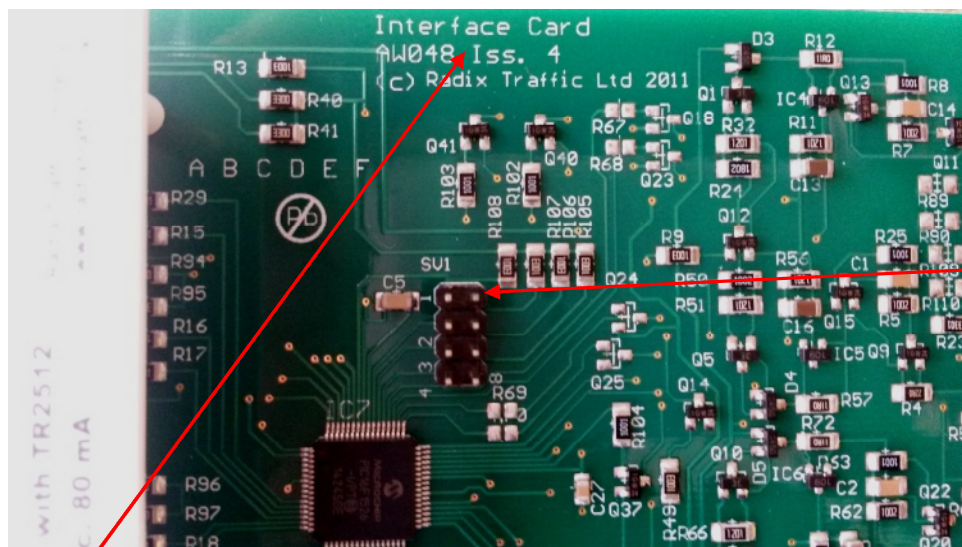
To change the outputs to open for detect on both pins on each channel, a jumper can be fitted at position 1 at SV1 to invert the output. Before fitting the jumper, the card must be powered down and the powered up again once fitted.



Jumper Fitted as Required on Issue 3 RTM500 Interface Card

#### 4. Issue 4 RTM500 Detect Output Connections

For Issue 4 RTM500 Interface Cards the open and close for detect outputs are now provided to each connection pin for each of the four channels as per the standard backplane connections and the use of the jumper at position SV1 is no longer required.



Jumper not Fitted on Issue 4 RTM500 Interface Card

If you are not sure which Issue hardware of the RTM500 Interface Card you have, this can simply be checked by looking at the top of the populated PCB where the Issue number is printed.

If you require any advice or more information about this Technical Advice Note, then please contact Radix Traffic on 01794 511388 or e-mail [info@radixtraffic.co.uk](mailto:info@radixtraffic.co.uk)