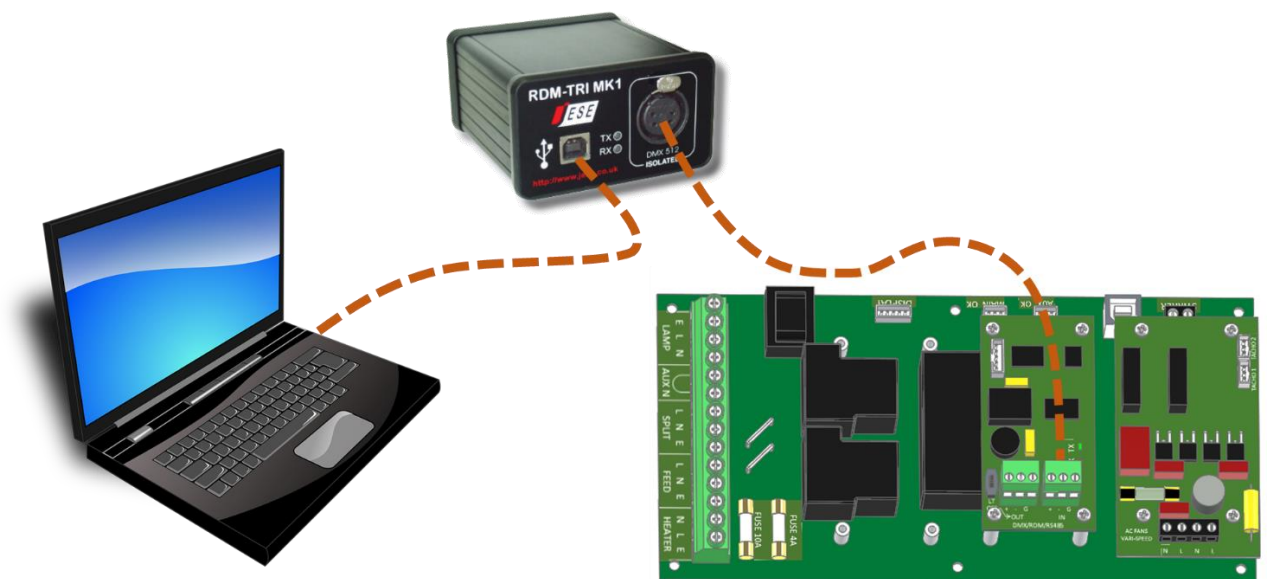


DEC4 Firmware Upgrade Instructions

Revision 05

September 2020

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Introduction

From time to time Tempest may introduce new DEC4 firmware for feature enhancements and bug fixes. Please note that the main System Control Board (SCB) and the various optional daughter boards each have their own firmware, and it will be good practice to update all firmware in an enclosure for optimal performance and interoperability.

- System Control Board firmware may be updated DIRECTLY using JESE JUST software and a USB cable, or INDIRECTLY, over an RDM network, using JESE GetSet software and a JESE RDM-TXI interface.
- Fan board firmware is extremely simple and is unlikely to require updating.
- RS485 Board (51.485) firmware may be updated over an RDM network, using JESE GetSet software and a JESE RDM-TXI interface.

All required files are available for download at <https://www.tempest.biz/tech-support/>

Direct Firmware Update (System Control Board only)

Requirements

Windows Laptop / PC, Windows XP through Windows 10 A standard

USB A to B cable



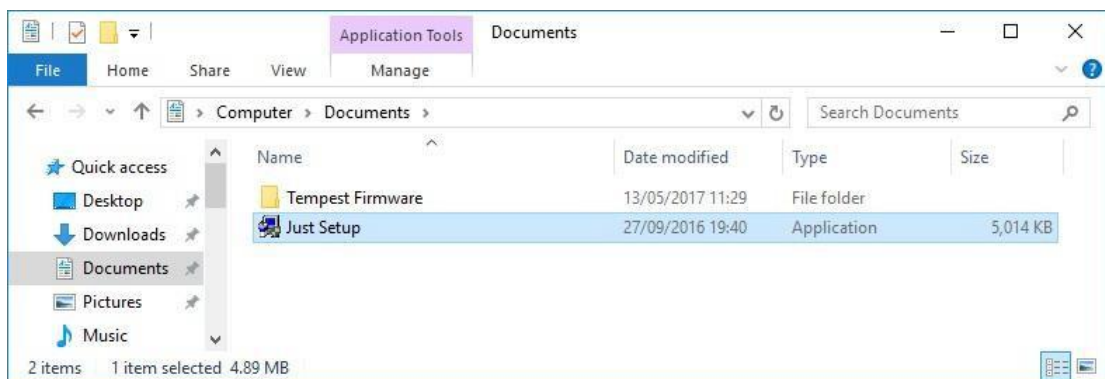
Latest version of JUST application (download from <https://www.tempest.biz/tech-support/>)

A copy of the firmware file to upload (download from <https://www.tempest.biz/tech-support/>)

Powered Target DEC4 SCB

Preliminaries

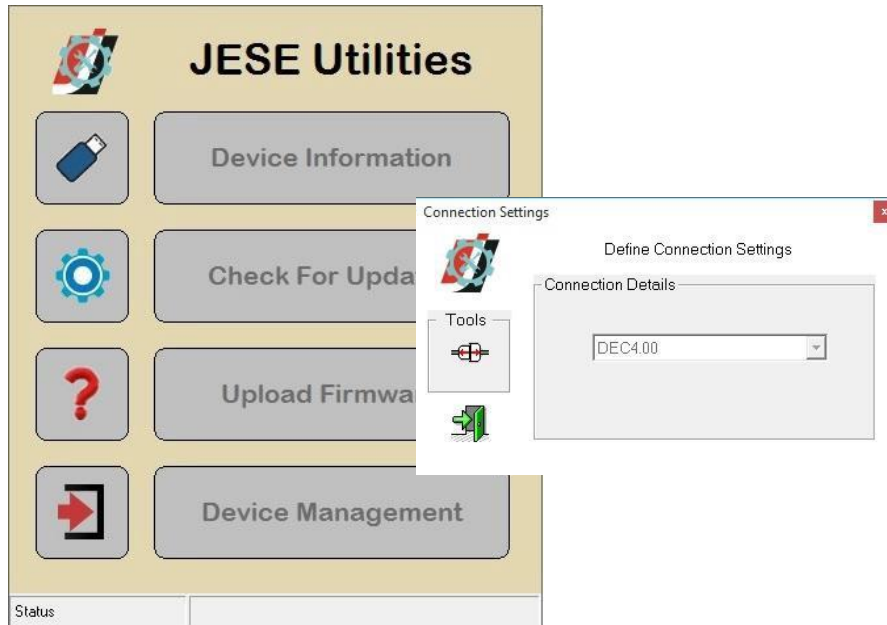
1. If not already installed, install the latest version of JUST.



2. Power up the target SCB and connect the USB Port to the PC or laptop.



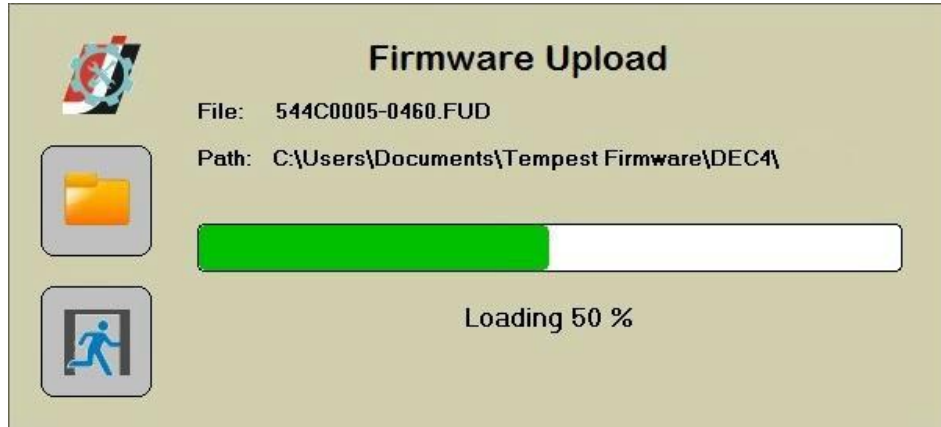
- Run JUST and select the top left USB connection icon. If the connection window opens, select the DEC from the connection option and click the connect/plug icon. Having connected, dismiss the connection window.



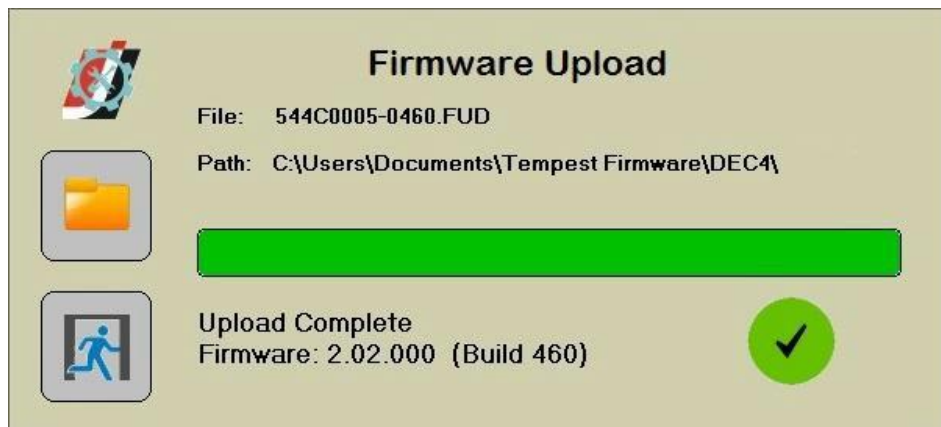
- From the main window, select the 'Upload Firmware' option. Select the file icon and navigate to the firmware file to upload



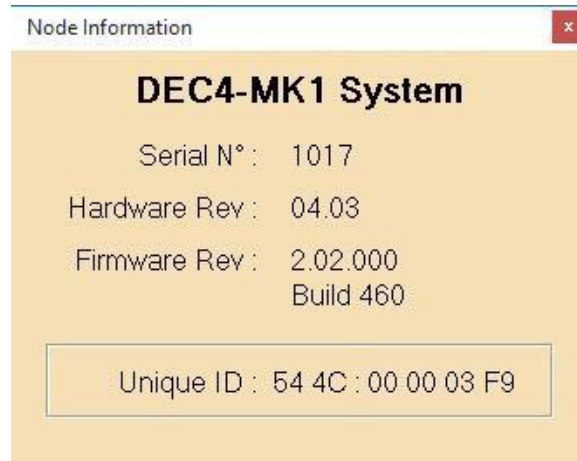
5. On selection, the firmware upload will begin and run till complete.



6. On completion of the upload, dismiss the upload window and return to the main window.



7. The details of the SCB and firmware version may be viewed and verified by selecting the 'Device Information' option



8. Close the application and disconnect the USB Cable from the SCB

- END -

Indirect Firmware Updates (System Control Board and RS485 Board)

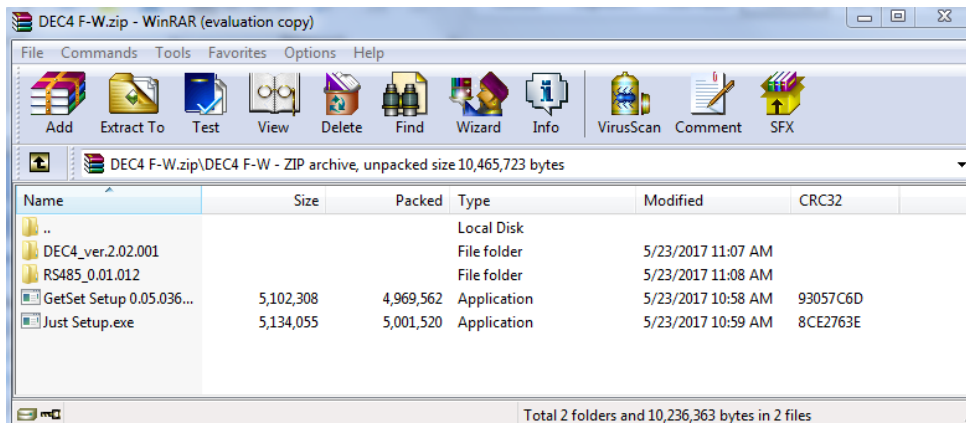
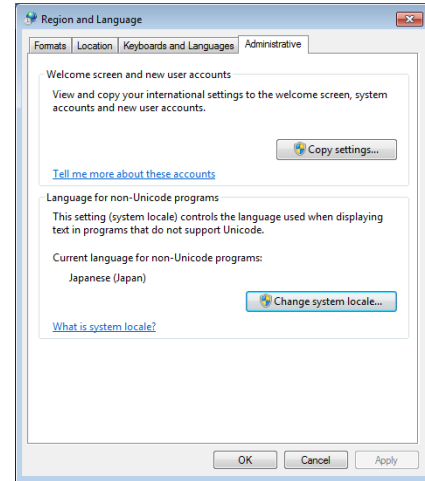
Requirements

Windows Laptop / PC, Windows XP through Windows 10

A JESE RDM-TXI interface, programming cable and USB connection (*available from Tempest, part # 2000.195*).

An installed version of the JESE GetSet RDM configuration utility (included with RDM-TXI).

A copy of the firmware file(s) to upload, available for download from www.tempest.biz/tech_support.

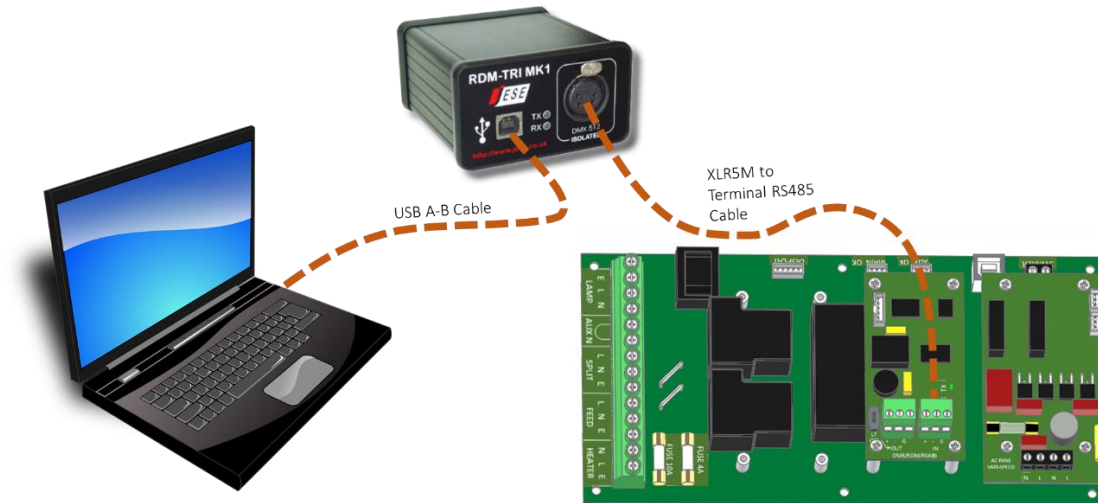


Powered Target DEC4 with 51.485 RS485 communication interface card.

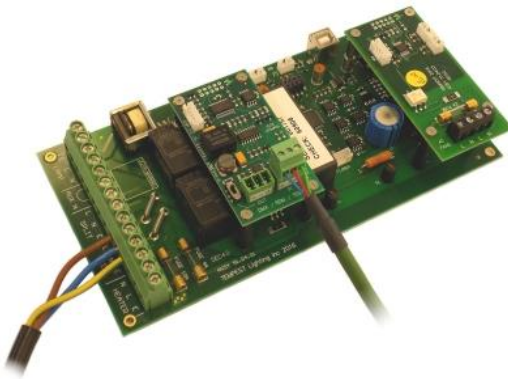
Installation Procedure

1. If not already installed, install a copy of GetSet. *To ensure that the correct USB drivers are loaded, the software should be installed and the PC/Laptop re-started before connection to an RDM-TXI.*
2. If using an Asian character set, go to control panel and select Region and Language. Ensure input locale for non Unicode programs is set to a non Asian language

3. Plug your RDM-TXI in to your PC and connect to the RS485 connection on the DEC4 communications board with the fly lead, as shown below.

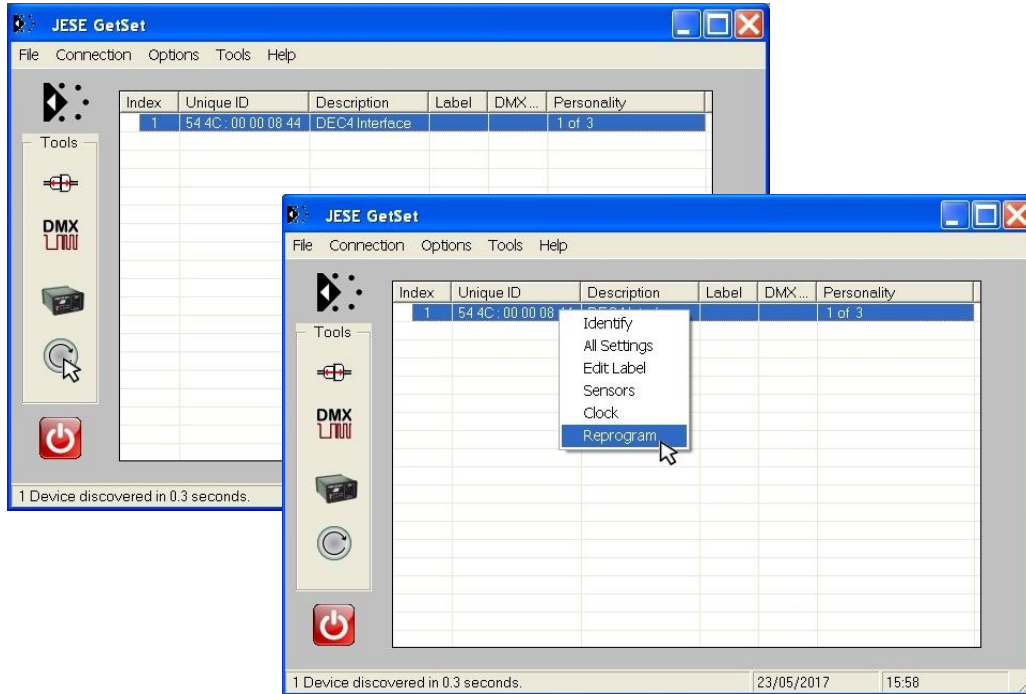


4. Power up the target SCB, ideally with mains power, or alternatively, with a USB power adaptor connected to the USB Port on the SCB.

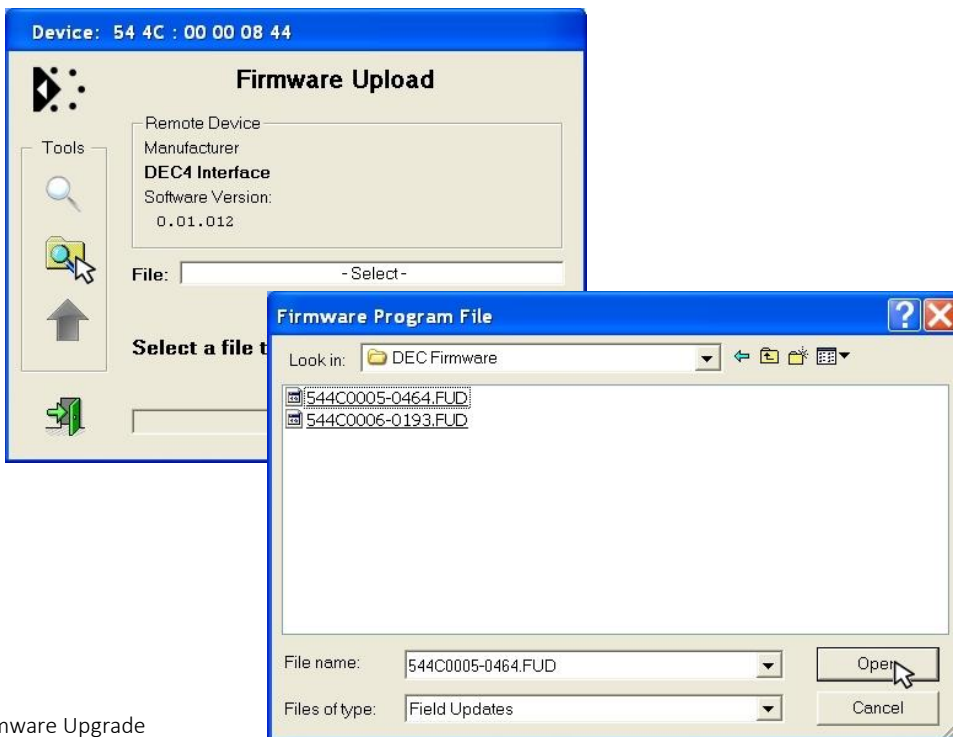


5. On older revisions of DEC Firmware, if the elected DEC 'DATA MODE' is set to 'RS485 TEMP', select 'RDM MONITOR' mode using the DEC user display. On more recent revisions of Firmware, the appropriate mode will be automatically selected.
6. Open the GetSet application, connect to the RDM-TXI and discover the DEC. To run discovery, click the Icon indicated below

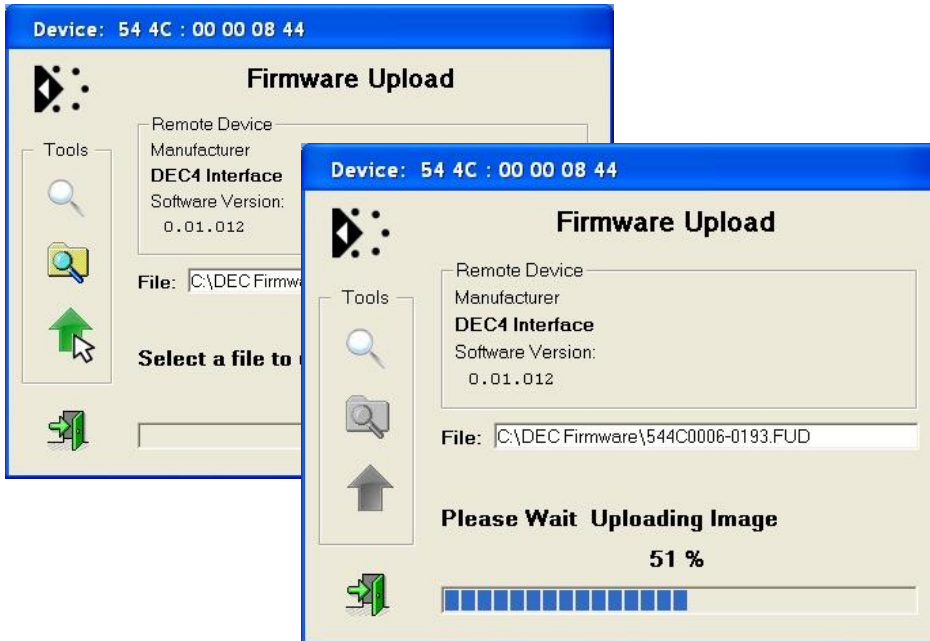
- Right click on the highlighted item in the list view and select 'Reprogram' from the popup menu. This will open the firmware upload tool.



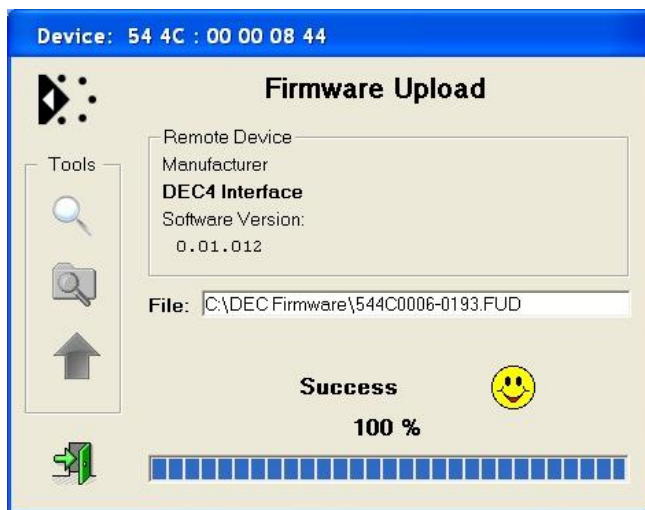
- In the Firmware upload handler, search for a file to upload by clicking the file icon. Find and select the file to load and click the Open button.



- On returning to the File upload tool window, select the green upload arrow to initiate the upload process. The upload will start.



- On successful completion of upload and restart, the firmware upload is complete.



Repeat from stage 8 to 11 for each additional file to upload.

On completion of the upload, dismiss the upload window and return to the main window.

Close the application and disconnect the USB Cable from the SCB



Important:

For Remote monitoring or control, set the **DATA MODE** for each enclosure as follows:

RDM ONLY MONITOR To view status information over **RDM** or control/monitor via **TEMP**

RDM + CONTROL To monitor and over **RDM** and control the Lamp/Projector relays via **DMX**

For more information on DEC control modes see your enclosure user manual, available for download at www.tempest.biz .

End.