# <u>T800 SeriesII Rack and Module</u> <u>Channel Change Dip Switch Operation and</u> <u>Channel Change OEM Interfacing.</u>

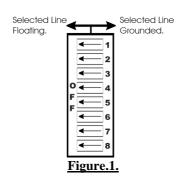
## Dip Switch Operation for Rack Backplane Assemblies.

What's required for Backplane Dip Switch Operation:-

External channel selection is *ONLY* available if an optional D-range kit (T800-03-0000) has been fitted to one or both T800 Series II modules (Rx, Tx, Ex only). This function can also be ordered by adding the (-0200) extension to T800 Series II modules. (i.e: T855-10-0200). The backplane DIP switches will *ONLY* address modules with these optional D-range kits fitted.

The channel selection lines need to be set to ground to change their states, as they pull up to +5V normally when set to the "off" position. (refer Figure 1).





The channel select DIP switches are paralleled for single channel operation across both Rx and Tx/Ex modules as standard. To operate the channel selection switches in this mode you must first select all 8 switches on SW2 to off, and use SW1 for the master channel selection across both modules.

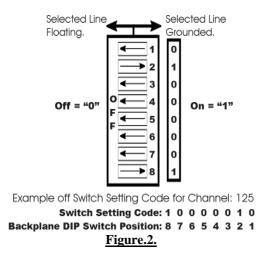
Both Rx and Tx/Ex T800 Series II modules have separate 8-way DIP switch available on the backplane PCB. You can use this switch to select one channel from any of the channels already programmed into the individual modules by PGM800 Win. To use this function you need to cut *ALL* links between *Channel Change Links Pads* on backplane. (Links 1 to 8).

When a Personality PCB assembly (T800-60-XXXX) has been fitted to a T800-50-0000 backplane assembly *ALL* DIP switches on the T800-50-0000 backplane must be switched to the "Off" position, so the T800-60-XXXX Channel Change DIP switches become the Master Channel Selection across both modules.

### Selecting a Channel from Backplane Dip Switches for Local Operation.

*Note:* Module channels 0-127 or 1-128 must be programmed using PGM800Win before backplane DIP switch function will be available.

Once modules have been programmed by PGM800Win, it will provide you in the *Switch Setting Column* of PGM800Win the user with a DIP switch code for each channel address. (i.e: Channel 125 (10000010)). When you relate this code back to the backplane channel selection switch the code is read from right to left. This means that the right most digit equals position "1" on the dip switch and the left most digit equals position "8". (refer to Figure 2).



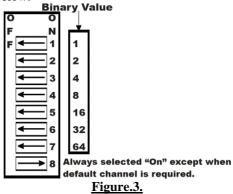
When backplane is to be operated in Local Channel Change Mode via backplane Dip switches, the DIP switch position "8" should always be in the "On" position.

#### Selecting a Channel Use TA087-02-0000 or T800-16-0000 Local Channel Change Panels.

When a backplane has a standard Tait Electronics Channel Panel installed (as above ) all DIP switches except position "8" must be in the "Off" position.

#### **Remotely Selecting a Channel from Backplane Assembly.**

The DIP switches are a form of binary counting so a channel number can be selected. The binary value of each DIP switch is shown below:

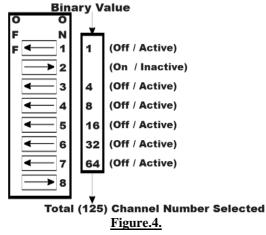


When a switch is "Off" its binary count is active, when a switch is "On" its binary count is inactive.

The various combinations of selected DIP switches when in there "On" or "Off" positions will provide a total sum, which when added up will be the equivalent of the T800 Series II modules channel number.

To select a channel, set the appropriate DIP switch or switches to the "Off" positions to make the binary count total the channel number you want. Set all other switches to "On".

- *Note:* The above ONLY applies when PGM800Win has selected the channel to run from 0 127 which is PGM800Win default setting. If PGM800Win has selected the channel to run from 1 128 you will need to add "1" to your total sum to generate the correct channel module number.
- *Example:* To select channel 125 when PGM800Win start at channel 0, the DIP switch settings are as shown below:



When selecting channel change remotely from the backplane OEM 25way D-range you must have the DIP switches which are being addressing through the OEM 25way D-range switched to the "Off" position and the remaining DIP switches which *AREN'T* being addressed in the "On" position.

Channel Lines Addressed		Number of Channel Selectable
1	=	0 to 1 Channels Selectable
1 to 2	=	0 to 3 Channels Selectable
1 to 3	=	0 to 7 Channels Selectable
1 to 4	=	0 to 15 Channels Selectable
1 to 5	=	0 to 31 Channels Selectable
1 to 6	=	0 to 63 Channels Selectable
1 to 7	=	0 to 127 Channels Selectable
8	=	Selected "On" Always for Remote Addressing
		Table.1.

Following is a table which shows the number of channels available versus channel address lines selectable:

# Selecting PGM800Win Default Channel Mode.

If any backplane DIP switches are selected, this will override the *Default Channel* programmed in by PGM800Win. When a *Default Channel* in selected via PGM800Win software, *ALL* DIP switches *MUST* be set to the "off" position. (i.e: 00000000).