## FR5000 Channel Steering



## FR5000 Channel Steering Port Assignments

The FR5000 uses BCD (Binary-Coded Decimal) for changing channels on the 25-pin connector.
In the Port Setting window, assign MCH Select 1-5 on any five pins (ports) available and set them Low (or High, depending on the output of the tone remote adapter). MCH Select does not mean channel number on the repeater, it refers to BCD numbers (please look at the table that follows).
Note: Assigning any pins as MCH Select XX immediately disables any channel changing using the Channel Up/Down Buttons.

| $\square$ LMR | Purl Selliry |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 区 Memnry CH | D-Suh 75pin |  |  |  |
| $\pm$ DTMF | Port | In/Cut | Function | Active Logic |
| $\pm \operatorname{SCAN}$ | Ext. I/O 15 | Input | MCH Select : 1 | Low |
| $\pm$ + 5Tone | Ext.1/O 16 | Input | MCH Select : 2 | Low |
| ${ }^{+}+\mathrm{OW}$ | Ext.I/O 17 | Input | MCH Select : 3 | Low |
| - External/\% | Ext.1/O 18 | Input | MCH Select : 4 | Low |
| able | Ext.1/O 19 | Input | MCH Select : 5 | Low |
| E-Uption | Ext.IJO 21 | Output | Analog Audible | Low |
| + [] Commor | Ext.I/O 23 | Output | Mic Mute | Low |
|  | Ext.I/O 24 | Output | Null | , Low |
|  | Ext.I/O 25 | Output | Hanger | Low |
|  | Ext.D/A 10 | Output, | Null |  |


| Port | BDC |
| :--- | :--- |
| MCH Select: $\mathbf{1}$ | +1 |
| MCH Select: $\mathbf{2}$ | +2 |
| MCH Select: $\mathbf{3}$ | +4 |
| MCH Select: 4 | +8 |
| MCH Select: 5 | +16 |

By using a combination of the BCD values, the Ex CH No can be selected, thus causing the radio to change to the channel that is referenced by that Ex Ch No. The

Ext CH No column is the sum of the MCH Select inputs from the tone remote adapter. The Move CH is the channel you want to switch to in response to the selection of the Ext CH No.


Example 1:
The examples assume the port channels (MCH Select) are set to be active Low and the dealer-selected remote device (BCD setting) is set to "Normally High (inactive state)".

With MCH Select 1, 2, 3, 4, set to Low (Port Setting Window), the tone remote adapter sends a Low signal to MCH Select pins (assigned on the DB-25) 1 and 3. This is equivalent to a BCD of $1+4$, which equals 5 . In the $\mathbf{C H}$ Switch Table shown above, Ext CH No 5 diverts the radio to Channel 5.

Example 2:
If a tone remote adapter sends a Low signal to MCH Select 1, 2, and 3, this is equivalent to a BCD of $1+2+4$, which equals 7 . In the table above, Ext CH No 3 diverts the radio to Channel 7.

Note: the "move" Channels can be changed in programming as needed.

