# MAGNUM S9 EXPORT FREQUENCY CONVERSION

**JP102 Jumper Block**     Remove Metal Cover          Note: See Programming Mode for more info:

**JP1** 10M/Band Select/Export Frequency
**JP2** Program Mode/Lock Bands
**JP3** Normal Spacing/10 KHz/5 KHz
**JP4** 5 Digit/6 Digit Frequency Display

PCBX-0335R3A

| | | |
|---|---|---|
| **JP1** | OFF = 10 Meter Band | ON = Export Band |
| **JP2** | OFF = LOCKED | ON = Program Mode |
| **JP3** | OFF = Normal Steps | ON = 10 KHz/5 KHz |
| **JP4** | OFF = 6 Digit All Mode | ON = 5 Digit AM/FM |

*JP1 sets 10M, Selects Band, or Export Band*
*JP2 sets the Programming Mode On or Lock*
*JP3 sets Channel Spacing to Normal or --*
*10 KHz - 5 KHz using Front Panel 10 KHz Sw.*
*JP4 sets the Frequency Display to 5 or 6 digits*

**Channel Board**                    **Jumper Diagram**
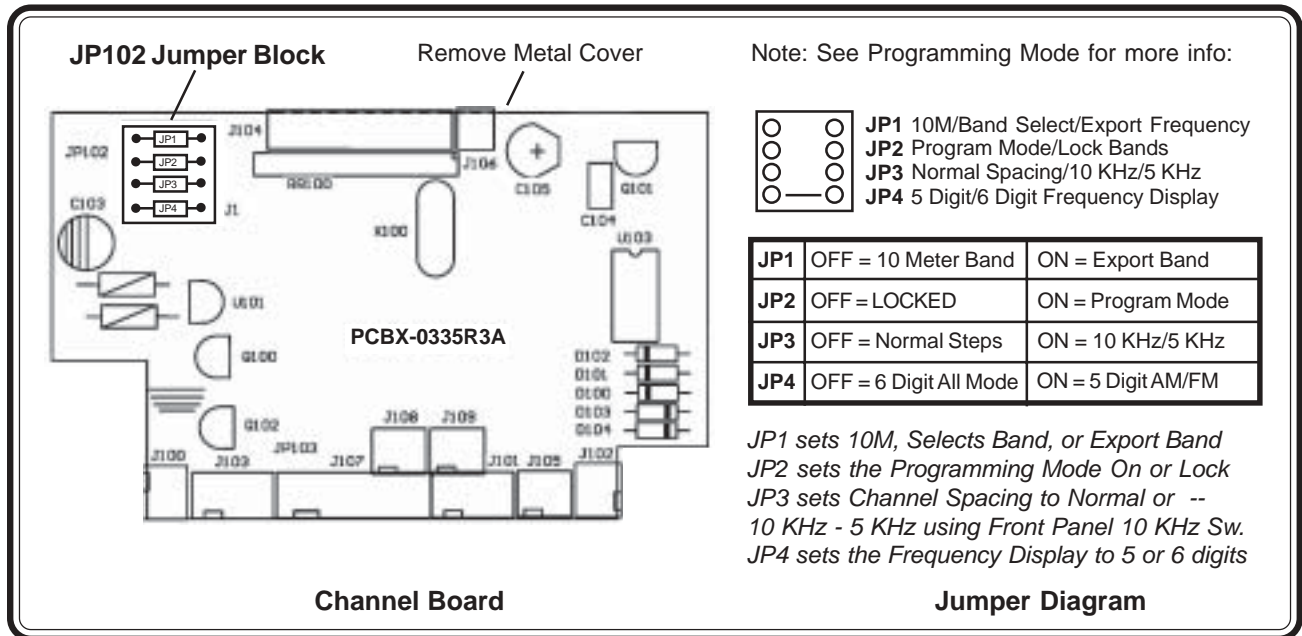
## Introduction:

The Magnum S9 is programmed for the 10 Meter Amateur Band out of the box, and covers a range of 28.065 - 28.525 MHz. The frequency range can be extended for Export Use in 8 Band segments each containing 40 Channels. These 8 bands can be programmed to any combination of Eight 40 channel blocks between 25.615 - 30.555 MHz.  The radio can also be programmed to cover all frequencies in 10 KHz or 5 KHz steps between 26.000 - 32.990 MHz.  (See Programming Mode)

## 10 Meter Only Mode:

The default setting from the factory covers only 4 bands between 28.065 MHz - 28.525 MHz. The jumper setting for this is JP1, JP2, JP3 = OFF and JP4 = ON.

## Export Mode:

This mode is pre-set to 8 Bands between 25.615 MHz - 29.205 MHz. The jumper setting for this mode is JP1 = ON   JP2,JP3 = OFF   JP4 = ON.

## Programming Mode:

This feature allows the radio to be setup into 8 separate bands, each individually programmed to cover any 40 channel segments you choose between 25.165 - 30.555 MHz. For instance, if you wanted Bands A and B to be setup to cover 25.165 - 26.055 MHz, Band C to be the CB Band 26.965 - 27.405 MHz, then Bands D, E, and F to cover 10 Meters at 28.315 - 29.655 MHz, the "Programming Mode" can be used to set this up.

Disconnect the wires from the power source after programming the unit to insure that the CPU (Computer) will reset properly.  Set the radio's Band Selector to position A. Using 2 short bare wires, jump the pins of JP2 and JP4 (JP1 & JP3 = OFF) Notice that the Channel Display now indicates a letter A through L instead of the Channel number. Temporarily short the pins of JP1 on the Channel Board using another short wire. Notice that the Channel Display advances to the next Band Letter each time the pins of JP1  are shorted. Continue advancing the letters on the display until you see the desired band for Position A of the Band Selector. Move the Band selector to position B, and again short the jumper pins of  JP1 until you see your choice for Band B. Repeat this for each of the 8 Band positions and when the last is done, move the Jumpers to this order to Lock them into Memory.   JP1 = ON   JP2, JP3 = OFF   JP4 = ON

This radio is also capable of covering the entire frequency range between 26.000 MHz - 32.990 MHz in 10 KHz steps or in 5 KHz steps (10 KHz Front Panel = OFF)    JP1 = ON    JP2 = OFF    JP3 - ON    JP4 = OFF

# MAGNUM S9 EXPORT FREQUENCY CONVERSION

**JP1 = ON   JP2 = OFF   JP3 = OFF   JP4 = ON    (EXPORT BAND)**

## Frequency Chart

| Ch. | Band A | Band B | Band C | Band D | Band E | Band F | Band G | Band H | Band I | Band J | Band L |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 25.615 | 26.065 | 26.515 | 26.965 | 27.415 | 27.865 | 28.315 | 28.765 | 29.215 | 29.665 | 30.115 |
| 2 | 25.625 | 26.075 | 26.525 | 26.975 | 27.425 | 27.875 | 28.325 | 28.775 | 29.225 | 29.675 | 30.125 |
| 3 | 25.635 | 26.085 | 26.535 | 26.985 | 27.435 | 27.885 | 28.335 | 28.785 | 29.235 | 29.685 | 30.135 |
| 4 | 25.655 | 26.105 | 26.555 | 27.005 | 27.455 | 27.905 | 28.355 | 28.805 | 29.255 | 29.705 | 30.155 |
| 5 | 25.665 | 26.115 | 26.565 | 27.015 | 27.465 | 27.915 | 28.365 | 28.815 | 29.265 | 29.715 | 30.165 |
| 6 | 25.675 | 26.125 | 26.575 | 27.025 | 27.475 | 27.925 | 28.375 | 28.825 | 29.275 | 29.725 | 30.175 |
| 7 | 25.685 | 26.135 | 26.585 | 27.035 | 27.485 | 27.935 | 28.385 | 28.835 | 29.285 | 29.735 | 30.185 |
| 8 | 25.705 | 26.155 | 26.605 | 27.055 | 27.505 | 27.955 | 28.405 | 28.855 | 29.305 | 29.755 | 30.205 |
| 9 | 25.715 | 26.165 | 26.615 | 27.065 | 27.515 | 27.965 | 28.415 | 28.865 | 29.315 | 29.765 | 30.215 |
| 10 | 25.725 | 26.175 | 26.625 | 27.075 | 27.525 | 27.975 | 28.425 | 28.875 | 29.325 | 29.775 | 30.225 |
| 11 | 25.735 | 26.185 | 26.635 | 27.085 | 27.535 | 27.985 | 28.435 | 28.885 | 29.335 | 29.785 | 30.235 |
| 12 | 25.755 | 26.205 | 26.655 | 27.105 | 27.555 | 28.005 | 28.455 | 28.905 | 29.355 | 29.805 | 30.255 |
| 13 | 25.765 | 26.215 | 26.665 | 27.115 | 27.565 | 28.015 | 28.465 | 28.915 | 29.365 | 29.815 | 30.265 |
| 14 | 25.775 | 26.225 | 26.675 | 27.125 | 27.575 | 28.025 | 28.475 | 28.925 | 29.375 | 29.825 | 30.275 |
| 15 | 25.785 | 26.235 | 26.685 | 27.135 | 27.585 | 28.035 | 28.485 | 28.935 | 29.385 | 29.835 | 30.285 |
| 16 | 25.805 | 26.255 | 26.705 | 27.155 | 27.605 | 28.055 | 28.505 | 28.955 | 29.405 | 29.855 | 30.305 |
| 17 | 25.815 | 26.265 | 26.715 | 27.165 | 27.615 | 28.065 | 28.515 | 28.965 | 29.415 | 29.865 | 30.315 |
| 18 | 25.825 | 26.275 | 26.725 | 27.175 | 27.625 | 28.075 | 28.525 | 28.975 | 29.425 | 29.875 | 30.325 |
| 19 | 25.835 | 26.285 | 26.735 | 27.185 | 27.635 | 28.085 | 28.535 | 28.985 | 29.435 | 29.885 | 30.335 |
| 20 | 25.855 | 26.305 | 26.755 | 27.205 | 27.655 | 28.105 | 28.555 | 29.005 | 29.455 | 29.905 | 30.355 |
| 21 | 25.865 | 26.315 | 26.765 | 27.215 | 27.665 | 28.115 | 28.565 | 29.015 | 29.465 | 29.915 | 30.365 |
| 22 | 25.875 | 26.325 | 26.775 | 27.225 | 27.675 | 28.125 | 28.575 | 29.025 | 29.475 | 29.925 | 30.375 |
| 23 | 25.905 | 26.355 | 26.805 | 27.255 | 27.705 | 28.155 | 28.605 | 29.055 | 29.505 | 29.955 | 30.405 |
| 24 | 25.885 | 26.335 | 26.785 | 27.235 | 27.685 | 28.135 | 28.585 | 29.035 | 29.485 | 29.935 | 30.385 |
| 25 | 25.895 | 26.345 | 26.795 | 27.245 | 27.695 | 28.145 | 28.595 | 29.045 | 29.495 | 29.945 | 30.395 |
| 26 | 25.915 | 26.365 | 26.815 | 27.265 | 27.715 | 28.165 | 28.615 | 29.065 | 29.515 | 29.965 | 30.415 |
| 27 | 25.925 | 26.375 | 26.825 | 27.275 | 27.725 | 28.175 | 28.625 | 29.075 | 29.525 | 29.975 | 30.425 |
| 28 | 25.935 | 26.385 | 26.835 | 27.285 | 27.735 | 28.185 | 28.635 | 29.085 | 29.535 | 29.985 | 30.435 |
| 29 | 25.945 | 26.395 | 26.845 | 27.295 | 27.745 | 28.195 | 28.645 | 29.095 | 29.545 | 29.995 | 30.445 |
| 30 | 25.955 | 26.405 | 26.855 | 27.305 | 27.755 | 28.205 | 28.655 | 29.105 | 29.555 | 30.005 | 30.455 |
| 31 | 25.965 | 26.415 | 26.865 | 27.315 | 27.765 | 28.215 | 28.665 | 29.115 | 29.565 | 30.015 | 30.465 |
| 32 | 25.975 | 26.425 | 26.875 | 27.325 | 27.775 | 28.225 | 28.675 | 29.125 | 29.575 | 30.025 | 30.475 |
| 33 | 25.985 | 26.435 | 26.885 | 27.335 | 27.785 | 28.235 | 28.685 | 29.135 | 29.585 | 30.035 | 30.485 |
| 34 | 25.995 | 26.445 | 26.895 | 27.345 | 27.795 | 28.245 | 28.695 | 29.145 | 29.595 | 30.045 | 30.495 |
| 35 | 26.005 | 26.455 | 26.905 | 27.355 | 27.805 | 28.255 | 28.705 | 29.155 | 29.605 | 30.055 | 30.505 |
| 36 | 26.015 | 26.465 | 26.915 | 27.365 | 27.815 | 28.265 | 28.715 | 29.165 | 29.615 | 30.065 | 30.515 |
| 37 | 26.025 | 26.475 | 26.925 | 27.375 | 27.825 | 28.275 | 28.725 | 29.175 | 29.625 | 30.075 | 30.525 |
| 38 | 26.035 | 26.485 | 26.935 | 27.385 | 27.835 | 28.285 | 28.735 | 29.185 | 29.635 | 30.085 | 30.535 |
| 39 | 26.045 | 26.495 | 26.945 | 27.395 | 27.845 | 28.295 | 28.745 | 29.195 | 29.645 | 30.095 | 30.545 |
| 40 | 26.055 | 26.505 | 26.955 | 27.405 | 27.855 | 28.305 | 28.755 | 29.205 | 29.655 | 30.105 | 30.555 |

**Note The VCO coil (behind channel board) may have to be re-adjusted for band coverage above 30 MHz Transmit Power above 29.990 MHz is Not Guaranteed.**

Programming Notes:

* Replace the Metal Cover on the Channel Board after programming to reduce receiver noise.
* The Channel Display Does Not Indicate Channels in the 10 KHz or 5 KHz Modes.
* Jumper JP4 sets 5 Digit (AM/FM Only) or 6 Digit (All Modes) Frequency Display.