

# Q106CRS Calibrated Range Switch

July 2002

The Q106CRS increases the accuracy of the Range switch on the Q106 Oscillator from 1% to .1%. Helpful when you want to change octaves without requiring fine frequency adjustment. The modification includes adding the Q106CRS circuit board between the Range switch and the Q106 circuit board, and the removal of a resistor on the Q106 circuit board.

## Installation

The Q106 should be calibrated first. Calibration is normally not needed unless the trim pots have been changed.

PCB: Printed Circuit Board

1. Locate R60 on the Q106 PCB and remove it with nippers.
2. Locate the Range switch cable connector and disconnect it from the PCB.
3. Attach the Q106CRS PCB to the connector where the Range switch was connected. Slip the PCB over the connector pins and solder the 8 pins.
4. Connect the Range switch connector onto the Q106CRS PCB.

## Calibration

Attach a frequency counter to the sine output.

Set the Range switch to 2'.

Adjust the frequency to 512.0Hz using the frequency control. Do not bump this control during calibration

Set the Range switch to 4'.

Adjust the Trim Pot labeled 4' to achieve 256.0Hz.

Set the Range switch to 8'.

Adjust the Trim Pot labeled 8' to achieve 128.0Hz.

Set the Range switch to 16'.

Adjust the Trim Pot labeled 16' to achieve 64.0Hz.

Set the Range switch to 32'.

Adjust the Trim Pot labeled 32' to achieve 32.0Hz.

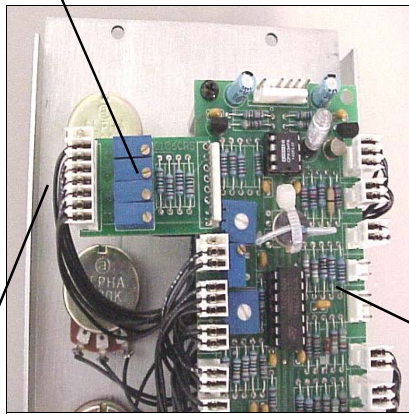
Q106 Oscillator



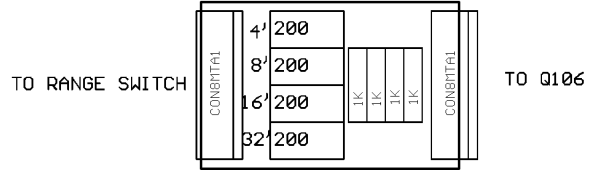
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Q106CRS PCB



Q106CRS CALIBRATED RANGE SWITCH



Q106 PCB

Range Switch Cable

Q106 Oscillator

