Technical Bulletin 109

MODIFYING A WC INPUT FOR PROPER GPS LEVEL

The DCD-8 has 3 Word Clock inputs, 2 on the rear panel and 1 on the front. The required level for these inputs is 0.79Vp-p.

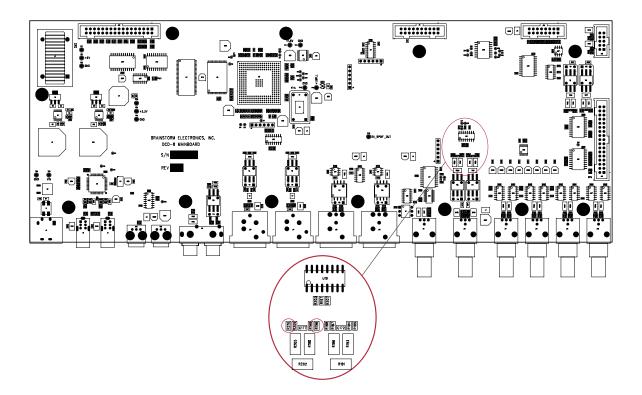
When using a 10MHz GPS signal as a reference, under most circumstances, the signal level into the DCD-8 will be fine and no modification is required.

However, if the level of the GPS becomes too low to be accepted by the DCD-8, 2 resistor values can be changed so that the required level would only be 0.59Vp-p.

MODIFICATION:

Locate R196 and R210. Normal value for both resistors is $4.7 \text{K}\Omega$.

Replace them by $10.5K\Omega$ resistors.



MODIFYING A WORD CLOCK INPUT FOR LOW LEVEL SOURCE

The DCD-8 has 3 Word Clock inputs, 2 on the rear panel and 1 on the front. The required level for these inputs is 0.79Vp-p.

When using a 10MHz GPS signal as a reference, although under most circumstances the level into the DCD-8 should be high enough, on occasion, it may be too low.

Sometimes also when using Word Clock as a reference, some distribution systems may deliver a level below the required 0.79Vp-p.

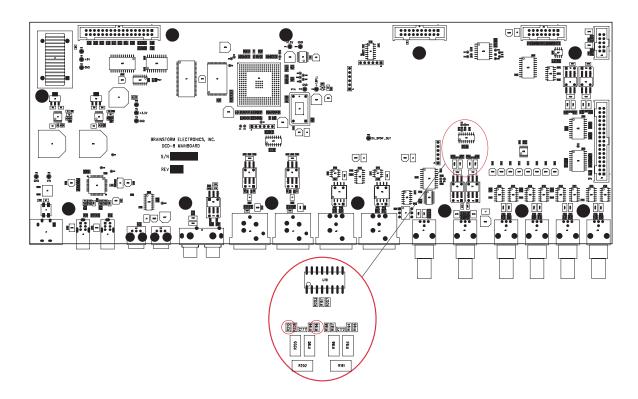
For those situations, 2 resistors can be removed, changing the minimum required input level to 0.20Vp-p.

MODIFICATION:

Typycally, we would recommend modifying WC Input 2 only, leaving the other 2 inputs unchanged so that they are less susceptible to noise.

To modify Input 2:

- locate R196 and R210. Normal value for both resistors is $4.7 \mathrm{K}\Omega$.
- Remove those resistors.



Inputs 1 & 3 can be modified the same way. The resistors to remove for those inputs are:

- INPUT 1: R188 & R195 - INPUT 3: R214 & R221