

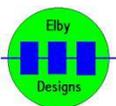


## CGS795 - Digital Reverb

### Construction Guide

Revision 0.1

May 2, 2020



# CGS795 - Digital Reverb

Construction of the [CGS795](#) requires the assembly of 2 boards:-

Column 1 - CGS795 PCB ([3D Model](#)) ([Overlay](#))

Column 2 - Panther Jack ([3D Model](#)) ([Overlay](#))

Bill Of Materials - [Short Delay](#)

Bill Of Materials - [Medium Delay](#)

Bill Of Materials - [Long Delay](#)

Constructors should refer to the PCB Overlays for any specific comments regarding the board assemblies, the Bills of Materials for the current value of all components and [General Construction Notes](#) for general PCB assembly guidelines.

1. Prepare the Jack Carrier assembly ([3D Model](#))
2. Assemble the Column 2 board
3. Assemble the Column 1 board fitting all components except the sub-assembly
4. Form the tinned copper wire and solder over the reverb module as a retainer to prevent the module from moving
5. Mount the sub-assembly on to the CGS795 PCB but do not solder
6. Offer the assembly up to the front panel and secure using the supplied nuts and washers
7. Install the Column assembly and secure using the supplied nuts
8. Connect the two boards using the short IDC cable



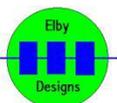
## Calibration

1. Set [LEFT MIX] and [RIGHT MIX] to the 'WET' position and [FEEDBACK] fully clockwise
2. Feed a 440Hz 5VAC pk-pk sine wave into [IN]
3. Monitor [LEFT MIX] which should be undulating between the 'WET' and 'DRY' outputs
4. Adjust P103 until both signals are of equal amplitude
5. Listen to the [LEFT REVERB] output
6. Set [FEEDBACK] to '8'
7. Adjust P102 until the output is just about to go in to 'overdrive' mode where the signal builds up on itself to the point of distortion

## Decay Period ( $T_{60}$ )

Reverberation Time ( $T_{60}$ ) is a measure of the time required for the sound to 'fade away' in an enclosed area after the source of the sound has stopped. The CGS795 is available with 3 different reverberation times of:-

- Short - 2.0 seconds
- Medium - 2.5 seconds, and
- Long - 2.85 seconds



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