N5262 Meter Buffer Board Installation Guide

The installation of the Meter Buffer Board can be a time-consuming process, involving a number of connections to and from the console. It is recommended that you allow 2-3 hours for the installation, although it is unlikely that it will take that long to complete.

**Required Tools:**

- 2mm Hex Driver or Allen Key
- PH1 Screwdriver (or any + style, medium-sized screwdriver will do)
- Pozi 1 Screwdriver

**Important:**

Please ensure the console is powered off prior to carrying out the following procedure.
Meter Buffer Board Assembly - Overview

A: ‘Power to N4613’ connects to ‘Power From Motherboard’

B: ‘Power Out’ connects to 10-Way Ribbon ‘N4613’ on Monitor Panel

C: ‘From Bin Meter Data’ connects to ‘Meter Comms’ on the Motherboard

D: ‘To Meter Data’ connects to ‘Control In’ on the back of the Master Bar Graph
Installation Guide

The installation stages requiring the removal of the fader panel and monitor panel will be most effectively carried out with 2 persons - one to hold the panels in place while the other works in the console bay.

Stage 1 - Removing The Master Fader Panel

Remove the four hex screws that secure the master fader panel in place. The panel will not have much room for movement once it has been unscrewed as it is connected to the console’s internal motherboard with ribbon cables. When the screws have been removed, gently pull the fader panel towards you from its top so that it can be held upright in a vertical position with the faders facing you [Fig 1.1].

Once the fader panel has been unscrewed and held in place, the N5262 Meter Buffer Board needs to be attached underneath the fader panel - the best place to put it is between the Group and Master Faders. There are adhesive pads mounted on the base of the Meter Buffer Board so it can be quickly affixed to the fader enclosure as shown in Fig 1.2 and 1.3 overleaf.
Fig 1.2 and 1.3 show the correct location where the Meter Buffer Board should be fixed in place. In Fig 1.3 (facing the console) you can see how the Board’s ribbon cables fit neatly between those attached to the Group and Master Fader Panel.

If you look up at the Buffer Board from underneath the console, you will see a row of four red LEDs. This is a design feature implemented so that you can monitor the LEDs after the Board has been installed. **Make sure they are lined up with the cut-out slots in the black panel so that you can clearly see the LEDs when looking up at the Buffer Board from underneath the console.**

Once you have identified where the Board should be attached, fix it in position using the adhesive feet on its base. You will be guided through where to connect the Meter Buffer Board’s four labeled ribbon cables (A, B, C and D) in the next steps.
Stage 2 - Removing the Monitor Panel

After the Meter Buffer Board has been attached underneath the fader panel, the fader panel can be replaced into its original position. The screws should be replaced after the whole installation has been carried out in case you need to access the Buffer Board again.

The next step is to completely remove the Monitor Panel which is the right-hand-half of the Centre section.

Use a 2mm Hex driver or Allen key to remove the 4 corner screws on the Monitor Panel [Fig 2.1]. Grip the Master Volume control knob (red) and/or the Oscillator Frequency selector knob [Fig 2.2] and lift the Monitor Panel gently towards you, then “fold” it out to the right-hand side (like opening a hinged door). Fig 2.3, above, shows this, but to the left-hand-side instead of right. At this stage, it may be easiest to ask another person to hold the Monitor Panel while you disconnect its various ribbon and 3-pin header cables. There are five cables that need to be disconnected so that the Monitor Panel can be completely removed:

1. 10-Way Ribbon Cable/Header- ‘Power to N4613’
2. 50-Way Ribbon Cable/Header - ‘N4612’
3. 50-Way Ribbon Cable/Header - ‘N4612’
4. iMon Cable (grey cable, 3-pin header)
5. Control Room Headphones (red/white/green cable, 3-pin header)
Removing Logic & Control Room Monitor Card (N4592)

Before removing the Logic & Control Room Monitor PCB card (N4592) you will have to remove the two ribbon cables that are attached to it – ‘7.1 Input’ and ‘Alt 2 Spkr Out’. These can be located towards the bottom end of the PCB card. In addition, you will also need to remove the thin, grey cable that is attached to the Logic & Control Room Monitor card with a 3-pin header connector. Once these three cables have been detached, gently remove the Logic & Control Room Monitor card by pulling it up towards you with even pressure on both ends of the card. Put the PCB card to one side.

Removing Stereo Summing Amps & Outputs PCB Card (N3694)

Before removing the Stereo Summing Amps & Outputs PCB card (N3694) from the centre section you will have to remove the ‘Reverb In’ 26-Way Ribbon cable that is attached to it. Disconnect this ribbon cable, then gently hold each end of the stereo card and pull it up with even pressure on both ends of the card to unseat it from the motherboard. Put the PCB card to one side.
Connecting Meter Buffer Board Ribbon Cables (A, B, & C)

At this stage it is time to connect three of the Meter Buffer Board’s ribbon cables to the console - A, C and then B.

Here you can see where to connect the first of the ribbon cables (labeled ‘A’). Feed the ribbon cable through the console chassis from the fader panel enclosure and into the centre section bay. The cable should be connected to the Motherboard via the header labeled ‘Power To N4613’. Previously, this was connected to the Monitor Panel via the smaller, 10-Way ribbon cable. Locate the ‘Power To N4613’ header (between the Stereo card and Logic & Control Room Monitor card) and plug in the ‘A’ ribbon cable.

Next, connect the ribbon cable marked ‘C’ to the header on the Motherboard that is labeled ‘Meter Comms’. This header is to the above-left of the ‘Power To N4613’ header from the previous step. Ensure the ‘C’ cable is connected to the ‘Meter Comms’ header and not the ‘HUI Comms’ header which is directly below it.
Stage 3 - Removing Master VU Meters Acrylic

In order to access the ‘Control In’ 10-Way Header that connects to the Meter Buffer Board’s ribbon cable ‘D’, the Master VU Meters Acrylic will need to be removed.

Please note that it is not required to remove the console’s top timber for these steps. The demonstration photos below were taken on an incomplete production console.

The VU Meters Acrylic is held in position with 4 ‘Pozi 1’ type screws. Once these have been removed, the Acrylic can be gently lifted out of its position, disconnected and removed from the console in order to connect various cables to the Buffer Board. To detach the VU Meters Acrylic, grip it using the outer casing of the Meters themselves [Fig 3.1, overleaf] and lift out towards you and up at the same time [Fig 3.2 & 3.3]. It is a tight fit, so take care to remove it slowly and avoid scratching the Acrylic surface. Also, be careful of loose cables/wires catching when removing the Meters. The Master VU Meters Acrylic is connected via a single 10-Way ribbon cable and latching header - disconnect this and put the VU Meters Acrylic to one side.
Now the Master Bar Graph can be removed in order to access its ‘Control In’ 10-Way Header. There are seven ‘Pozi 1’ screws that hold the Bar Graph in place. Remove these, then lift the Bar Graph gently down and out towards you as shown below:

On the rear of the Bar Graph is a slim 10-Way ribbon cable connected to a 10-Way Header (labeled ‘Control In’) - disconnect this at both ends and remove the ribbon cable from the console as it will be replaced with a new one in the next step. Now, you will have to feed the Meter Buffer Board’s cable labeled ‘D’ through the chassis of the console and into its centre section bay. From there, feed it up behind the Bar Graph’s enclosure and through the empty gap from where the 10-Way ribbon was removed in the previous step.

Now, connect the Meter Buffer Board’s ribbon cable labeled ‘D’ to the ‘Control In’ header on the rear of the Master Bar Graph. Push the connector in firmly until the latching header snaps into place, as shown below:
Stage 4 - Reconnecting & Re-Seating

After the Meter Buffer Board is completely installed, you will have to replace all components, screws, cards and panels that were removed in order to access the Board’s cables connections. It is probably best to follow this guide in reverse order to ensure you do not miss any vital steps. Here is a suggested workflow:

1) Re-seat Master Bar Graph in position; replace and secure all Bar Graph screws.

2) Re-connect Master VU Meters Acrylic ribbon cable; replace Acrylic in original position and secure all screws.

3) Re-seat Stereo Summing Amps & Outputs PCB Card and replace ‘Reverb In’ ribbon cable.

4) Re-seat Logic & Control Room Monitor PCB Card and replace ‘7.1 Input’ and ‘Alt 2 Spkr Out’ ribbon cables.

5) Re-seat Monitor Panel’s ‘N4612’ 50-Way ribbon cables and replace iMon and Control Room Headphone cables via their 3-Pin headers.

6) Replace Monitor Panel in Centre Section, replace all hex screws.

7) Replace Fader Panel hex screws and secure in place.