

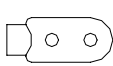
GL4000 Expander Fitting instructions

ALLEN & HEATH

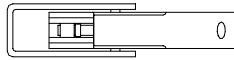
The GL4000 expander options are designed to attach to either side of the GL4000 console depending on console format. The expander can be fitted to consoles with the integral meterbridge as well as those consoles that do not have the integral meterbridge. The expander modules allow a GL4000 console to be expanded up to a maximum of 48 channels.

Please read the following instructions carefully before attempting to fit the module.

1. Check contents of pack to ensure all parts have been supplied.



A
CATCHPLATE
QUANTITY 1
PART NO. AB0336



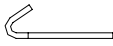
B
ADJUSTABLE FASTENER
QUANTITY 1
PART NO. AB0335



C
SCREW M6X8 SKT HEX
QUANTITY 2
PART NO. AB2421



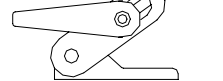
D
SCREW M3X6 HEX
QUANTITY 3
PART NO. AB2813



E
SCREW 6BX5/16
QUANTITY 40
PART NO. AB2810



G
NUT LOCK M4
QUANTITY 4
PART NO. AB0188



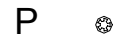
H
STUD M6X38.5
QUANTITY 5
PART NO. AB0325



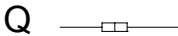
J
STUD SLOTTED
QUANTITY 2
PART NO. AB2406



K
NUT LOCK M3
QUANTITY 3
PART NO. AB0102

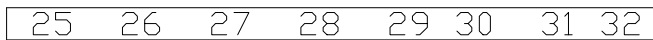


L
SHAKEPROOF WASHER
QUANTITY 3
PART NO. AB0244

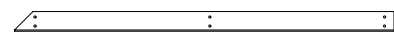


Q
OR LINK
QUANTITY 5
PART NO. AC0335

M
BASE BRACKET
QUANTITY 1
PART NO. AA2191

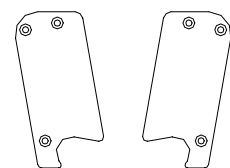
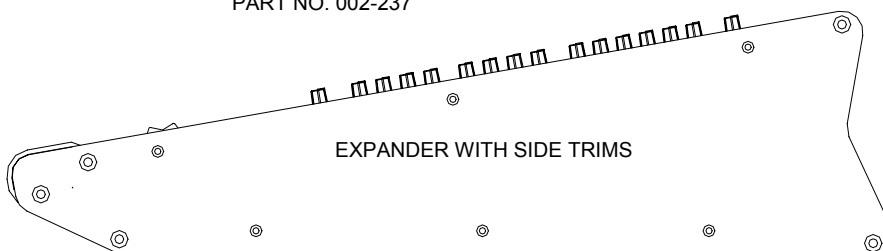


L IDENT STRIP
QUANTITY 1 SET
PART NO.s AK2637 AK2638 AK2639 AK2703 AK2704
AK3112 AK3113 AK3114 AK3115 AK3116



N
EARTH STRAP
QUANTITY 1
PART NO. 002-237

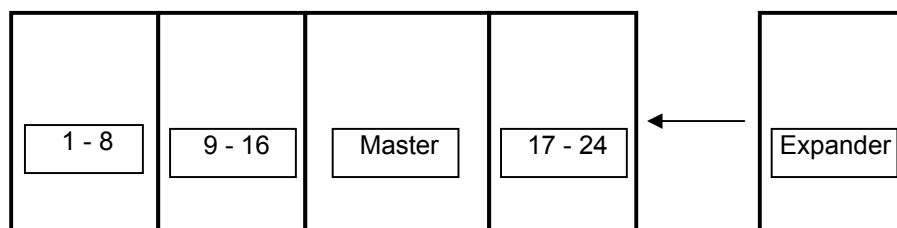
R
SIDE PLATES
QUANTITY 1 PAIR
PART NO: AA3849L&R



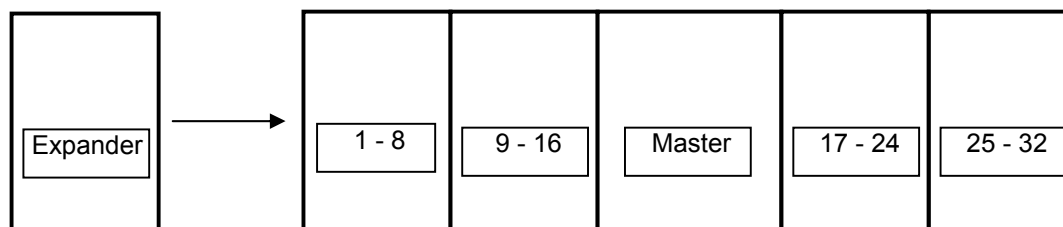
EXPANDER POSITIONING

2. The Expander unit must be fitted in the position shown in the diagrams below.

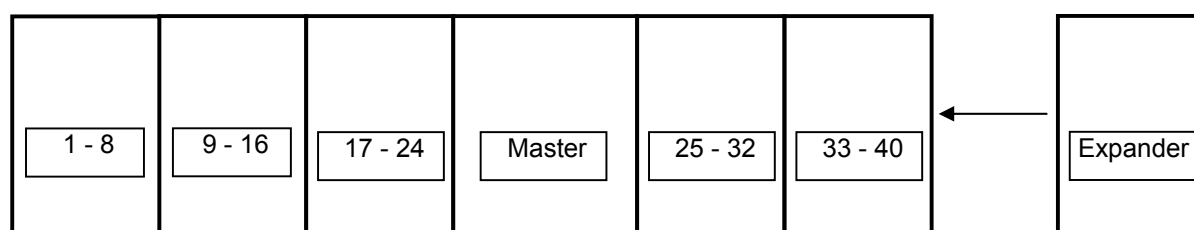
GL4000-824 + Expander



GL4000-832 + Expander



GL4000-840 + Expander



TOOLS REQUIRED:

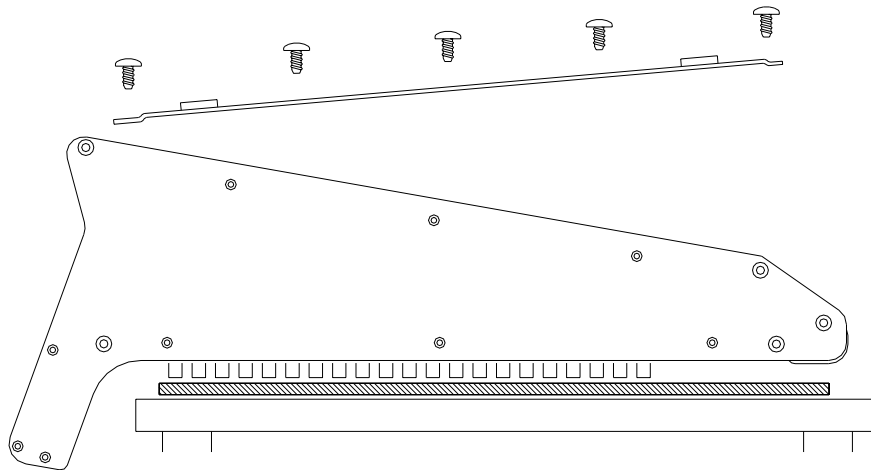
The following tools are required to fit the expander module.

- 1x 2.5mm Hex key
- 1x 4mm Hex key
- 1x 1-point Pozi screwdriver
- 1x flat point screwdriver
- 1x long nose pliers
- 1x 5.5mm AF spanner
- 1x wire cutters
- 1x small tipped soldering iron and solder

INSTALLATION

Only technically competent personnel should attempt to fit the expander module. Disconnect the Power Supply Unit and cables from the console before fitting the expander module

3. Ensure you have a good work surface and clear area before starting work. Carefully invert the console and remove the base panel by removing all screws along the edges of the base panel. Also remove the 3 screws in the centre of the large base panel. Note; do not rest the console on the meterbridge.



4. Remove the side trim and bracket from the side of the console that is to have the expander fitted. Similarly; remove the side trim and bracket from the side of the expander that is to be joined to the console.

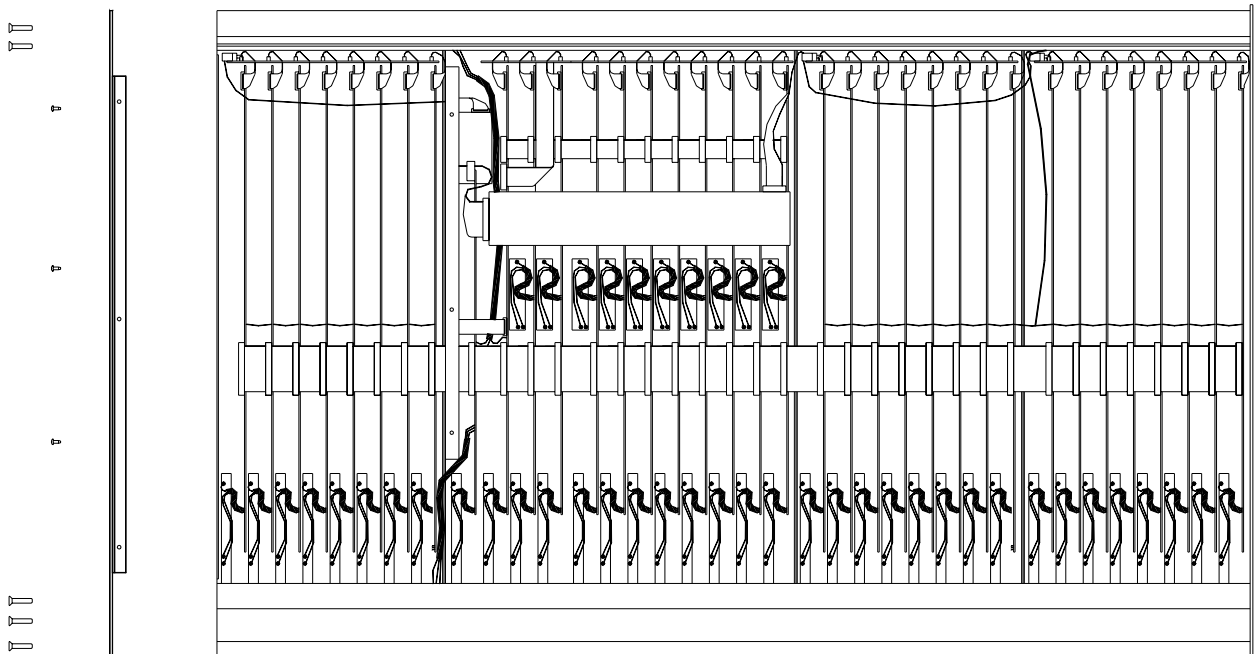
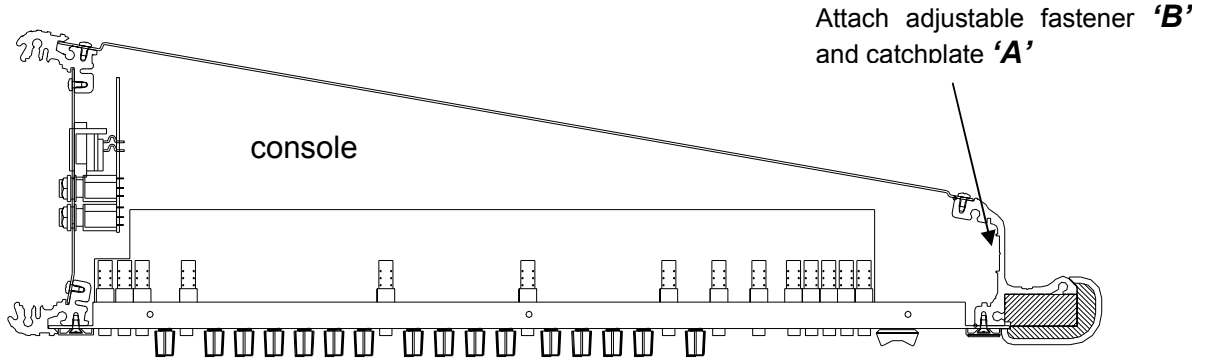
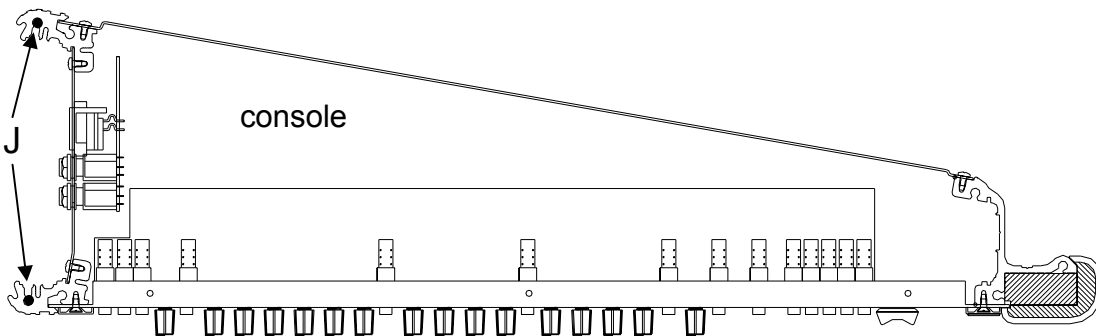


Figure shows console to be expanded on right hand side

- Attach the adjustable fastener **'B'** to the inside of the front extrusion of the console and catchplate **'A'** to the inside of the expander using screws **'F'** and nuts **'G'**. The mounting holes are located under the front armrest of each unit and are pre-drilled for the adjustable fastener and catchplate. Make sure the movement of the fastener lever does not interfere with the input channel circuit board assemblies.

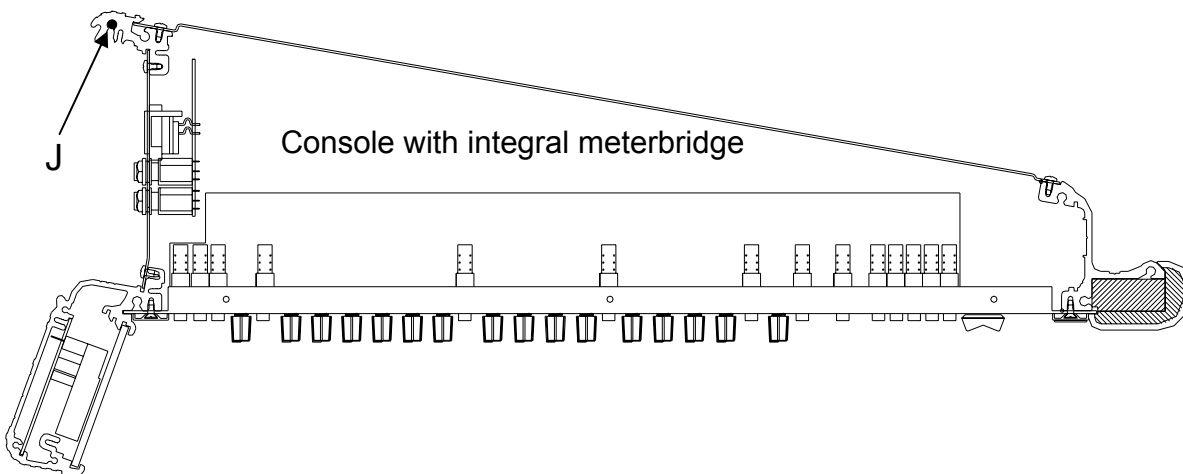


- Screw the 2 slotted studs **'J'** into the upper and lower rear extrusions of the console. Rotate the studs until the flat is visible in the slots.

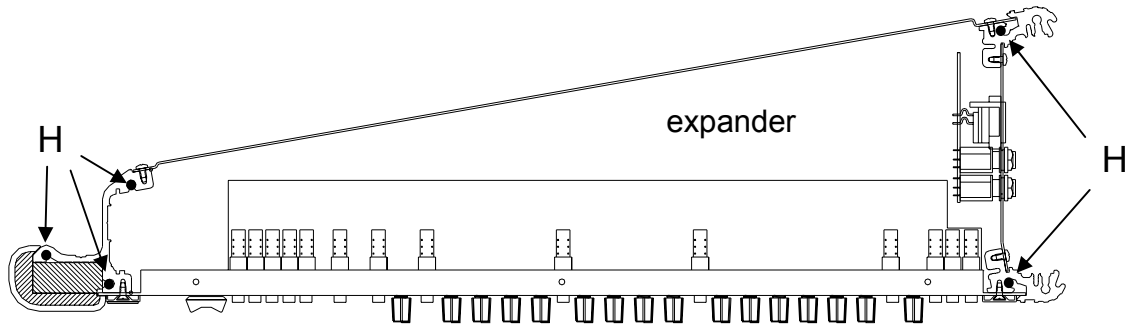


Console with integral meterbridge

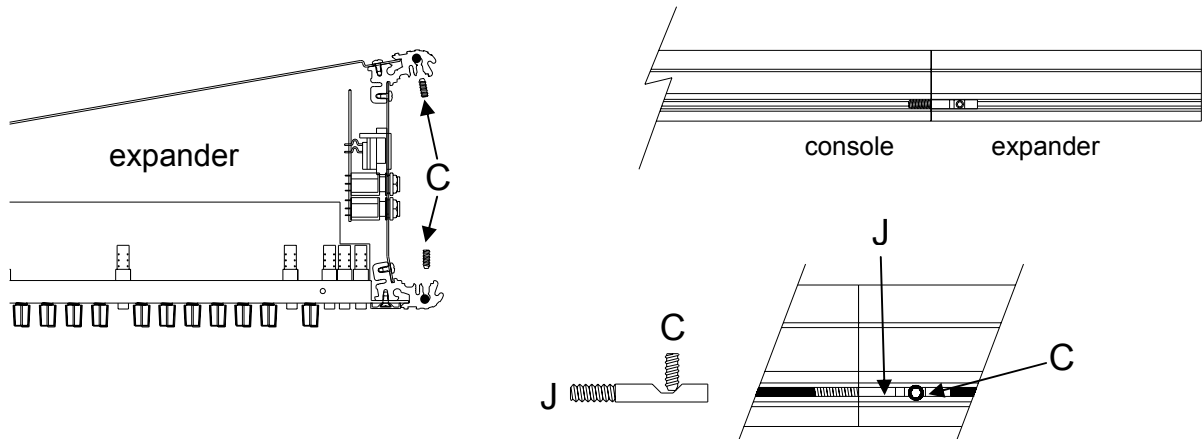
- Screw the single slotted stud **'J'** into the lower rear extrusion of the console. Rotate the stud until the flat is visible in the slot.



7. Screw the 5 plain studs **'H'** into the extrusion holes of the expander as shown below.

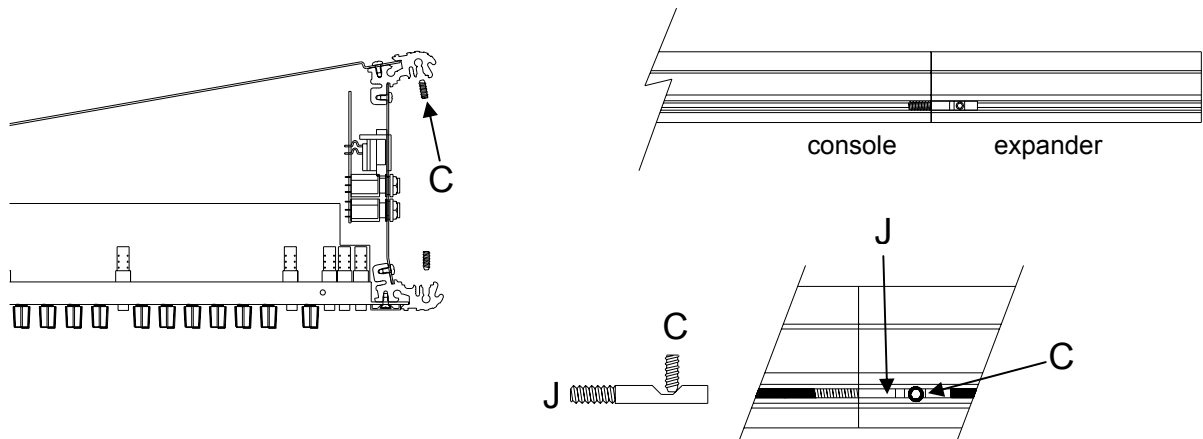


8. Slide the expander module onto the 7 studs and close the adjustable fastener **'B'** over the catchplate **'A'**, see 5. The fastener can be adjusted to ensure a good join. Screw in the locking screws **'C'** into the pre-tapped holes of the expander. Make sure the locking screws **'C'** engages with the flat of the slotted studs **'J'**, see diagram below.

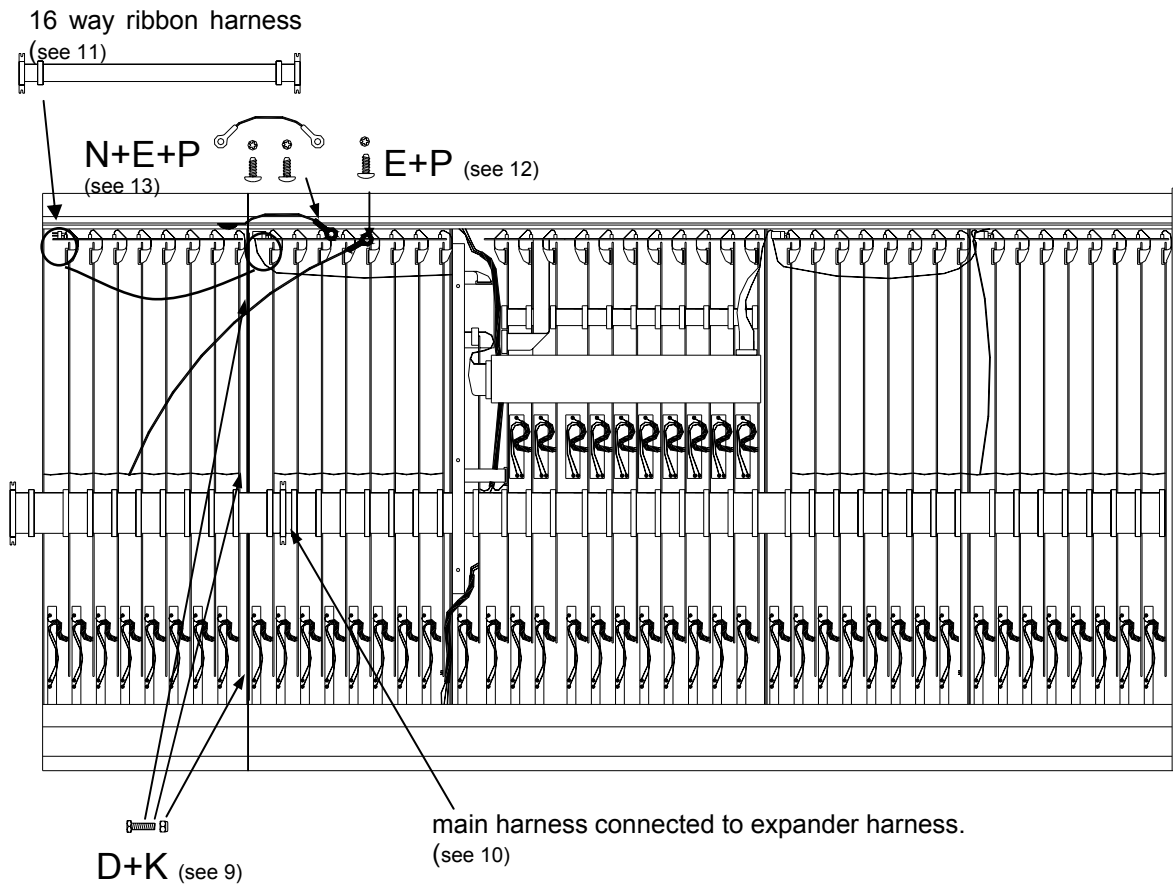


Console with integral meterbridge

8a. Slide the expander module onto the 6 studs and close the adjustable fastener **'B'** over the catchplate **'A'**, see 5. The fastener can be adjusted to ensure a good join. Screw in the locking screw **'C'** into the pre-tapped hole of the expander. Make sure the locking screw **'C'** engages with the flat of the slotted stud **'J'**, see diagram below.



9. With the expander module and console securely clamped together, bolt the expander and console front panels together using bolts 'D' and lock nuts 'K' with a 5.5mm spanner. The input channel circuit board assembly nearest the panel flanges will have to be removed to gain access to the fixing holes.
10. Disconnect the main harness from the end input channel circuit board on the console. Connect the male connector on the expander harness to the console main harness. Re-connect the end Input circuit board with the extra connector on the expander harness.
11. The 16 way ribbon harness is factory fitted for attaching the expander onto the right hand side of the main console as shown. Connect the 16 way ribbon harness in same way as the main harness. If the expander is fitted on the left hand side then the 16 way ribbon harness will have to be repositioned accordingly.
12. Connect the expander green wire back to the console main extrusion using screw 'E' and washer 'P'. **Do not connect the wire back to the expander extrusion.**
13. Connect the short green wire strap 'N' across the join in the rear chassis extrusions of the console and expander module using screws 'E' and washers 'P'.



Console inverted and expanded on the right side.

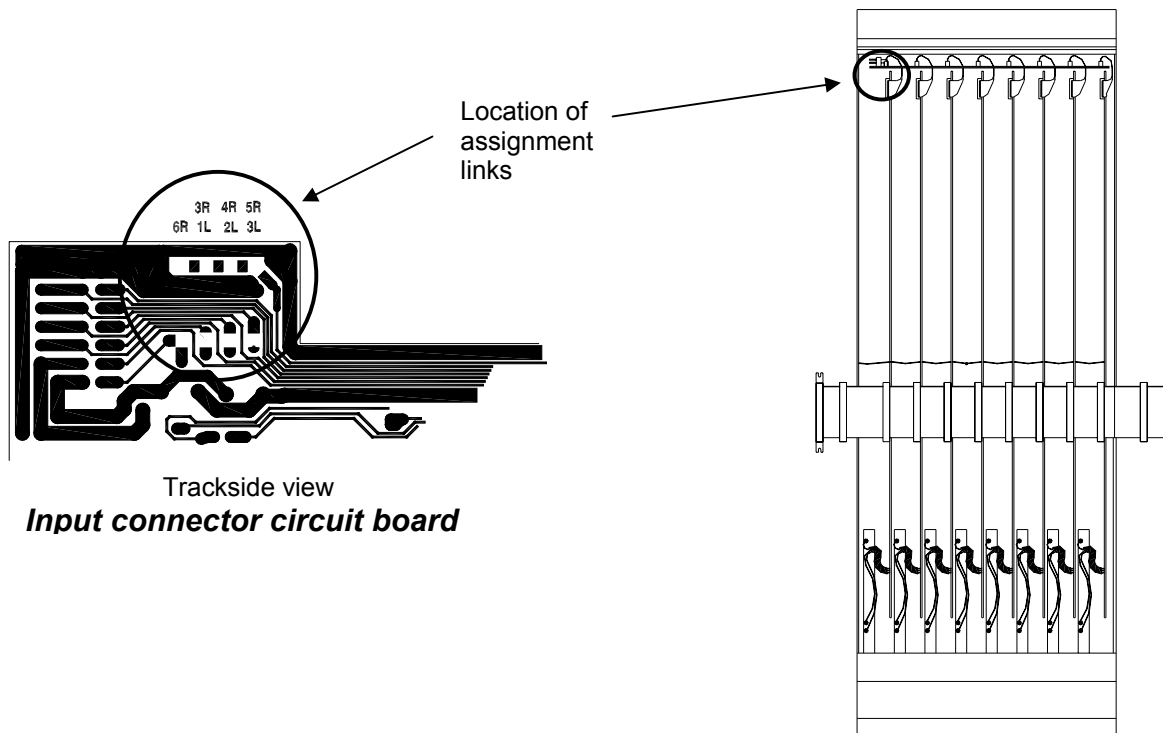
EXPANDER ASSIGNMENT

14. Depending on whether the expander is positioned on the left or right hand side of the main console, one or more of the input connector circuit boards (AG2622) will have to be assigned to enable the channel mutes to function correctly.

For consoles that have the expander on the right hand side of the console (e.g. expanded GL4000-824S and GL4000-840S consoles) only the expander requires assignment.

For consoles that have the expander on the left hand side (e.g. expanded GL4000-832S consoles), all of the input connector circuit boards will have to have the existing assignment links removed and re-assigned. Refer to the assignment diagrams below.

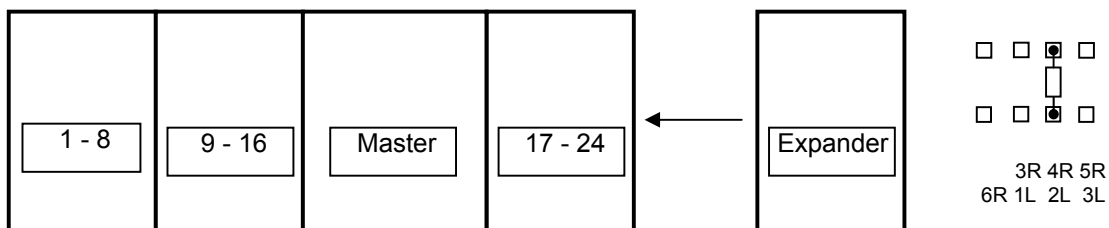
The assignment links are 0R resistors 'Q', located next to the 16 way ribbon harness connector on the input connector circuit board. Fitting the links in various positions determines the assignment for each block of 8 input channel mutes.



Link assignments for each input connector circuit board

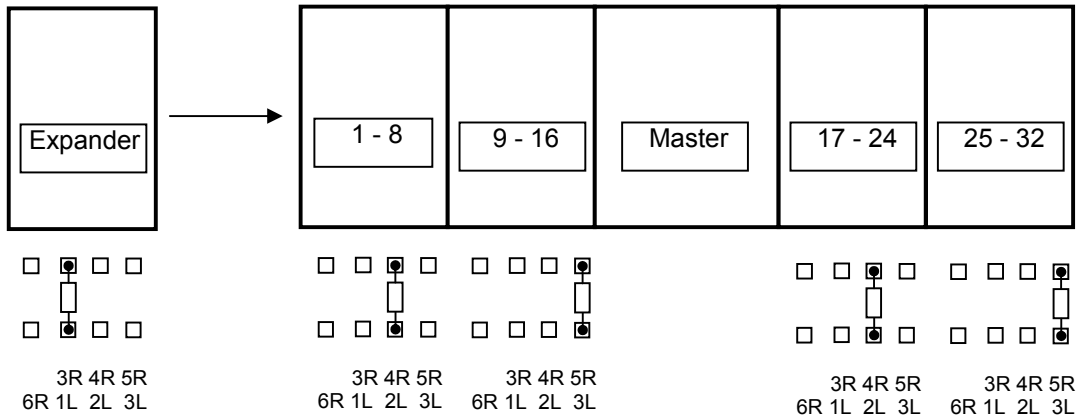
To avoid having to remove the input connector circuit board, fit the links onto the track side of the circuit board

GL4000-824 + Expander

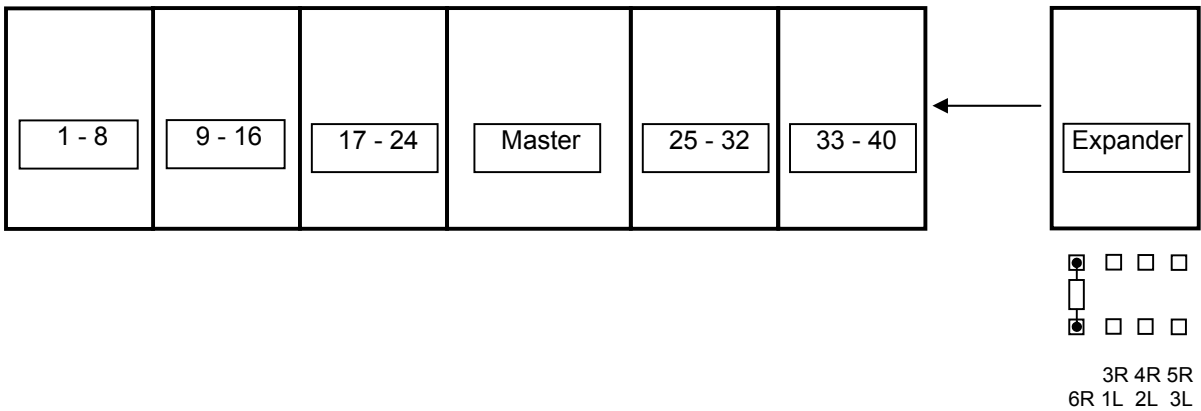


GL4000-832 + Expander

Note: remove existing assignment links on all connector circuit boards before re-assignment.

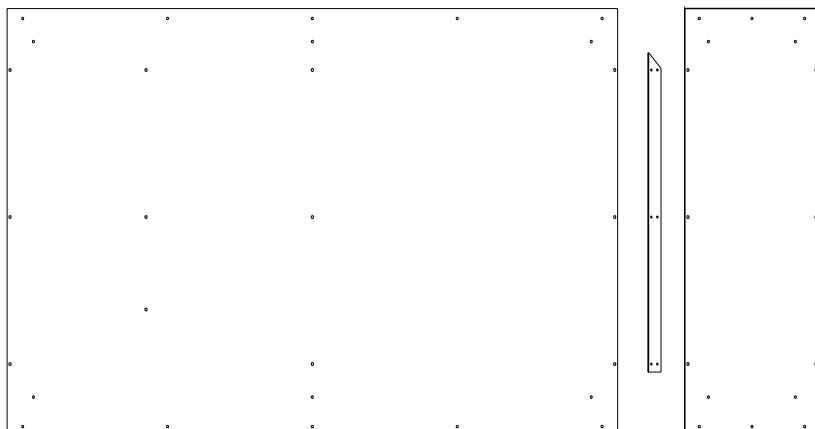


GL4000-840 + Expander



Attaching the base panels

- Attach the base panel joining bracket '**M**' to the console base using screws '**E**'. Refit the base panels onto the expanded console using screws '**E**'.



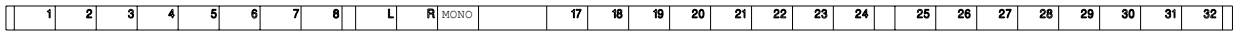
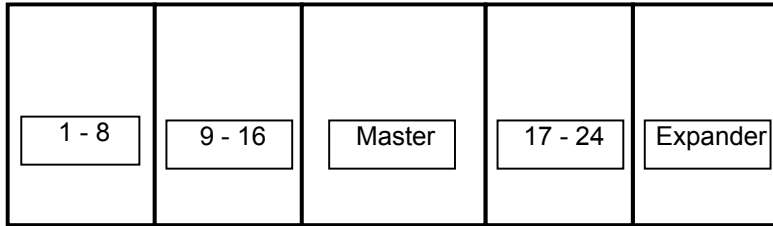
Console with integral meterbridge.

Fit the meterbridge side plate '**R**' using the screws from the original side trim.

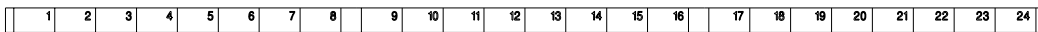
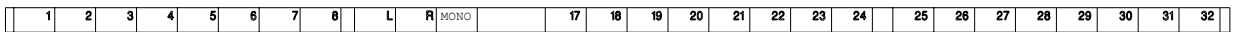
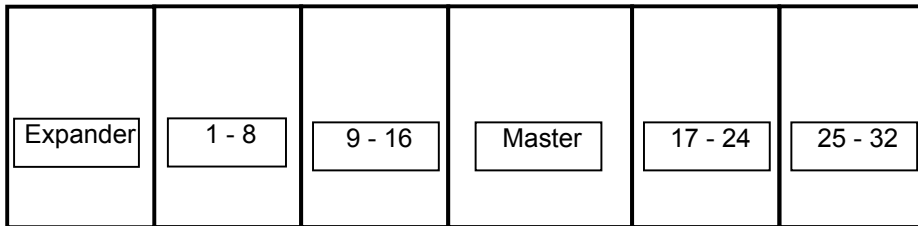
NUMBER STRIP POSITIONING

16. Carefully turn the console the correct way up and fit the new number strips. A complete set of number strips 'L' is supplied with the Expander kit. The diagrams below show the combination of strips to be fitted to the expanded consoles.

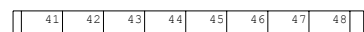
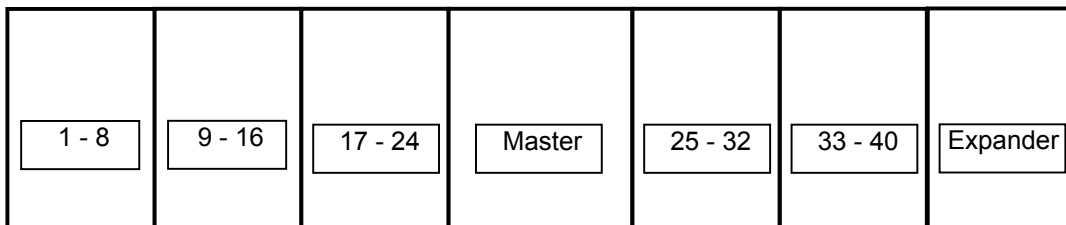
GL4000-824 + Expander



GL4000-832 + Expander



GL4000-840 + Expander



TESTING THE CONSOLE

17. The fitting of the expander module is now complete. Before re-plugging the console, apply power and check for correct operation e.g. mutes & PFL LEDs illuminate.

Please note; to prevent damage to the console chassis, the expanded console must be supported along its entire length.

Should you experience any difficulties in fitting this module or have any queries regarding your **GL4000** console please contact your **ALLEN & HEATH** agent. Include the console serial number in any correspondence.