5088

Fully Discrete Analog Mixer

Operations Manual

Rupert Neve Designs

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or beer glasses, shall be placed on the apparatus.
16. Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
17. This apparatus has been designed with Class-I construction and must be connected to a mains socket outlet with a protective earthing connection (the third grounding prong).
18. This apparatus has been equipped with a rocker-style AC mains power switch. This switch is located on the rear panel and should remain readily accessible to the user.
19. The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device shall remain readily operable.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.
Le symbole éclair avec point de flèche à l'intérieur d'un triangle équilatéral est utilisé pour alerter l'utilisateur de la présence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'éléctrocution.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.
Le point d'exclamation à l'intérieur d'un triangle équilatéral est employé pour alerter les utilisateurs de la présence d'instructions importantes pour le fonctionnement et l'entretien (service) dans le livret d'instruction accompagnant l'appareil.

This symbol indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

20. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
    - Reorient or relocate the receiving antenna.
    - Increase the separation between the equipment and the receiver.
    - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
    - Consult the dealer or an experienced radio/TV technician for help.

    CAUTION: Changes or modifications to this device not expressly approved by Rupert Neve Designs LLC, could void the user's authority to operate the equipment under FCC rules.
21. This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

ATTENTION — *Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant las limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le réglement sur le brouillage radioélectrique édicté par les ministere des communications du Canada.*

22. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the following chart. According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here:

Duration, per day in hours	Sound Level dBA, Slow Response	Typical Example
8	90	Duo in small club
6	92	
4	95	Subway Train
3	97	
2	100	Typical music via head phones
1.5	102	
1	105	Siren at 10 m distance
0.5	110	
0.25 or less	115	Loudest parts at a rock concert

WARNING — To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Table of Contents

Introduction

Thank you for purchasing a Rupert Neve Designs 5088 Fully Discrete Analogue Mixing Console. We hope you will enjoy this versatile centerpiece in your studio for many years to come. It has been a great pleasure to design and build a console of this caliber. We've taken great care to uphold the standards and attention to detail expected of Rupert Neve Designs.

We have ensured that our console topologies will integrate seamlessly into your modern studio workflow while simultaneously providing an unparalleled sonic character. Tracking, mixing, and overdubbing become effortless when using the 5088, allowing the engineer, producer and artist to focus on what is most important - making quality recordings.

Safety Guidelines

ALWAYS power down the console before removing or installing any modules to ensure console longevity. Extra care should be taken when removing or installing modules, especially because high voltage +/- 45VDC rails power the Class A discrete amplifiers.

DO NOT attempt to service any part of the Console Power Supply (no user serviceable parts inside). High voltages are present and the power supply can deliver large amounts of current. Disregarding this warning may cause harm to you or to the console power supply. Please contact our support team at the following email address for troubleshooting if you encounter an issue: service@rupertneve.com

DO NOT operate the 5088 near any water sources or in areas with high indoor air pollution. (smoke, dust, etc.)

DO NOT place any beverages on or around the 5088 console. If liquids (water, coffee, soda, etc.) are spilled on the console, immediately turn off all console power supplies. Please contact our support staff as soon as possible for resolution:
service@rupertneve.com

DO NOT install the 5088 Console or its Power Supplies in an unventilated or tightly enclosed space.

DO NOT block any of the chassis ventilation holes. The 5088's class-A discrete circuits generate heat during operation and the ventilation holes allow the internal console fans to properly dissipate the heat. Modifying the fans or blocking the chassis ventilation holes will shorten the life of electronic components and could cause circuit instabilities.

Unpacking the 5088

The 5088 is a large-format mixing console that ships in high-quality wooden crates to ensure safe transport. These are a few important items to note when getting ready to unpack and install a 5088 console.

1. Please make sure to have at least 4 people on-hand to help with unpacking the crate and moving the console.

2. It is recommended to use heavy-duty dolly carts whenever possible to move the shipping crate(s) into position.

5088 Shipping Crate Weight & Dimensions:

8 Channel Fully Loaded
Includes one 'Small' Wooden Crate

Width: 91.4 cm / 36 in
Depth: 121.9 cm / 48 in
Height: 137.2 cm / 54 in

Weight: 250-290 kg / 550-650 lbs

16 Channel Fully Loaded
Includes one 'Medium' Wooden Crate

Width: 137.2 cm / 54 in
Depth: 121.9 cm / 48 in
Height: 121.9 cm / 48 in

Weight: 336-363 kg / 740-800 lbs

32 Channel Fully Loaded
Includes one 'Large' Wooden Crate

Width: 208.3 cm / 82 in
Depth: 121.9 cm / 48 in
Height: 137.2 cm / 54 in

Weight: 495-500 kg / 1080-1100 lbs

48 Channel Fully Loaded
Includes one 'Large' and one 'Small' Wooden Crate (dims above)

Total Weight: 680-725 kg / 1500-1600 lbs

Unpacking the 5088 (continued)

1. Use a powered drill with a Phillips head bit to unscrew the top panel of the crate.

2. Carefully slide the top panel off the crate and set it safely to the side.

3. Starting with the bottom center screw, remove the longer side panel by alternately loosening the screws on the left and right sides of the panel. Leave the upper left and upper right screws for last so that the panel doesn't fall as the screws are removed. After all screws have been removed, set the side panel safely out of the way.

Unpacking the 5088 (continued)

4. A) For 16 and 32 Channel consoles, unscrew the brace that supports the Meter Bridge.

1. Carefully lift it out of the crate.
2. Unscrew the brace that lays across the penthouse section and carefully lift it out of the crate.

4. B) For 8 channel consoles and expansion chassis, unscrew the brace that lays across the faders. Carefully lift it out of the crate, then unscrew the brace that supports the cheek and remove it as well.

Unpacking the 5088 (continued)

5. With the help of 4+ people, remove the 5088 chassis from the crate. The easiest method is to slide the console chassis across the foam until one person has a firm grip on each corner of the console. When lifting the front of the console it is best to hold it by the metal frame, **NOT** the armrest.

6. Once the 5088 is out of the crate you may begin removing the boxes from the bottom section of the crate.

Installing Modules

BEFORE loading the 5088 chassis with modules, make sure to secure the chassis to the console stand once it is placed in the desired location. A fully loaded 5088 console can weigh more than 750lbs, making it significantly more difficult to reposition once it is loaded. To reiterate, it is important to install the console chassis in its final location **BEFORE** installing the modules.

BE CAREFUL to install the 541/552 CHANNEL and 561 GROUP Modules in the correct slots. CHANNEL and GROUP modules are NOT interchangeable.

NOTE: 561 Group modules should always be installed in the four available slots immediately to the left of the Master Section Module. The 561 Group modules and Master Section are connected to a different backplane circuit board than the 541/552 Channel modules and damage can occur if they are not installed in the correct position.

AFTER the 5088 Chassis is installed in the console stand, unpack each module and slide it into the correct slot of the console frame. Every console module's channel number is printed onto each 'mute' switch.

Once every module is inserted into the correct console module slot **AND** both power & audio connections have been tested, carefully hand-tighten the thumb screws at the top and bottom of each module to firmly secure them to the 5088 frame.

Guarding Against Interference

Although the 5088 Console circuitry is well shielded by the console chassis and individual module frames, it is impossible to guarantee immunity from all potential sources of Electromagnetic (EMI) and Radio Frequency Interference (RFI).

The typical recording studio environment has many potential noise sources in the form of radiating energy fields, such as external power supplies, computer monitors, speaker power amplifiers, and fluorescent lights & dimmers.

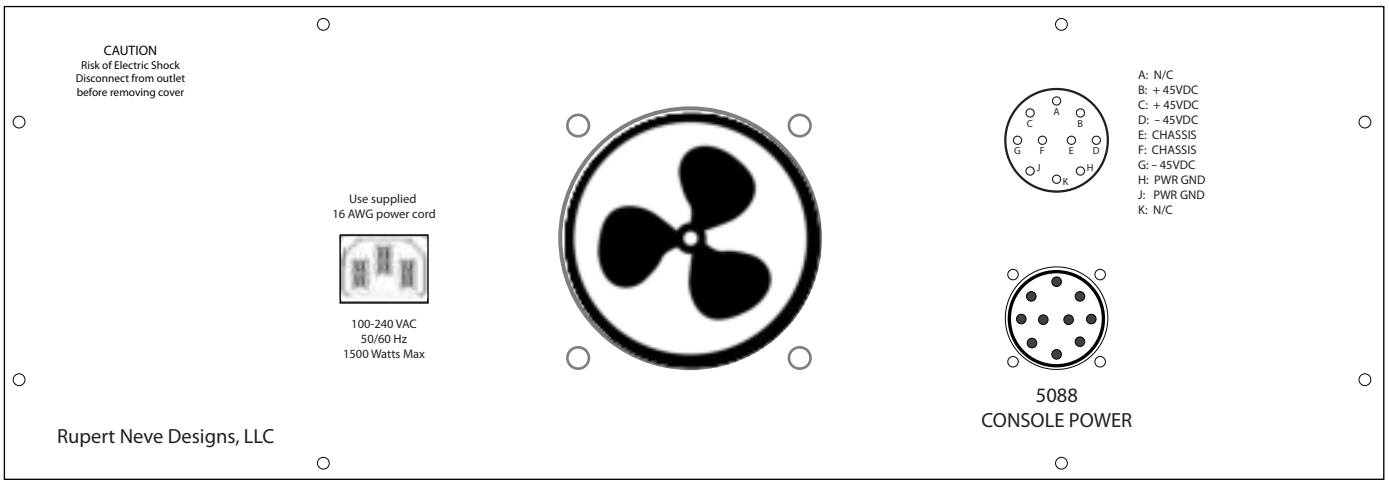
Therefore, it is best to take precautions to prevent these radiated noise sources from interfering with the 5088 console's audio path. As a first measure, try relocating certain electronic devices to minimize their effect. If interference issues persist, please contact our support staff so that we may help troubleshoot for potential problems:
service@rupertneve.com

Connecting the Main Power Supply

The 4 RU Main Power Supply included with the 5088 Console is designed to supply power to 32 channels maximum.

PLEASE NOTE:

** If another 16 Channel Expansion Chassis is added, an additional power supply will be required.



5088 Main PSU Rear Panel

POWER CONSUMPTION:

16 Channel Master: 825 Watts
16 Channel Expander: 575 Watts

MAIN PSU CABLE CONNECTOR DIMENSIONS:

Outer Dimension of Jacket: 0.5” / 13.0mm
Outer Dimension of Connector - 1.344” / 34mm

PLEASE NOTE:

** Although the Console Power Supply is relatively quiet, we recommend installing it in an area outside of the control room, such as a properly ventilated machine room. If the power supply is installed in a rack, please leave at least one slot of empty space (1RU) above and below the Power Supply for ventilation purposes. Blocking the Power Supply’s vents or modifying the fans can cause permanent damage to the 5088 Power Supply.

Connecting the 25-Way Penthouse Module Power Supply

The 2 RU, 25-Way Penthouse Module power supply is included when Penthouse modules are part of the console configuration, safely powering up to 25 modules. Each Penthouse module has a 4-pin female connector that connects to one of the 25 4-pin female connectors on the PSU.

PLEASE NOTE:

** There are currently two versions of the Penthouse power supply available. Each model is outfitted with power connectors specific to the Penthouse modules ordered. The connectors on PSU model # 820-00021 are compatible with the 5051 and 5052 modules and the connectors on PSU model # 820-00110 are compatible with the 5053 and 5022 modules. Either PSU model 820-00021 or model 820-00110 will be included based on the 5088's penthouse configuration, along with any necessary connection adapters, to ensure full compatibility with all the specified penthouse modules.

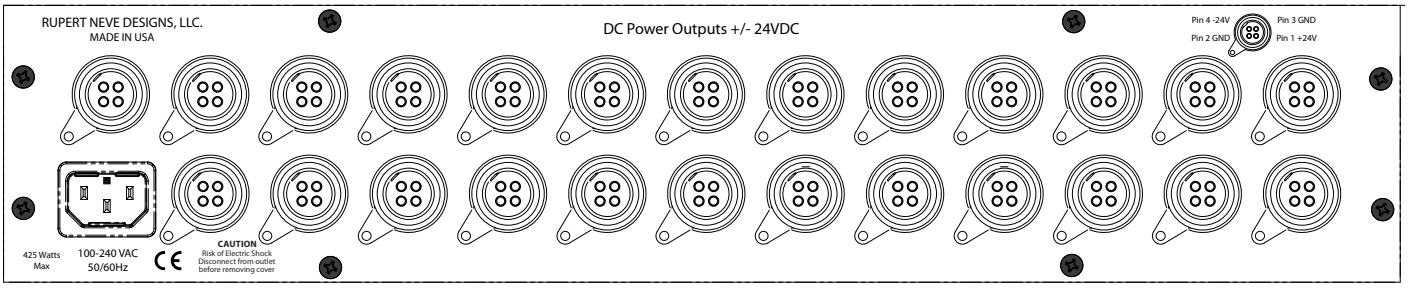
** Please only use the cables provided with the PSU to power the Penthouse Modules.

** Please make sure to align the arrow on the cable connector with the arrow next to each socket on the back of the PSU to ensure each cable is connected properly.

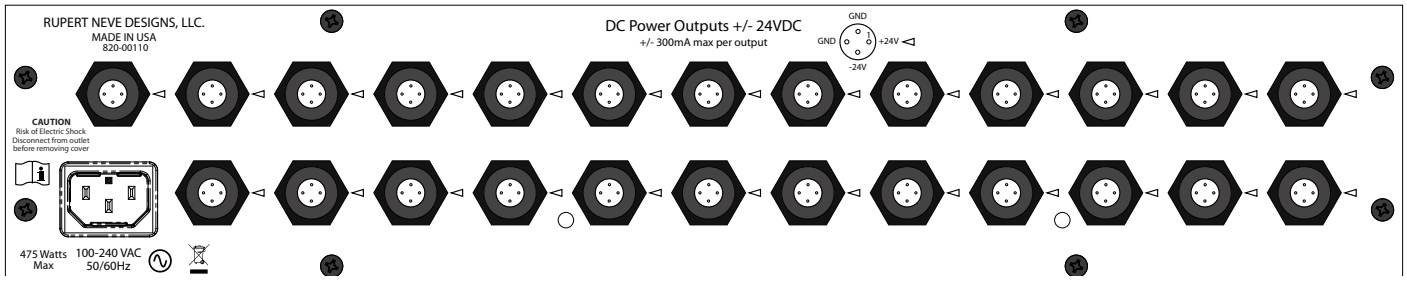
** If the PSU is installed in a rack, please leave at least one slot of empty space (1RU) above and below the Power Supply for ventilation purposes. Blocking the Power Supply's vents or modifying the fans can cause permanent damage to the Penthouse Module Power Supply.

** Each Penthouse module consumes approximately 10 Watts each

** Please contact our support staff if any questions arise regarding the Penthouse PSU: service@rupertneve.com



5051 & 5052 Penthouse Module PSU Rear Panel (Model # 820-00021)
Outer Dimension of Jacket: 3/16" / 5mm
Outer Dimension of Connector: 1" / 25mm



5053 & 5022 Penthouse Module PSU Rear Panel (Model # 820-00110)
Outer Dimension of Jacket: 3/16" / 5mm
Outer Dimension of Connector: 3/4" / 19mm

Connecting Additional Power Supplies

PLEASE NOTE: Make sure to connect **ALL** included fan power supplies before using the console. Damage can occur if all fans are not powered on.

Connecting Audio

It is recommended to only use high quality, balanced audio cables for all of the input and output connections to and from the 5088 console. Although the 5088's rear panel I/O can be directly connected to external destinations, we suggest consulting a professional studio technician for interfacing the 5088 Console's I/O to a patch bay. Installing a patch bay will protect the 5088's rear panel I/O from unnecessary wear and make signal routing more convenient.

Cleaning Instructions

When cleaning the 5088, do not spray cleaning solutions directly onto the console surface. It is best to use a vacuum with the soft brush nozzle attached to gently remove any dust accumulation as needed.

Removing & Shipping Modules

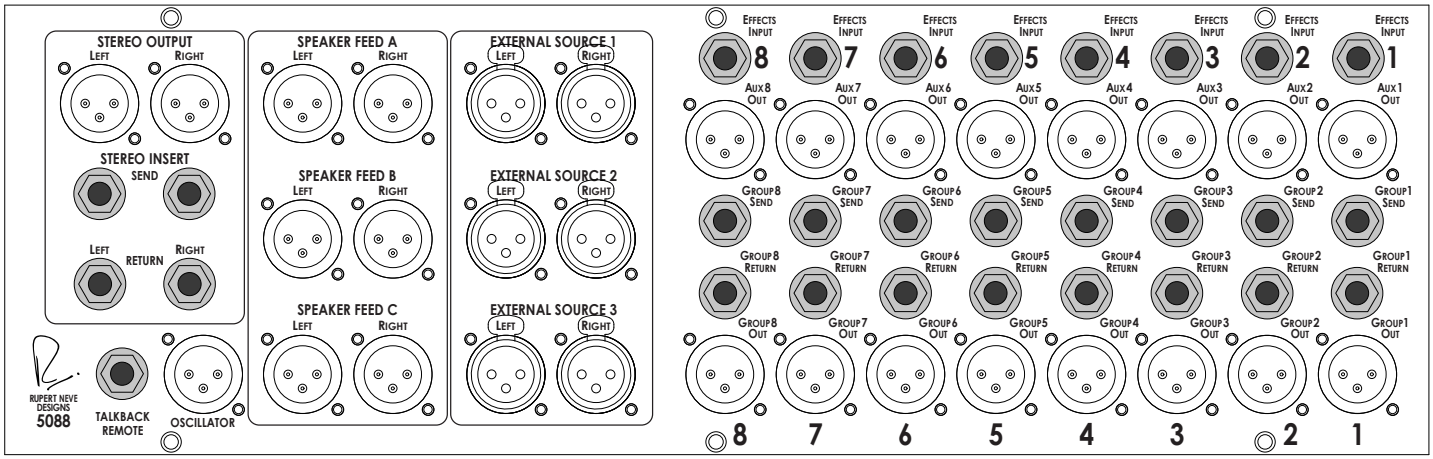
To remove a 541/552 Channel or 561 Group module for servicing, power off the 5088, unscrew the thumbscrews at the top and bottom of the module and carefully slide the module out of the slot by pulling upwards on the thumbscrews. Contact our support team for shipping instructions: service@rupertneve.com

Additional 541/552 Channel or 561 Group modules may be purchased as spares in the event of a module requiring service.

If the Master module needs to be serviced, please contact our support team for instructions prior to removal: service@rupertneve.com

Rear Panel Diagrams

*** Specific measurement diagrams of rear panel connections are available upon request. Please contact our support team to obtain these diagrams: service@rupertneve.com ***



16 Channel Frame: Master Section

Master Section:

6 x XLR Female
- 3x Stereo ‘External Source’ Inputs

9 x XLR Male
- 3x Stereo ‘Speaker Feed’ Outputs
- 1x Stereo ‘Stereo Output’
- 1x Mono ‘Oscillator’ Output

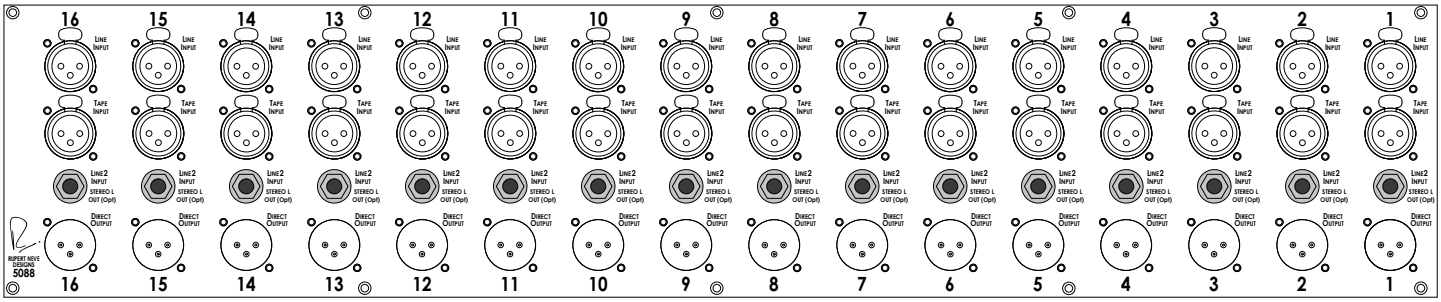
5 x TRS
- 1x ‘Stereo Insert Send’
- 1x ‘Stereo Insert Return’
- 1x Mono ‘Talkback Remote’

Group & Aux Section:

24 x TRS
- 8x ‘Effects Input’ (Aux Returns)
- 8x Insert ‘Group Send’ Outputs
- 8x Insert ‘Group Return’ Inputs

16 x XLR Male
- 8x ‘Aux Out’ Outputs
- 8x ‘Group Out’ Outputs

Rear Panel Diagrams (continued)



16 Channel Frame: Inputs 1-16:

32 x XLR Female

16x ‘Line’ Inputs

16x ‘Tape’ Inputs

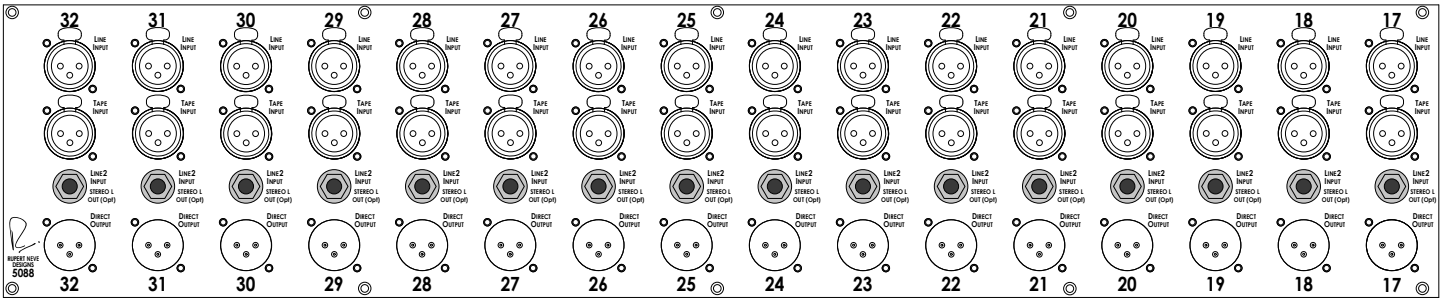
*** ‘Line’ Input is left CH and ‘Tape’ Input is right CH when 552 stereo modules are installed ****

16 x TRS

16x ‘Line 2’ Inputs/’Stereo L’ Direct Outputs

*** ‘Stereo L’ Direct Outputs active with 552 stereo modules only ****

16 x XLR Male



Expander Section: Inputs 17-32:

32 x XLR Female

16x ‘Line’ Inputs

16x ‘Tape’ Inputs

*** ‘Line’ Input is left CH and ‘Tape’ Input is right CH when 552 stereo modules are installed ****

16 x TRS

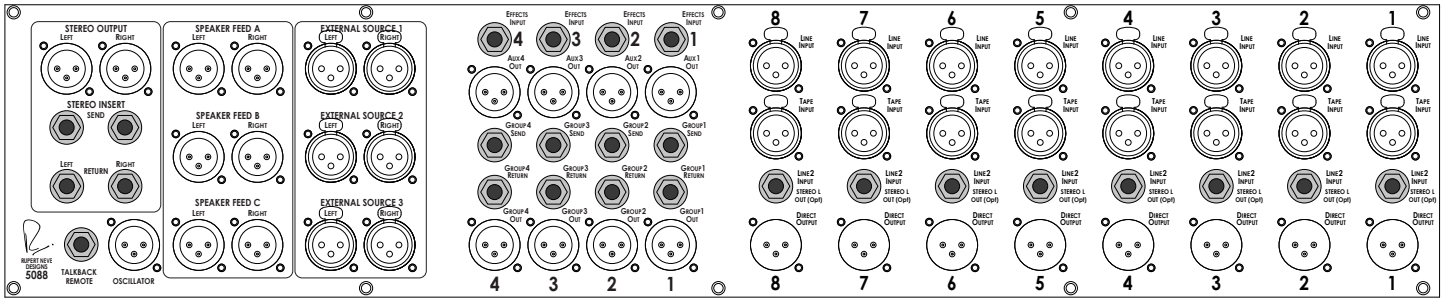
16x ‘Line 2’ Inputs/’Stereo L’ Direct Outputs

*** ‘Stereo L’ Direct Outputs active with 552 stereo modules only ****

16 x XLR Male

16x ‘Direct’ Outputs

Rear Panel Diagrams (continued)



8 Channel Frame: Master Section + Inputs 1-8

Master Section:

6 x XLR Female
- 3x Stereo ‘External Source’ Inputs

9 x XLR Male
- 3x Stereo ‘Speaker Feed’ Outputs
- 1x Stereo ‘Stereo Output’
- 1x Mono ‘Oscillator’ Output

5 x TRS
- 1x ‘Stereo Insert Send’
- 1x ‘Stereo Insert Return’
- 1x Mono ‘Talkback Remote’

Group & Aux Section:

12 x TRS
- 4x ‘Effects Input’ (Aux Returns)
- 4x Insert ‘Group Send’ Outputs
- 4x Insert ‘Group Return’ Inputs

8 x XLR Male
- 4x ‘Aux Out’ Outputs
- 4x ‘Group Out’ Outputs

Channel Input Section:

16 x XLR Female
- 8x ‘Line’ Inputs
- 8x ‘Tape’ Inputs

*** ‘Line’ Input is left CH and ‘Tape’ Input is right CH when 552 stereo modules are installed ***

8 x TRS
- 8x ‘Line 2’ Inputs/’Stereo L’ Direct Outputs

*** ‘Stereo L’ Direct Outputs active with 552 stereo modules only ***

8 x XLR Male
- 8x ‘Direct’ Outputs

Console Configurations

Using Penthouse Modules as ‘Direct Outputs’

The simplest method is to use a patch bay to route microphone signals from the recording room into the microphone inputs of the penthouse modules and then connect the line outputs directly to A/D Converter/tape machine inputs. Next, route each D/A Converter/tape machine output to a corresponding ‘tape’ input on the 5088 and create stereo and cue mixes with the 5088’s 541/552 Channel and 561 Group routing controls for recording or mixing.

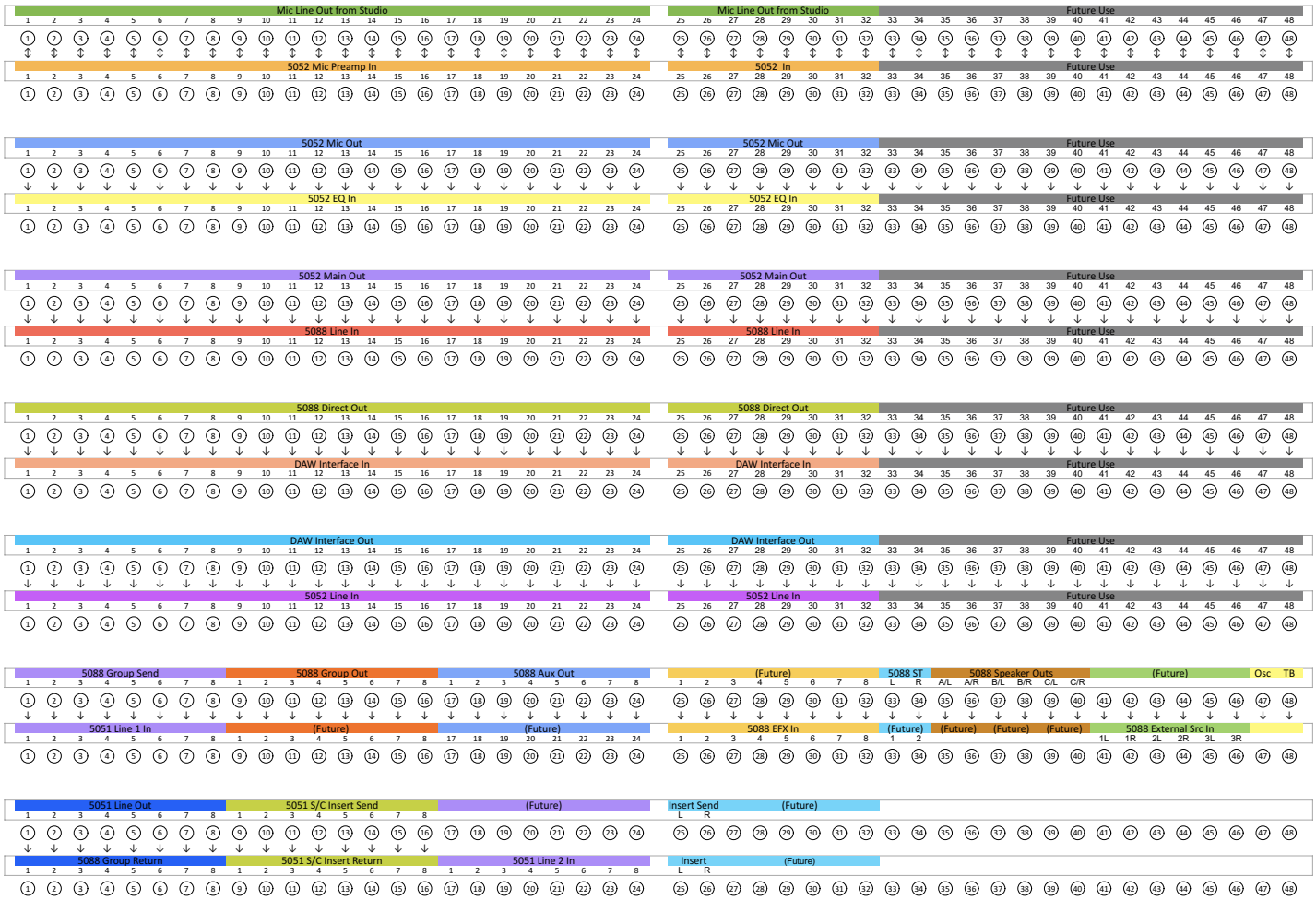
Using Console Modules as ‘Direct Outputs’

Alternatively, in order to capture a more complete picture of the 5088’s sonic character, the penthouse module outputs can be routed to the line inputs on the 5088, and the 5088’s Direct Outputs can be connected to the A/D Converter/tape machine inputs for recording through the 5088, using Auxes 1-8 and Groups 1-8 to create cue mixes and effects sends/returns.

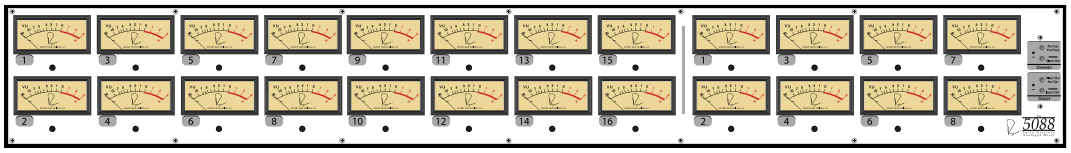
Creating a ‘Split’ Console Configuration

Another option available to users with enough channel modules is to operate the 5088 in a split configuration, using one half of the console for tape/DAW sends, and the other half for tape/DAW returns. On a smaller console, the DAW can be used to sub-mix tracks and return the sub-mixed outputs to the Group Master returns and Effects returns for monitoring.

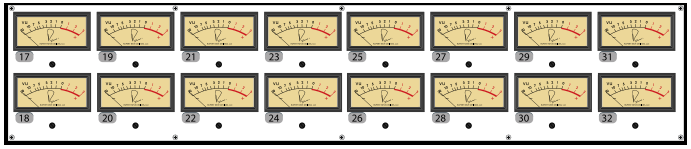
32-CHANNEL 5088 PATCHBAY LAYOUT (EXAMPLE)



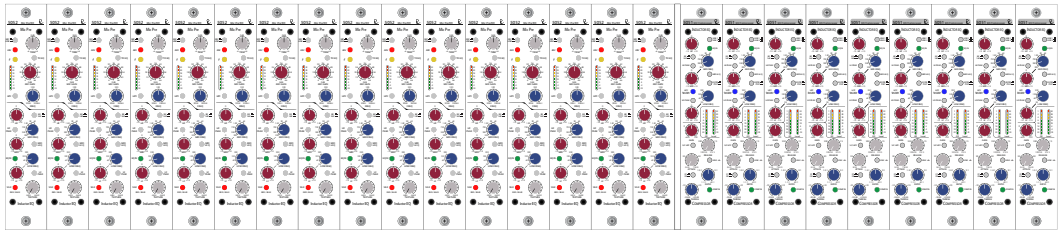
5088 Configuration Guide



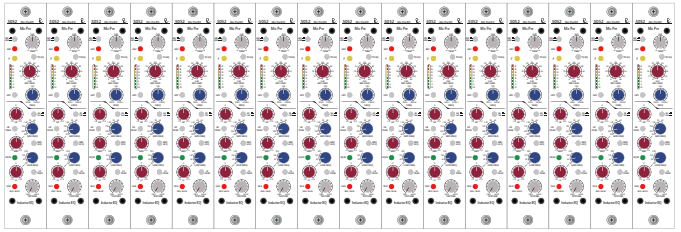
VU Meterbridge



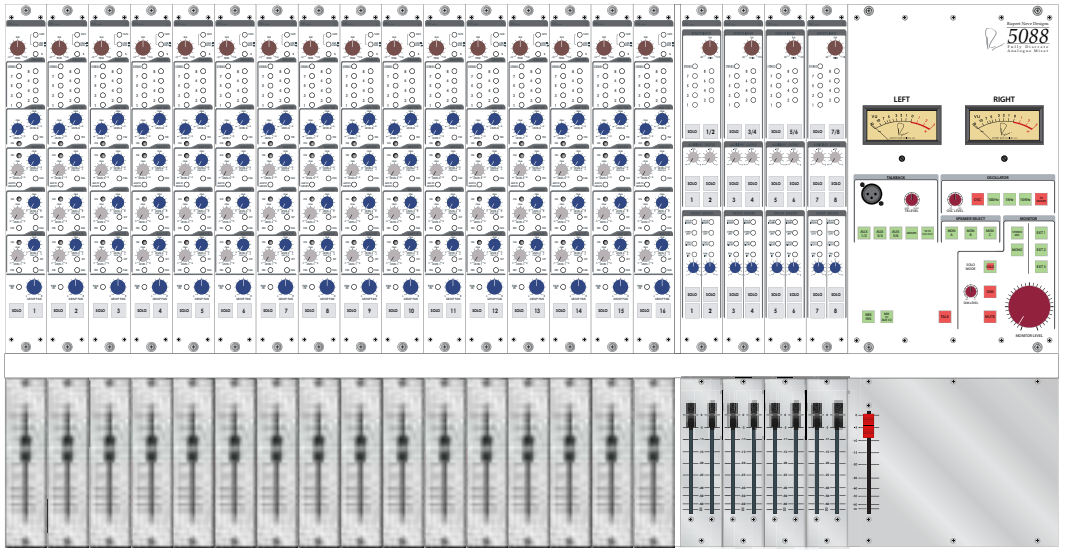
VU Meterbridge Expansion



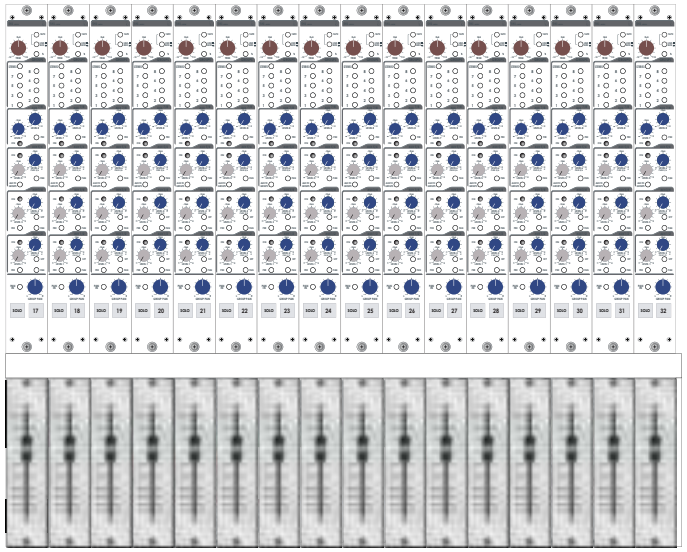
Penthouse



Penthouse Expansion



16 Channel Console with Penthouse and Meterbridge



16 Channel Expansion Chassis

5088 Console Dimensions & Weights

8 Channel Console with Penthouse and Meterbridge

Width: 76 cm / 29.9 in
Depth: 105 cm / 41.3 in
Height: 58.2 cm / 22.9 in
Weight (Unloaded): 86.2 kg / 190 lbs
Weight (Loaded): 132.5 kg / 292 lbs

16 Channel Console with Penthouse and Meterbridge

Width: 116.8 cm / 46 in
Depth: 105 cm / 41.3 in
Height: 58.2 cm / 22.9 in
Weight (Unloaded): 89.8 kg / 198 lbs
Weight (Loaded): 169 kg / 374 lbs

16 Channel Expansion with Penthouse and Meterbridge

Width: 73 cm / 28.7 in
Depth: 105 cm / 41.3 in
Height: 58.2 cm / 22.9 in
Weight (Unloaded): 62.6 kg / 138 lbs
Weight (Loaded): 142.4 kg / 314 lbs

32 Channel Console with Penthouse and Meterbridge

Width: 189.8 cm / 74.7 in
Depth: 105 cm / 41.3 in
Height: 58.2 cm / 22.9 in
Weight (Unloaded): 152.4 kg / 336 lbs
Weight (Loaded): 301.2 kg / 664 lbs

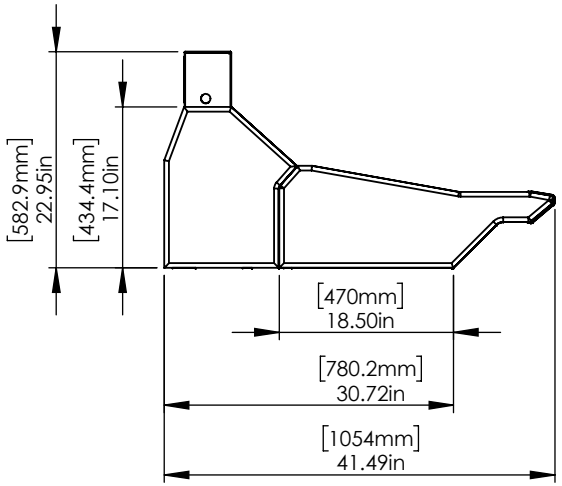
48 Channel Console with Penthouse and Meterbridge

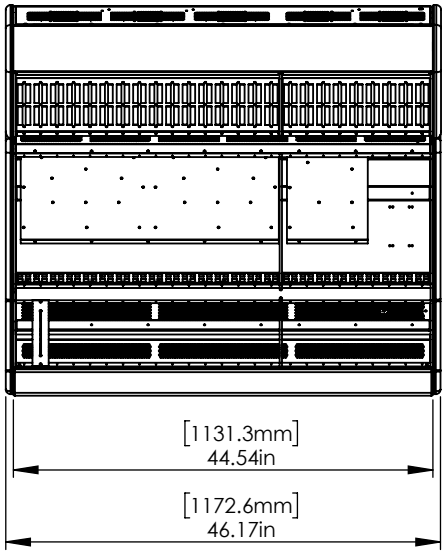
Width: 262.8 cm / 103.5 in
Depth: 105 cm / 41.3 in
Height: 58.2 cm / 22.9 in
Weight (Unloaded): 215 kg / 474 lbs
Weight (Loaded): 432.7 kg / 954 lbs

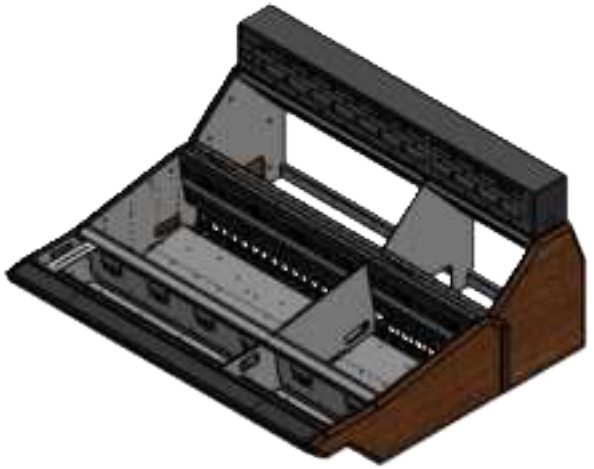
64 Channel Console with Penthouse and Meterbridge

Width: 408.8 cm / 161 in
Depth: 105 cm / 41.3 in
Height: 58.2 cm / 22.9 in
Weight (Unloaded): 277.6 kg / 612 lbs
Weight (Loaded): 564.3 kg / 1244 lbs

5088 Dimensions

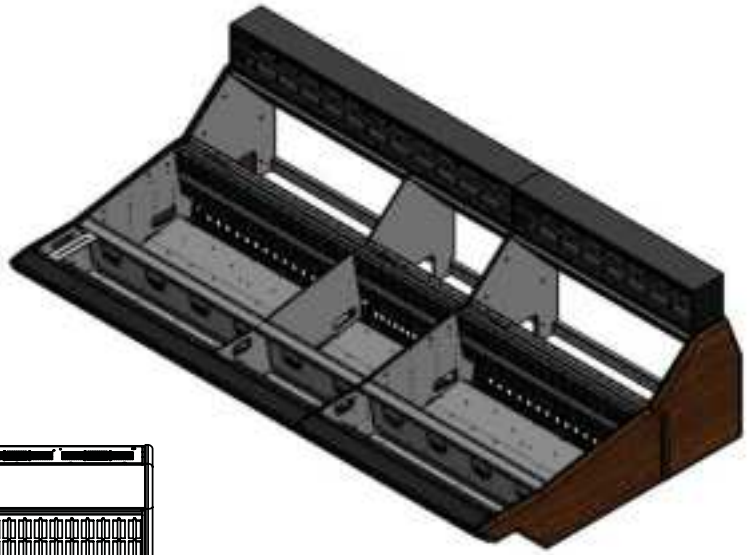


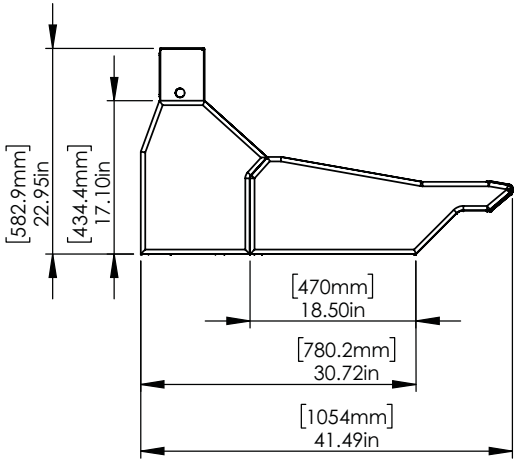


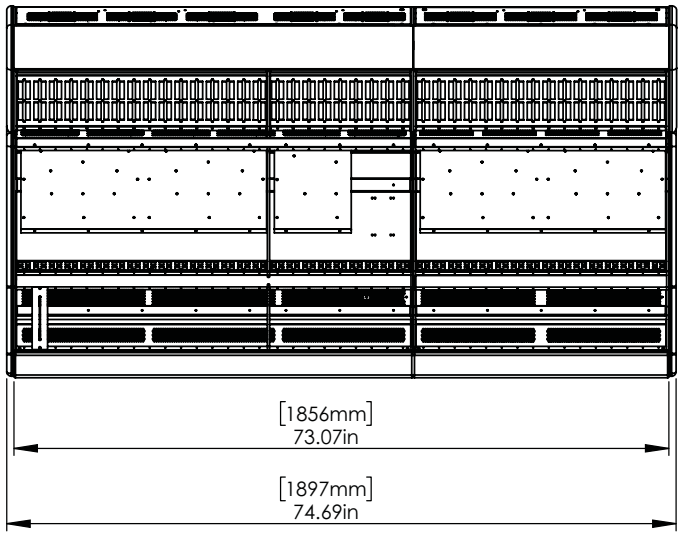


16 Channel Configuration with Penthouse & Meter Bridge

5088 Dimensions

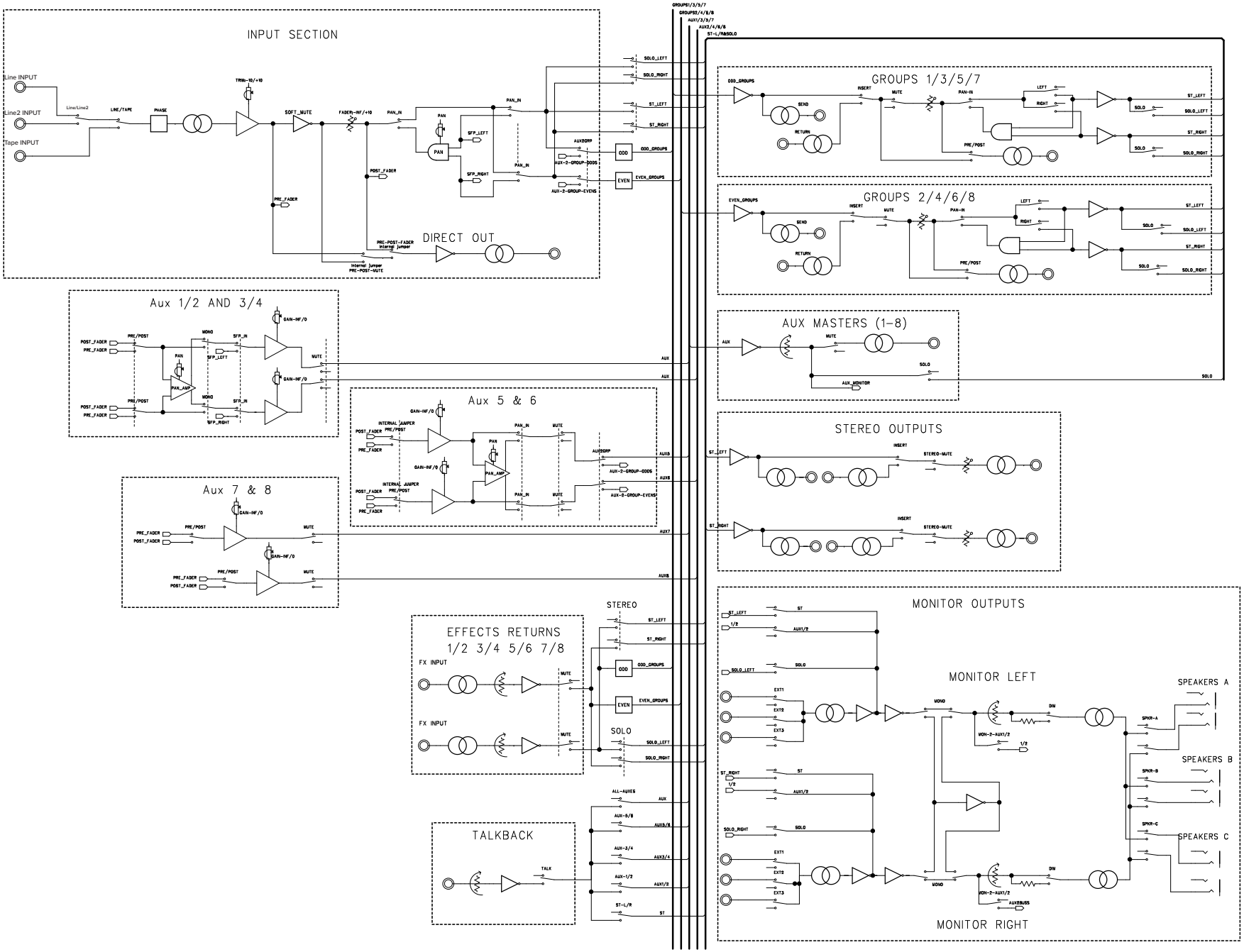




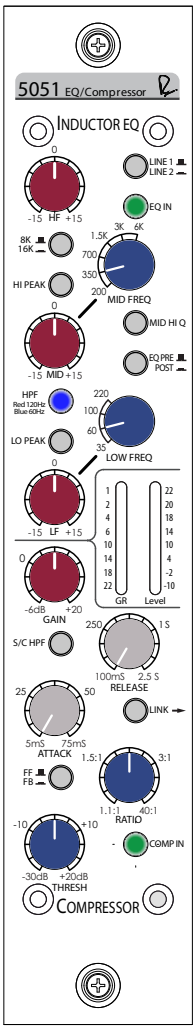


32 Channel Configuration with Penthouse & Meter Bridge

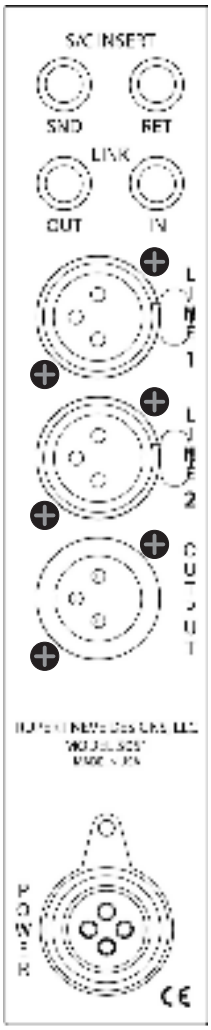
5088 Block Diagram



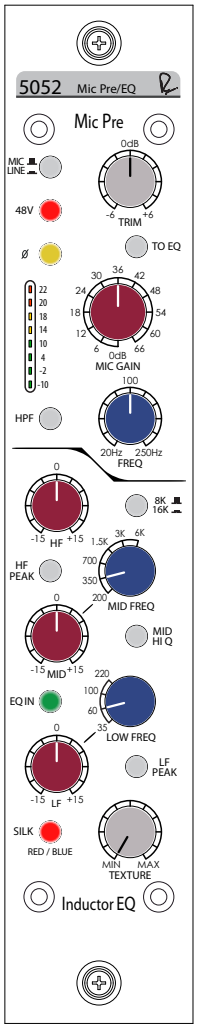
Penthouse Modules



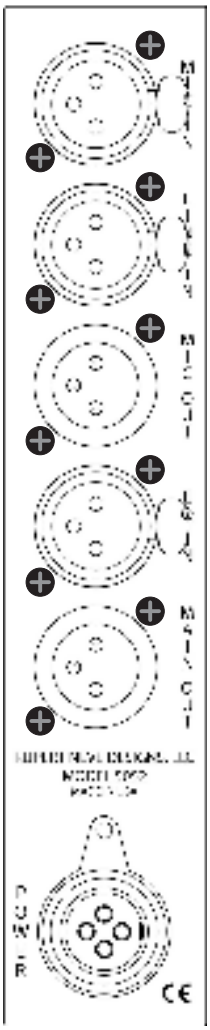
Front



Rear



Front

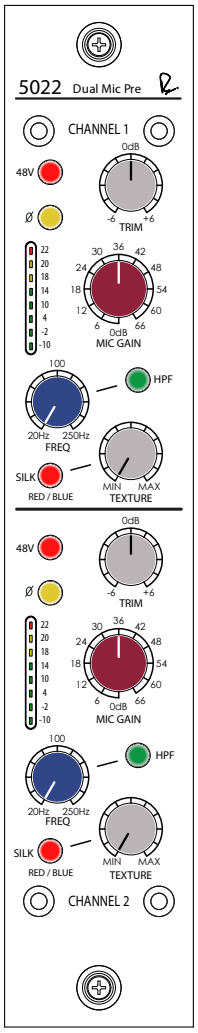


Rear

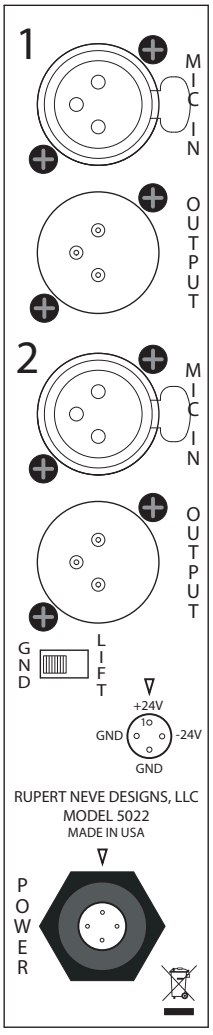
5051
Inductor EQ + VCA Compressor

5052
Mic Pre + Inductor EQ

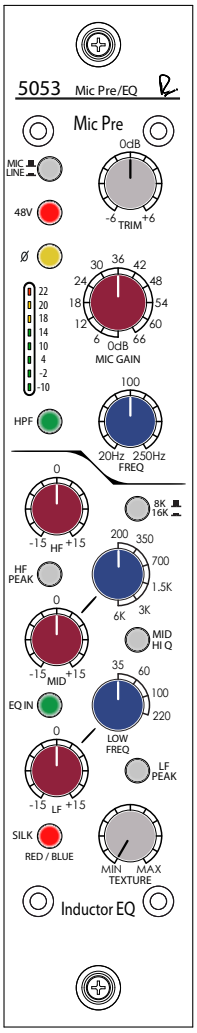
Penthouse Modules



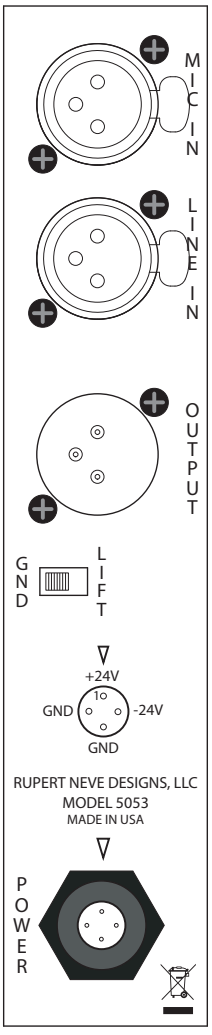
Front



Rear



Front



Rear

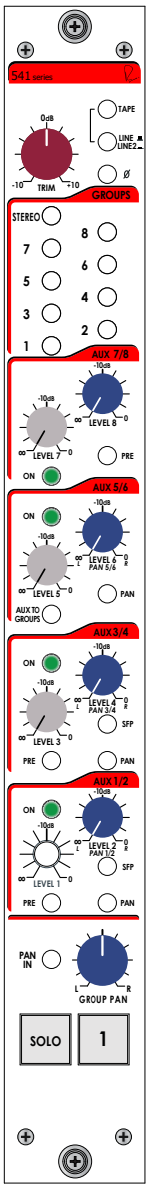
5022

Dual Mic Pre + Variable SILK

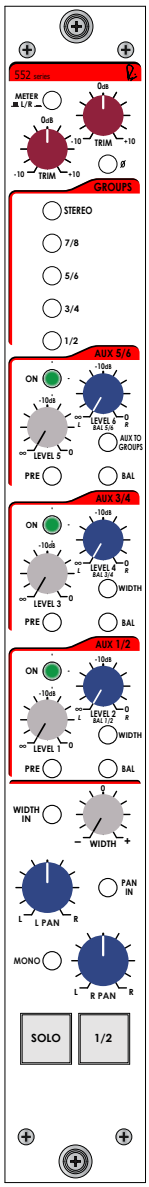
5053

Transformer-Gain Mic Pre + Inductor EQ

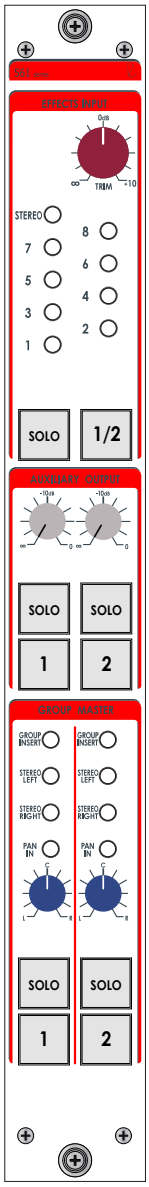
Console Modules



541
Mono Channel Module



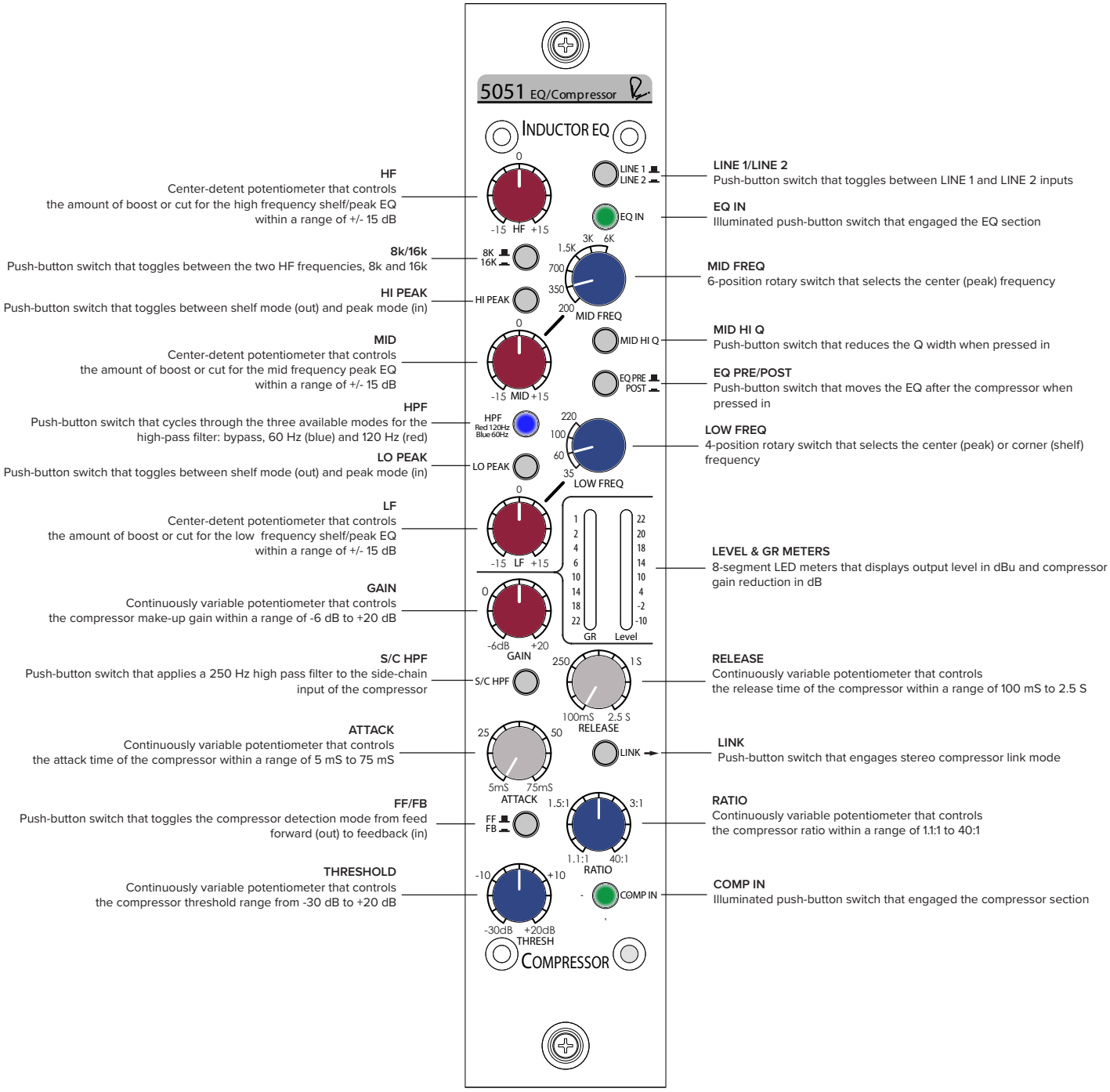
552
Stereo Channel Module



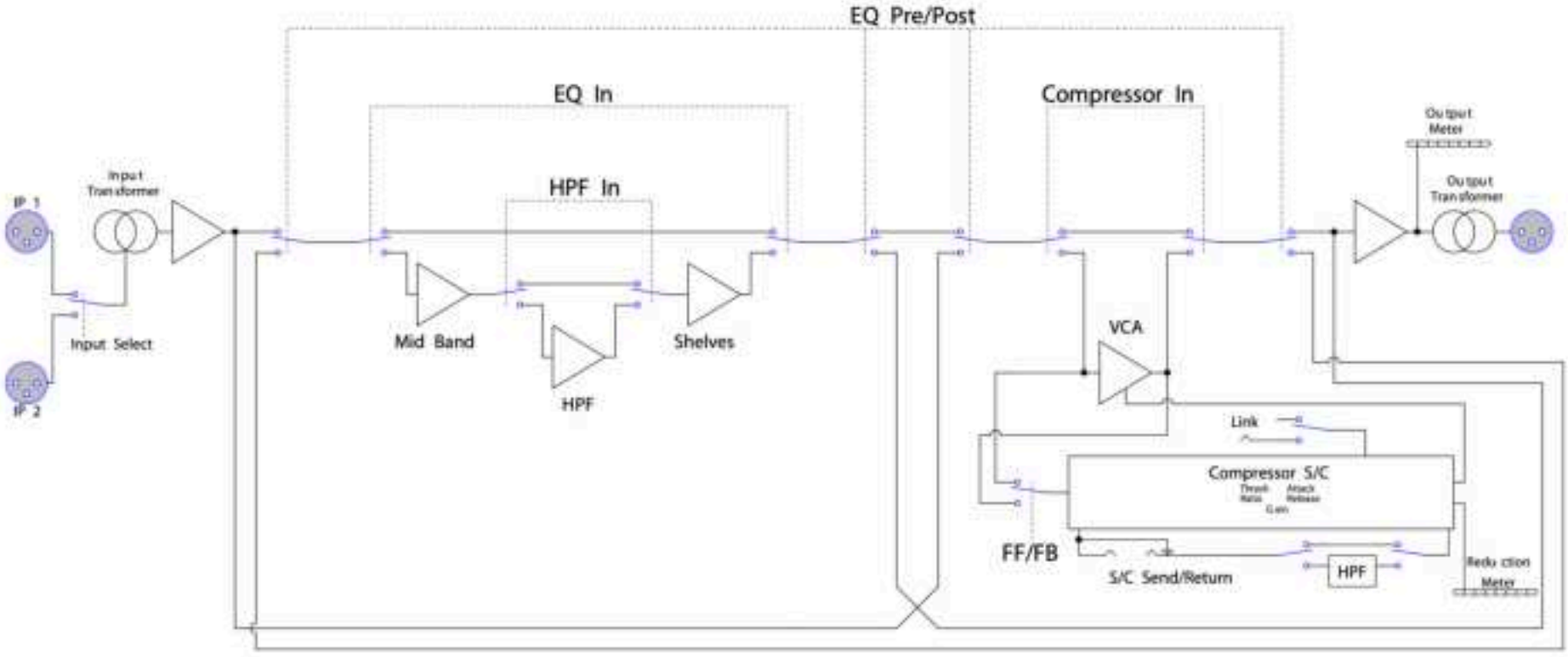
561
Group Module

5051 Front Panel

The 5051 combines a three-band Inductor EQ based on Rupert's vintage designs with the power & flexibility of the Portico II VCA Compressor. Utilizing a fully-discrete class-A signal path and custom audio transformers and inductors, the 5051 delivers all the performance and musicality expected from a Rupert Neve design.



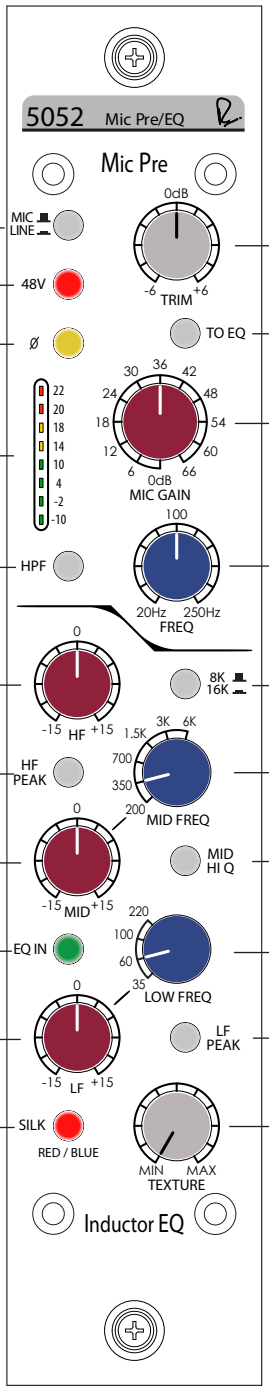
5051 Block Diagram



Main Output Impedance: ~40 ohms

5052 Front Panel

The 5052 echoes the feature set of classic Rupert Neve Channel modules, with a class-A, electronically balanced mic preamp, high pass filter, and 3-band inductor EQ, plus modern capabilities like the variable Silk / Texture control and an additional ‘Mic’ Output and ‘EQ’ Input for routing flexibility.



MIC/LINE
Push-button switch that selects the mic input or the line input

48V
Illuminated push-button switch that engages 48V Phantom Power

Polarity
Illuminated push-button switch that inverts the phase of the input signal

LEVEL METER
8-segment LED meter that displays output level in dBu pre-SILK

HPF
Push-button switch that engages the high pass filter

HF
Center-detent potentiometer that controls the amount of boost or cut for the high frequency shelf/peak EQ within a range of +/- 15 dB

HF PEAK
Push-button switch that toggles between shelf mode (out) and peak mode (in)

MID
Center-detent potentiometer that controls the amount of boost or cut for the mid frequency peak EQ within a range of +/- 15 dB

EQ IN
Illuminated push-button switch that engages the EQ section

LF
Center-detent potentiometer that controls the amount of boost or cut for the low frequency shelf/peak EQ within a range of +/- 15 dB

SILK
Illuminated push-button switch that toggles through the three available SILK modes: OFF, RED & BLUE

TRIM
Center-detent potentiometer that controls the input trim within a range of +/- 6 dB

TO EQ
Push-button switch that sends the Mic Pre signal to the EQ section

MIC GAIN
12-position rotary switch that control the mic preamp gain in 6 dB steps

FREQ
Continuously variable potentiometer that controls the cutoff frequency of the high pass filter within a range of 20 Hz to 250 Hz

8k/16k
Push-button switch that toggles between the two HF frequencies, 8k and 16k

MID FREQ
6-position rotary switch that selects the center (peak) frequency

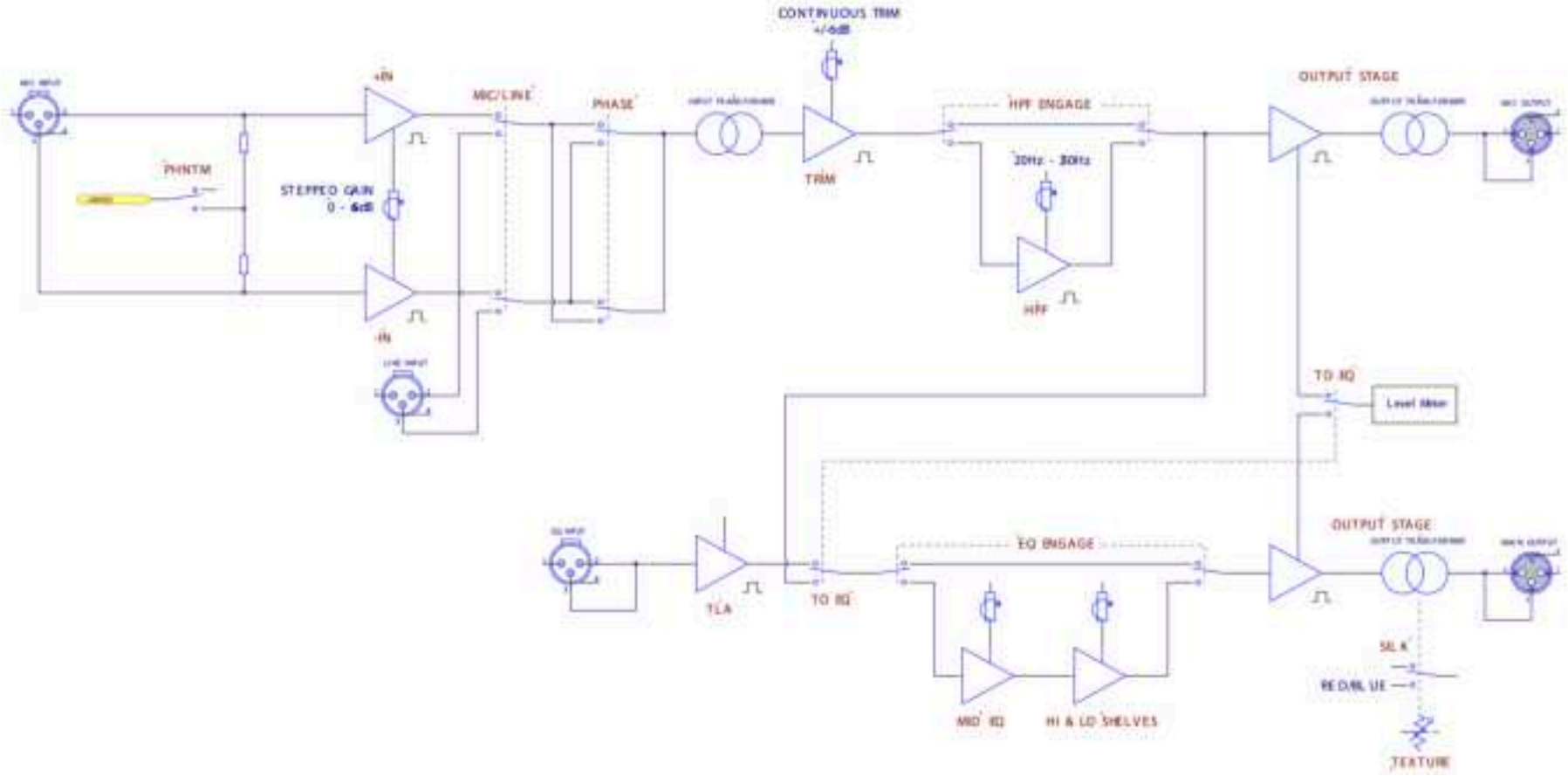
MID HI Q
Push-button switch that reduces the Q width when pressed in

LOW FREQ
4-position rotary switch that selects the center (peak) or corner (shelf) frequency

LF PEAK
Push-button switch that toggles between shelf mode (out) and peak mode (in)

TEXTURE
Continuously variable potentiometer that controls the amount of SILK harmonics when SILK is engaged

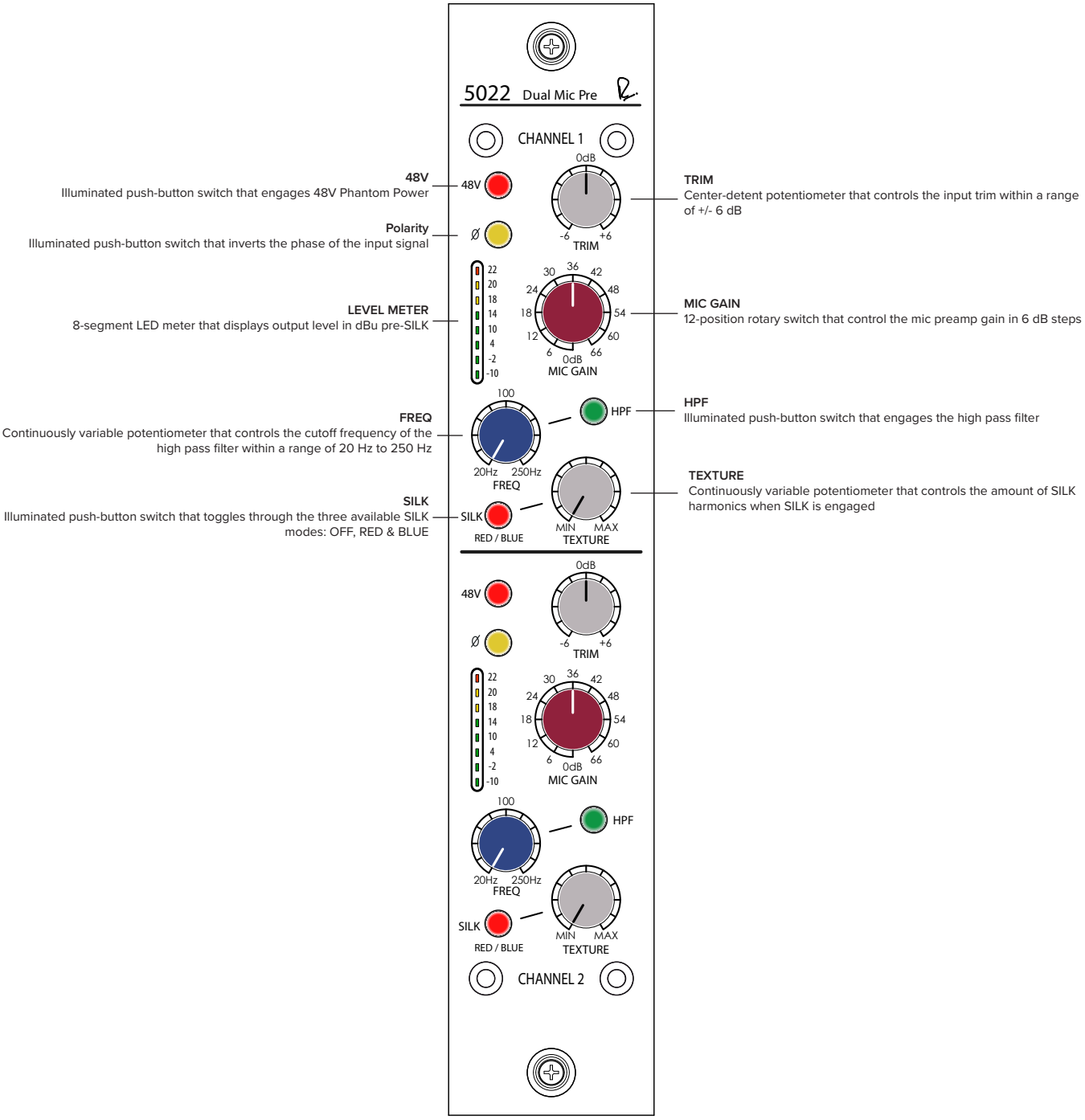
5052 Block Diagram



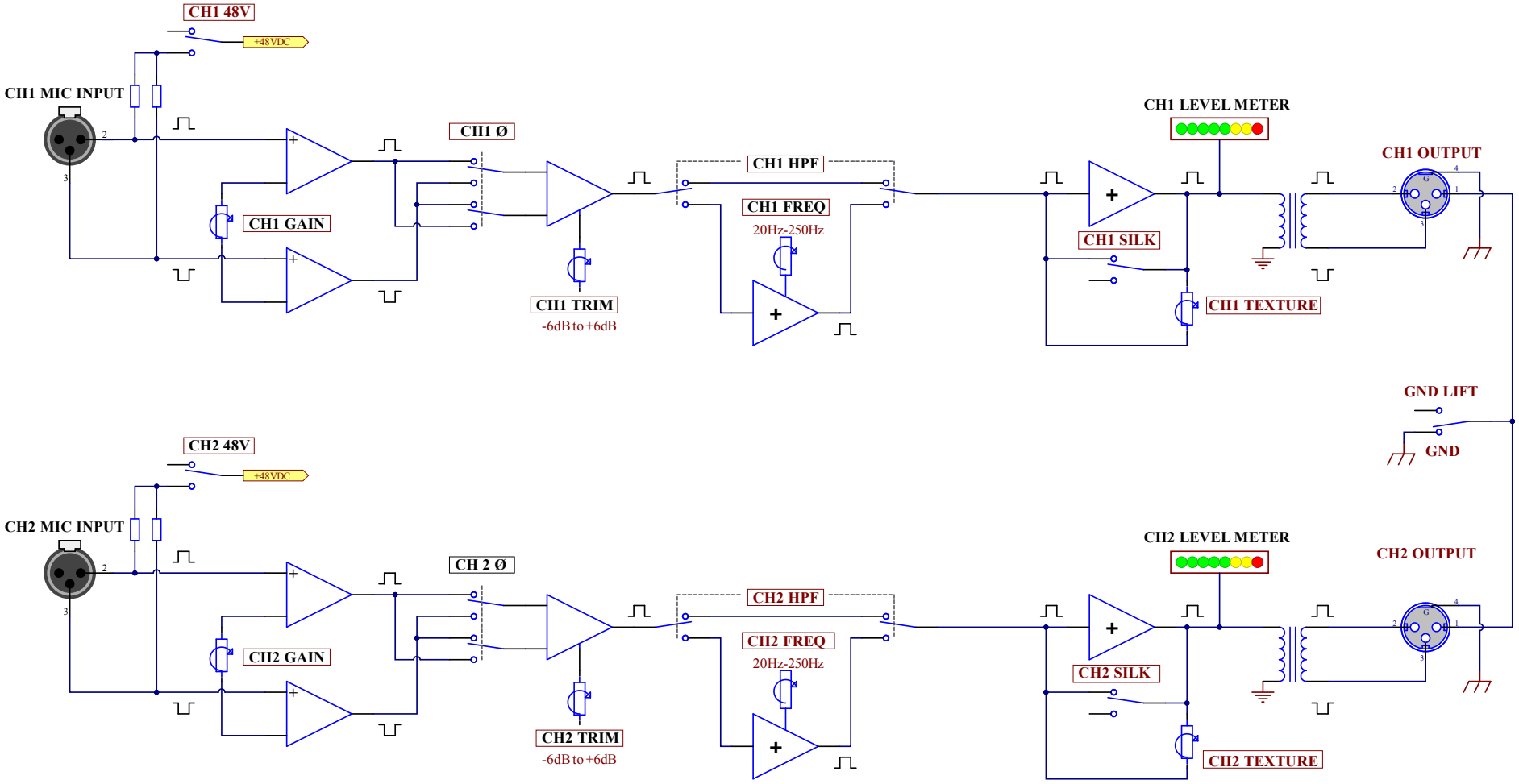
Output Impedance: ~40 ohms

5022 Front Panel

The 5022 is designed to maximize the amount of inputs available in one Penthouse Module, by providing two class-A, electronically balanced mic preamps, 2 variable high pass filters, and a variable Silk / Texture control for each input channel.



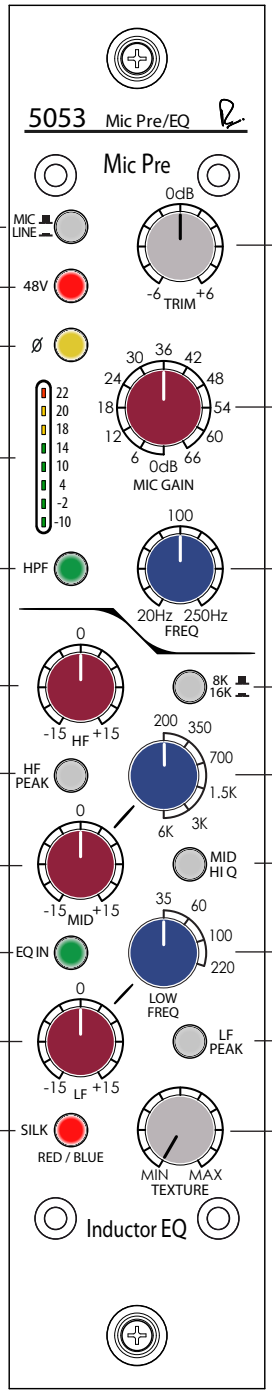
5022 Block Diagram



Output Impedance: ~40 ohms

5053 Front Panel

The 5053 builds further upon classic Rupert Neve Modules by incorporating an additional custom RND transformer specifically for the mic preamp, which provides slightly more warmth and harmonic color than the 5052 and is the exact same input transformer used in the Shelford Channel. It also has the same variable high pass filter, 3-band inductor EQ and variable Silk / Texture control.



MIC/LINE
Push-button switch that selects the mic input or the line input

48V
Illuminated push-button switch that engages 48V Phantom Power

Polarity
Illuminated push-button switch that inverts the phase of the input signal

LEVEL METER
8-segment LED meter that displays output level in dBu pre-SILK

HPF
Push-button switch that engages the high pass filter

HF
Center-detent potentiometer that controls the amount of boost or cut for the high frequency shelf/peak EQ within a range of +/- 15 dB

HF PEAK
Push-button switch that toggles between shelf mode (out) and peak mode (in)

MID
Center-detent potentiometer that controls the amount of boost or cut for the mid frequency peak EQ within a range of +/- 15 dB

EQ IN
Illuminated push-button switch that engages the EQ section

LF
Center-detent potentiometer that controls the amount of boost or cut for the low frequency shelf/peak EQ within a range of +/- 15 dB

SILK
Illuminated push-button switch that toggles through the three available SILK modes: OFF, RED & BLUE

TRIM
Center-detent potentiometer that controls the input trim within a range of +/- 6 dB

MIC GAIN
12-position rotary switch that control the mic preamp gain in 6 dB steps

FREQ
Continuously variable potentiometer that controls the cutoff frequency of the high pass filter within a range of 20 Hz to 250 Hz

8k/16k
Push-button switch that toggles between the two HF frequencies, 8k and 16k

MID FREQ
6-position rotary switch that selects the center (peak) frequency

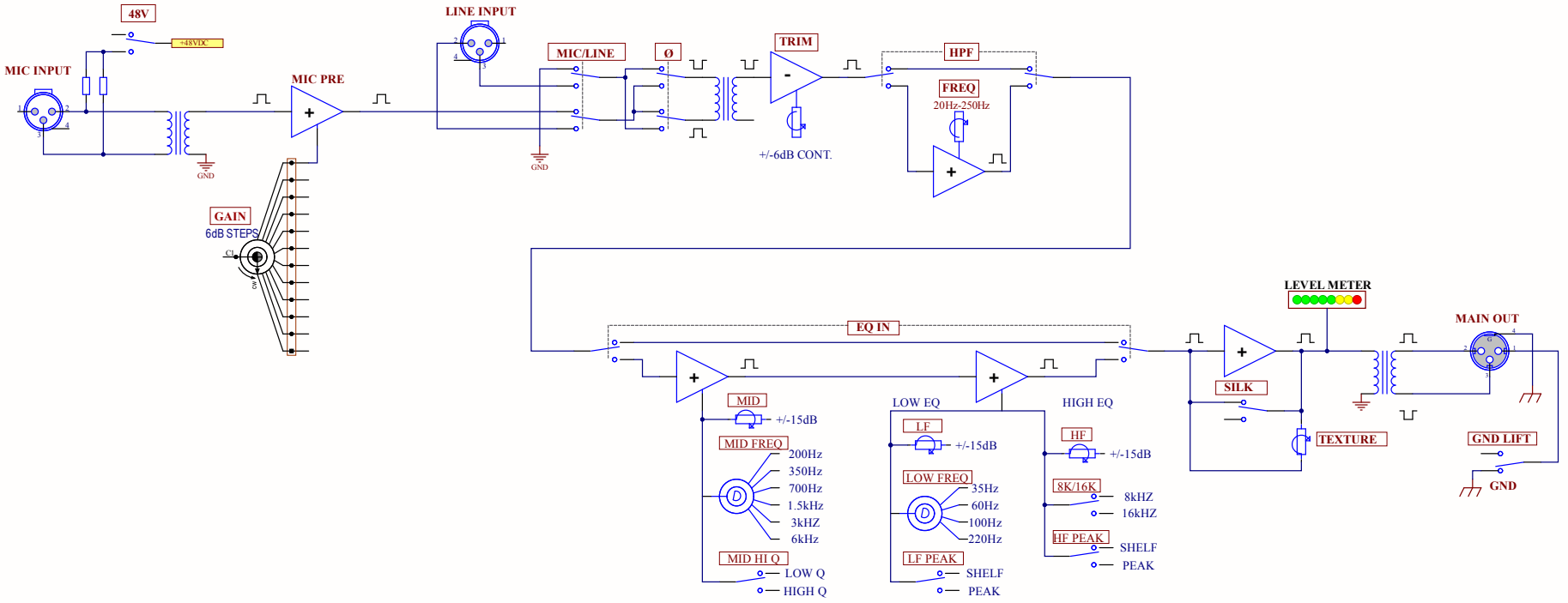
MID HI Q
Push-button switch that reduces the Q width when pressed in

LOW FREQ
4-position rotary switch that selects the center (peak) or corner (shelf) frequency

LF PEAK
Push-button switch that toggles between shelf mode (out) and peak mode (in)

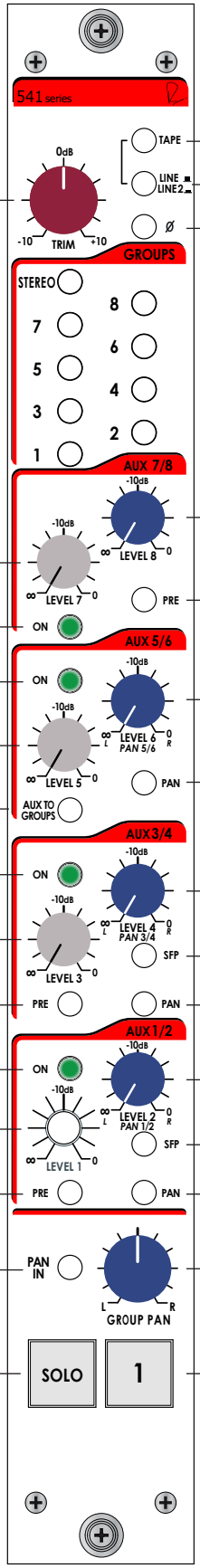
TEXTURE
Continuously variable potentiometer that controls the amount of SILK harmonics when SILK is engaged

5053 Block Diagram



Main Output Impedance: ~40 ohms

541 Mono Channel Module Front Panel



TRIM
Center-detent potentiometer that controls the input trim within a range of +/- 10 dB

TAPE
Push-button switch that selects the Tape Input

LINE/LINE 2
Push-button switch that toggles between the Line input and the Line 2 input

POLARITY
Push-button switch that inverts the phase of the input signal

GROUP ASSIGN SWITCHES
Push-button switches that assign the input to the corresponding group bus

LEVEL 8
Continuously variable potentiometer that controls the level of the Aux 8 send

LEVEL 7
Continuously variable potentiometer that controls the level of the Aux 7 send

PRE
Push-button switch that toggles Aux 7/8 from post fader to pre fader

AUX ON
Illuminated push-button switch that engages the Aux 7/8 sends

AUX ON
Illuminated push-button switch that engages the Aux 5/6 sends

LEVEL 6 (*PAN 5/6*)
Center-detent potentiometer that toggles between controlling the level of Aux 6 to controlling the pan position of Aux 5/6

LEVEL 5
Continuously variable potentiometer that controls the level of the Aux 5 send

PAN
Push-button switch that toggles the LEVEL 6 pot from controlling the level to controlling the pan position for Aux 5/6

AUX TO GROUPS
Push-button switch that assigns Aux 5/6 to the group buses selected in the group assignment section

AUX ON
Illuminated push-button switch that engages the Aux 3/4 sends

LEVEL 4 (*PAN 3/4*)
Center-detent potentiometer that toggles between controlling the level of Aux 4 to controlling the pan position of Aux 3/4

LEVEL 3
Continuously variable potentiometer that controls the level of the Aux 3 send

SFP
Push-button switch that engages 'Send Follows Pan' and allows Aux 3/4 to be controlled by the channel pan.

PRE
Push-button switch that toggles Aux 3/4 from post fader to pre fader

PAN
Push-button switch that toggles the LEVEL 4 pot from controlling the level to controlling the pan position for Aux 3/4

AUX ON
Illuminated push-button switch that engages the Aux 1/2 sends

LEVEL 2 (*PAN 1/2*)
Center-detent potentiometer that toggles between controlling the level of Aux 2 to controlling the pan position of Aux 1/2

LEVEL 1
Continuously variable potentiometer that controls the level of the Aux 1 send

SFP
Push-button switch that engages 'Send Follows Pan' and allows Aux 1/2 to be controlled by the channel pan.

PRE
Push-button switch that toggles Aux 1/2 from post fader to pre fader

PAN
Push-button switch that toggles the LEVEL 2 pot controlling the level to controlling the pan positionfor Aux 1/2

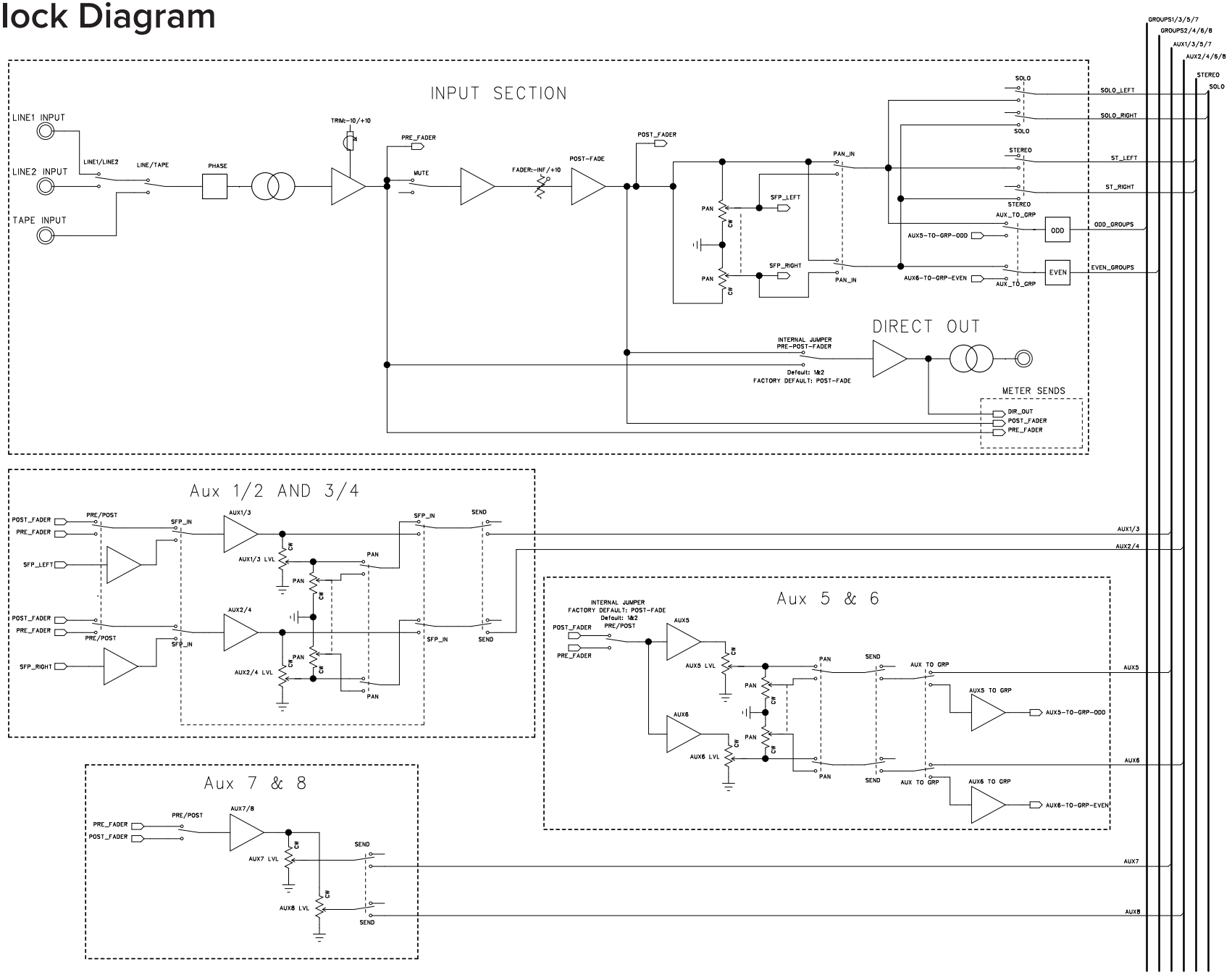
PAN IN
Push-button switch that engages the GROUP PAN potentiometer

GROUP PAN
Center-detent potentiometer that controls the pan position of the input to the channel.

SOLO
Illuminated latching switch that engages SOLO

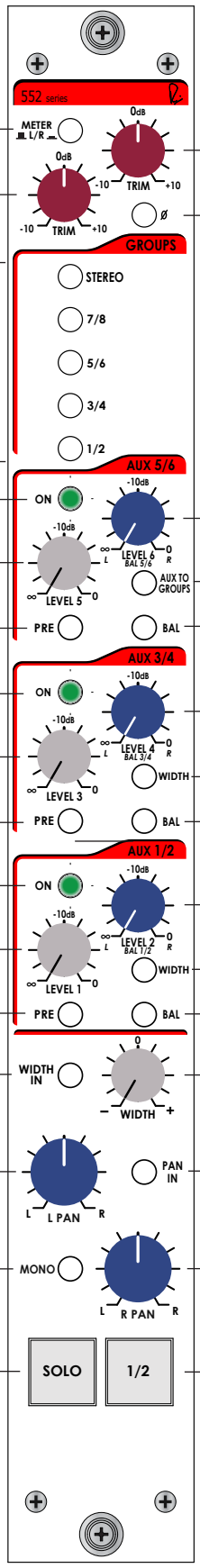
MUTE
Illuminated latching switch that engages soft MUTE

541 Block Diagram



Direct Output Impedance: ~90 ohms

552 Stereo Channel Module Front Panel



METER L/R
Push-button switch that toggles the corresponding VU meter to displaying the left (out) or right (in) channel

LEFT INPUT TRIM
Center-detent potentiometer that controls the left channel input trim within a range of +/- 10 dB

RIGHT INPUT TRIM
Center-detent potentiometer that controls the right channel input trim within a range of +/- 10 dB

POLARITY
Push-button switch that inverts the phase of the input signal

GROUP ASSIGN SWITCHES
Push-button switches that assign the input to the corresponding group bus

AUX ON
Illuminated push-button switch that engages the Aux 5/6 sends

LEVEL 5
Continuously variable potentiometer that controls the level of the Aux 5 send

PRE
Push-button switch that toggles Aux 5/6 from post fader to pre fader

LEVEL 6 (*BAL 5/6*)
Center-detent potentiometer that toggles between controlling the level of Aux 6 to controlling the balance of Aux 5/6

AUX TO GROUPS
Push-button switch that assigns Aux 5/6 to the group buses selected in the group assignment section

BAL
Push-button switch that toggles the LEVEL 6 pot from controlling the level to controlling the balance for Aux 5/6

AUX ON
Illuminated push-button switch that engages the Aux 3/4 sends

LEVEL 3
Continuously variable potentiometer that controls the level of the Aux 3 send

PRE
Push-button switch that toggles Aux 3/4 from post fader to pre fader

LEVEL 4 (*BAL 3/4*)
Center-detent potentiometer that toggles between controlling the level of Aux 4 to controlling the balance of Aux 3/4

WIDTH
Push-button switch that engages the stereo field width processing on Aux 3/4

BAL
Push-button switch that toggles the LEVEL 4 pot from controlling the level to controlling the balance for Aux 3/4

AUX ON
Illuminated push-button switch that engages the Aux 1/2 sends

LEVEL 1
Continuously variable potentiometer that controls the level of the Aux 1 send

PRE
Push-button switch that toggles Aux 3/4 from post fader to pre fader

LEVEL 2 (*BAL 1/2*)
Center-detent potentiometer that toggles between controlling the level of Aux 2 to controlling the balance of Aux 1/2

WIDTH
Push-button switch that engages the stereo field width processing on Aux 1/2

BAL
Push-button switch that toggles the LEVEL 2 pot from controlling the level to controlling the balance for Aux 1/2

WIDTH IN
Push-button switch that engages the channel stereo field width processing

WIDTH
Continuously variable potentiometer that controls the amount of stereo field width processing

L PAN
Center-detent potentiometer that controls the pan position of the left input channel.

PAN IN
Push-button switch that engages the L PAN and R PAN potentiometers

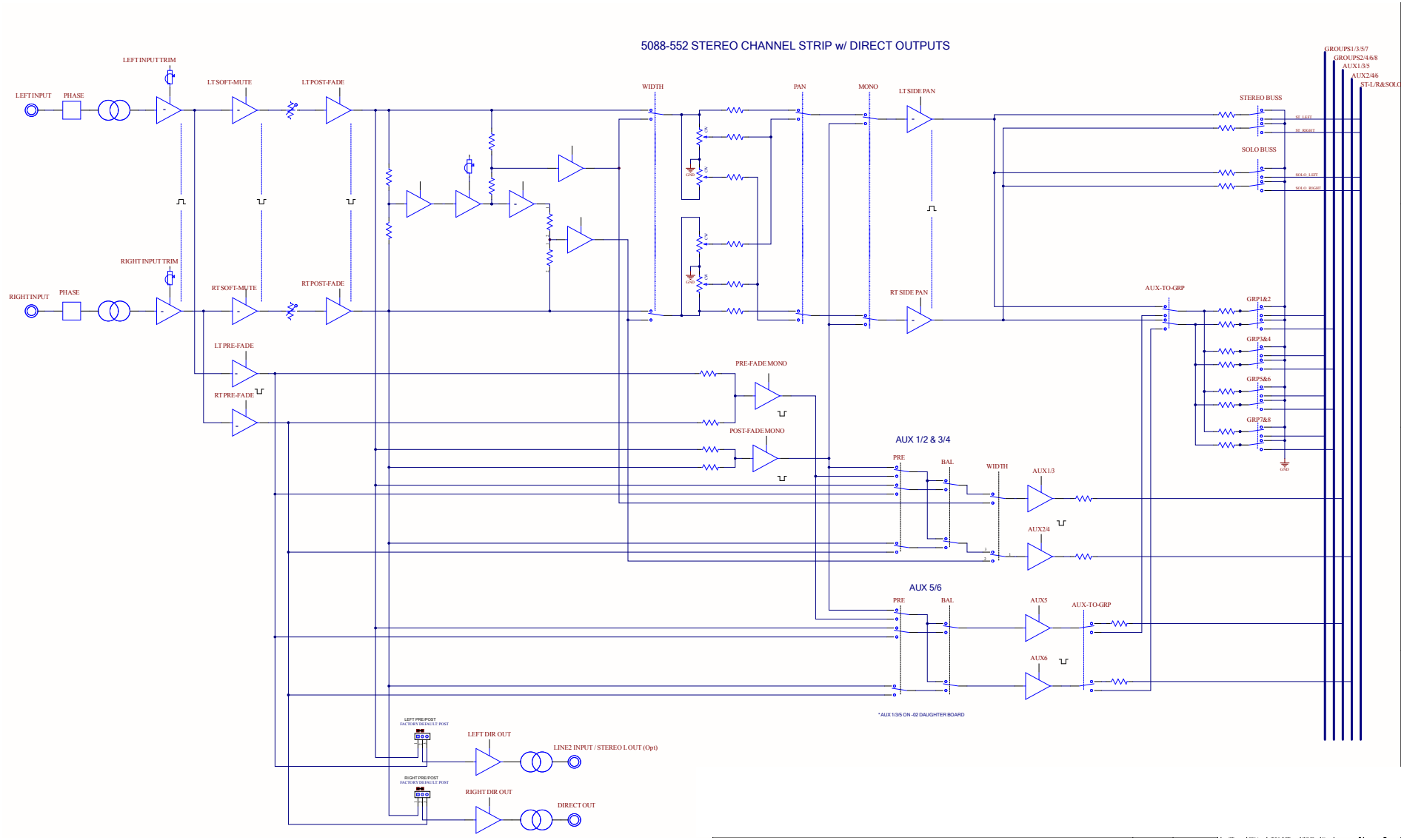
MONO
Push-button switch that bypasses the pan and width controls and positions the left and right channel inputs to center

R PAN
Center-detent potentiometer that controls the pan position of the right input channel.

SOLO
Illuminated latching switch that engages SOLO

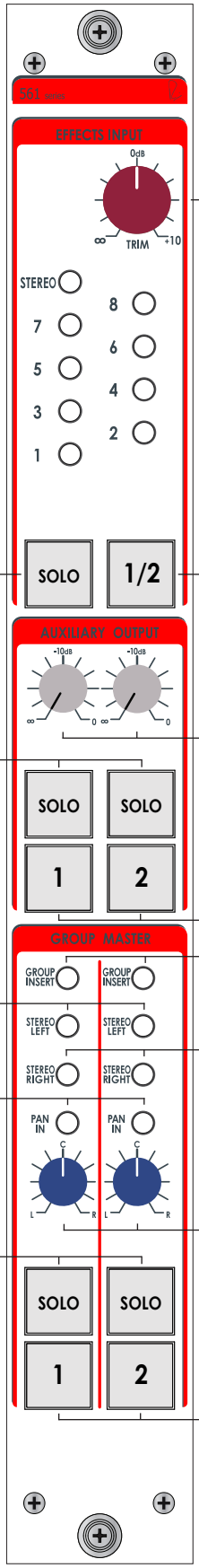
MUTE
Illuminated latching switch that engages MUTE

552 Block Diagram



Direct Output Impedance: ~90 ohms

561 Group Channel Module Front Panel



EFFECTS INPUT TRIM
Center-detent potentiometer that controls the stereo effects input trim within a range of +/- 10 dB

STEREO EFFECTS INPUT (RETURN) GROUP ASSIGN
Push-button switches that assign the effects input to the corresponding group bus

SOLO
Illuminated latching switch that engages SOLO for the stereo effects input

MUTE
Illuminated latching switch that engages a soft MUTE for the stereo effects input

AUX MASTER OUTPUT (SEND) CONTROLS
Center-detent potentiometers that control the master aux output (send) levels from -infinity to zero

SOLO
Illuminated latching switches that engage SOLO for the aux master outputs (sends)

MUTE
Illuminated latching switches that engage a soft MUTE for the aux master outputs (sends)

GROUP INSERT
Push-button switches that engage the insert return for the group masters

STEREO LEFT
Push-button switches that assign the group masters to the left stereo bus

STEREO RIGHT
Push-button switches that assign the group masters to the right stereo bus

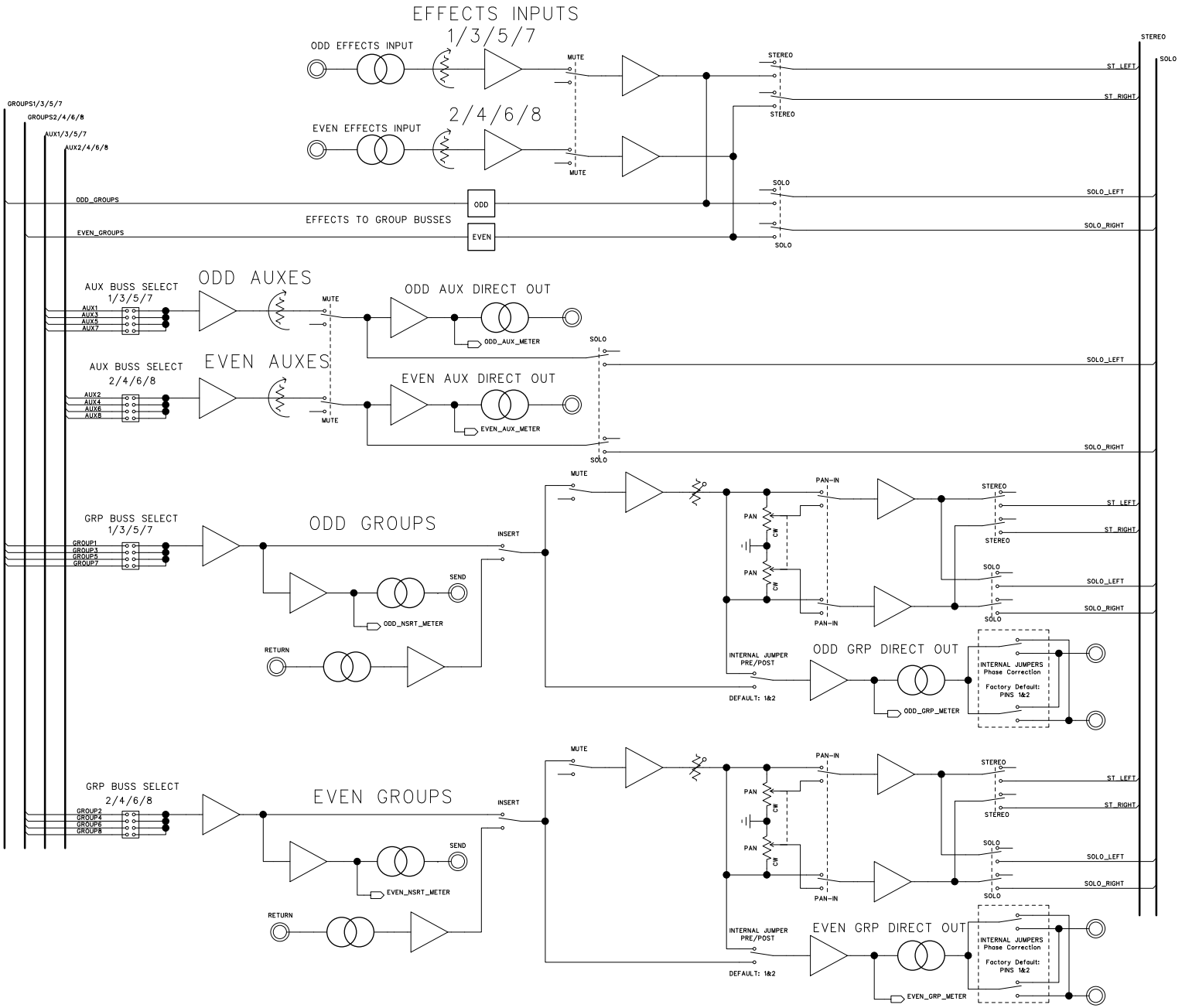
PAN IN
Push-button switch that engages the group master pan potentiometers

GROUP MASTER PAN
Center-detent potentiometers that control the pan position of the group masters

SOLO
Illuminated latching switches that engage SOLO for the group masters

MUTE
Illuminated latching switches that engage a soft MUTE for the group masters

561 Block Diagram



Insert Send & Direct Output Impedance: ~90 ohms

Channel & Group Module Internal Jumpers

The 541 mono & 552 stereo channel modules & the 561 group module all have custom transformer-coupled direct outputs with corresponding 100mm faders for controlling the output level.

The direct outputs of the 541 & 552 can be assigned to be either pre/post fader via internal jumpers located on each module's circuit board.

The 541 also has internal jumpers that assign the Aux 5/6 sends to be pre/post fader.

The 561 has internal jumpers that select the input assigned to each group bus, as well as jumpers to assign the direct output to be pre/post fader and polarity to flip the phase 180° based on the pre/post fader adjustment.

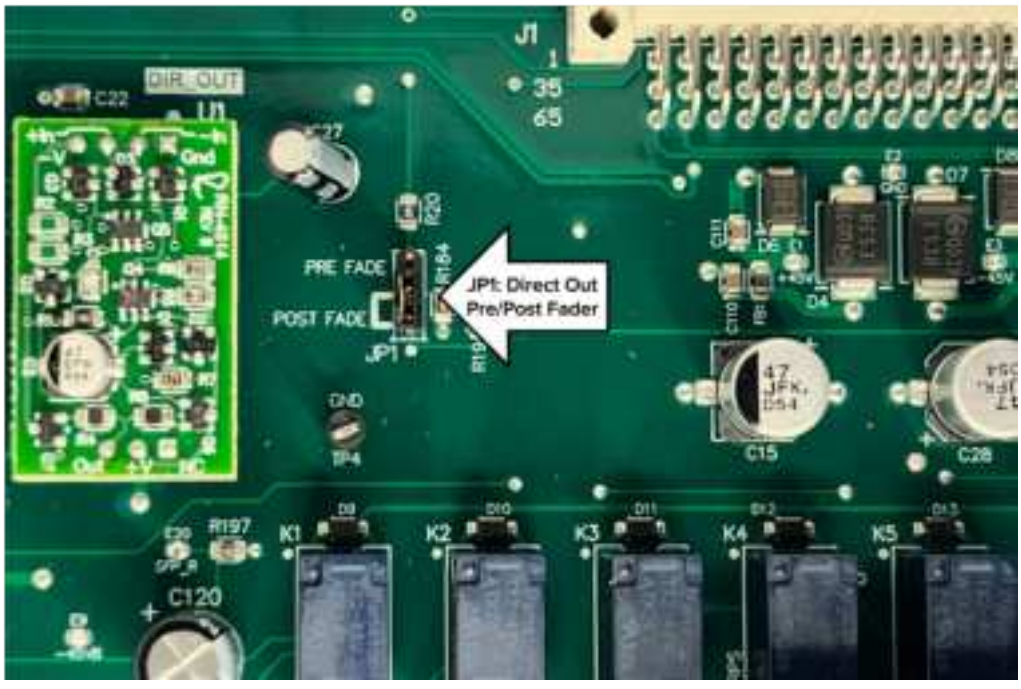
NOTE: Before removing 5088 modules to change jumper positions, ***POWER OFF THE 5088.*** *We recommend adjusting the jumpers by hand or with a small set of needle-nose pliers.*

Please contact our support staff at the following email address if any questions arise: service@rupertneve.com, 512-847-3013

541 Direct Output: Pre/Post Fader Jumper

The 541 Channel's transformer-coupled direct output can be assigned to be either Pre-Fader or Post-Fader via the internal jumper shown below.

541 Direct Out: Pre/Post Fader

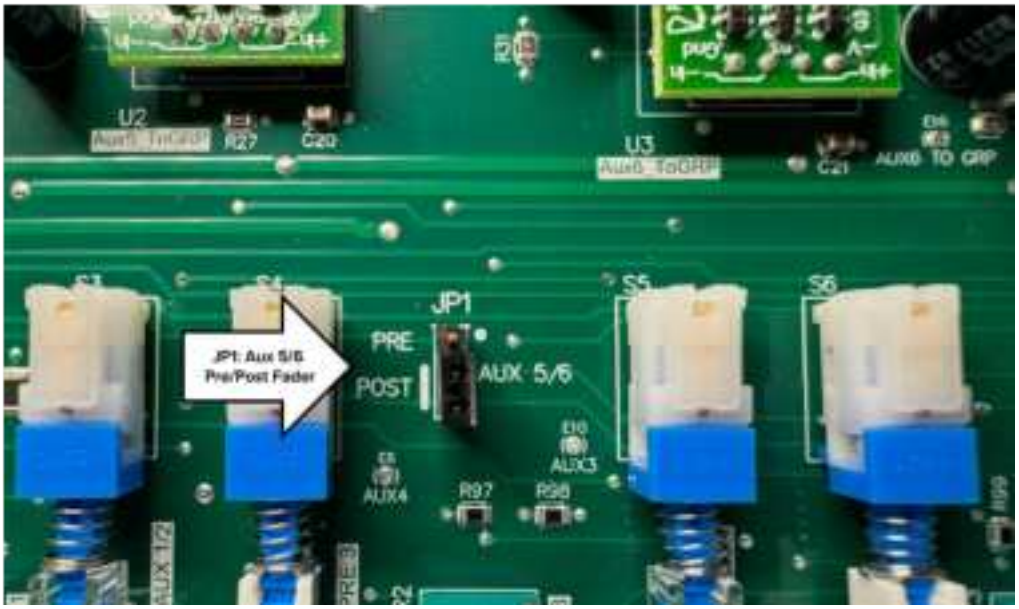


Channel & Group Module Internal Jumpers (continued)

541 Aux 5/6: Pre/Post Fader Jumper

The 541 Channel's Aux 5/6 sends can be assigned to be either Pre-Fader or Post-Fader via the internal jumper shown below.

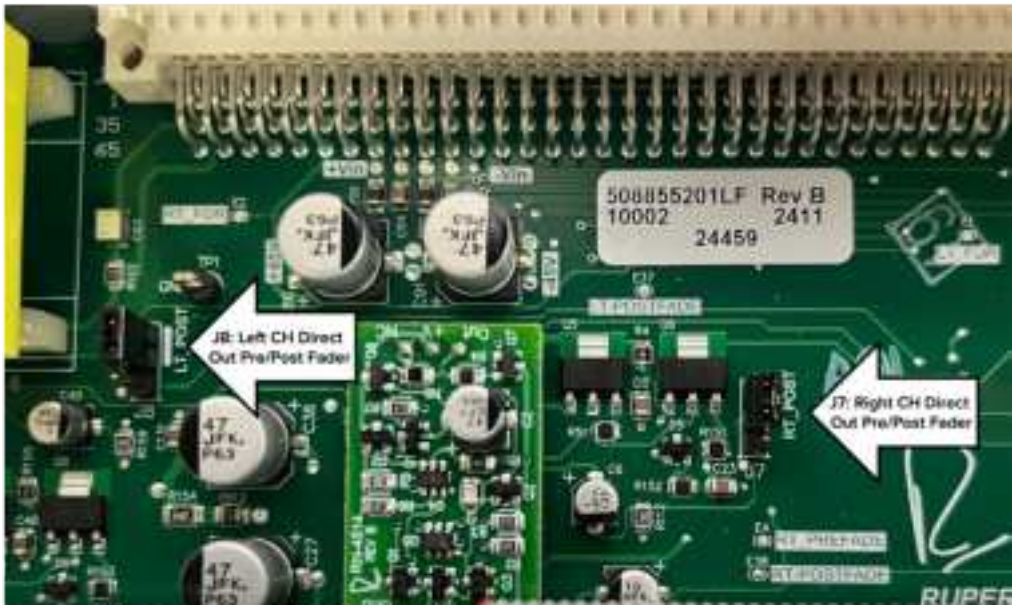
541 Aux 5/6: Pre/Post Fader



552 Direct Outputs: Pre/Post Fader Jumpers

The 552 Channel's transformer-coupled direct outputs can be assigned to be either Pre-Fader or Post-Fader via internal jumpers.

552 Direct Outs: Pre/Post Fader



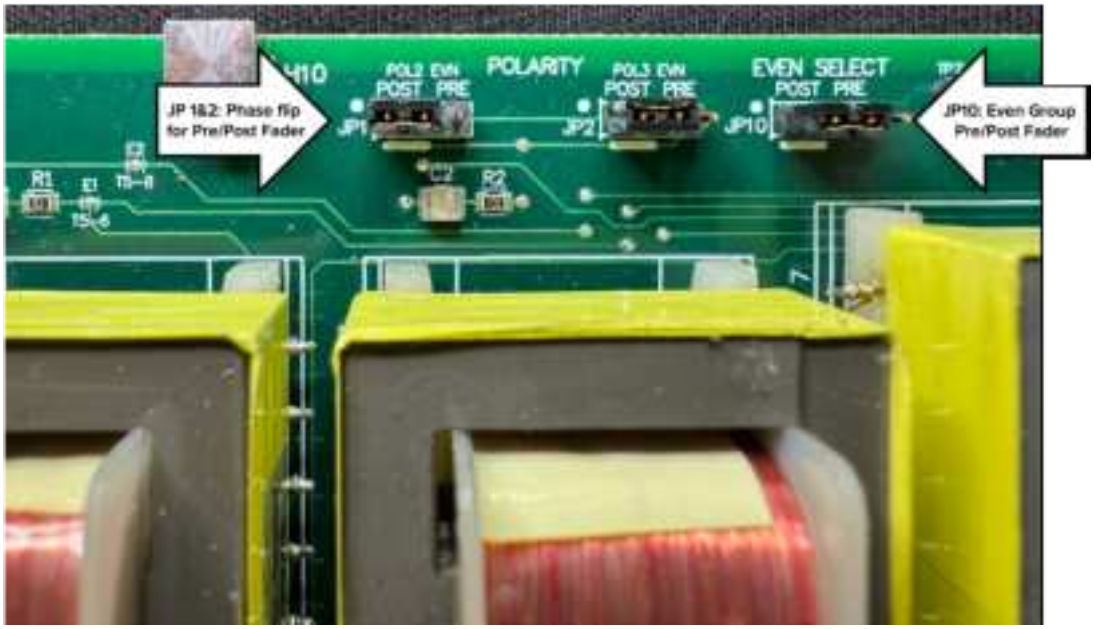
Channel & Group Module Internal Jumpers (continued)

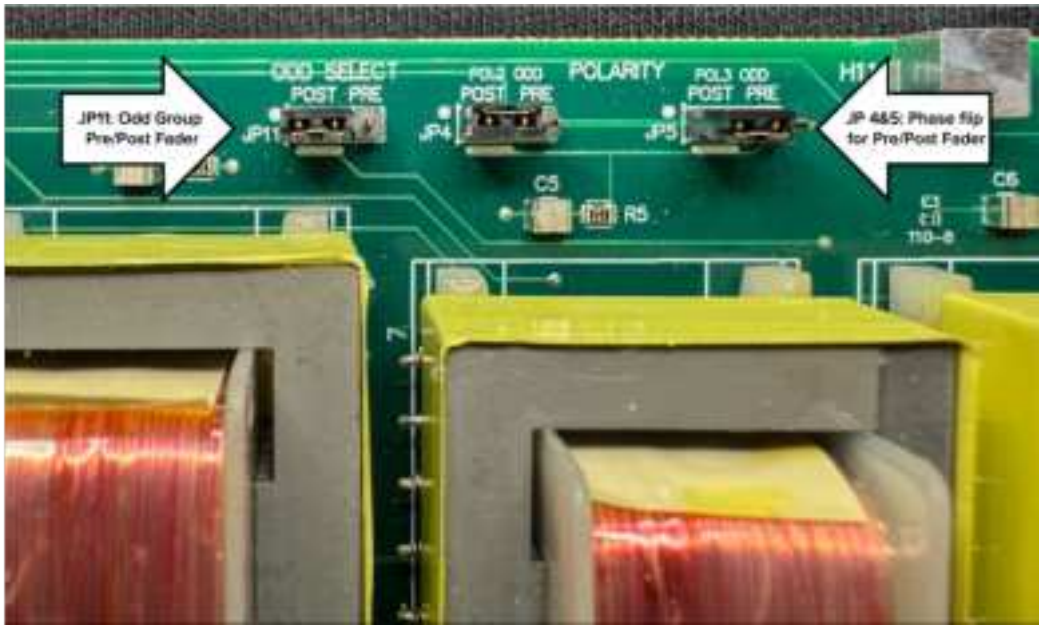
561 Direct Outs: Pre/Post Fader & Polarity Jumpers

The 561's transformer-coupled direct outputs can be assigned to be either Pre-Fader or Post-Fader via the internal jumpers shown below. In addition, there are corresponding polarity jumpers that should match the position of the pre/post direct output jumpers.

561 Direct Outs: Pre/Post Fader & Polarity

NOTE: 'POLARITY' jumper positions should match the 'EVEN/ODD SELECT' jumper positions





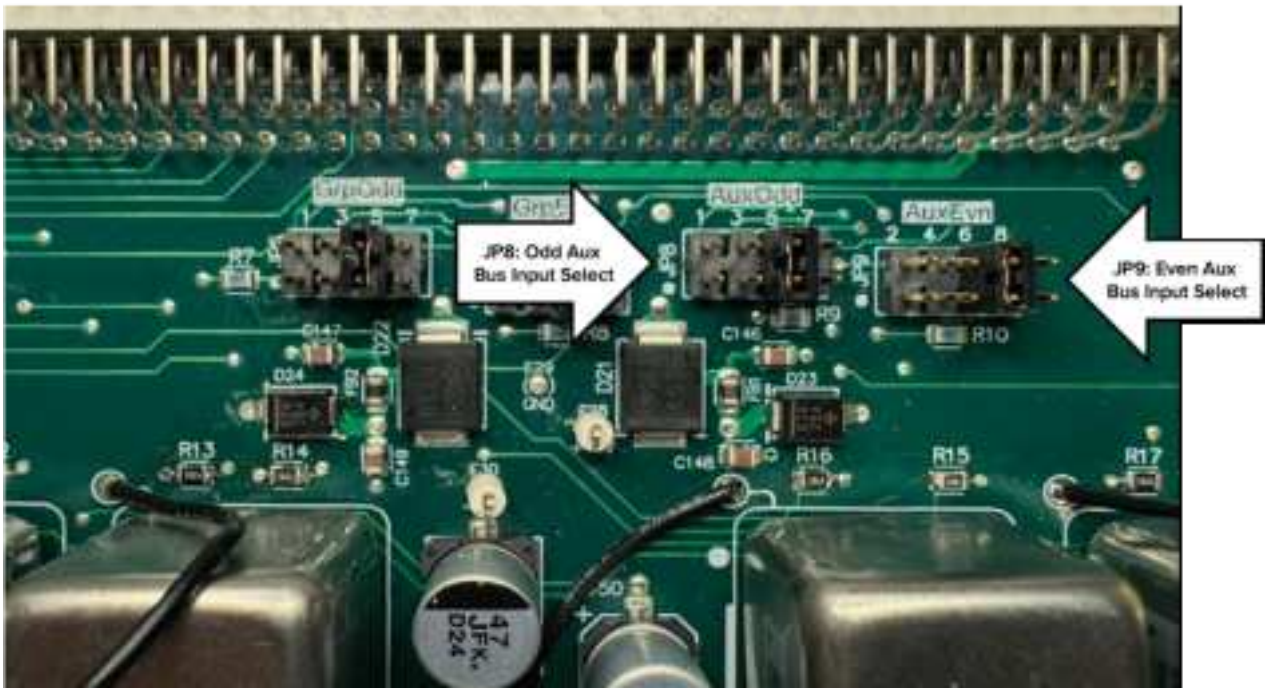
Channel & Group Module Internal Jumpers (continued)

561 Group & Aux Bus Inputs: Bus Input Selection Jumpers

Each 561 can be configured to receive any of the 8 available Group & Aux Bus inputs via the internal jumpers shown below.

561 Group Bus: Input Selection

561 Aux Bus: Input Selection



VU Meter Bridge

The VU Meter bridge has independent VU meters for monitoring both the Channel and Group module signals.

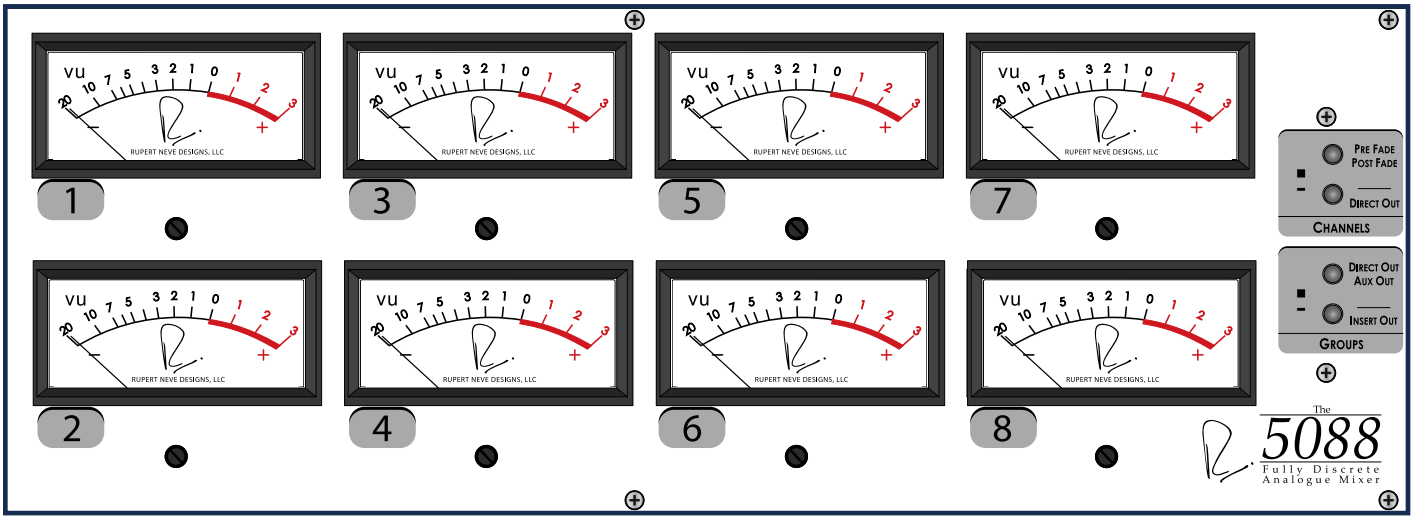
The Channel section VU meters can be toggled between reading Pre-Fader, Post-Fader, and Direct Output using the push-buttons on the right side of the Meterbridge.

The Group section VU meters can be toggled between Aux Out, Group Insert Out, and Group Direct Output monitoring.

The VU Meters are calibrated in the factory prior to shipping where 0 VU = +4 dBm.

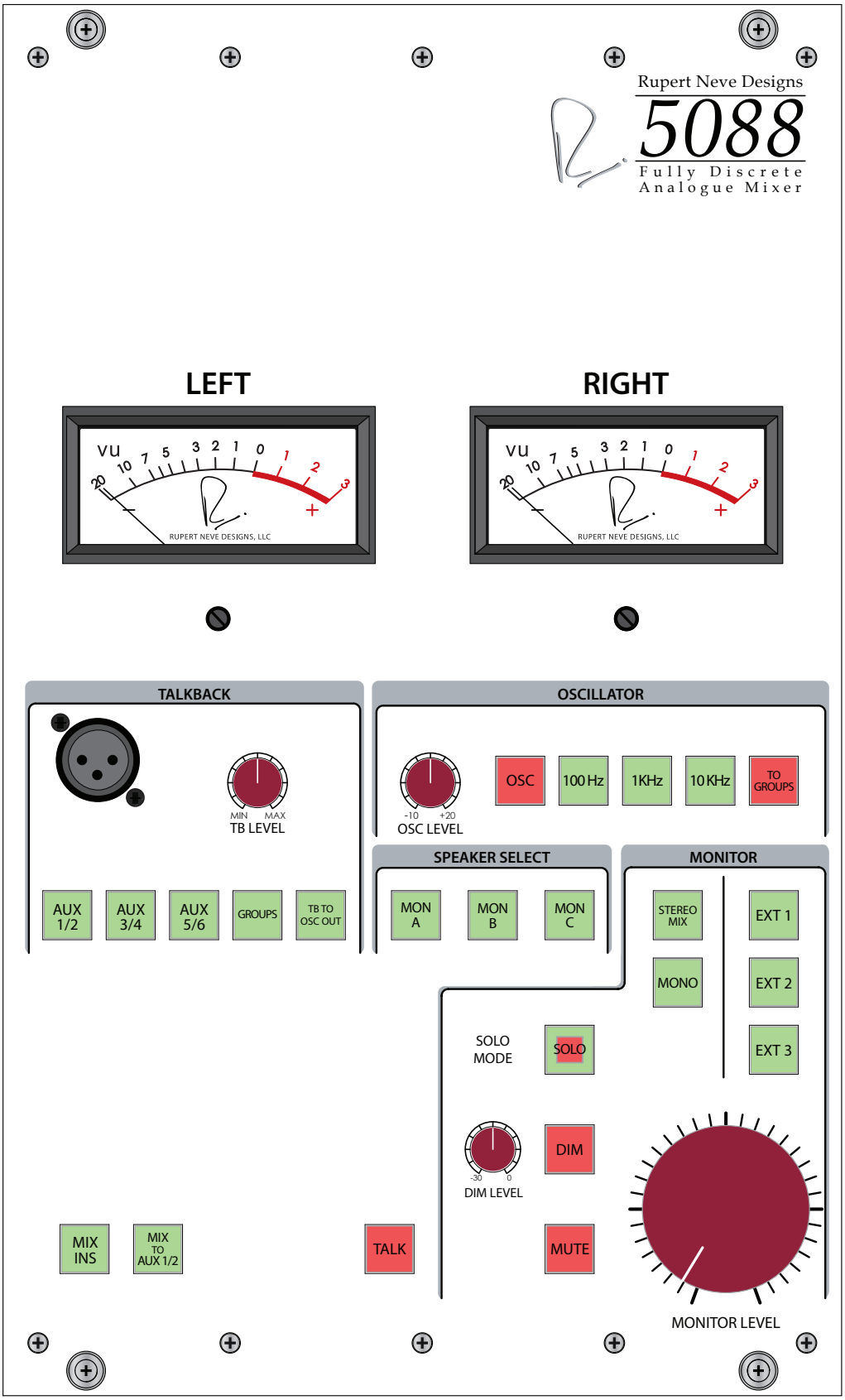
NOTE: If additional calibration is needed once the console is installed please contact our service and support team at: service@rupertneve.com

CHANNEL SECTION VU METER DISPLAY PUSH-BUTTONS



GROUP SECTION VU METER DISPLAY PUSH-BUTTONS

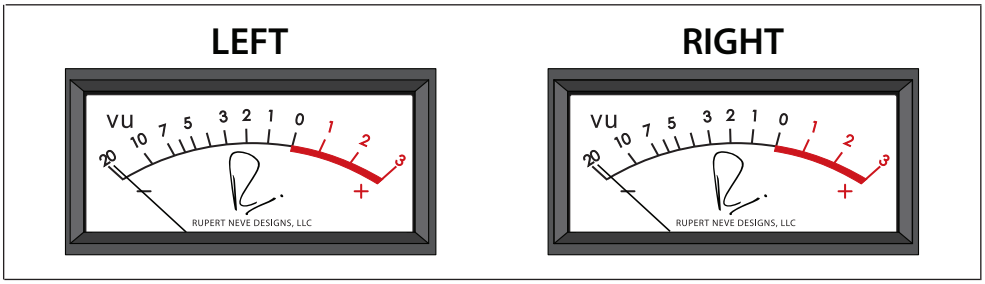
Master Section



Master Section (continued)

LEFT & RIGHT VU METERS

The Left & Right VU Meters are calibrated as standard VU meters where 0 VU = +4dBu.



TALKBACK

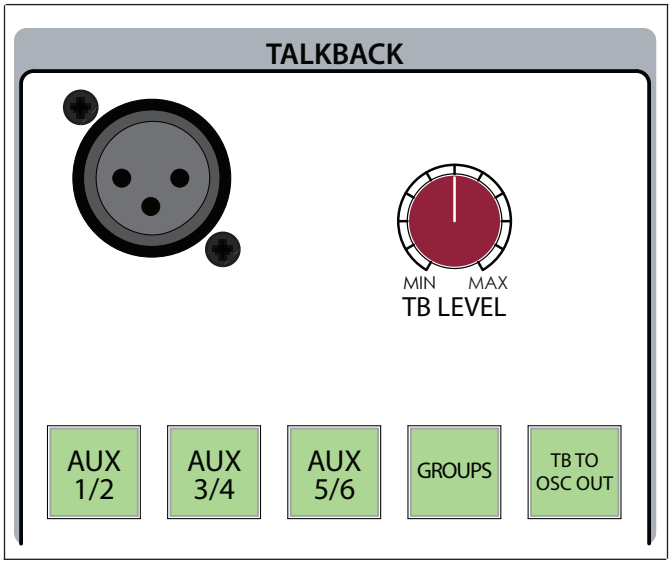
The talkback section contains the following controls (from top to bottom, left to right):

XLR Connector: Female XLR input with +48V and an auto-compressor engaged by default. *(talkback mic not included)*

TB LEVEL: Continuously variable level control for the connected talkback microphone.

AUX 1/2, AUX 3/4, AUX 5/6, & GROUPS: Illuminated switches that route the talkback to the corresponding destination. These routing buttons can be used either individually or simultaneously.

TB TO OSC OUT: Illuminated switch that routes the talkback signal to the external 'OSCILLATOR' XLR output on the rear panel of the master section.



MASTER BUS CONTROLS & TALKBACK ENGAGE

MIX INS: Illuminated switch that engages the transformer-coupled stereo insert point on the master bus.

MIX TO AUX 1/2: Illuminated switch that routes the master bus signal to the aux 1/2 bus.

TALKBACK: Illuminated switch that momentarily engages the talkback mic signal. The talkback engage can also be controlled with a footswitch via the 'TALKBACK REMOTE' 1/4 connector on the rear panel of the master section.

Master Section (continued)

OSCILLATOR

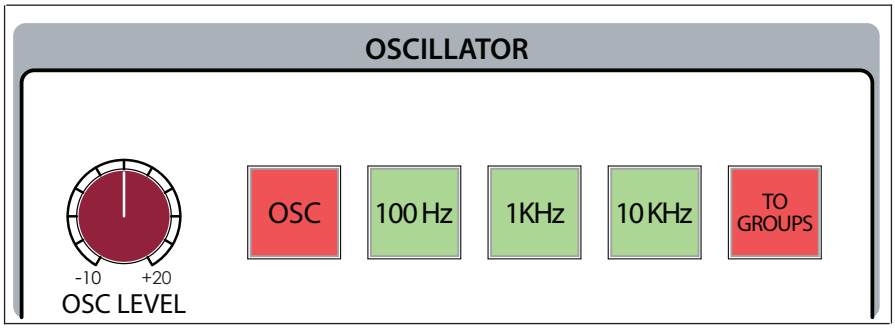
The oscillator section can be used to calibrate input & output levels and verify the frequency response of each 5088 channel. The male XLR output connector for the oscillator is found on the back of the master section rear panel. The oscillator section contains the following controls (from left to right):

OSC LEVEL: Continuously variable level control within a range of -10 to +20 dBu.

OSC: Illuminated switch that engages the oscillator.

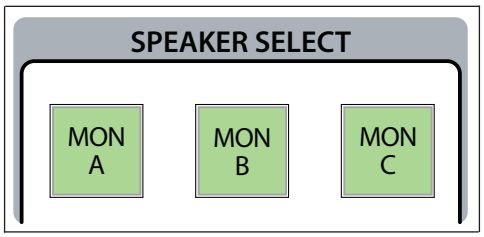
100Hz, 1KHz and 10KHz: Illuminated switches that change the generated oscillation frequency.

TO GROUPS: Illuminated switch that routes the oscillator to the group outputs.



SPEAKER SELECT

The speaker select section contains three illuminated switches that select the MON A, MON B or MON C transformer-coupled stereo monitor outputs. The XLR male connectors for the outputs are located on the rear panel of the master section.



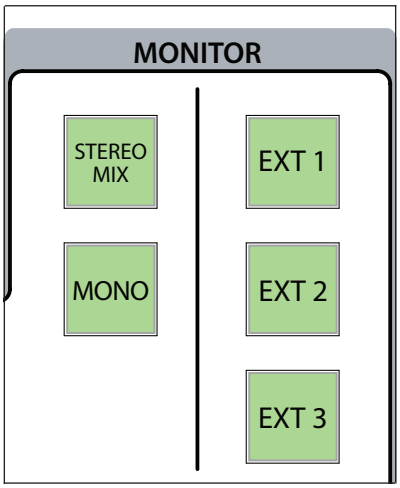
MONITOR

The monitor section contains the following controls (from top to bottom, left to right):

STEREO MIX: Illuminated switch that selects the stereo mix for monitoring.

MONO: Illuminated switch that sums the left and right signals of the selected monitor source to mono.

EXT 1, EXT 2 or EXT 3: Illuminated switches that select the corresponding stereo external source for monitoring. The XLR female connectors for these external sources are located on the rear panel of the master section.



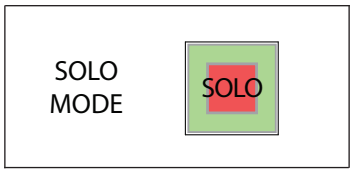
Master Section (continued)

SOLO MODE

The ‘SOLO MODE’ section has an illuminated switch that engages Solo-in-Place (SIP). SIP allows for the monitoring of a channel signal post-pan and fader control, maintaining the signal’s position in the stereo field. This can be useful when needing to solo a channel and also listen to the corresponding effects return, for example.

Solo-in-Place is achieved by monitoring the main mix bus instead of the default solo bus.

PLEASE NOTE - SIP mode is destructive because it will mute all channels where solo is not engaged. This means engaging solo on any channels while in SIP mode will actually affect the final mix! In this case it is best to use SIP mode with caution, especially during the final stages of a mix.



MONITOR CONTROLS

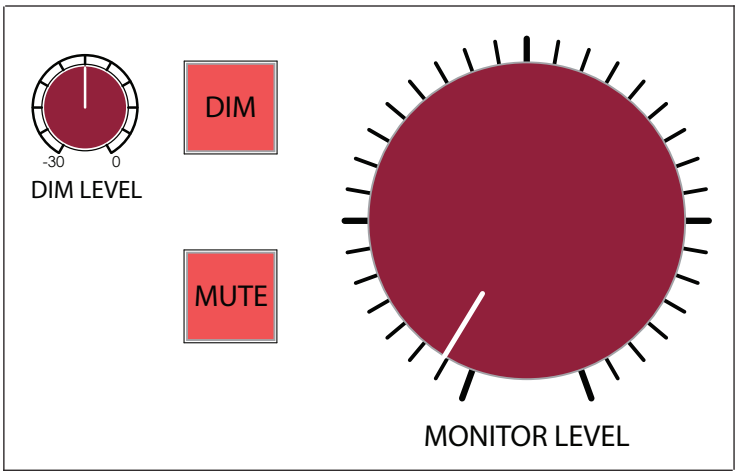
The monitor level section contains the following controls (from top to bottom, left to right):

DIM LEVEL: Continuously variable level control within a range of -30 to 0 dBu.

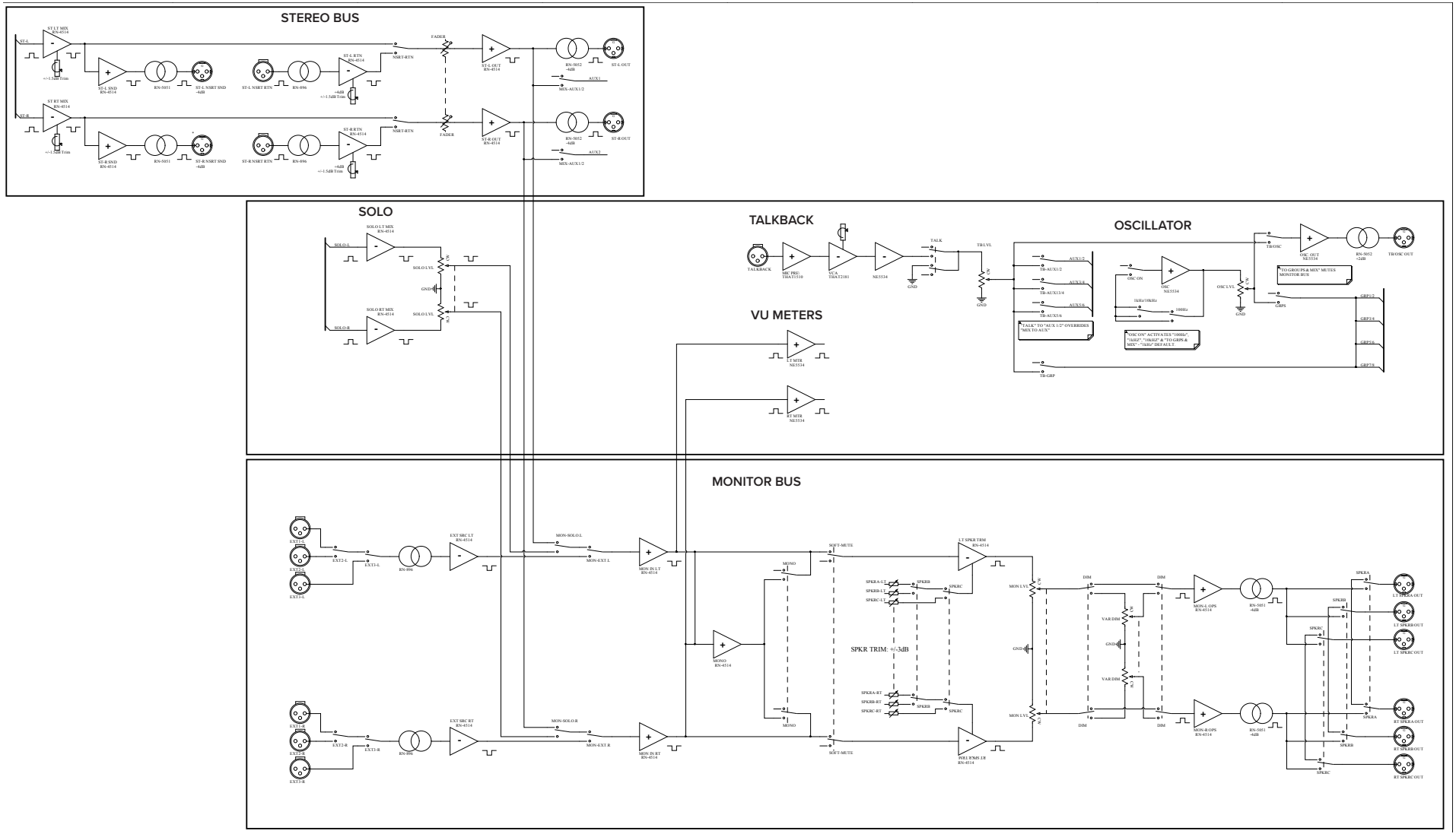
DIM: Illuminated switch that attenuates the selected monitor output by the set ‘DIM LEVEL’ amount.

MUTE: Illuminated switch that mutes the selected monitor output.

MONITOR LEVEL: High-precision, stepped potentiometer for controlling the monitor output level.



Master Section Block Diagram



Monitor Output Impedance: ~90 ohms

Main Mix Output Impedance: ~45 ohms

PRODUCT WARRANTY

Rupert Neve Designs warrants this product to be free from defects in materials and workmanship for a period of three (3) years from date of purchase, and agrees to remedy any defect identified within such three year period by, at our option, repairing or replacing the product.

LIMITATIONS AND EXCLUSIONS

This warranty, and any other express or implied warranty, does not apply to any product which has been improperly installed, subjected to usage for which the product was not designed, misused or abused, damaged during shipping, damaged by any dry cell battery, or which has been altered or modified in any way. This warranty is extended to the original end user purchaser only. A purchase receipt or other satisfactory proof of date of original purchase is required before any warranty service will be performed. THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, TO THE EXTEND ALLOWED UNDER APPLICABLE STATE LAW. IN NO EVENT SHALL RUPERT NEVE DESIGNS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of consequential damages or limitations on how long an implied warranty lasts, so this exclusion may not apply to you.

WARRANTY SERVICE

If you suspect a defect in this product, please contact our support staff for troubleshooting by phone (512-847-3013) or email (service@rupertneve.com). If it is determined that the device is malfunctioning, we will issue a Return Material Authorization and provide instructions for shipping the device to our service department.

Rupert Neve Designs
PO Box 1969
Wimberley TX 78676
www.rupertneve.com
tel: +1 512-847-3013
fax: +1 512-847-8869