

FOR MUSIC LOVERS, BY MUSIC LOVERS.

Radius 4 MK2

Master Sounds

Radius MK2 builds on the success of the previous generation model, adding to its unique feature set with a 4/3 band isolator, variable Q HPF per channel, add mix feature, 2 x headphone jack points, and individual auxiliary return knob. Redesigned internal circuitry offers increased fidelity with MasterSounds open, natural, and dynamic sound.

Handmade in small batches via Union Audio in Rural Cornwall, England.

Radius MK2, it's Radius on another level.
Built for discerning DJs.

If you experience any issues, please contact us immediately - scan the QR codes below for our support and, social channels.



Support



Socials

IMPORTANT SAFETY INSTRUCTIONS

READ THE INSTRUCTIONS Read and retain these instructions for future reference. Adhere to all warnings printed here and on the console and its power unit.

COVERS Do not remove the power unit cover. Operate the console with its cover correctly fitted. Refer servicing work to authorised personnel only.

MAINS POWER Connect the console power unit to a mains power supply only of the type described in this user guide and marked on the unit. The power source must provide a good ground connection. Do not remove or tamper with the ground connection in the power cord. Use the power cord with a sealed mains plug appropriate for your local mains supply as provided with the console. Route the power cord so that it is not likely to be walked on, stretched or pinched by items placed upon or against it. MasterSounds recommends the use of a mains conditioner on all our DJ mixers.

INSTALLATION Install the console and its power unit in accordance with the instructions printed in this user guide. Do not connect the output of power amplifiers directly to the console. Use audio connectors and plugs only for their intended purpose.

VENTILATION Ensure adequate ventilation around the console and its power unit. Do not obstruct the ventilation slots or position the unit where the airflow required for ventilation is impeded.

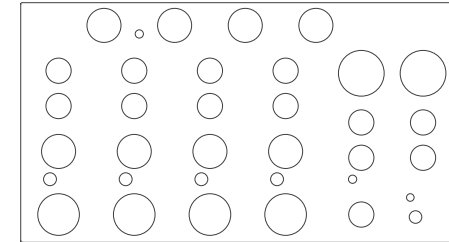
MOISTURE To reduce the risk of fire or electric shock do not expose the equipment to rain or moisture or use it in damp or wet conditions. Do not place containers of liquids on it, which might spill into any openings.

ENVIRONMENT Locate the units away from direct sunlight and any equipment which produces heat, such as power supplies, amplifiers, and heaters. Protect from excessive dirt, dust, heat, and vibration when operating and storing. Avoid tobacco ash, drinks spillage, and smoke, especially that associated with smoke machines. Do not mount the power supply on any surface subject to resonance or vibration.

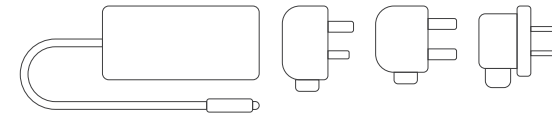
HANDLING To prevent damage to the controls and cosmetics avoid placing heavy objects on the console surfaces, scratching the surface with sharp objects, or rough handling and vibration. Protect the controls from damage during transit. Use adequate packing if you need to ship the unit.

WHAT'S IN THE BOX

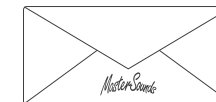
1x Mixer



1x Power Supply + plug fittings



1x Warnings Booklet



1x Keep on Groovin' Postcard



FRONT PANEL CONTROLS



1- 4/3 BAND ISOLATOR The new 4/3 band ISOLATOR offers unrivaled performance and playability of the SUB / LOW / MID & HIGH FREQUENCIES from OFF to +7dBu.

2- 4 WAY / 3 WAY This button illuminates red when pressed into the 3-way configuration, and by doing changes the 4-band ISOLATOR to 3 bands.

3- AUX The AUX send level pot adjusts the amount of channel signal level sent to the aux mix buss (and onto an external FX unit). Fully clockwise the signal level is boosted by +10dBu, allowing for precise adjustment of FX signals.

4- PRE The PRE button switches the AUX to send a feed from post-fader to pre-fader (i.e. set to pre-fader it will still send to the aux mix buss with the rotary fader down).

5- TRIM The TRIM pot adjusts the input signal level from OFF up to a maximum of +10dBu, enabling accurate level matching between different musical sources.

6- LINE/RIAA This button selects either the RIAA (Phono) level input in its top position, or the LINE input in the bottom position as indicated with screen-printed text.

7- VARIABLE Q HPF The new Variable-Q high pass filter offers a natural roll-off at low frequencies, lending perfectly to mixing with the filters alone, but as the knob is rotated the Q automatically rises to provide that classic analogue swept filter sound, with high-pass filter frequency range of 15Hz to 1500Hz.

8- CUE Each CUE button routes the channel signal to the headphones. Pressing the CUE button illuminates the red LED. When CUE buttons are activated you can hear the selected CUE channels playing. When NO cue button is active there is no signal in the headphones.

FRONT PANEL CONTROLS

9- CH1 TO CH4 ROTARY FADER Each channel has a large ROTARY FADER for precision control of its level when mixing. The rotary ranges from fully off when anti-clockwise to unity gain (0dB) when clockwise. For best performance operate these controls near to their fully clockwise position for normal music level.

10- VU METERS TWO VALVE MK2 features two high-quality analogue VU (Volume Unit) meters, which accurately measure the left and right audio signals. The meters show the post-EQ sound level. An added feature of the VU Meters is that when driven over +6VU the meter will illuminate **RED** to warn against clipping. In SPLIT MODE the LEFT VU Meter indicates the cue signal level, and the RIGHT VU Meter indicates the MIX level, (see SPLIT below).

11- RETURN The return rotary pot adjusts the return signal level of the channel AUX rotary pots, allowing precise control of the returned signal on one or multiple channels.

12- PHONES Please take care when monitoring with headphones as excessive sound volumes can cause premature deafness. The 1/4" jack headphone input is located on the front of the mixer as shown on the headphone graphic.

13- SPLIT The SPLIT CUE button illuminates **RED** when activated and links to the CUE button VU meters. When the SPLIT CUE is active and the channel CUE is pressed, the mix buss level will be shown on the right meter R (MIX), and the channel pre-fade signal (CUE) will be shown in the left meter L (CUE). This is handy if you want to match the house signal to the cued signal level before mixing. This function also lets you hear the cued signal in mono. To hear both the cued signal & the house signal when the SPLIT CUE button is active, rotate the ADD MIX / CUE MIX knob clockwise. This is handy for signal monitoring in quiet environments. SPLIT CUE is automatically disabled when all channel cues are off, and the VU meters revert to monitoring the stereo master signal.

14- ADD MIX/CUE MIX The add mix knob controls the amount of stereo house mix sent to your cued track in the headphones. When the knob is rotated fully anti-clockwise only the cued track will be heard. Turning the knob clockwise increases the amount of house mix that can be heard in the headphones.

15- MASTER The MASTER rotary pot adjusts the signal level sent to the Main Output XLRs (House Mix) ranging from off to +10dBu of gain. Set the control to approximately 1 o'clock for unity gain.

16- BOOTH The BOOTH rotary pot adjusts the signal level sent to the Booth Output TRS Jacks (Monitor Mix) ranging from off to +10dBu of gain. Set the control to approximately 1 o'clock for unity gain.

17- HEADPHONE JACK Radius MK2 offers the option of 1/4 jack headphone input or 1/8" mini jack.

REAR PANEL CONTROLS



1- MASTER OUT Output level is +14dBu when the MASTER level control is fully clockwise and the VU meters read -4VU. The XLR output is designed to operate with balanced equipment such as powered monitor speakers and amplifiers.

2- AUX SEND & RETURN/INSERT The AUX SEND & AUX RETURN system has $\frac{1}{4}$ " TRS (balanced) jack sockets for connection to an external FX unit. The SEND is connected to the FX units' input, and the FX units' output is connected to the RETURN, (see USING THE EXTERNAL SEND & RETURN SYSTEM).

3- INSERT ON BUTTON Reconfigures the aux return jacks as a mix buss Insert, giving the user unparalleled flexibility for FX integration at the press of a button (see USING THE EXTERNAL SEND & RETURN SYSTEM).

4- GROUND POST Unscrew the knurled nut, attach the turntable(s) ground lead(s), and screw back into place without over-tightening the nut.

5- RECORD OUT Twin RCA sockets enable the user to make a stereo recording of a performance. The overall volume of the master output does not affect the record-out function—this outputs at -6dBu.

6- BOOTH OUT The $\frac{1}{4}$ " TRS (balanced) jack booth output feeds the DJ's booth (local monitor) amplifier/loudspeaker system.

7- POWER SWITCH "0" = OFF. Press the "-" to power the mixer ON with the external power supply connected.

8- POWER INPUT SOCKET Connect the external 18V power supply to the input socket as labeled on the rear panel. The power input socket has a twist & lock mechanism for use with our LinearPOWER supply upgrade.

9- CH1 TO CH4 CH1 to CH4 feature LINE & PHONO inputs which have twin (left & right) RCA phono sockets. The Phono Input provides gain and RIAA equalization for turntable cartridges, and the LINE inputs provide input for CD players.

USING THE EXTERNAL SEND & RETURN SYSTEM

STEP 1 Connect the Mixer Aux Send outputs to the FX unit inputs and connect the FX unit's outputs to the mixer Aux Returns. Set the FX unit to unity gain.

STEP 2 Turning up the mixer channel send control feeds the channel signal to the FX unit. This signal is processed by the FX unit and its output is fed back into the mix, adding an echo, delay, reverb, or other effect to the track that's playing. Turning down the mixer channel send stops the channel signal feeding to the FX unit and so also stops the effect. Turning up the mixer channel send increases the level of FX.

STEP 3 Use the RETURN knob to finely adjust the level of signal returned into the mixer via the AUX pots. You can adjust single or multiple channels and AUX effects and balance the return through the RETURN knob. (Please note, the RETURN knob does not work with MasterSounds FX units, as MasterSounds FX uses our INSERT system as described below).

STEP 4 Normally the feed to the channel AUX send is also controlled by the channel fader, so turning down the fader also turns down the level of FX. However if the AUX send PRE button is pressed, the AUX send takes its signal before the Channel Fader so the channel signal can be sent to the FX Unit even if the fader is off. This can be a cool way to mix into a new track: introducing a low level delay of the track you are about to mix into, before mixing in the new track by bringing up the channel fader.

STEP 5 MIX INSERT - MasterSounds DJ mixers have a unique feature that allows the aux return jack sockets to be reconfigured as a mix buss Insert point, just by pressing the INSERT ON button. This allows you to run the entire mix through an external FX processor or other devices, such as a compressor, limiter, or graphic equaliser. With the button pressed the two $\frac{1}{4}$ " TRS Jacks become a conventional mixer Insert, with the Tip being the SEND, and the Ring being the RETURN.

TECHNICAL SPECIFICATIONS

POWER REQUIREMENT

(Each mixer is supplied with a compact switch-mode power supply for anywhere in the world and we supply the correct IEC lead for your country)

External Power Supply - Universal 90V - 265V AC 50/60Hz 18v 30W Max
DC Internal Power Rails - +/- 18V DC

AUDIO PERFORMANCE

THD+N - 0dBu Line In to Mix Out +4dBu = 0.008%
Frequency Response - 20Hz - 100kHz +/- 1dBu
Mix Noise - Line In to Mix Out Unity -81dBu unweighted.
Residual Output Noise -105dBu
Left/Right Crosstalk -78dB
Fader Shutoff - -80dB
RIAA accuracy 30Hz - 20kHz < +/- 1dB
HPF Range - 15Hz - 1500Hz
Maximum Output +27.5dBu

ISOLATOR

Isolator Cut / Boost - OFF to + 7dB
Isolator Crossover fc 4 Band- SUB: 110Hz, LOW: 210Hz, MID: 1500Hz, HIGH: 3000Hz
Isolator Crossover fc 3 Band- LOW: 650Hz, MID: 1500Hz, HIGH: 3000Hz

DIMENSIONS & WEIGHT

W = 350mm* L = 190mm H = 84mm*
Weight = 2.5KG

*Please Note: This is the Faceplate size.
Not including knobs, sockets, cabling, etc.

Packed Dimensions:

W = 350mm L = 260mm H = 180mm
Packed weight = 4.7KG

GAIN STRUCTURE

Channel +10dBu
Master +9.5dBu
Nominal Output Level +4dBu
Insert Level -2dBu
Record Out -8dBu

WARRANTY

MasterSounds warrants that the Mixer shall be free of defects in workmanship and materials for a period of twenty-four months from the date of purchase. In the event that the product fails to operate as intended, MasterSounds will repair or replace the product subject to the following conditions.

- That the failure was not due to improper installation, operation, cleaning or maintenance, accident, damage, misuse, abuse, or non-approved modifications to the Mixer.
- The warranty does not cover normal wear and tear or any other event, act, default or omission outside MasterSounds control.
- Faulty products must be returned to MasterSounds or an authorised service agent along with the original invoice or proof of purchase, and the mixer must be returned packed in the original shipping box. Please contact MasterSounds before shipping a faulty unit.
- The warranty applies only to the original purchaser and is not transferrable.
- At their sole discretion, MasterSounds may either repair the defective product or replace with an equivalent service exchange item.
- This warranty constitutes the purchaser's sole remedy. MasterSounds shall not be liable for any other repair or replacement cost or any damage or loss directly or indirectly related to the malfunction of this mixer.

Pots, switches, crossfaders & faceplates and warranted for 3 months from the date of purchase.

MasterSounds VALVE Series complies with the European Electromagnetic Compatibility directives 2014/30/EU and the European Low Voltage directives 2014/35/EU.

MasterSounds reserves the right to change specifications without notice.

RADIUS 4 MK2 Operation Manual

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www.mastersounds.co.uk

