



Microphone and Instrument Preamp / EQ / DI
Owner's Manual Rev. B

GRACE
DESIGN

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1 Welcome

Welcome and thank you purchasing this ROXi microphone preamp pedal. This little box is the culmination of many decades of us refining our mic and instrument preamps, and then packing it all into a single, rugged stage box. Even though it's a compact footpedal, we cut no corners designing and building this unit. As a mic preamp and EQ, it will compete with any full size studio gear and help any source you plug into it sound incredible.

Our hope is that the ROXi encourages you to be wildly creative and play your very best. While it's a fairly simple bit of hardware, there are some subtle and cool features that are best understood by reading this manual. Enjoy!

Have fun!

- The Grace Design Team

TABLE OF CONTENTS

1 Welcome	2	9.4 Phase Reverse	7
2 Safety Information	2	9.5 12V Power	7
3 Safety Marking Symbols	3	9.6 Boost control	7
4 Features	3	9.7 Boost Trim Function	7
5 Top Panel Controls and Features	4	9.8 FX Dry / Wet Control	7
6 Back Panel Controls and Features	5	9.9 AMP level control	7
7 Side Panel Controls and Features	5	9.10 Filtering and EQ	7
8 Connecting ROXi to Stuff	6	9.11 Output controls	8
8.1 XLR MIC / ¼" line Combo input.....	6	9.12 Footswitch Controls	9
8.2 FX SEND and RETURN.....	6	9.13 Side Panel Controls	9
8.3 Amp Out.....	6	10 Diagrams	9
8.4 Tuner Output.....	6	10.1 Block Diagram.....	9
8.5 DI Output.....	6	10.2 Connection Diagram.....	10
8.6 100-240VAC Power Input.....	6	10.3 Adjusting Internal Jumpers.....	11
8.7 9V @ 500mA DC POWER OUTPUT.....	6	10.4 Internal Jumper Locations.....	12
9 Operation	6	11 Specifications	13
9.1 Where to put ROXi?.....	6	12 Cleaning and Maintenance	14
9.2 Microphone / line input.....	6	13 Warranty	14
9.3 Setting the Gain.....	6	14 Manual Revisions	15

2 Safety Information

- Indoor use only
- Ordinary Protection: This equipment should not be exposed to dripping or splashing.
- Avoid placing objects filled with liquids, such as vases or glasses, on this equipment.
- Class I Equipment (grounded type)
- Electrical rating: 100-240V~ 50-60Hz 10W
- Mains supply voltage fluctuations are not to exceed $\pm 10\%$ of the nominal supply voltage.
- Pollution Degree 2
- Installation (Over voltage) Category II for transient overvoltages.
- Maximum Relative Humidity: <80%
- Operation temperature range: 10 °C to 40 °C
- Storage and transportation temperature range -40 °C to 70 °C
- Maximum altitude: 3000m (9843 ft)
- Equipment suitable for continuous operation
- Weight: 2.2lbs

3 Safety Marking Symbols

Caution: Read Accompanying Documents



This symbol, located on the equipment and in this manual, refers to important instructions. Read this manual thoroughly before operating this equipment.

Warning: Electrical Shock Hazard



This symbol, located on the equipment and in this manual, indicates the potential for electrical shock hazard.

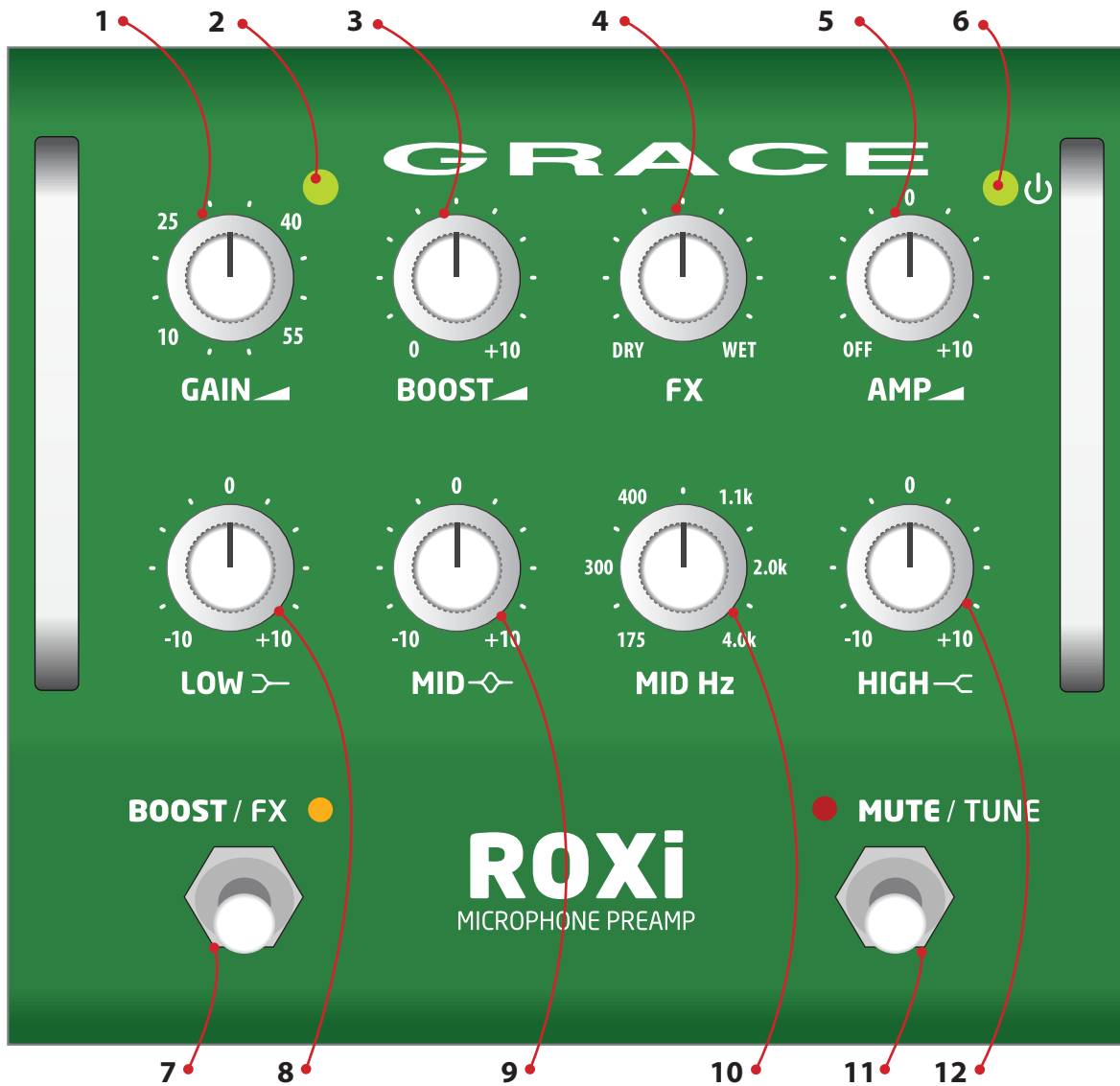
Service Information

The Grace Design ROXi contains no user serviceable components. Contact Grace Design for repair and upgrade information. In the event that your Grace Design ROXi needs to be returned to the factory, contact us for a return authorization number.

4 Features

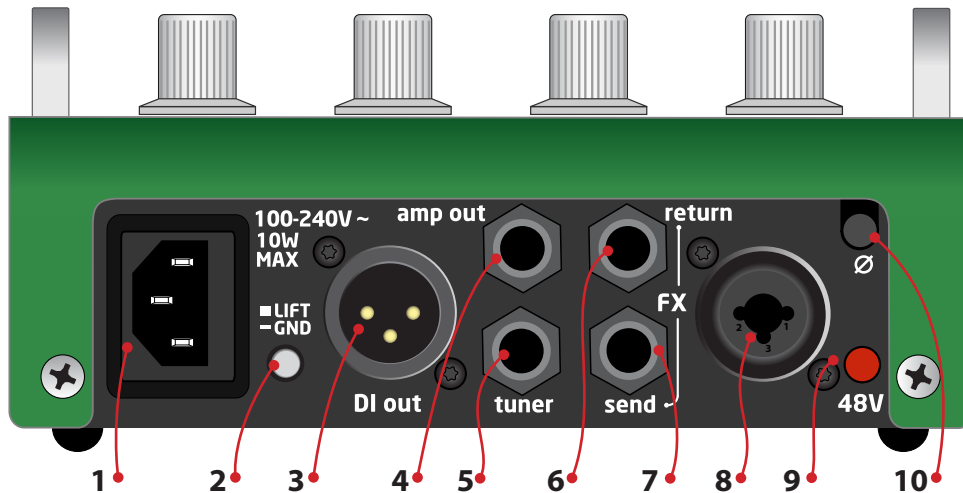
- Studio-quality mic preamplifier
- Precision gold-contact rotary gain control switch
- 48V phantom power
- Ultra precision 0.5% thin film resistors used in the signal path
- Careful power supply design and grounding for an ultra-quiet signal path and professional level headroom and line driving ability
- Fully ground-isolated DI output with high-quality, low-distortion, fully shielded transformer
- Rugged 1/4" connectors with heavy duty metal bushings
- Powerful, independent EQ – HIGH and LOW shelving and sweepable midrange
- Switchable 75Hz or 150Hz High Pass Filter
- Mute/ tune footswitch mutes all outputs except dedicated tuner out
- 12V mic input power
- 9VDC @ 500mA (2.1mm BOSS™ standard center negative) power output for powering other pedals from the ROXi
- Boost footswitch for variable 10dB level boost
- Dedicated level controlled stage amp output
- Dedicated tuner out, remains active when unit is muted
- Side panel DIP switches various settings and controls
- FX insert loop with an optional footswitch function for FX insert mute
- FX Insert Mix control
- Universal 100-240 AC power supply with standard IEC cable – no wall wart - take ROXi anywhere in the world!
- Full 5 year transferable warranty / built for a long, happy life on the road
- Designed and built by us in Lyons, CO, USA

5 Top Panel Controls and Features



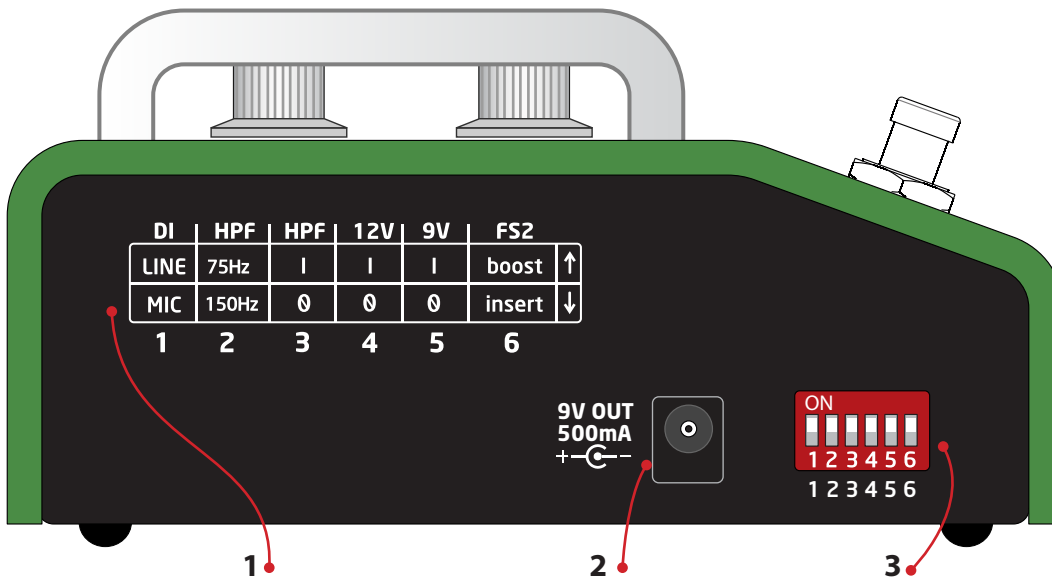
- 1. Gain control
- 2. Signal / peak LED indicator
- 3. Boost level
- 4. FX insert blend control
- 5. Amp / Tuner output level
- 6. Power indicator light
- 7. BOOST / FX footswitch
- 8. Low frequency shelving cut and boost
- 9. Midrange cut and boost
- 10. Midrange frequency select
- 11. MUTE / TUNE footswitch
- 12. High frequency shelving cut and boost

6 Back Panel Controls and Features



1. Universal 100-240VAC power supply input
2. DI output ground lift switch
3. Balanced XLR DI output
4. Balanced 1/4" amp output
5. Stage Tuner 1/4" output
6. Effects insert return
7. Effects insert send
8. XLR / 1/4" combo input jack
9. 48V phantom power switch
10. Phase reverse switch

7 Side Panel Controls and Features



1. DIP Switch function diagram
2. 9VDC, 500mA output
3. DIP switch controls:
 - 1) DI output level switch
 - 2) High Pass Filter roll off select
 - 3) High Pass Filter on/off
 - 4) 12V electret mic power on/off
 - 5) 9V output on/off
 - 6) Footswitch 2 function, boost or insert

8 Connecting ROXi to Stuff

8.1 XLR MIC / 1/4" LINE COMBO INPUT

This input can accommodate any type of microphone - dynamic, condenser or ribbon - via the XLR input, *or* any 1/4" mono instrument input via the center 1/4" phono jack. The XLR connector is wired pin 2 positive, pin 3 negative and pin 1 ground. The 1/4" center of the combo jack is for connecting any instrument with a pickup, electret mic or line out jack to the ROXi. The jack is a standard 1/4" wired tip signal, sleeve ground. The ring is used only for 12V mic power if needed.

8.2 FX SEND AND RETURN

These send and return jacks create a buffered, unbalanced insert point (pre-boost) for connecting outboard effects to ROXi. This allows mono outboard signal processing to be placed in series with the signal, while still utilizing all of ROXi's output capabilities. The insert send has an adjustable pad if you are using an effect pedal with lower headroom. The pad has 3 settings (off, -6dB and -16dB) that can be set via internal jumpers.

[SEE JUMPER DIAGRAM page 12](#)

8.3 AMP OUT

This output is for sending a balanced or unbalanced, non-transformer isolated output to a stage amp or anywhere else you may need an additional signal. This output has the added benefit of a level control, which is on the top panel. This output is muted when the MUTE / tune footswitch is activated.

8.4 TUNER OUTPUT

This is another unbalanced output which is always active - provided as a dedicated stage tuner out. When the MUTE is activated, your stage tuner will continue to receive signal, allowing you to tune silently. The tuner output level follows

the Amp Out level control. **NOTE:** because the tuner output level follows the AMP level control, if your AMP level control is turned down, your tuner won't work.

8.5 DI OUTPUT

This output is balanced and transformer isolated, for sending signal to a front of house, monitor console, or any mixer or interface where balanced, isolated signal needs to be sent. XLR pin-out is: pin 2 positive, pin 3 negative and pin 1 ground.

This output has a level setting switch - side panel DIP switch #1, labeled **line and mic**. In the 'mic' setting, the output is padded down -26dB to interface properly with mic inputs at the console, while the 'line' setting is not padded for better level matching with line level inputs at the console or interface.

8.6 100-240VAC POWER INPUT

ROXi is powered by a universal AC power supply. This means that no matter where your musical wanderings take you, ROXi can plug into the wall and it will work. And it also means one less wall wart you'll own in your life. All units are shipped with a standard AC cable suitable for the country where it is going. This is a standard, off-the-shelf IEC power cable, so in the event you misplace the one that came with your ROXi, you can just borrow one from a bandmate and go. Tell them we said so.

8.7 9V @ 500mA DC POWER OUTPUT

This output jack will power other 9VDC pedals you may have at your feet. The jack is a standard 2.1mm BOSS™ style, with the center *negative*. Maximum output current is 500mA, which means you need to add up the current draw of all the pedals you wish to power to ensure they don't exceed that. To connect multiple pedals, you'll need an off the shelf multi-plug daisy chain cable. **NOTE:** this output jack can be switched on and off by side panel DIP switch #5. It is set to 'off' from the factory.

9 Operation

9.1 WHERE TO PUT ROXi?

Great question. We recommend you put it wherever you want. It will look very pretty when you first pull it out of its box, but trust us, it's built to stand up to just about any kind of stage shenanigans you might encounter. All the pots have metal shafts and are well mounted to the top panel. All the 1/4" jacks have heavy duty metal bushings. The top panel is 1/4" extruded aluminum, and the bottom chassis is heavy-duty aluminum.

As you probably know, the main inspiration for this product was to provide studio-grade audio hardware, properly ruggedized to work on stage or mounted to a pedal board. Velcro is fine. The installed rubber feet will thread out so your Velcro mount will be flush. Hang on to those rubber feet, though, they're pretty nice.

9.2 MICROPHONE / LINE INPUT

To connect a microphone to ROXi, first make sure the top panel gain knob is turned all the way down and the adjacent red 48V phantom power switch is set to off (pushed out). Then connect your microphone and if 48V is needed, simply activate it with the 48V switch. Always remember to turn 48V power on after connecting your microphone and off before disconnecting your microphone.

To connect an instrument, simply plug a 1/4" instrument cable into the center of the combo jack.

9.3 SETTING THE GAIN

The first knob on the left side of the top panel is the GAIN control. With your mic or instrument connected to the input and signal flowing, turn the GAIN knob clockwise until the

signal / clip LED indicator is on and lit solid green. This will represent a good operating level. The indicator will start to flash red when your signal is 13dB before clipping, so occasional red flash is ok, but all red means you should turn the gain control down.

Gain range for this input is adjustable between +5dB to +60dB (mic) or -15dB to +40dB (instrument). The Boost control can add another 10dB to these ranges. Also, the 1/4" instrument input has a jumper (J4) to select between a LOW and HIGH gain setting, the HIGH gain setting offering a gain range of 0dB to +55dB.

9.4 PHASE REVERSE

ROXi has a phase reverse switch, located on the rear panel, top right (facing the rearpanel). Use this to toggle the polarity of audio signal.

Phase relationships can be very complicated, and discrepancies can result in accentuated or de-accentuated bass response of an out of phase signal. It can sound hollowed out and thin, or just downright weird. The rule of thumb here is whatever sounds right is probably right.

There may be setup scenarios where the front of house or monitor engineer requires you to try flipping the phase to achieve better phase coherency with other signals in the mix. At the very least, it's good for you to know how to operate this controls and hear it in use with your instrument.

9.5 12V POWER

The 1/4" instrument input of the combo jack can be used to amplify an electret capacitor microphone. These are common for applications where a small microphone is mounted inside acoustic instruments, or a clip-on lavalier style microphone used somewhere on the outside of the instrument. Normally these microphones will contain very small integrated preamps which require a voltage to power. So the ROXi can send 12V power out on this input. This is activated via DIP switch #5 on the side panel.

12V power can be applied to the tip or ring of the instrument input combo jack. Configuration is done via internal jumpers, described in detail in the following "Internal Jumpers" chapter.

When switched on, this power supply charges up slowly, so you may need to wait a few seconds before signal from your electret mic is present at the input of ROXi. It is always best to make your input connections before applying power at the DIP switch, and power OFF the 12V at the DIP switch before disconnecting your source.

NOTE: the 12V power is supplied through a current limiting resistor that allows the power supply to be used with mics rated for as low as 3V. This includes DPA 4000 series mics and the K&K Trinity mic.

9.6 BOOST CONTROL

Want ROXi to go to almost eleven? This knob sets the amount your signal is boosted when you activate the 'BOOST' footswitch. Fully counter-clockwise is zero boost added, fully clockwise adds +10dB of boost.

As you can probably imagine, if you are using a microphone or a particularly feedback prone pickup system, adding boost might easily send you in to feedback territory. So start small. If you need to boost your output, start with a gentle boost amount and work your way upwards. If you start to hear stage feedback or are overloading the input at the console, then you'll need to back it off. We are not responsible for disgruntled soundpeople you may encounter during the operation of the boost circuit.

9.7 BOOST TRIM FUNCTION

The Boost footswitch (FS2) has an alternate function that activates or deactivates the FX insert. This function is selected via the sidepanel DIP switch #6, labeled FS2.

If you are using this mode, we have included a bonus feature that allows you to permanently engage the Boost circuit and use the Boost knob as an additional gain trim control. This gives you to access the additional 10dB of gain provided by the boost circuit. This gain / trim setting will remain on regardless of DIP switch #6 setting.

This Boost Trim function is activated by setting internal jumper J2 to the 'on' position. The instructions for this jumper procedure is illustrated on pages [11 & 12](#).

9.8 FX DRY / WET CONTROL

This knob allows you to vary the amount of effected signal vs. dry signal in the FX loop. If your effects are too prominent in your output, simply turn the knob counter-clockwise, or turn the knob clockwise to increase the amount of effects in your signal. You might experiment running your individual effects wetter than normal, then use the control to tailor them according the particular stage or room where you are performing.

9.9 AMP LEVEL CONTROL

This allows you to adjust the level of the signal being sent on the AMP out jack on the rearpanel. 12 o'clock is unity gain which matches the output level of the DI out (when set to line level). REMEMBER, this also effects the level of the TUNER out, so if your tuner isn't getting signal, double check you that you have this control turned up sufficiently.

9.10 FILTERING AND EQ

One of the defining features of ROXi is the very powerful, EQ / filter controls. If you haven't used EQ's or filters much, we will provide a basic overview here. But the full science of this process is more than we can cover here, so we strongly recommend some adjunct reading:

<http://en.wikipedia.org/wiki/Equalization>

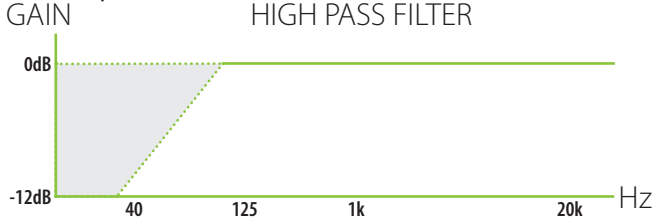
As with all audio processing techniques, the more you know, the better you will sound.

HPF

The High Pass Filter (HPF) allows signal information only above its set frequency to pass to the output. You can also think of this as a low-cut. This filter employs 12dB per octave roll off and is designed to be very musical sounding. Use this control to tame

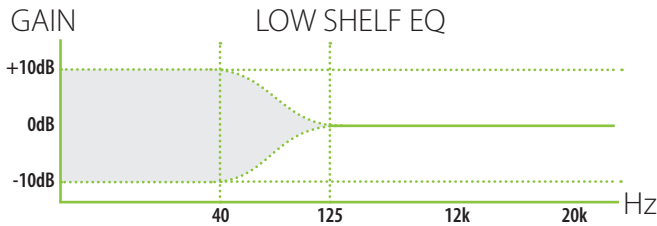
unwanted low end rumble or stage noise that may find its way into your microphone.

The HPF is activated with the side panel DIP switch #3 – the up position activates the HPF, the down position turns it off. There are 2 HPF roll off frequencies: 75Hz and 150Hz which are set by the side panel DIP switch #2.



LOW Control

The Low control is for adjusting the bass frequencies in your signal. The control fixed at 125Hz (+-3dB) corner frequency (40Hz peak), with a gain range of -10 to +10dB. This is a fixed shelving type control, which means everything below the 125Hz is boosted or cut. It's all about the bass.



Also, because certain acoustic instruments (banjo, fiddle, plinkly little whathaveyous) may react better to a higher corner frequency, we have added a Low control range jumper on the main PCB. Moving this jumper shifts the Low frequency up to 250Hz (+/-3dB) corner frequency. *This is easy to do!* We specifically designed ROXi's chassis to make it easy to access internal jumpers. Please refer to the jumper diagram and access procedure on pages [11](#) and [12](#).

WARNING Make sure to disconnect the power mains before opening removing the ROXi top panel to make jumper adjustments.

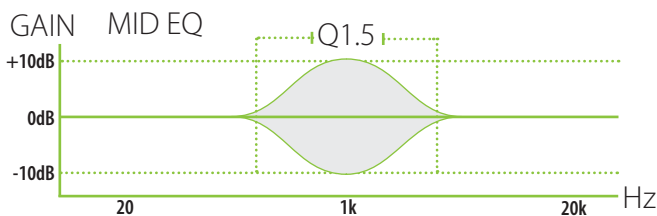
MID Controls

The mid range section of ROXi's equalizer is semi-parametric, which enables you control the mid range gain and frequency at a fixed Q factor. The range of these controls are:

Gain = +/- 10dB,

Freq Hz setting = 175Hz – 4kHz

Fixed Q factor = 1.2

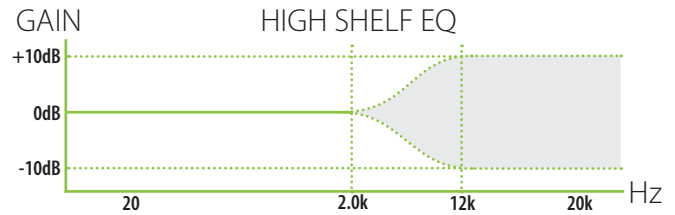


In general, you use the mid range EQ control to affect frequencies in the typical range of the human voice or most instruments. Turning it down results in a more 'scooped' sound,

turning up a honkier or peaky sound. Heres a good read on frequencies: https://en.wikipedia.org/wiki/Audio_frequency

High Control

The High control of the ROXi preamplifier is set with a 2kHz (+/-3dB) corner frequency (12kHz peak), with a gain range of -10 to +10dB. This is a fixed shelving type control, which means everything above the 2kHz is boosted or cut. Simply put, this is a treble control. If you think your banjo may be too bright, turn this knob counterclockwise. If you think your guitar needs a little more bite, turn this knob clockwise. If you're not sure, then get down there and start turning it one way or the other until it sounds better.



And the same as the Low control, we have added a High control range jumper on the main PCB. Moving this jumper shifts the High frequency down to a 1kHz corner frequency. Please refer to the jumper diagram and access procedure on pages [11](#) and [12](#).

9.11 OUTPUT CONTROLS

Boost

This knob sets the amount your signal is boosted when you activate the 'BOOST' footswitch. Fully counter-clockwise is zero boost added, fully clockwise adds +10dB of boost. The boost is after the FX loop and affects both the DI and amp outputs.

As you can probably imagine, if you are using a microphone or a feedback prone pickup system, adding boost will send you in to feedback territory. So start small. If you need to boost your output, start with a gentle boost amount and work your way upwards. If you start to hear stage feedback or are overloading the input at the console, then you'll need to back it off.

ROXi is not responsible for disgruntled soundpeople you may encounter during the operation of the boost circuit, especially those you have already borrowed your misplaced IEC power cable from. Keep those people happy, they control the suck knob.

Amp Output Level

This knob sets the output level of the amp and tuner outputs on the rearpanel. If you are using a stage amp, use this control as your master level. Correct input gain settings for your sources, with the signal LED showing mostly green, should not be adjusted to alter your stage amp level. Rather, use this control to make master level changes.

Troubleshooting advice: if your stage tuner is connected to the 'tuner' jack but not working, make sure your Amp out knob is turned up sufficiently.

9.12 FOOTSWITCH CONTROLS

Boost / FX

This switch has two different functions based on the setting of DIP switch #6 labeled FS2.

In the Boost setting (switch in the down position), the footswitch enables the boost circuit. When active, the LED will be lit and the output signal is boosted by the amount set by the 'BOOST' knob. More is always better, but feedback and angry soundpeople can make for an uncomfortable gig, so start small!

In FX setting, (switch in up position) the footswitch activates or deactivates the insert / FX loop. There are 2 different modes for operating the FX footswitch:

- Mutes the return of the FX loop, so whatever signal is still in the FX loop (i.e. reverb or delay tails) will be cut immediately.
- Mutes at the send of the FX loop, allowing signals (i.e. reverb or delay tails) in the FX loop to trail off naturally.

These two options are selected via the internal Jumper J10.

Also, remember, if you are using the Boost footswitch for FX insert control, you can also turn on the 'Boost Trim Function' via internal jumper J2, which allows you to use the Boost control knob as an addition 10dB gain / trim control.

Mute / Tune

This switch mutes the DI and AMP output, but not the tuner

output. This enables you to quickly and easily cut your signal to the FOH or stage amp and tune or unplug your instrument without having to have the soundperson mute your channel. When MUTE / tune is active, the adjacent LED illuminates RED.

9.13 SIDE PANEL CONTROLS

ROXi has a lot going on, more than we could fit on the rear and top panels alone. So there are a few features to be familiar with on the side panel.

DIP Switches

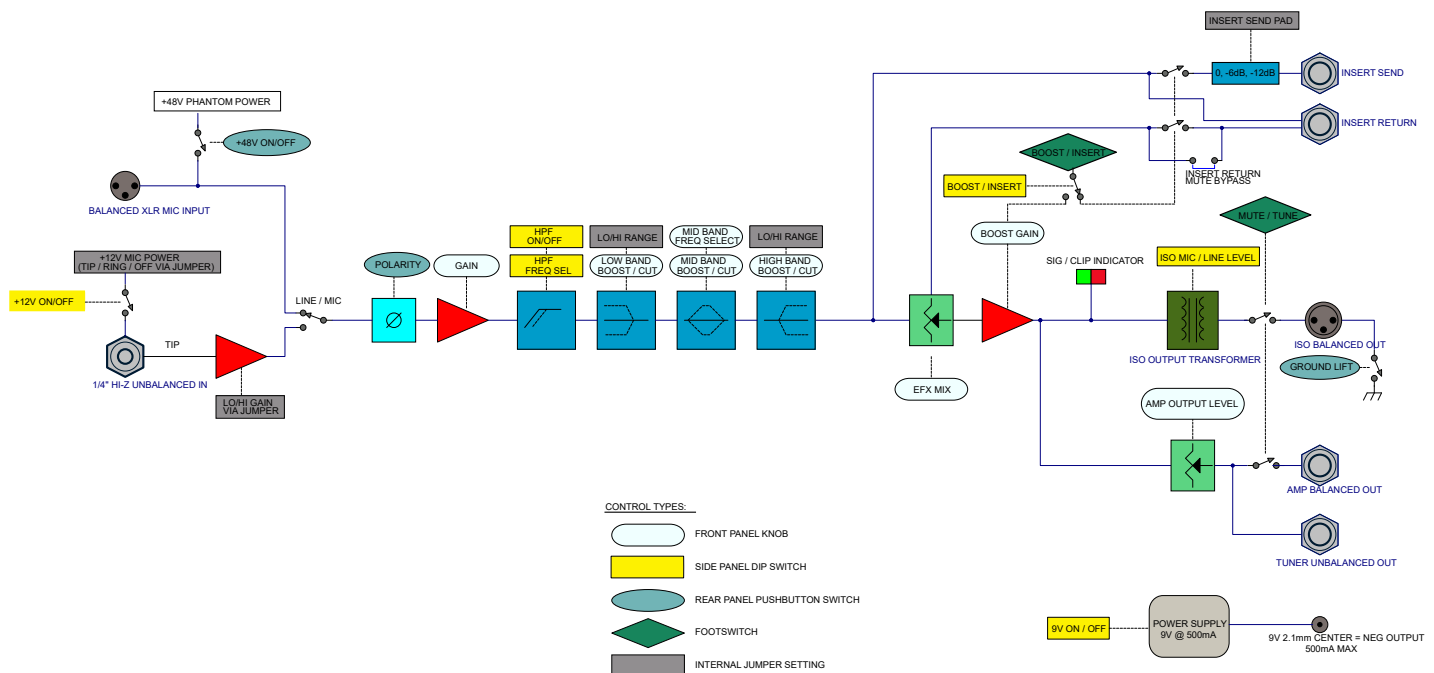
This is a bank of 6 DIP switches, used to activate these various modes and settings.

1. DI output level switch (MIC and LINE)
2. High Pass Filter roll off select (75Hz or 125Hz)
3. High Pass Filter on/off
4. 12 Volt phantom power on/off
5. 9V output on/off
6. Footswitch 2 function, boost or insert

DIP switches are a little hard to move, which is good because they probably won't get inadvertently changed, but bad when you actually want to use them. Use the edge of a fingernail, a guitar pic or a toothpick. Whatever you chose, take care not to dig into the plastic too hard. You'll get the hang of it.

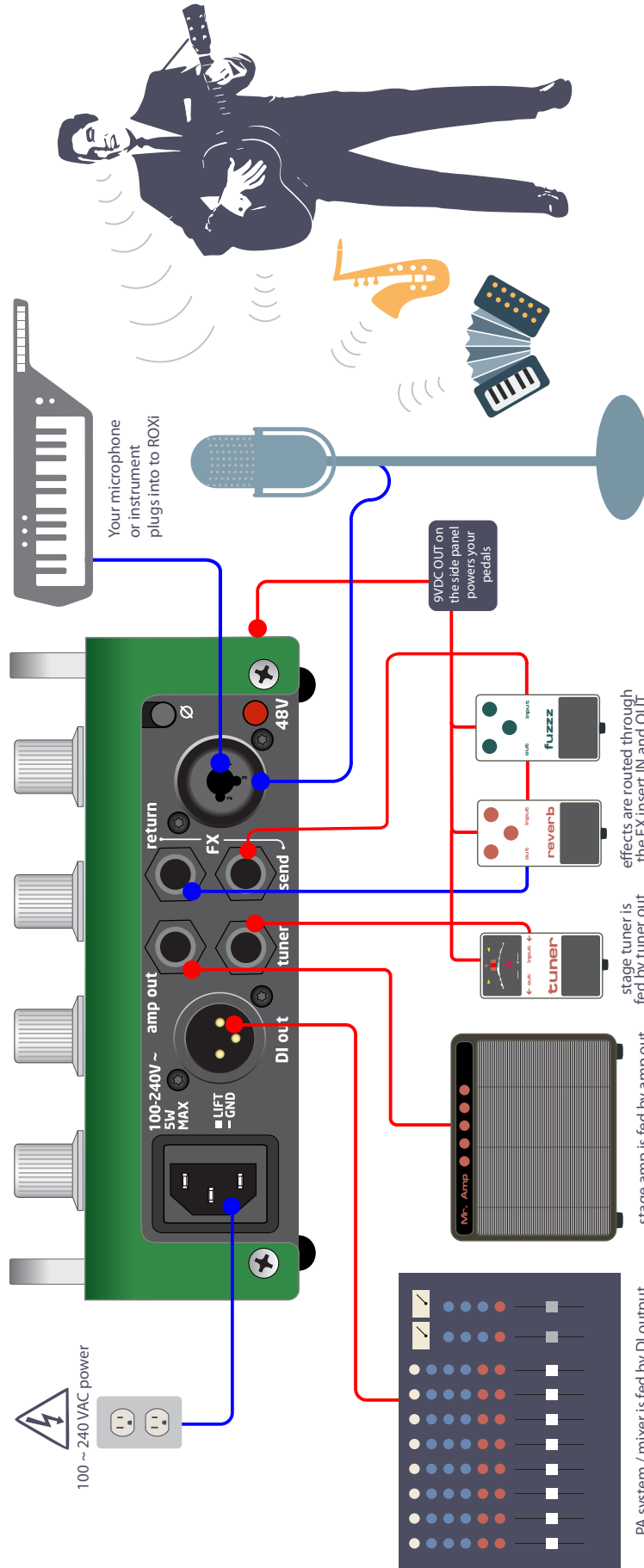
10 Diagrams

10.1 BLOCK DIAGRAM



ROXi connections

Nothing too terribly hard and fast here - just the basics about how to plug stuff in and out of your preamp. **INPUT paths are shown in blue.** **OUTPUT paths are shown in red.** There are many ways to setup your preamp, so if you aren't sure about how something works, please have a look at your owner's manual, check out our website - www.gracedesign.com - or feel free to call us. We are always glad to help out in any way we can. 1.303.823.8100, M-F, 9-5 MST



10.3 ADJUSTING INTERNAL JUMPERS

Several ROXi settings can be adjusted via internal jumpers. While it's not trivial to do, if you are handy with a screwdriver and tweezers, you'll be fine. *This is not something you should attempt to do on a dark stage or in the back of the tour van.* Directions for disassembling the chassis and accessing the jumpers is as follows:



IMPORTANT: Before you do anything, disconnect ROXi from the AC power, disconnect all cables and place ROXi on a flat stable surface with good lighting.

- 1. DOUBLE CHECK:** Did you completely disconnect the power supply? Ok then.
- With a #2 Phillips screwdriver, remove the 4 chassis screws, located on the outer edges of the front bottom and rear bottom of the aluminum top chassis (figure 1).
- Orient the unit so the rearpanel is facing forward towards you. Carefully pull up on the top chassis and flip it up and over the bottom chassis (figure 2). This will reveal the top and bottom circuit boards. Do not pull them apart any further than the ribbon cables that connect them will allow. The top should rest easily on the work surface flipped over and behind the bottom chassis (figure 3).
- Now refer to the jumper location diagram on the following page to move any jumpers you wish (closeup - figure 4).
- To move a jumper, use tweezers or your fingernails to gently pull the jumper off of its header pins. To reposition the jumper, double check the diagram, then gently press the jumper back down in the correct location.
- When you are finished adjusting the jumpers, make sure there are no loose jumpers or any other junk lying around inside your ROXi.
- Then carefully reassemble the top and bottom chassis, making sure to let the ribbon cable fold easily back in place. If there is any tension or something isn't fitting properly, carefully pull the top and bottom back apart and inspect for interference.
- Once you have put the unit back together, replace the 4 screws, making sure they go in straight and true. You may need to nudge the top panel back and forth a bit to ensure the holes in the top panel chassis line up evenly with the inner threaded holes.
- Do not tighten the screws until all 4 are cleanly started in the threads. Take your time and remember, cross-threading is a crime.



figure 1

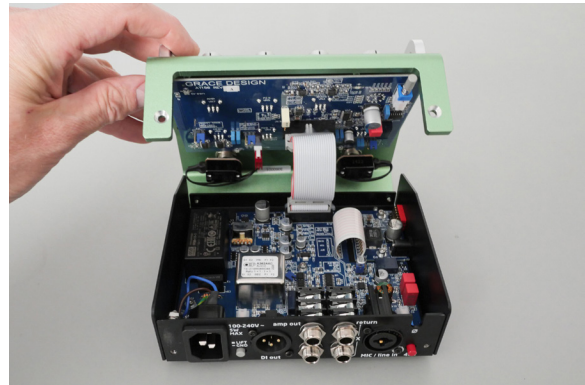


figure 2



figure 3

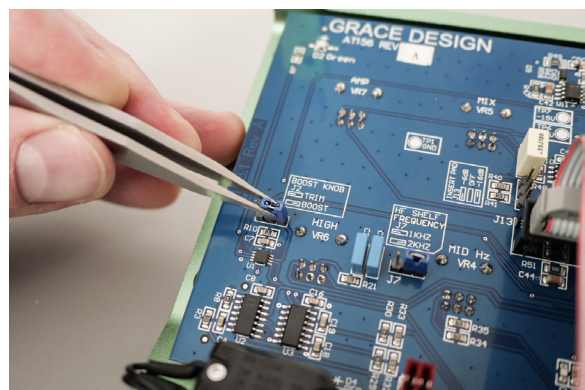
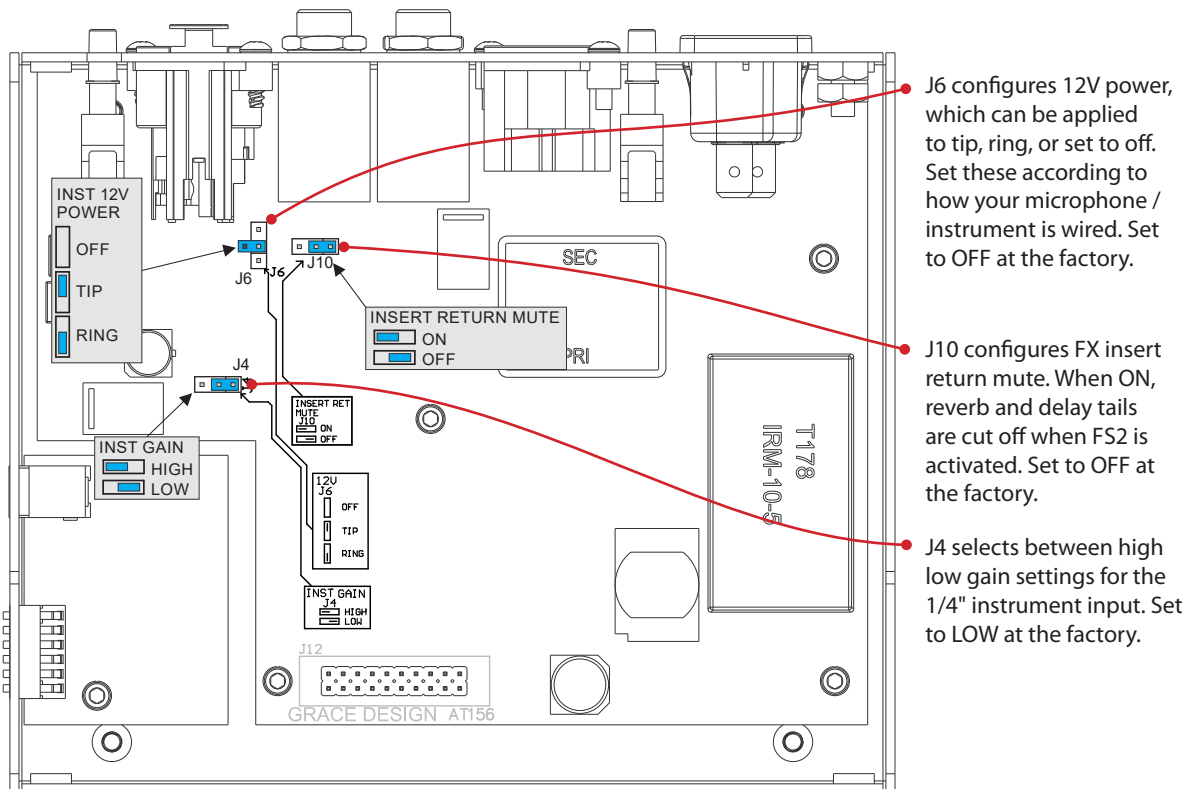
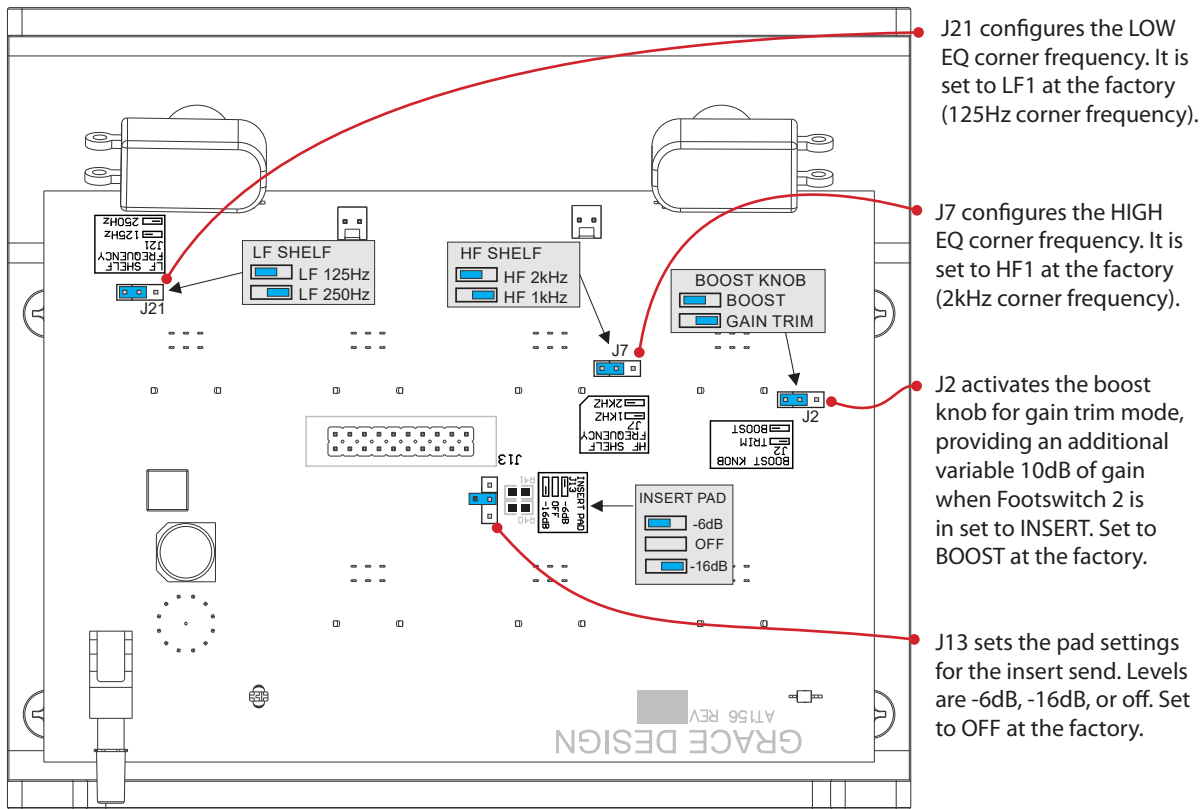


figure 4

10.4 INTERNAL JUMPER LOCATIONS



11 Specifications

GAIN RANGE (Instrument Input to DI Output)	
MIC In, DI Line, Insert pad 0dB, Boost 0dB	+0.6dB to +55.1dB
MIC In, DI Mic, Insert pad 0dB, Boost 0dB	-24dB to +30.5dB
Inst In, Low Gain, DI Line, Insert Pad 0dB, Boost 0dB	-13.4dB to +41.1dB
Inst In, High Gain, DI Line, Insert Pad 0dB, Boost 0dB	+0.6dB to +55.1dB
Boost	0-11.5dB
GAIN RANGE (Input to Amp Out)	
MIC In, DI Line, Insert pad 0dB, Boost 0dB, Amp Out Max	+9.3dB to +63.9dB
Inst In, Low Gain, DI Line, Insert Pad 0dB, Boost 0dB, Amp Out Max	-4.7dB to +49.9dB
Inst In, High Gain, DI Line, Insert Pad 0dB, Boost 0dB, Amp Out Max	+9.3dB to +63.9dB
Boost	0-11.5dB
THD+N 1kHz, 22Hz-22kHz BW (MIC Input to Amp Output)	
@ 18dB Gain +10dBu out	<-103dB
@ 38dB Gain +10dBu out	<-97dB
@ 58dB Gain +10dBu out	<-80dB
@ 69dB Gain +10dBu out (boost at max)	<-73dB
INTERMODULATION DISTORTION - SMPTE/DIN 4:1 7kHz/50Hz (MIC Input to DI Output)	
@ 40dB Gain +10dBu out	< 0.070%
INTERMODULATION DISTORTION - SMPTE/DIN 4:1 7kHz/50Hz (MIC Input to Amp Output)	
@ 38dB Gain +10dBu out	<0.0020%
NOISE - REFERRED TO INPUT MIC In 20Hz-22kHz BW 50Ω source	
Mic IN to DI-Line level out 55.1dB Gain	-130dB
Mic IN to Amp Out	-130dB
CMRR @40dB Gain	
100Hz	> 50dB
1kHz	> 80dB
10kHz	> 80dB
CMRR @60dB Gain (55db + 5dB Boost)	
100Hz	> 50dB
1kHz	> 80dB
10kHz	>90dB
FREQUENCY RESPONSE (Input to DI Output)	
Mic input @ 0.5dB Gain -3dB	6Hz-63kHz
Inst input @ 20dB Gain -3dB	15Hz-65kHz
I/O IMPEDANCE	
CH1 MIC Input	8.1kΩ
CH1 Inst Input	1.0MegΩ
Insert Input	10kΩ
DI Outputs	150Ω
Amp, Tuner and Insert Outputs	500Ω
SIGNAL / PEAK LED METER	
Green threshold	-16dBu
Red threshold	+7dBu
MAXIMUM INPUT LEVEL	
CH1 MIC	+17.5dBu
CH1 Inst	High Gain: +17.5dBu
	High Gain: +21.5dBu
MAXIMUM OUTPUT LEVEL - 100k Ohm load, 0.1% THD	
DI Outputs	Line: +19.7dBu
	Mic: -4.8dBu
Amp Out Balanced	+22.0dBu
Tuner Out Unbalanced	+21.6dBu
HIGH PASS FILTER / NOTCH FILTER	
High Pass Filter 75Hz	-3dB @ 78Hz
High Pass Filter 150Hz	-3dB @ 153Hz
EQ	
Gain	+/-10dB
Low Frequency	Low Range: 125Hz Shelving
	High Range: 250Hz Shelving
Mid Frequency	275Hz - 3.6kHz
Mid Frequency Q	1.2
High Frequency	High Range: 2kHz Shelving
	Low Range: 1kHz Shelving
OUTPUT NOISE 22Hz-22kHz BW	
CH1 MIC Input (50 ohms) to DI Output (Line)	< -95dBu
CH1 Inst Input (50 Ohms) to DI Output (Line)	< -95dBu
CH1 MIC Input (50 ohms) to DI Output (Mic)	< -115dBu
CH1 Inst Input (50 Ohms) to DI Output (Mic)	< -115dBu
POWER CONSUMPTION	
100-240VAC 50/60Hz	10 Watts Max
9V DC OUTPUT	
2.1mm, Center Negative	9V, 500mA MAX
WEIGHT and DIMENSIONS	
3.2lbs	H3.0" x W6.2" x D5.5"

12 Cleaning and Maintenance

Your ROXi is chassis is constructed out of high quality aluminum and steel. Under normal circumstances, very little maintenance is required to keep it looking good. However, if you find it getting more dirty or dusty than you like, here are some cleaning tips: We recommend using a little shot of Windex™, applied to a clean, dry, lint free cloth. Gently wipe all surfaces, taking care not to allow the cleaning product to build up around or under the knobs.

13 Warranty

- Grace Design warrants this product to be free of defective parts and workmanship for a period of five years. This warranty period begins at the original date of purchase and is transferable to any person who may subsequently purchase the product during this time.
- This warranty excludes the following conditions: normal wear and tear, misuse, customer negligence, accidental damage, unauthorized repair or modification, cosmetic damage and damage incurred during shipment.
- During the time of this warranty, Grace Design will repair or replace, at its option, any defective parts or repair defective workmanship without charge, provided the customer has appropriate proof of purchase and that the product has its original factory serial number.
- In order for Grace Design to provide efficient and timely warranty service, it is important that you mail the completed warranty registration card enclosed with all of our products within 10 days of the original date of purchase. You may also register your product directly with Grace Design by telephone (303-823-8100 Monday-Friday 9:00am to 5:00pm MST), or you can register your product online at www.gracedesign.com.
- This warranty is in lieu of all other warranties whether written, expressed, or implied, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- In no event will Grace Design be liable for lost profits or any other incidental, consequential or Exemplary damages, even if Grace Design is aware of the possibility of such damages. In no event will Grace Design's liability exceed the purchase price of the product.
- This warranty gives the customer specific legal rights. The customer may also have other rights, which vary from state to state. Some states do not allow limitations on implied warranties or consequential damages, so some of the limitations of the above may not apply to a particular customer.

14 Manual Revisions

Revision	Page	Change	Date	Initials
A	all	Initial release	01/08/2023	edg
B	5,10	changed rearpanel drawing to show spring lock retention on XLR input	6/14/2023	edg