Rubix Series

Products Overview

Rubix44



Rubix24



Rubix22



◎ **USB audio interface with support for up to 192 kHz / 24-bit**

◎ **Newly developed high-quality mic preamps, with combo sockets that accept both XLR and Jack plugs.**

◎ **Input stage includes an analog compressor / limiter (Rubix24 and Rubix44 only).**

◎ **Innovative level indicators offer excellent visibility from all angles.**

◎ **Direct monitoring allows you to monitor your input before it reaches the DAW**

◎ **Enclosed in a durable metal body that offers excellent protection against external noises, with ground lift feature.**

◎ **MIDI IN/OUT Jacks.**

◎ **Supports ASIO in Windows and Core Audio in MacOS and iOS.**

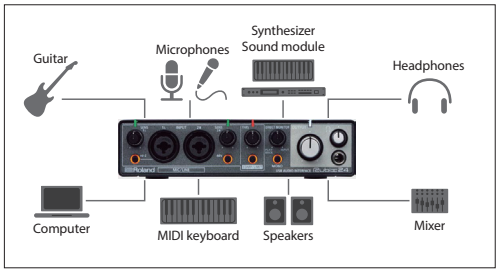
Top-in-class AD/DA converter

The "Rubix" series of audio interfaces are packed with the technologies and know-how that Roland has accumulated over the years. They are highly versatile units that come equipped with a high-speed USB2.0 connection renowned for its stability. The Rubix series are compatible not only with Mac and Windows based machines but iPad as well. The top-in-class 24-bit/192 kHz AD/DA converters included in the Rubix series only build further on Roland's already high reputation for audio quality.



Newly designed next-gen mic preamp circuitry

One of the key factors that determine the quality of your recording, is the circuitry used in the mic preamp. The Rubix series comes with newly designed, next-gen mic preamp circuitry. This allows all models in the series to record with excellent dynamic range (104 dB), with up to 14 dB of headroom. Based on an extremely low noise design, the pre-amp circuitry helps to prevent recording issues and captures a true-to-life sound for both vocals and acoustic instruments.



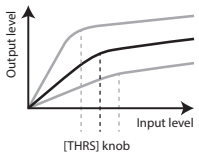
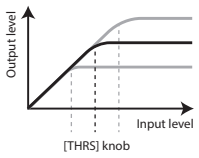
Combo sockets accept both XLR and 1/4" jack plugs

The input sockets on the Rubix series accept both XLR and 1/4" jack plug connections. The XLR inputs are equipped with a 48 V phantom power option, and the 1/4" jack sockets can be switched to receive a Hi-Z input. This wide range of options means you are equipped to record using both condenser and dynamic type microphones, line level instruments and directly from an electric guitar or bass. The outputs on the Rubix series are professional balanced TRS type jack sockets to provide better protection against external noise and to insure compatibility with other professional audio equipment.



Control un-even volumes with the compressor / limiter

Rubix24 and Rubix44 both come with an analog compressor / limiter in front of the AD converter. This allows you to smooth out un-even volumes which makes life a lot easier when you come to the mixing stage. The compressor / limiter has three different modes: "Instruments compressor," "Vocal Compressor" and "Limiter." You can easily adjust how much compression to apply using a convenient control on the front panel.

Switch	Explanation	Response
COMP1	When the input signal exceeds the level specified by the [THRS] knob, the level is restrained at a fixed proportion. This setting is suitable for instruments, such as percussion or guitar.	
COMP2	This compressor has a shorter attack time than COMP1, making it suitable for vocals (the effect applies more rapidly than COMP1).	
LIMIT	This is a limiter. It prevents clipping (distortion) from occurring when an unexpectedly loud signal is input. Signals that exceed the level specified by the [THRS] knob are limited. * Clipping distortion will occur if the input exceeds the capacity of the limiter.	

Connect external MIDI devices with MIDI IN/OUT ports

The Rubix series have MIDI IN/OUT ports that are indispensable when including external MIDI devices in your setup. You can connect your master keyboard or synth module to these ports, and also directly connect synths or drum machines that have no USB jacks.

Multi-color level indicators offer excellent visibility

The level indicators on the Rubix series are positioned on the top portion of the front panel and provide a stylistic accent to their design. By embedding high-luminosity LEDs the level indicators provide excellent visibility not only from the front but also from above. The level indicators can produce multiple colors and will turn red when the input audio goes above -3 dB. Rubix24 and Rubix44 models also have this type of indicator for the compressor / limiter control.

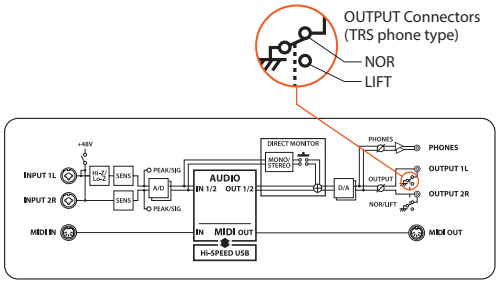


Supports independent headphone output and direct monitoring

The front panel features a headphone socket with a dedicated volume control. This control is independent of the main output allowing you to separately adjust the volume in your headphones. The Rubix series also supports direct monitoring which means you can monitor your input sound without plugging into your PC or iPad. This allows players to comfortably monitor the sound at just the right volume with no latency.

Ground lift feature to eliminate unwanted ground loop noise

The Rubix series comes with a ground lift feature that shields the audio signal form unwanted ground loop noises. This means that Rubix series are immune to ground loop noises that can be a problem on PC-based DAW systems. Additionally, the Rubix series are enclosed in a sturdy metal body that make it much less susceptible to external noises.



Loopback feature

The Loopback feature on the Rubix24 and Rubix44 allows you to loop the audio playing on your PC back to your PC. This means you can mix the input audio with the sound playing on your PC or iPad, and then record the result.

Use it on the go with an iPad



Since the Rubix series interfaces are USB class-compliant, you can use them with your iPad and because the Rubix22 and Rubix24 are able to run on a mobile battery, you can work just about anywhere.

* Connection with iPad requires connection accessory sold separately by Apple. Rubix series cannot draw power directly from iPad

No need to install a driver (Mac)

The Rubix series supports USB Audio Device Class 2.0 which means Mac users do not need to install a driver saving all the hassle of the initial setup and leaving you free to start recording.

* Driver installation is still required with Windows machines.

USB bus power (Rubix22 and Rubix24 only)



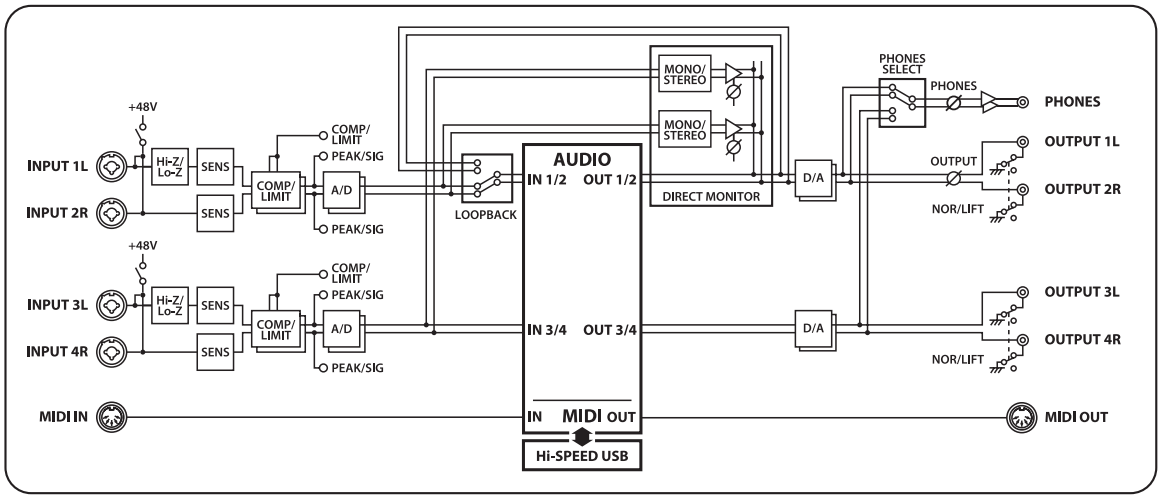
When connected to a PC, Rubix22 and Rubix24 can run on USB bus power. This allows you to create a mobile recording setup using your laptop without having to worry about extra power cables.

Testimony to sound quality. Hi-Res audio certified

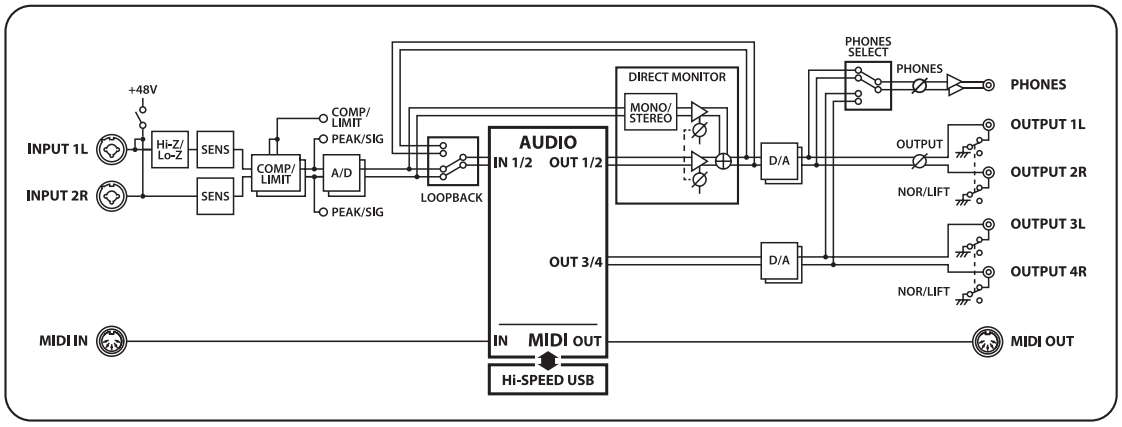
As an audio interface that was designed with no stone unturned in terms of sound quality, the Rubix series has been Hi-Res audio certified by the Japan Audio Society. This is testimony to the series' excellent sound quality for both recording and playback.

* Complies with the definitions of Hi-Res audio as recommended by the Japan Audio Society. The Hi-Res logo is a trademark and is licensed from the Japan Audio Society.

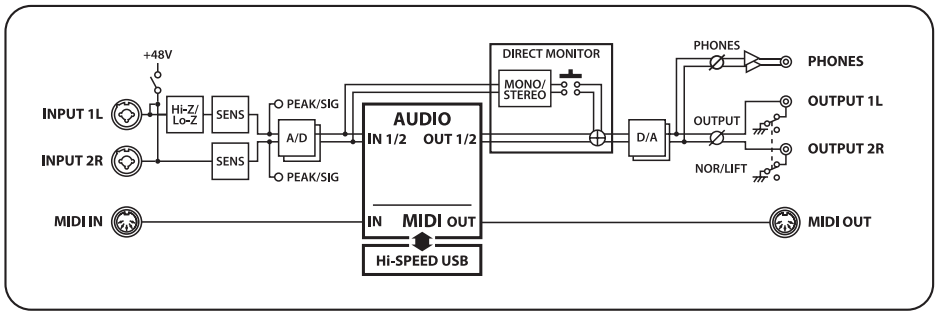
Rubix44 Block Diagram



Rubix24 Block Diagram



Rubix22 Block Diagram



9 Performance comparison 1

	Rubix44	Rubix24	Rubix22
			
System			
Number of Audio Record/ Playback Channels	Record: 4 channels Playback: 4 channels	Record: 2 channels Playback: 4 channels	Record: 2 channels Playback: 2 channels
Signal Processing	PC interface: 24 bits AD/DA conversion: 24 bits		
Sampling Frequency	AD/DA conversion: 44.1 kHz, 48 kHz, 96 kHz, 192 kHz		
Interface	Hi-Speed USB MIDI IN, OUT		
Connectors	INPUT (1L, 2R, 3L, 4R) connectors: XLR type (balanced, phantom power: +48 V, 6 mA Max *1) INPUT (1L, 2R, 3L, 4R) jacks *2: 1/4-inch TRS phone type (balanced) PHONES jack: Stereo 1/4-inch phone type OUTPUT (1L, 2R, 3L, 4R) jacks: 1/4-inch TRS phone type (impedance balanced) MIDI (IN, OUT) connectors USB port: USB Type B DC IN jack *1 Current value per channel. *2 INPUT 1L, 3L support high impedance	INPUT (1L, 2R) connectors: XLR type (balanced, phantom power: +48 V, 6 mA Max *1) INPUT (1L, 2R) jacks *2: 1/4-inch TRS phone type (balanced) PHONES jack: Stereo 1/4-inch phone type OUTPUT (1L, 2R, 3L, 4R) jacks: 1/4-inch TRS phone type (impedance balanced) MIDI (IN, OUT) connectors USB port: USB Type B DC 5 V port: USB Type micro B *1 Current value per channel. *2 INPUT 1L supports high impedance	INPUT (1L, 2R) connectors: XLR type (balanced, phantom power: +48 V, 6 mA Max *1) INPUT (1L, 2R) jacks *2: 1/4-inch TRS phone type (balanced) PHONES jack: Stereo 1/4-inch phone type OUTPUT (1L, 2R) jacks: 1/4-inch TRS phone type (impedance balanced) MIDI (IN, OUT) connectors USB port: USB Type B DC 5 V port: USB Type micro B *1 Current value per channel. *2 INPUT 1L supports high impedance
Controllers	SENS 1L, 2R, 3L, 4R knobs Hi-Z switches 48 V switches THRS knobs COMP/LIMIT switches DIRECT MONITOR 1/2 knob DIRECT MONITOR 3/4 knob MONO switches OUTPUT knob PHONES knob POWER switch GROUND LIFT switch PHONES SOURCE switch LOOPBACK switch COMP/LIMIT TYPE 1/2 switch COMP/LIMIT TYPE 3/4 switch	SENS 1L, 2R knobs Hi-Z switch 48 V switch THRS knob COMP/LIMIT switch DIRECT MONITOR knob MONO switch OUTPUT knob PHONES knob POWER SOURCE switch LOOPBACK switch COMP/LIMIT TYPE switch GROUND LIFT switch PHONES SOURCE switch	SENS 1L, 2R knobs Hi-Z switch 48 V switch OUTPUT knob PHONES knob POWER SOURCE switch DIRECT MONITOR switch GROUND LIFT switch
Indicator	Level indicators (1L, 2R, 3L, 4R) Level indicator (COMP/LIMIT) POWER indicator Hi-Z indicators 48 V indicators COMP/LIMIT indicators	Level indicators (1L, 2R) Level indicator (COMP/LIMIT) POWER indicator Hi-Z indicator 48 V indicator COMP/LIMIT indicator	Level indicators (1L, 2R) POWER indicator Hi-Z indicator 48 V indicator

9 Performance comparison 2

	Rubix44	Rubix24	Rubix22
			
Characteristics			
Nominal Input Level	INPUT (1L, 2R, 3L, 4R) connectors (XLR type): -60–-12 dBu INPUT (1L, 2R, 3L, 4R) jacks (1/4-inch TRS phone type): -44–+4 dBu	INPUT (1L, 2R) connectors (XLR type): -60– -12 dBu INPUT (1L, 2R) jacks (1/4-inch TRS phone type): -44–+4 dBu	
Maximum Input Level	INPUT (1L, 2R, 3L, 4R) connectors (XLR type): +2 dBu INPUT (1L, 2R, 3L, 4R) jacks (1/4-inch TRS phone type): +18 dBu	INPUT (1L, 2R) connectors (XLR type): +2 dBu INPUT (1L, 2R) jacks (1/4-inch TRS phone type): +18 dBu	
Nominal Output Level	OUTPUT (1L, 2R, 3L, 4R) jacks: -6 dBu (impedance balanced)		OUTPUT (1L, 2R) jacks: -6 dBu (impedance balanced)
Maximum Output Level	OUTPUT (1L, 2R, 3L, 4R) jacks: +8 dBu (impedance balanced)		OUTPUT (1L, 2R) jacks: +8 dBu (impedance balanced)
PHONES Maximum Output Power	20 mW + 20 mW (L + R, 47 ohms load)		
Headroom	14 dB		
Input Impedance	INPUT (1L, 2R, 3L, 4R) connectors (XLR type): 4 k ohms or greater (balanced) INPUT (1L, 2R, 3L, 4R) jacks (1/4-inch TRS phone type): 15 k ohms or greater (balanced) INPUT (1L, 3L) jacks (1/4-inch phone type *3): 500 k ohms or greater *3 When the Hi-Z is turned on	INPUT (1L, 2R) connectors (XLR type): 4 k ohms or greater (balanced) INPUT (1L, 2R) jacks (1/4-inch TRS phone type): 15 k ohms or greater (balanced) INPUT (1L) jack (1/4-inch phone type *3): 500 k ohms or greater *3 When the Hi-Z is turned on	
Output Impedance	OUTPUT (1L, 2R, 3L, 4R) jacks: 2 k ohms (balanced) PHONES jack: 47 ohms		OUTPUT (1L, 2R) jacks: 2 k ohms (balanced) PHONES jack: 47 ohms
Residual Noise Level	INPUT (1L, 2R) –> OUTPUT (1L, 2R): -94 dBu typ. (SENS 1L, SENS 2R knobs: min., input terminated with 600 ohms, IHF-A, typ.)		
Dynamic Range	AD block INPUT (1L, 2R, 3L, 4R) jacks: 104 dB typ. (SENS 1L, SENS 2R knobs: min.) DA block OUTPUT (1L, 2R, 3L, 4R) jacks: 109 dB typ.	AD block INPUT (1L, 2R) jacks: 104 dB typ. (SENS 1L, SENS 2R knobs: min.) DA block OUTPUT (1L, 2R, 3L, 4R) jacks: 109 dB typ.	AD block INPUT (1L, 2R) jacks: 104 dB typ. (SENS 1L, SENS 2R knobs: min.) DA block OUTPUT (1L, 2R) jacks: 109 dB typ.
Other			
Power Supply	AC adaptor	Supplied from the computer via USB, DC 5 V	
Current Draw	—	500 mA	
Operating System	Microsoft(R) Windows(R) 7, Windows(R) 8, Windows(R) 8.1, Windows(R) 10 Apple Mac OS X 10.10 or later Apple iOS 9 or later		
Dimensions	310 (W) x 165 (D) x 46 (H) mm 12-1/4 (W) x 6-1/2 (D) x 1-13/16 (H) inches	183 (W) x 165 (D) x 46 (H) mm 7-3/16 (W) x 6-1/2 (D) x 1-13/16 (H) inches	145 (W) x 165 (D) x 46 (H) mm 5-3/4 (W) x 6-1/2 (D) x 1-13/16 (H) inches
Weight (main unit only)	1.8 kg 4 lbs	1.2 kg 2 lbs 11 oz	1.0 kg 2 lbs 4 oz
Accessories	Setup Guide Leaflet ""USING THE UNIT SAFELY"" Power cord USB cable	Setup Guide Leaflet ""USING THE UNIT SAFELY"" USB cable	

* 0 dBu = 0.775 Vrms
* ASIO is a trademark and software of Steinberg Media Technologies GmbH.
  ASIO Technology by Steinberg Media Technologies GmbH.
  ASIO Interface Technology by Steinberg Media Technologies GmbH.
* In the interest of product improvement, the specifications and/or design of these units are subject to change without prior notice.

Rubix44 Rear View



Rubix24 Rear View



Rubix22 Rear View

