

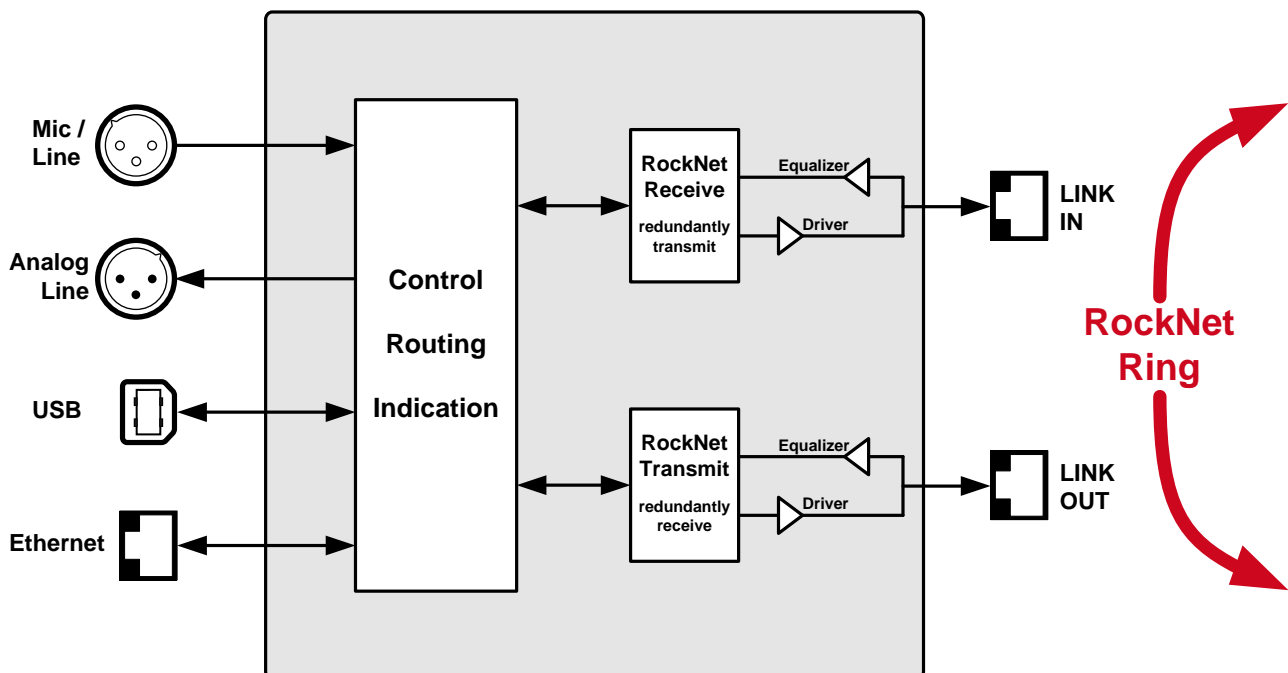
RockNet RN.101.IO

The RN.101.IO provides 16 remote controllable combined microphone line input channels and 8 analog line output channels on XLR connectors. The state of the art circuitry is designed to fulfill the highest demands in dynamic range, common mode rejection and overall audio quality. The front panel controls have been designed with full consideration to speedy operation and instant recall required in live situations.



- 16 microphone and line inputs
(access to the first 80 channels of the 160 channels in the RockNet network)
- Gain range 90 dB (-6 dB to +84 dB in 1 dB steps)
- 8 analog line outputs
- Variable output level (-9 dBu to +24 dBu in 1 dB steps)
- 48V PHANTOM Power
- Channel mute
- LED status indicators
- Remote control
 - via remote PC / Mac software RockWorks
 - from digital Yamaha mixing consoles via RN.341.MY and RN.141.MY
 - from digital Soundcraft / Studer mixing consoles via RN.343.VI
 - from digital Soundcraft Compact and Performer consoles via RN.344.SI
 - from digital SSL consoles C10 / C100 via RN.334.MD
- Front panel operation (Channel Parameter only via RockWorks available)
- CAT5 redundant network interface
- Redundant power supply (mains/24 VDC)
(24 VDC power supply is optional)

Block Diagram



RockNet RN.101.IO



Legend

- 1) Input / Output Section
- 2) Control Section
- 3) Network Section
- 4) Front IEC connector
- 5) XLR input connectors & LED indicators
- 6) XLR output connectors & LED indicators
- 7) 3 two-digit displays with 6 push buttons for menu operation
- 8) RJ45 connector for Ethernet Transport
- 9) USB connector for PC Remote Control
- 10) Link Input connector
- 11) Link Output connector

Status LEDs

	color	off	on	flashing
MUTE	red	Channel active	Channel muted	--
SIG	green	No signal present (< -48 dBFS)	Signal present (> -48 dBFS)	--
CLIP	red	Signal ok (< 0 dBFS)	Signal clipping (> 0 dBFS)	--
48V	yellow	PHANTOM power is switched off	+48V PHANTOM power is switched on	--
PSU INT / EXT	green	Power Supply not connected or power failure	Power Supply ok	--
LINK IP / OP	yellow	No communication to neighbor device present	Communication and synchronization ok	Communication ok but synchronization missing
MASTER	yellow	Device is Sync-Slave	Device is active Sync-Master	Device is passive Sync-Master
EXT	yellow	External Wordclock synchronization disabled	External Wordclock synchronization ok	External Wordclock synchronization failure
48k	yellow	--	48 kHz samplerate selected	--
OPT	reserved	for future use		
10/100BT	yellow	No Ethernet connection present	Ethernet connection established	--
USB	yellow	No connection via USB present	RockWorks connection via USB established	--

Specifications

Channels	16 input & 8 output		
Crosstalk	-105 dB	20 Hz ... 20 kHz	channel-to-channel
Frequency Response	20 Hz ... 20 kHz	-0.1 dB	
Level Indicators	Signal, Clip		
Resolution	24 Bit		
Sample Rate	48 kHz		
USB Port	USB 1.1/2.0 compatible		
Ethernet Port	10 BaseT / 100 BaseT		

Inputs

Input Format	Analog line or microphone		
Gain Range	-6 ... +84 dB	150 Ω Source	
Gain Step	1 dB	±1 dB	
Sensitivity	-42 dBu ... +30 dBu	Max. before clip	
Max. Input Level	+30 dBu		
Input Impedance	5.4 kΩ	±1 %	
PHANTOM Power	+48 V	selectable per channel	
Equivalent Input Noise (EIN)	-117 dBu	@ 30 dB Gain	150 Ω Source, 20 kHz B/W
	-125 dBu	@ 84 dB Gain	
Dynamic Range	113 dB	@ -6 dB Gain	
Common Mode Rejection Ratio	>75 dB	@ 84 dB Gain	0 dB In, 50 Hz ... 15 kHz, 20 kHz BW, 150 Ω Source
Total Harmonic Distortion + Noise	0.008 %	@ 66 dB Gain	-42 dBu In, 100 Hz ... 10 kHz, 20 kHz BW, 150 Ω Source
Delay	363 μs		

Outputs

Output Format	Analog line		
Max Output Level	+24 dBu	±0.2 dB	
Output Level Range	-9 ... +24 dBu	@ digital Full Scale, 600 Ω load	
Output Impedance	<1 Ω		
Impedance Imbalance	<1 %		
Noise	-89 dBu	20 kHz BW, 600 Ω Source	@ +24 dBu "A" weighted
Dynamic Range	113 dB	20 kHz BW	
Common Mode Rejection Ratio	>65 dB	@ 84 dB Gain	0 dB In, 50 Hz ... 15 kHz, 20 kHz BW, 2x300 Ω Source
Total Harmonic Distortion + Noise	0.002 %	@ +24 dBu Out	100 Hz ... 10 kHz, 600 Ω load, 20 kHz BW
	0.003 %	@ +4 dBu Out	
Delay	245 μs		

Overall

Environmental Temperature	0 °C to +50 °C (Non-condensing)		
Supply Voltage	POWER A/B: 100 ... 240 VAC / 47 ... 63 Hz	EXT PSU: 24 VDC, 1.5 A	
Power Consumption	45 VA		
Dimensions (w×h×d)	483 mm × 133 mm (3RU) × 90 mm		
Weight	3.5 kg		