

Specialists in RF techniques

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**RR1092A Option 02**  
**32 x 64 Audio/PTT Matrix**



**Features:**

Raven Research Audio matrix units are based on an integrated circuit analogue switching array, which is used as a basic switching matrix. It is non-blocking in the forward direction. This basic circuit is used to configure a variety of audio, digital and analogue matrix types.

The RR1092A is a 64 x 64 matrix configured from sixteen 16 x 16 audio switch modules. The unit can be fitted partially for smaller applications and the input/output modules can be fitted with different buffers to cope with a wide variety of applications.

The system is controlled via RS232C serial data input on the rear panel or by means of an optional front panel keypad when the unit is set to local control.

Option 02 of the RR1092A is a subsystem designed to provide 32 x 64 matrix configuration with both audio and PTT channels. It comprises a single 3U high box for 32 x 64 audio switching and a second 3U unit to provide the PTT facility.

**Specifications:**

**Audio Subsystem**

Frequency Response	:	20Hz - 20kHz minimum
Number of Inputs	:	32
Number of Outputs	:	64
Gain	:	0dB nominal
Gain Variation	:	+/-0.5dB maximum

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Input/Output Impedance	:	600Ω balanced nominal
Maximum Input Signal Level	:	++6dBu
Crosstalk Level*	:	-60dBc
Residual Noise*	:	-75dBu maximum (3kHz bandwidth)
Harmonic Distortion	:	0.05% maximum @ 0dBu into 600Ω

### PTT Subsystem

Frequency Response	:	DC
Number of Input	:	32
Number of Outputs	:	64
Input Signal	:	contact to ground (CTG)
Output Signal	:	makes CTG @100mA max.
Response Time	:	10ms

### General

Remote Control Input	:	RS232 serial data
Control Protocol	:	Two 8-bit words per selection
Switching Time	:	10ms maximum
Front Panel (Optional)	- Local Control	: Pushbutton keypad
	- Display	: 40 x 2-line LCD display
Connectors	- Audio Input	: 37-way D-type plug (4 off)
	- Audio Output	: 37-way D-type socket (4 off)
	- RS232 Control	: 25-way D-type socket
	- Power (ac)	: IEC fused/filtered/switched plug
	- PTT Control	: 90-way D-type
Power Supply	:	80 - 242V @ 50 - 60Hz
Dimensions	- Width	: 483mm (19" rack mounting)
	- Depth	: 420mm
	- Height	: 153mm, 3U
Weight	:	TBS
Temperature Range	- Operating	: 0°C to +50°C
	- Storage	: -10°C to +70°C