



Features:

- Digital audio matrix expandable to 192 channels
- Each A8 matrix provides:
 - 8 balanced analog mic/line inputs (terminal block connector)
 - 8 balanced analog line outputs (terminal block connector)
 - 4 digital inputs (RJ45)
 - 4 digital outputs (RJ45)
 - 8 network digital inputs and outputs using the optional Danté 32 card
- Units can be linked together for a total of 192 in/out
- Complete matrix routing with any input to any output
- 32/64bit floating point SHARC processor
- TCP/IP LAN control from any PC
- Digital audio to/from zones via RS485

Input DSP Processing:

- Expander / Noise Gate
- Input level adjustment 0dB - +50dB
- 48V Phantom power individually switchable
- Polarity 0-180 degrees
- Five band parametric EQ
- HPF/LPF crossovers
- Compressor / Limiter
- Delay adjustable from 0 -1361ms/ft

Output DSP Processing:

- Eight band parametric EQ
- HPF/LPF crossovers
- Compressor / Limiter
- Delay adjustable from 0 -1361ms/ft
- Matrix page with any input to any output
- Ducker: any input can override any BGM input
- FBC auto dynamic feedback eliminator selectable on any input
- Auto-mixer for up to 12 inputs

Save / Load / Copy all parameters for quick and easy recall

Multiple Accessories for remote audio and control:

- RPM-200 multi zone paging microphone with LCD display
- Danté 32 network expansion card provides 8 network in/out
- RVC-1000 complete control wall controller (daisy chain up to 8 units per A8 Matrix)
- RVC-1000-Plate 3 gang flush mount plate for RVC-1000



Optional RPM-200 192 Zone Paging Microphone



Optional RVC-1000 Wall controller



Main Input Page:

Expander / Noise Gate, Input level adjustment 0dB - +50dB, 48V Phantom power individually switchable, Polarity 0-180 degrees, Five band parametric EQ, HPF/LPF crossovers, Compressor / Limiter, Delay adjustable from 0 -1361ms/ft, Naming all inputs/ outputs.





Main Matrix Page:

Any Input to any output

Mix inputs to any output

Add Network inputs and outputs with the optional Danté 32 card

Inputs and outputs can also be selected from the RVC-1000 wall controller



Main Output Page:

Polarity 0-180 degrees, Eight band parametric EQ, HPF/LPF crossovers, Compressor / Limiter, Delay adjustable from 0 -1361ms/ft, Naming all inputs and outputs.

EQ	Frequency	Qfact	Gain	Type	Bypass
EQ1	31.2Hz	3.0	12.5dB	Peak	Bypass
EQ2	103.9Hz	3.0	-11.5dB	Peak	Bypass
EQ3	387.8Hz	3.0	13dB	Peak	Bypass
EQ4	675.2Hz	3.0	-12.5dB	Peak	Bypass
EQ5	1.26KHz	3.0	12.5dB	Peak	Bypass
EQ6	2.10KHz	3.0	-18dB	Peak	Bypass
EQ7	4.29KHz	3.0	9.5dB	Peak	Bypass
EQ8	11.32KHz	3.0	-5.5dB	Peak	Bypass



Main Ducker Page:

Microphones and other input sources can override any other source for effective automatic ducking with adjustable threshold, dept, attack and release.

System App ID: 06 Device ID: 1000 Status: █ Firmware Version: v1.5

Input DSP Channel Matrix Output DSP Channel **DUCKER** FBC AutoMixer Save/Load/Copy System

Source Select
Local Input: 1 2 3 4 5 6 7 8 9 10 11 12

BGM Setting
Local Input: 1 2 3 4 5 6 7 8 9 10 11 12
Network Input: 1 2 3 4 5 6 7 8

Ducking Controller
Threshold (dB) Dept (dB) Attack (mS) Release (mS)
-80dB -40dB 200mS 4500mS
Bypass Default

Input Channel(Ch01-Ch12) | **Output Channel(Ch01-Ch12)**

CD MUSIC	TV MUSIC	MIC	IN04	MIC MEET.	IN06	IN07	BAR	RESTAUR	PATIO	MEETING	OUT05	OUT06	OUT07
Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute
01 clip +15 +14 dB 0 +6	02 clip +15 +14 dB 0 +6	03 clip +15 +14 dB 0 +6	04 clip +15 +14 dB 0 +6	05 clip +15 +14 dB 0 +6	06 clip +15 +14 dB 0 +6	07 clip +15 +14 dB 0 +6	01 clip +15 +14 dB 0 +6	02 clip +15 +14 dB 0 +6	03 clip +15 +14 dB 0 +6	04 clip +15 +14 dB 0 +6	05 clip +15 +14 dB 0 +6	06 clip +15 +14 dB 0 +6	07 clip +15 +14 dB 0 +6
-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80	-10 -20 -30 -40 -50 -60 -70 -80
-13dB	-13dB	0dB	0dB	11dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB



Main FBC Feedback Eliminator Page:

Microphones can cause feedback and the FBC can automatically identify feedback frequencies and eliminate them for feedback free operation. Dynamic feedback mode and static feedback modes are available.



Main Auto-mixer Page:

Microphones can cause feedback and other noise. The Auto-mixer can automatically shut down microphones that have not been used for a specified period of time. This feature is very useful in conference microphone installations.

System App ID: 06 Device ID: 1000 Status: ■ Firmware Version: v1.5

Input DSP Channel Matrix Output DSP Channel DUCKER FBC **AutoMixer** Save/Load/Copy System

Source Select

Local Input

1 2 3 4 5 6 7 8 9 10 11 12

Active Time

ON 2000ms

Input Channel (Ch01-Ch12) Output Channel (Ch01-Ch12)

CD MUSIC	TV MUSIC	MIC	IN04	MIC MEET.	IN06	IN07	BAR	RESTAUR	PATIO	MEETING	OUT05	OUT06	OUT07
Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute
01 clip	02 clip	03 clip	04 clip	05 clip	06 clip	07 clip	01 clip	02 clip	03 clip	04 clip	05 clip	06 clip	07 clip
+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14	+15 +14
dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10	dB +10
0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6	0 +6
-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2	-10 +2
-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0	-20 0
-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2	-30 -2
-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4	-40 -4
-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5	-50 -5
-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15	-60 -15
-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25	-70 -25
-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40	-80 -40
-13dB	-13dB	0dB	0dB	11dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB	0dB



Main Save Load Copy Page:

Every matrix setting can be stored and recalled at any time.

Specifications:

MATRIX-A8

Analog I/O 8 x 8

- Connectors : Euroblock 4 x 6-pin, 5 mm pitch,
- CODEC : CS4272, 24-bit, 48 kHz

MIC Inputs

- Active balanced
- Gain Settings: +10 to +60 dB ,1 dB steps
- Input Impedance: 2.6 k Ω 1% ,1 kHz, each leg to ground
- Phantom Power: +48 VDC, 10 mA max per input
- THD+N: < 0.01 % ,typ 20-20k Hz, +4 dBu
- Maximum Input: 3 dBV (1.4 Vrms)

Line Inputs

- Active balanced
- Gain Settings: +10 to +20 dB ,1 dB steps from +10 to +20
- Input Impedance : 5.1 k Ω
- THD+N: < 0.01 % typ 20-20k Hz, +4 dBu
- Maximum Input: 20.0 dBu
- Frequency Response: 20-20k Hz, +0, -0.5 dB
- Dynamic Range: 105 dB max, A weighted
- Crosstalk: 104 dBu , 20-20k Hz, +20 dBu, ch to ch

Outputs

- Active balanced
- Impedance: 200 Ω 1%
- Maximum Output: +20.0 dBu
- Frequency Response: 20-20k Hz
- Dynamic Range: 105 dBu
- Crosstalk: 110 dB

Indicators

- Signal : -50 dBu Green LED, peak-reading
- Overload : -0.5 dBu Red LED, peak-reading

DSP

- Processor : SHARC ADSP-21489, 450 MHz
- Word Length: 32 / 64-bit Floating Point

Dimensions

- L x H x D: 483 x 44 x 256 mm

RPM-200 Paging Station

MIC Input

- Active balanced
- Connector: 3-pin female XLR
- Phantom Power: +24 VDC @ 100 mA On/off in software

Indicators and switch

- LCD Display: Zone activation
- LEDs: Signal Status
- Switch: Push to Talk

Ports

- RD net to Matrix : RJ45, 200 m cable
- USB: For MP3 Chimes Sound file (4 seconds)

Dimensions

- L x H x D: 166 x 53 x 162 mm

RIO-200 Remote Audio I/O

Inputs

- Active Balanced
- Connectors : 3-pin female XLR, RCA
- Input Impedance : 5.1 k Ω
- THD+N: < 0.01 % typ 20-20k Hz, +4 dBu
- Maximum Input: 20.0 dBu
- Frequency Response: 20-20k Hz, +0, -0.5 Db
- Dynamic Range: 105 dB max, A weighted
- Crosstalk: 104 dBu , 20-20k Hz, +20 dBu, ch to ch

Outputs

- Active Balanced
- Connectors : Euroblock 1 x 6-pin, 5 mm pitch
- Impedance: 200 Ω 1%
- Maximum Output: +20.0 dBu
- Frequency Response: 20-20k Hz
- Dynamic Range: 105 dBu
- Crosstalk: 104 dB

Indicators

- Signal : -50 dBu Green LED, peak-reading
- Overload : -0.5 dBu Red LED, peak-reading

Ports

- RD net to Matrix : RJ45, 200 m cable

Dimensions

- L x H x D: 147 x 86 x 47 mm

RVC-200 Remote Volume Control With Audio Out

Analog Outputs x 2

- Active Balanced
- Connectors : Euroblock 1 x 6-pin, 5 mm pitch
- Impedance: 200 Ω 1%
- Maximum Output: +20.0 dBu
- Frequency Response: 20-20 kHz
- Dynamic Range: 105 dBu
- Crosstalk: 104 dB

LCD Display

- Volume range: -120dB - 0dB

Ports

- RD net to Matrix : RJ45, 200 m cable

Dimensions

- L x H x D: 147 x 86 x 47 mm

RVC-1000 Remote Volume Control

LCD Display

- Adjustable volume range: -120dB - 0dB

Ports

- RD net to Matrix : RJ45, 1000 m cable
- RD net LINK RJ45, 1000 m cable

Dimensions

- L x H x D: 147 x 86 x 47 mm