

### ARCHITECTS SPECIFICATIONS

#### VCM-88

The VCA unit shall contain 8 independent voltage controlled amplifier channels capable of 20dB of amplification as well as 75dB of attenuation. Each channel shall also have a limiter with a wide-range of threshold level adjustment and a limiter active indicator. Each channel shall have separate balanced input and output jacks as well as the ability to combine unbalanced input and output connections on a single insert jack.

The VCA unit shall provide a master level control and a master sum output jack for the unit to function as a stand-alone remotely controllable line mixer.

The VCA unit shall be remotely controllable digitally over a standard XLR microphone cable or multichannel snake cable. The VCA unit shall phantom power the remote controller and receive data over at least 1500 feet of 24 gauge audio snake cable. The unit shall also have a data reception indicator and a remote disable switch. The VCA channels and master level shall also be remotely controllable by DC voltages through a D-sub connector using standard linear taper potentiometers. The VCA channels and master level shall also be remotely controllable by a PC connected by a standard serial port and cable using Ashly Protea System Software. The VCA channels and master level shall also be remotely controllable via MIDI. The unit shall have internal patching capabilities to route individual channel's input and output to any channel.

The output noise at unity gain on each channel shall be less than -94dBu unweighted over 20Hz-20kHz. The total harmonic distortion shall be less than 0.01% at 0dBu, 1kHz and less than 0.15% at 20dBu over 20Hz-20kHz. Crosstalk between adjacent channels shall be less than 80dB over 20Hz-20kHz.

The frequency response shall be flat +/-0.2dB over 20Hz-20kHz. The VCA unit shall weigh no more than 9 lbs. net and mount into 1 rack space (1.75") of a standard 19" rack. The power requirement shall be 95-125VAC, 50-60Hz at less than 18W. The unit shall be an Ashly Audio VCX-80.

The remote controller shall control 8 channels plus the master level using slide faders. Each channel and the master shall have an on/off switch with an indicator light. There shall also be a remote disable indicator that illuminates when the remote controller has been disabled at the VCA unit. The remote controller shall be phantom powered by the VCA unit so that no batteries or AC line cords are needed. The remote controller shall have a low profile for desk-top operation and must have provisions to be rack mounted where two remote controllers will occupy no more than two 19" rack spaces (3.5" high).

The data signal shall not have characteristics which would cause digital crosstalk noise into adjacent microphone-level channels in a multichannel snake cable. This data crosstalk noise shall be less than -120dB along 1000 feet of adjacent 150 ohm microphone lines. The remote controller shall be phantom powered by the VCA unit so that no batteries or AC line cords are needed while controlling the VCA unit over 1500 feet of cable. The remote controller shall be available in a desk-top/rack-mount version as well as a wall-mount version for permanently installing into a standard 4-gang electrical box. The desk-top/rack-mount remote controller shall be the model RD-8 and the wall-mount remote controller shall be the model RW-8.

#### Features:

- Eight Channels of Remote Level Control
- RS-232 Interface Connector
- PC Control Using Protea System Software
- MIDI In and Thru
- Digital Control Over a Single XLR Mic or Snake Line
- Internal Channel Patching for Flexible Signal Routing and Matrixing
- Internal Selection of Crestron, AMX, MIDI or RS-232 Protocol
- Internal Channel Pass-Through for Cascading Multiple Units in Parallel
- Signal Present LED's On Each Channel
- RD-8, RW-8 Compatible
- Works With Any Mixer With Channel Insert Points
- Master Sum Output Jack
- +20dB to -75dB Level Control
- Individual Limiter Threshold Adjustment for Each Channel

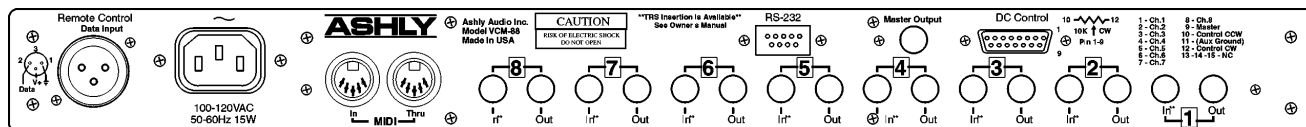
## General Specifications VCM-88

INPUT TYPE:	1/4" TRS
INPUT IMPEDANCE:	20k ohm balanced, 10k ohm unbalanced
MAX INPUT LEVEL:	+23dBu
OUTPUT TYPE:	1/4" TRS
OUTPUT IMPEDANCE:	200 ohm pseudo balanced, 100 ohm unbalanced
MAX OUTPUT LEVEL:	+22dBu
NOMINAL GAIN:	0dB $\pm$ 0.5dB
GAIN RANGE:	+20dB to -75dB
FREQUENCY RESPONSE:	$\pm$ 0.2dB, 20Hz-20kHz
THD:	< 0.01% @ 0dBu, 1kHz; < 0.15% @ +20dBu, 20Hz-20kHz
OUTPUT HUM AND NOISE:	< -94dBu, 20Hz-20kHz unweighted
CROSSTALK:	< -80dB @ 20Hz-20kHz
LIMITER THRESHOLD RANGE:	-23dBu to +22dBu
LIMITER COMPRESSION RATIO:	10:1
DATA INPUT TYPE:	9-pin female D-Sub connector
DATA FORMAT:	RS-232 using Protea System Software
DC CONTROL INPUT TYPE:	15-pin female D-Sub connector
DC CONTROL VOLTAGE:	-4V to +15V provided for external 10k ohm potentiometers
SIZE:	19"L x 1.75"H x 6"D
POWER REQUIREMENTS:	95-125VAC, 50-60Hz, 18W (240V available)
SHIPPING WEIGHT:	9 lbs

RD-8/RW-8 SPECS:	
FADER RANGE:	+10dB to -75dB (master fader @ 0dB)
DATA/POWER CONNECTOR:	Male XLR jack
MAX DATA CABLE LENGTH:	1500ft (24ga twisted pair)
DATA FORMAT:	4800 baud, 2Vp raised cosine
DATA CROSSTALK TO AUDIO:	< -120dB along 1000ft of 150 ohm shielded cable
SIZE:	7.5"L x 3.5" H x 1.75"D
POWER REQUIREMENTS:	Phantom powered by VCM-88
SHIPPING WEIGHT:	3 lbs

Input jack may be internally selected as a single in/out patch point.

## Rear Panel VCM-88



## Applications:

Remote control of stage monitors, remote control of microphones in a church or large meeting room, remote control of sound in a theme park or banquet facility. Dedicated 8-channel limiter for speaker protection.

For detailed applications, request the VCM-88 Product Applications Note. Or, download it directly from the Ashly Audio Web Site.

**Ashly manufactures a complete and comprehensive line of Graphic and Parametric Equalizers, Electronic Crossovers, Power Amplifiers, Compressor-Limiters, Mixers, and Amplifier Input Options. Please call, write or visit our web site for information on any of these Ashly Products.**

Ashly Audio Inc., 847 Holt Road, Webster, NY 14580-9103, Toll Free (800) 828-6308, Telephone (585) 872-0010, FAX (585) 872-0739  
Internet: <http://www.ashly.com>, email: [info@ashly.com](mailto:info@ashly.com)