

# ACU16-C

## Amplifier Control Unit



# ACU16-C



Rear Panel

**MIDI** CobraNet 1U

## CobraNet compatible 16-channel D/A converter and monitor/control unit.

- The ACU16-C converts up to 16 channels of digital audio (48 kHz, 20-bit or 24-bit) to analog using CobraNet technology, and delivers analog audio to Tn series and PC-1N series power amplifiers with a dynamic range of 110dB.
- A single ACU16-C unit can control up to 32 amplifiers.
- Amplifier settings and status can be monitored and controlled using the supplied NetworkAmp Manager software and a computer: power on/standby, attenuation, out/in levels, temperature, load impedance, and more.
- A computer can be connected to any NHB32-C or ACU16-C in the network to provide full monitoring and control capability for all amplifiers on the CobraNet network.
- Automatic troubleshooting and logging.
- Redundant connections for exceptional reliability.

### GENERAL SPECIFICATIONS

<b>Maximum unit count</b>	16 units for a CobraNet network
<b>Max. input channel count</b> (from/to CobraNet)	32ch (48kHz/20bit); 28ch(48kHz/24bit)
<b>Maximum analog output channel count</b>	16ch
<b>Sampling frequency rate</b>	48kHz
<b>Total harmonic distortion**1</b>	Less than 0.05% (+4dB output@20Hz-20kHz) Less than 0.01% (full scale output@1kHz)
<b>Dynamic range</b>	110dB
<b>Hum &amp; noise level**2</b> (20Hz to 20kHz), Rs=150Ω	-92dBu residual noise
<b>Crosstalk (@1kHz)</b>	-80dB
<b>Front panel</b>	USB : PC USB connector UNIT ID : ID dial POWER ON/OFF
<b>Rear panel</b>	CH1-16 : Euro block type(6pin) x 8 RS485 : RJ45 x 1 to Tn and PC-1N series Power Amplifier CobraNet™ : PRIMARY/SECONDARY; RJ45 x 2 TO COMPUTER : Dsub-9pin(male)
<b>Power requirements</b>	Japan: AC100V, 50/60Hz North America: AC110-120V, 50/60Hz Other Areas: AC220-240V, 50/60Hz
<b>Power consumption</b>	40W
<b>Dimensions (W x H x D)</b>	480 x 44 x 385.5mm (18 7/8" x 1 3/4" x 15 5/32"), 1U
<b>Weight</b>	4.8kg (10.6lbs)

\*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.  
\*2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation.

### MONITORED PARAMETERS

<b>Unit ID</b>	0 - 31
<b>Amp type</b>	2ch, 4ch, 6ch, 8ch
<b>Model ID</b>	Model ID numbers for Tn and PC-1N series
<b>Mode</b>	Stereo/Bridge/Parallel
<b>Input level</b>	Power amplifier input level
<b>Output level</b>	Power output in watts/volts
<b>Output clip</b>	When limiter is activated
<b>Impedance</b>	Impedance/Warning
<b>Protection</b>	When protection circuit is activated
<b>Temperature</b>	Heat sink temperature/Warning

### CONTROL PARAMETERS

<b>Power</b>	Universal control of all power amplifier ON/Stand-by controls
<b>Attenuator</b>	63 step
<b>Phase</b>	Normal/Reverse
<b>Mute</b>	On/Off

### ANALOG OUTPUT SPECIFICATIONS

Output Terminals	Actual Source Impedance	For use with nominal	Output level		Connector
			Nominal	Max. before clip	
OUTPUT 1-16	75Ω Lines	10kΩ Lines	+4dBu	+18dBu	Euroblock*

### DIGITAL I/O SPECIFICATIONS

Terminal	Format	Level	Connector
CobraNet™*	PRIMARY	100Base-TX	100Base-TX
	SECONDARY		

\* 16OUT

### CONTROL I/O SPECIFICATIONS

Terminal	Format	Level	Connector
TO COMPUTER	-	RS232C	D-Sub 9pin (Male)
USB	USB	-	B type USB Connector
RS485 (Amp Control)	-	TTL/75Ω	RJ-45

### DIMENSIONS

