

ACU16-C

Amplifier Control Unit



ACU16-C

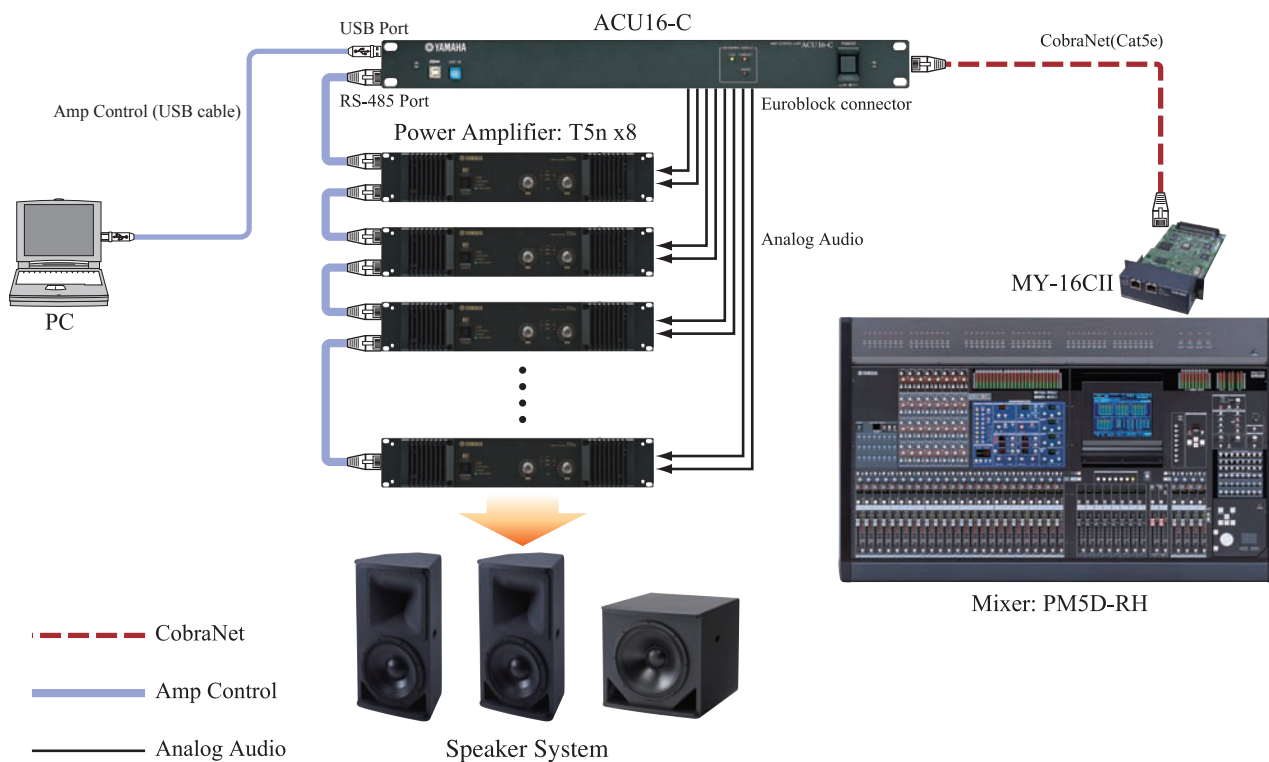


Rear Panel

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.

SYSTEM EXAMPLE



GENERAL SPECIFICATIONS

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

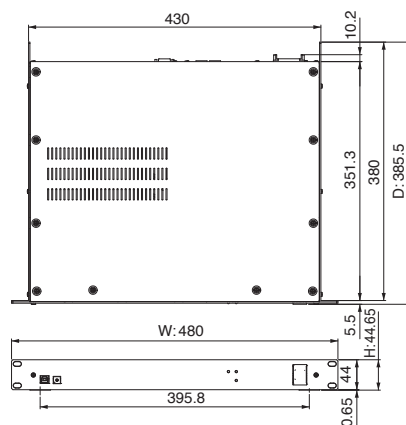
Unit ID	0 - 31
Amp type	2ch, 4ch, 6ch, 8ch
Model ID	Model ID numbers for Tn and PC-1N series
Mode	Stereo/Bridge/Parallel
Input level	Power amplifier input level
Output level	Power output in watts/volts
Output clip	When limiter is activated
Impedance	Impedance/Warning
Protection	When protection circuit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

CONTROL PARAMETERS

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

DIMENSIONS

unit : mm



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	RJ-45
	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