# Top Class High Power and Pure Sound Technology with ToP-ART, CD/DVD Direct Amplification and Linear Damping.









Hidden Control Panel offers headphone jack, speaker A, B or A+B selector, bass/treble/balance controls with center clicks, loudness control and rec out selector.

### ToP-ART CDIDVD Direct

# High Sound Quality

- ToP-ART (Total Purity Audio Reproduction Technology)
- Switchable CD/DVD Direct Amplification
- Super Audio CD and DVD-Audio Ready with Extended Frequency Response
- Linear Damping
- High Dynamic Power, Low-Impedance Drive Capability

### Advanced Facilities

- Rec Out Selector
- Continuously Variable Loudness Control and Bass/Treble/Balance Controls (with Center Clicks)
- Remote Controllable Motor-Driven Volume Control
- RoHS Compliant

[AUDIO SECTION]	
Minimum RMS Output Power (8 ohm	ns, 20 Hz—20 kHz, 0.019% THD)
	85 W + 85 W
Minimum RMS Output Power (6 ohm	ns, 20 Hz—20 kHz, 0.038% THD)
	100 W + 100 W
Output Power (4 ohms, 1 kHz, 0.7%	THD)
	120 W + 120 W
Maximum Power (8 ohms, 1 kHz, 10	)% THD)
	130 W + 130 W
Dynamic Power (8/6/4/2 ohms)	130 W/150 W/185 W/220 W
Damping Factor	
(8 ohms, 20 Hz-20 kHz)	240 (speaker A)
Input Sensitivity/Impedance	
Phono (MM)	2.5 mV/47 k-ohms
CD	195 mV/47 k-ohms
Frequency Response (Pure Direct)	10 Hz-100 kHz ±1 dB
Total Harmonic Distortion (20 Hz-2	0 kHz)
Phono (MM) to Rec Out	0.003% (3 V)
CD to Sp Out	0.009% (42.5 W/8 ohms)
Signal-to-Noise Ratio	
Phono (MM) [Input Shorted 5 mV	/] 88 dB
CD [Input Shorted 195 mV]	110 dB (CD Direct On))
[GENERAL SECTION]	
Dimensions (W x H x D)	435 x 151 x 390 mm
	17-1/8" x 5-15/16" x 15-3/8"
Weight	9.1 kg; 20.1 lbs.

#### **High Sound Quality**

# ToP-ART (Total Purity Audio Reproduction Technology)



When processing and transmission of the audio signal

is simple and direct there is less chance of it being affected by noise and distortion. Yamaha's amplifier design technology called ToP-ART features I/O (input to output) Direct Symmetrical Design, with left and right channels organized in a straight, symmetrical layout for highest signal purity.

#### Switchable CD/DVD Direct Amplification (Discrete Configuration)



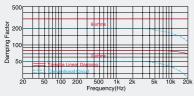
Engaged by a front panel switch, it matches CD

signal levels so each stage produces less noise, resulting in improved S/N ratio and maintenance of the amp's total gain balance.

#### **Pure Direct Switch**

When this switch engaged, the signal bypasses the tone, loudness, balance controls, and other circuit, being fed directly to the discrete power amplifier. It travels in a straight line from the volume control, through the high-gain short, direct path is maximum signal purity.

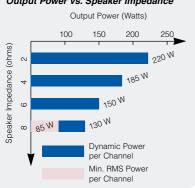
#### **Damping Factor Characteristics**



#### Linear Damping

Yamaha's Linear Damping maintains a high, stable damping factor even at frequencies from 10Hz to 20kHz, where it generally tends to fall off. The result is superior articulation of all sounds.

#### Output Power vs. Speaker Impedance



#### **Discrete Amplifier Configuration**

The CD buffer amplifier, volume control amplifier and power amplifier are all constructed from carefully selected discrete parts. This configuration provides superior signal quality.

#### Super Audio CD and DVD-Audio Ready



Rather than the usual 20Hz–20kHz frequency response, Yamaha has given the AX-497 the ability to handle frequencies from 10Hz

to100kHz (1dB). Although the ear cannot hear the higher frequencies, it has been proven that these harmonics can affect sound reproduction quality. Super Audio CD , DVD-Audio and other new formats will be able to output sound over this range, so the AX-497 is fully compatible with products using these formats.

#### **Linear Damping**

Level variations due to high amp impedance tend to reduce an amplifier's damping factor, and frequency variations cause it to fluctuate. This circuit cancels the effect of these variations, maintaining a high, stable damping factor, for superior articulation of all sounds and better frequency response.

# High Dynamic Power, Low-Impedance Drive Capability

The AX-497 capable of delivering large amounts of reserve power for accurate reproduction of high energy peaks. This emphasizes the music's dynamic qualities and provides a sharper sound image.

#### **Advanced Facilities**

#### **Rec Out Selector**

The AX-497 has a Rec Out Selector, which lets you easily and simply listen to one source while recording another, for

even more convenience and flexibility in your multi-component system.

# Continuously Variable Loudness Control and Bass/Treble/Balance Controls

With this control, the midrange frequencies are attenuated over a continuously varying, level-dependent curve, instead of a fixed level of low and high frequency boost as in conventional loudness controls.

The bass/treble/balance controls are continuously variable, so they can offer smooth and accurate tonal response control over a wide range. And, with the controls set to their center defeat positions, you have a perfectly flat tonal balance, with no influence on the original sound.

## Remote Controllable Motor-Driven Volume Control

The remote unit can be used to turn the volume control. The command from the remote activates a motor which moves the volume knob. Because operation is mechanically driven, signal quality is not degraded.

#### Speaker A, B or A+B Selection

Speaker A, B or A+B selection lets you listen to either or both of two sets of speakers in two locations.

#### **RoHS Compliant**

This environmentally friendly amplifier fully complies with the EU's RoHS (Restriction of Hazardous Substances) standards.

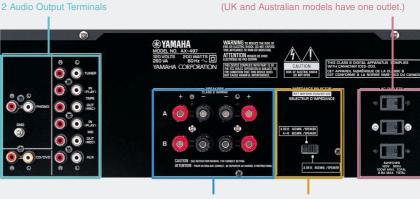
#### **Other Notable Features**

- Gold-Plated CD Input Terminals
- 6 Audio Input Positions with Tape Monitor
- Speaker Impedance Selector (6 ohms/4 ohms)
- Front Panel Headphone Jack
- System Remote Control Unit

#### **AX-497 Extensive Connections**

6 Audio Input (including Phono) and

Three Switched AC Outlets
(LIK and Australian models have



Speaker L/R (Speaker A, B or A+B Selection) Terminals (2-Way Binding-Post Speaker Terminals (Banana-Plug Compatible)\*)

\* Not available on European, Singapore and Korean models

Impedance Selector (8/4 ohms)