Yamaha is proud to introduce two flagship separate components that stand at the pinnacle of the AVENTAGE Series of ultra-high performance components. They are the fullest expression of the AVENTAGE concept which combines fine craftsmanship, superb sound quality, unequalled sound realism, innovative technologies and enhanced controllability. Drawing on the spirit of uncompromising design and technological integrity manifested by our Z11 flagship receiver, the CX-A5000 and MX-A5000 take the AVENTAGE Series to new levels of audio performance, as well as greater than ever flexibility for use in network environments. By delivering not only great sound quality, but also the capability to achieve the best possible performance from any source, they take the home theater experience to a new standard of excellence and enjoyment.
Overwhelming Power and High Density Presence Achieved by 11.2 Channel Separate AV Amps

Making full use of CINEMA DSP HD™, the pinnacle of three-dimensional sound field reproduction, the CX-A5000 AV pre-amplifier realizes detailed, accurate sound imaging. The MX-A5000 discrete structured 11 channel power amplifier delivers powerful driving force that provides superb quality and performance for all channels. Combining these two achieves overwhelming silence and sound filled with dynamic feeling - the goal to which Yamaha constantly aspires. With all types of sound sources, you will enjoy a deep resonance that immerses you in music with the full scale presence of 11.2 channels.

Specially Designed High Rigidity Chassis Eliminates the Effects of Vibration for Greater Sound Purity

As part of the no-compromise design policy for these two amplifiers, Yamaha created an advanced chassis with strong rigidity. Chassis stiffness is enhanced by an H-shaped cross frame that boosts mechanical strength by adopting aluminum side panels that increase the stiffness of the housing and by a three- ply structure with independent top cover and side panels. Any external vibration from the rack or other sources is damped by heavy insulators. The A.R.T.™ (Anti-Resonance Technology) Wedge in the center of the bottom cover acts as an additional vibration countermeasure and firmly supports the internal circuits and delicate parts. In addition, both models have a double bottom with the MX-A5000’s consisting of vibration control plates made of 1/8 inch (1.6 mm) black steel, the same type of construction used on the previous flagship model Z11. In order to support the heavy heat sinks and other parts, it has a left-right independent construction strengthened by a rigid-frame structure. The bottom frame reduces the transmission of vibration produced by the large power supply transformer and heat sinks. It also incorporates a heavy insulator that blocks external vibration.

High Density Presence and Richly Detailed Sound Ensured by High Sound Quality Parts and Design (CX-A5000)

In the CX-A5000, all channels use ultra high performance ESS ES9016 DACs, which provide 192 kHz/32-bit compatible high SN ratio and dynamic range, ensuring that it can faithfully reproduce audio signals from Blu-ray Disc™ and other players and high quality signals from high resolution sound sources input through networks. Matched to the design of the DAC circuit which achieves stable ground potential (DAC on Pure Ground), they ensure high precision D/A conversion. The OP amp is a high grade type adopted only by flagship models for maximum signal purity. It realizes even more detailed sound by adopting a three-layer circuit board design that completely separates the digital, analog video and analog audio circuit boards, which have different noise levels and frequency bands, and by a design that provides the shortest possible circuit route. Further, by separating the power supplies to the analog circuit boards, it eliminates high frequency noise interference from the digital circuits. The shielded power supply restricts noise radiation and the large power transformer minimizes vibration.

Highest Quality Parts Achieve High Power to 11 Channels and Unrestricted Speaker Drive (MX-A5000)

The MX-A5000 uses a current feedback power amp with a three stage Darlington circuit that has superior phase properties and is resistant to speaker impedance fluctuation. To fully realize its inherent power, it uses high quality parts with superior sound quality that were strictly selected based on listening tests. The power supply transformer is a specially developed high output, high efficiency, large-size toroidal transformer. With two specially developed high capacity (27,000µF) block capacitors, it minimizes energy loss and features power supply capacity with generous headroom. This ensures sound capable of superior musical expression. The speaker output terminals are high quality gold-plated types and are compatible with Y plugs for optimum speaker connectivity.

Noise Resistant, Highly Reliable Balanced Connection

Electrical noise may be generated due to connection with other AV components and even to the connection between them, as well as from other sources of external noise. To ensure that the CX-A5000 and MX-A5000 are not affected by this distortion, they use balanced connections that are highly noise resistant—the same type generally used in pro audio equipment. Even the RCA unbalanced connection uses a ground sensing transmission method that achieves simple balanced transmission. In cases where each channel with the XLR is used selectively, the impact of noise flowing between the pre-amp and the chassis of the power amp is removed, minimizing sound quality deterioration due to the connection. The CX-A5000 also allows balanced audio input connection to high grade source components such as CD players.
AV Controller App Allows Convenient Control from a Smartphone

You can use the Yamaha AV Controller App to control power on/off and volume, select input and DSP modes and operate other functions from an iPhone® or Android™ device. You can also use it as many as 23 different languages and customize the interface by hiding unused icons and renaming functions. A tablet version is also available.

Network Integration Functions Provide Wider Source Access with Greater Control

AirPlay® lets you stream music wirelessly from a Mac®, PC, iPod®, iPhone® or iPad®. You can also access music files stored on a PC or NAS, Internet radio or subscription-based music services*. Compatibility with high resolution music files in the FLAC/WAV 192 kHz formats allows playback with outstanding sound quality. The AV Controller App offers convenient operation from a smartphone or tablet.

* Music service availability varies by region.

CINEMA DSP HD³ Expands the Sound Field Vertically for More Thrilling and Realistic Surround Sound

CINEMA DSP HD³ literally takes the surround sound experience to new heights. By using four CINEMA DSP engines with advanced 3D processing and four presence channels in an 11 channel configuration, it gives the sound an enhanced vertical dimension. You are enveloped in wide, high and dense sound fields that deliver excitingly realistic surround sound. In addition, a rear Virtual Presence Speaker has been added to the usual front Virtual Presence Speaker, so you can enjoy CINEMA DSP HD³ programs using a 9 channel system (without rear presence speakers) with almost the same sensational sound as an 11 channel system.

33 DSP Programs, Including 10 Introduced in the Flagship Z11 Receiver

The broad array of surround sound programs, including 10 featured in the flagship Z11 receiver, features six “Movie” choices, including “Spectacle” for movies with strong visual and audio impact, “Sci-Fi” for SFX movies, “Adventure” to emphasize the sound of action movies, and “Drama”. Seven “Entertainment” programs match the audio characteristics of sources such as sports, music videos and action and role-playing games. Compatibility with the Dolby® TrueHD and DTS-HD® sound formats means you hear the full potential of every movie and music source.

YPAO-R.S.C. (Reflected Sound Control) Sound Optimization with Speaker Angle Measurement

YPAO® analyzes room acoustics and performs speaker angle measurements, then calibrates audio parameters to achieve optimum sound at any of several listening positions. It employs Reflected Sound Control to correct early reflections for studio-quality sound. It also provides DSP Effect Normalization, which varies the CINEMA DSP parameters according to the reflected sounds.

33 DSP Programs

<table>
<thead>
<tr>
<th>Hi-Fi DSP Programs</th>
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<tr>
<td>Hall in Munich A</td>
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<td>Hall in Munich B</td>
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<td>Hall in Frankfurt</td>
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<td>Hall in Stuttgart</td>
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<td>Hall in Vienna</td>
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<td>Hall in Amsterdam</td>
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<td>Hall in USA A</td>
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<td>Hall in USA B</td>
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<tr>
<td>Chamber</td>
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<td>Church in Tokyo</td>
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<td>Church in Friburg</td>
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<td>Church in Royaumont</td>
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<th>LIVE/CLUB</th>
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<td>Village Gate</td>
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<td>Village Harvest</td>
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<td>The Bottom Line</td>
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<td>Cellar Club</td>
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<td>The Roxy Theatre</td>
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<td>Warehouse Loft</td>
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<td>Arena</td>
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<th>STUDIO</th>
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<tr>
<td>11 Channel Stereo</td>
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Hi-Fi DSP Subtotal: 20

CINEMA DSP Programs

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<tr>
<th>ENTERTAINMENT</th>
<th>MOVIE THEATER</th>
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<tbody>
<tr>
<td>Sports</td>
<td>Standard</td>
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<tr>
<td>Music Video</td>
<td>Spectacle</td>
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<tr>
<td>Recital/Opera</td>
<td>Sci-Fi</td>
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<tr>
<td>Pavilion</td>
<td>Adventure</td>
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<tr>
<td>Disco</td>
<td>Drama</td>
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<tr>
<td>Action Game</td>
<td>Mono Movie</td>
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<tr>
<td>Role-playing Game</td>
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Yamaha Original Video Processing

The CX-A5000 is not only a superb audio component, it also helps the AV system achieve the highest possible levels of video performance. Drawing on our experience in developing high-end video projectors, Yamaha has incorporated a number of advanced video processing technologies, including edge adaptive to smooth out jaggy noise, motion adaptive to analyze image motion for precise by-pixel processing, cinema detection of 3:2/2:2 pulldown to match film content and multi-cadence detection.

HDMI: Eight Inputs and Two Outputs with MHL® Support and Ultra HD (4K) Upscaling/Pass-through

Enjoy the quality and convenience of HDMI connection with eight input and two output components. MHL provides easy, direct connection of compatible mobile devices, with playback of up to 1080p video and multi-channel audio. The AV pre-amplifier also charges the connected phone. Play, stop and other basic operations can be controlled from the remote control. Ultra HD (4K) makes it possible to enjoy super high-definition resolution from lower resolution video sources.
Advanced HDMI Zone Switching

While standard HDMI zone switching can only send HD video programs to the main and second zones, Yamaha’s advanced HDMI zone switching adds the capability to choose from various audio and video sources for playback in either zone. An on-screen graphical user interface makes it easy to browse and select content to enjoy from the second zone no matter what is being played in the main zone.

AV Controller App Provides Zone Control

The AV Controller App is extremely useful for controlling various functions in multi-zone custom installations. Displaying zone icons for easy reference, it allows control of power on/off, input selection and volume level in each zone. It also shows when Party Mode is being used and allows volume control of this function.

In Addition to 11.2 Channel Output, 5 Channel Bi-amping and Other Configurations are Possible.

The CX-A5000 and MX-A5000 are designed to allow flexible system building. Complementing their 11 channel output that maximizes CINEMA DSP HD^2 performance and makes the most of the capabilities of the speakers, they also support bi-amping for tweeter and woofers driving with separate amps. Furthermore, they allow bi-amping of, for example, all five channels using the 11 internal channels. Extra amps can be used to power multiple zones in addition to the main room, letting you configure your system for music play in another room, such as a bedroom or kitchen. On the MX-A5000, you can switch all 11 channel input jacks back and forth between balanced and unbalanced for each channel, further increasing system flexibility.

Auto Power Standby

Using less power saves money and is friendly to the earth. The MX-A5000 has an Auto Power Standby function that will turn the power off after eight hours. It can be turned on and off via a rear panel switch and will be overridden by the trigger function.

Handy Trigger Control

The CX-A5000 provides two Trigger Out jacks that enable control of connected component functions such as power on/off and input selection. The MX-A5000 or another amplifier or subwoofer with a Trigger In jack can be connected to allow use of the convenient trigger function.
11.2 Channel AV Pre-amplifier

**CX-A5000**

**Main Specifications**

**Audio Section**

- **Rated Output Level / Impedance**
  - RCA Unbalance: 1.0 V / 470 ohms
  - XLR Balance: 2.0 V / 470 ohms

- **Max Output Level**
  - RCA Unbalance: >4.25 V (except for SW), >6.8 V (SW)
  - XLR Balance: >8.5 V

- **Input Sensitivity / Impedance**
  - RCA Unbalance (Audio 2, etc.): 200 mV / 47 kilohms
  - XLR Balance (Audio 4 Attenuator OFF): 200 mV / 47 kilohms
  - XLR Balance (Audio 4 Attenuator ON): 400 mV / 47 kilohms

- **Total Harmonic Distortion**
  - MULTI CH INPUT to Speaker Out (Pure Direct, 70 W, 8 ohms): 0.008%

- **Signal-to-Noise Ratio (IHF-A Network)**
  - Audio 2, etc. to PRE OUT (Bal/Unbal)
    - Pure Direct, Input 1 kilohm Shorted, Analog Input: 112 dB

- **Frequency Response (Pure Direct, Audio 2, etc. Front L / R)**
  - 10 Hz–100 kHz +0 / -3 dB

**General**

- **Standby Power Consumption**
  - HDMI Control Off, Standby Through Off: 0.3 W (typical)
  - HDMI Control On, Standby Through On: 5.0 W (typical)
  - Network Standby On: 2.2 W (typical)

- **Dimensions (W x H x D)**
  - 17-1/8" x 7-1/2" x 17-5/8" / 435 x 192 x 448 mm

- **Weight**
  - 30 lbs.; 13.6 kg

**Extensive Connections**

**Inputs**

- HDMI (Front HDMI, MHL input compatible): 8
- USB*: 1
- Radio Antenna (FM/AM, incl. HD Radio*): 2
- Analog Audio
  - RCA Unbalance (with Phone): 9
  - XLR Balance: 1
  - Optical Digital* (Assignabl except Video AUX): 1
  - Coaxial Digital (Assignabl): 1
  - Component Video (Assignabl): 4
  - Multi-channel input: 8 ch

**Outputs**

- HDMI: 2 (none assignable)
- Optical Digital: 1
- Analog Audio: 1
- PRE OUT
  - RCA Unbalance: 11 ch
  - XLR Balance: 11 ch
- Monitor Out
  - Composite Video: 1
  - S-Video*: 1
  - Component Video*: 1
- AV OUT (S-Video/7.1 Video): 1
- Subwoofer: 2 (front, front / rear, mono x 2)
- DC Out*: 1
- Headphone jack*: 1

**Others**

- Zone 2 Out: 1
- Zone 3 Out: 1
- Remote In/Out: 2
- 12V/100 mA Trigger Out*2: 2
- RS-232C: 1

- Terminal for Detachable Power Cable: 1

* Including front panel terminals.
*2 For USA only.
*3 Assignable to monitor out or Zone 2/3/4 out.
*4 For optional accessories.
*5 Yamaha subwoofer system control support.
11 Channel Power Amplifier

MX-A5000

Main Specifications

Audio Section

Rated Output Power [6 ohms, 20 Hz–20 kHz, 0.06% THD, 2 ch driven]
All Channels 170 W

Rated Output Power [8 ohms, 20 Hz–20 kHz, 0.06% THD, 2 ch driven]
All Channels 150 W

Continuous Power [6 ohms, 1 kHz, 0.9% THD, 1 ch driven]
All Channels 170 W

Dynamic Power [CH1 (Front L, R), 8 / 4 / 2 ohms]
190 / 250 / 350 / 500 W

Total Harmonic Distortion (70 W, 8 ohms)
0.008%

Input-Signal Noise Ratio [1 kHz, 0.5% THD, 8 ohms]
116 dB

Frequency Response 10 Hz–100 kHz +0 / -3 dB

Input Impedance (1 kilohm, 100 W / 8 ohms)
Unbalance (Audio 2, etc.) 2.0 V / 47 kilohms
Balance 1.0 V / 47 kilohms

Maximum Input Signal [1 kHz, 0.5% THD, 8 ohms]
Unbalance (Audio 2, etc.) 1.3 V
Balance 2.6 V

General

Standy Power Consumption 0.1 W (typical)

Dimensions (W x H x D) 17-1/8” x 8-1/4” x 18-1/8”
435 x 210 x 463.5 mm

Weight 56 lbs.; 25.4 kg

Extensive Connections

Inputs

Analog RCA Unbalance 11
Analog Phono Balance 11

Outputs

Speaker 11 ch (13 terminals)

Others

Trigger Out* (+12 V / Max 100 mA ) 1
Trigger Through* 1

* Yamaha subwoofer system control support.

* "Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance. AirPlay, iPhone, iPod, iPod classic, iPod nano, iPod touch, and iTunes are trademarks of Apple Inc., registered in the U.S. and other countries. iPad is a trademark of Apple Inc. AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion, and Mac Pro with Mac OS X 10.7 or later. ©2010 Apple Inc. DTS-HD Master Audio, DTS-HD, and the Symbol are registered trademarks of DTS, Inc. DTS, Inc., the DTS logo and High-Definition Multimedia Interface are trademarks, or registered trademarks of Dolby Laboratories. HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC. Blu-ray, the Blu-ray Disc logo, BDF, BD-Live, and My Blu-ray are trademarks of Blu-ray Disc Association. "x.v.Color" is a trademark of Sony Corporation. "CINEMA DSP" is a trademark of Yamaha Corporation. "SLIM CINEMA" is a trademark of Yamaha Corporation. "HD Radio" Technology is licensed under license from iBiquity Digital Corp., U.S. and foreign patents. HD Radio and the HD Radio Trademark Marks are proprietary trademarks of iBiquity Digital Corp. Pandora and Pandora Internet Radio logos are registered trademarks or trademarks of Pandora Media, Inc. in the United States and/or other countries. Rhapsody and the Rhapsody logo are registered trademarks of Rhapsody International, Inc. SIRIUS, XM and all related marks and logos are trademarks of Sirius XM Radio Inc. and its subsidiaries. All rights reserved. Service not available in Alaska and Hawaii. Product designs and specifications are subject to change without notice.