

ANTHEM®



**AVM** SERIES  
A/V PROCESSORS  
AVM 90 | AVM 70

A/V PROCESSORS

## Extended Data Sheet

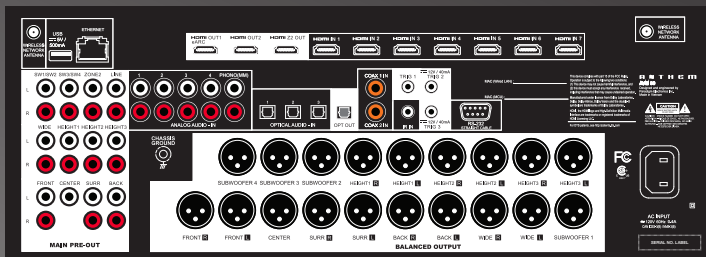
A/V RECEIVERS



**MRX** SERIES  
A/V RECEIVERS  
1140 | 740 | 540



# THE **ALL-NEW!** AVM & MRX SERIES



## AVM 90 A/V PROCESSOR

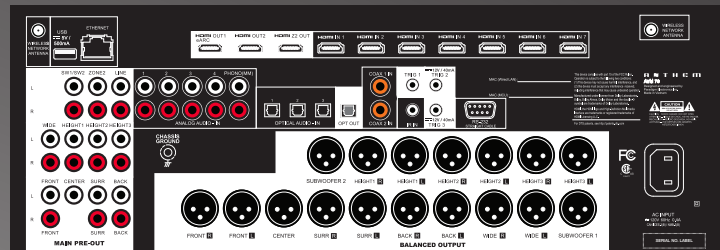
15.4 A/V Pre-Amplifier/Processor with Dolby Atmos, DTS:X and IMAX Enhanced. Includes ARC (Anthem Room Correction). HDMI v2.1 8K Upgradeable.

**Availability:** December 2020

## AVM 70 A/V PROCESSOR

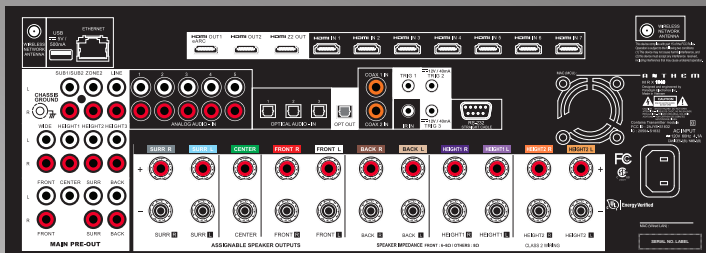
15.2 A/V Pre-Amplifier/Processor with Dolby Atmos, DTS:X and IMAX Enhanced. Includes ARC (Anthem Room Correction). HDMI v2.1 8K Upgradeable.

**Availability:** December 2020



A/V PROCESSORS

A/V RECEIVERS



## MRX 1140 A/V RECEIVER

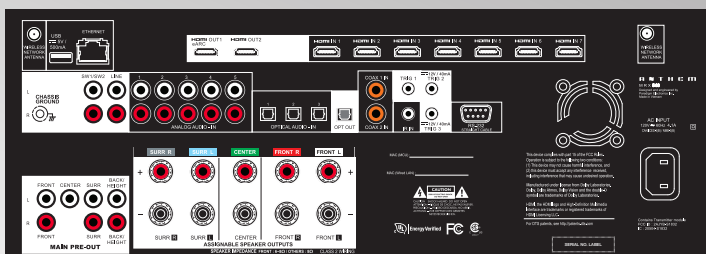
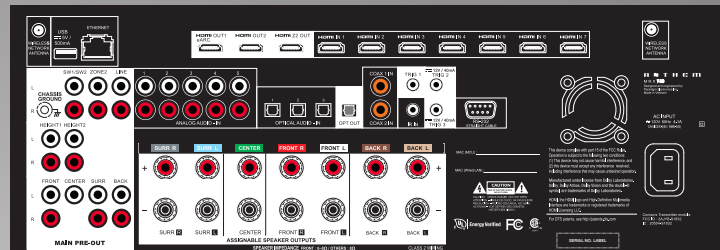
15.2 Pre-Amplifier / 11 Amplifier Channel A/V receiver with Dolby Atmos, DTS:X and IMAX Enhanced. 140-watts per channel continuous power into 8 ohms. Includes ARC (Anthem Room Correction). HDMI v2.1 8K Upgradeable.

**Availability:** December 2020

## MRX 740 A/V RECEIVER

11.2 Pre-Amplifier / 7 Amplifier Channel A/V receiver with Dolby Atmos, DTS:X and IMAX Enhanced. 140-watts per channel continuous power into 8 ohms. Includes ARC (Anthem Room Correction). HDMI v2.1 8K Upgradeable.

**Availability:** December 2020



## MRX 540 A/V RECEIVER

7.2 Pre-Amplifier / 5 Amplifier Channel A/V receiver with Dolby Atmos, DTS:X and IMAX Enhanced. 100-watts per channel continuous power into 8 ohms. Includes ARC (Anthem Room Correction). HDMI v2.1 8K Upgradeable.

**Availability:** December 2020



# THE EVOLUTION OF ANTHEM



## The Anthem Advantage

From the very beginning, there have been two key fundamental elements of Anthem's business plan. The first element is component related; ensuring every component is optimized for performance to provide the best possible sonic purity. For the second element, we undertook the commitment for what was to be an intensive, ongoing program of research into the nature of sound and human hearing, and the adaptation of those lessons learned into products that could realize the full potential of the quality audio equipment we build. The building blocks of the research began with the formation of a partnership between a consortium of Canadian Audio companies that formed CARC (Canadian Audio Research Consortium); and the National Research Council of Canada (NRC). This partnership was meant to carry forward the many years of pure research work done at the NRC since the 1970s. The original work by the NRC research team, peer-reviewed and published, gave clear definition and direction with their groundbreaking investigation into the relationship between anechoic measurements (objective analysis) and listener preferences (subjective analysis) in loudspeakers. The newly undertaken research initiative between CARC and the NRC was named the Athena project. Research on the

project began in 1989. The fundamental goal was to define the necessary elements to successfully remove, to an extent as much as possible, the typically negative impact that the listening room itself has on the realistic recreation of a recorded sonic event. As a starting point, the team needed to clarify and further define and refine many of the definitions of the fundamentals of human hearing. Much of the initial research involved the threshold of audibility testing using a variety of appropriate test signals. Endless hours of subjective testing followed, with the results meant to optimize which characteristics the ear-brain prioritizes to provide the accurate perception sound it receives.

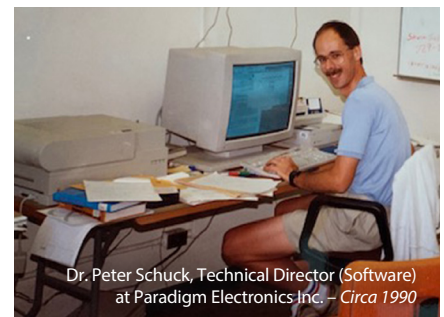
In addition to refining the fundamentals of human hearing even further, it became abundantly clear early on that manipulation of the original signal would need to be done in the digital domain. To ensure the cure "would not be worse than the disease," an equivalent emphasis was put on ensuring any and all digital manipulation would be inaudible outside of the desired effect.

After several years, the research was completed, a prototype motherboard was built, and the project concluded. Paradigm/Anthem extended an invitation to two of the project's chief architects, Marc Bonneville and Dr. Peter Schuck, to join our team, and the Paradigm/Anthem

Advanced Research Centre (PARC) was founded to continue their work and develop state-of-the-art digital electronics and software.

Moving out of the laboratory and into the real world, the PARC team identified a method for identifying and implementing frequency and phase corrections to generate the ideal response for any room and speaker combination. The first dedicated Anthem Room Correction (ARC) platform was custom built by Marc Bonneville, running custom software developed by Dr. Peter Schuck. Unfortunately, it would be over a decade before consumer electronics platforms had enough computational speed to implement it. Eventually, though, the research was distilled into a realizable and saleable form, then incorporated into its first iteration, the Anthem AVM-50.

The team grew substantially in the following years, developing new and exciting products while continuing to research and refine ARC until the release of the Statement D2 A/V Processor in 2006. The electronics had caught up to the research that had begun nearly 20 years prior.



## WHY CHOOSE ANTHEM?



Today, Anthem's pre-amps, amplifiers and A/V receivers feature the most advanced tools available to easily connect, control, optimize and power all your entertainment systems.

***"The Anthem MRX is the best home theater receiver that I have had the pleasure of ever using."***

***- Secrets of Home Theater and High Fidelity***

Backed by over 35 years of home-grown, hands-on design, and innovative audio engineering experience, Anthem products provide an unprecedented level of reliability and functionality; delivering one of the industry's highest performance/price ratios. This is just one reason why Anthem electronics are the choice of knowledgeable audiophiles, professional musicians and engineers the world over.

Another reason is our advanced proprietary technologies, like Anthem Room Correction (ARC®), the industry's leading audio optimizer. Pros love its accuracy, and casual listeners love its ease of use and profound results.

Anthem amplifiers feature non-invasive Advanced Load Monitoring (ALM) cir-

cuitry which monitors the temperature, current and voltage to ensure optimum long-term performance.

In addition, our unique input topology reduces distortion and improves linear response. An independent power supply design, along with oversized, super-efficient heatsinks, reinforces the bulletproof stability of Anthem products.

The point of all this advanced technology is not to call attention to itself but to deliver pure audio with no trace of coloration or distortion. Anthem products put you front and center at the performance. You can enjoy the best in two-channel audio or the impact of full-on home theater entertainment, and everything in between.

***"You'd be hard-pressed to find a better-sounding solution short of going with separates. Highly recommended."***

***- Sound and Vision***

With one glance at our products, you'll see that we're just like you: We like attractive and functional industrial designs. All

our products feature clear connection schematics, easy-to-navigate setup systems and sleek, handsome facades that look great in A/V racks and on entertainment system shelves.

***"Simply put, the MRX Series is kind of in a class of its own right now. At the very least, I'm drawing a complete blank when trying to think of any other receiver that features this level of multichannel and stereo sonic performance combined with this much customizability."***

***- Home Theater Review***

Anthem products are engineered to be the nerve centers of your every entertainment whim, and to deliver astonishingly high performance at a surprisingly reasonable price. Our success is reflected in the constant outpouring of excellent reviews from both the professional audio press and from consumers who want a reference standard performance value, just like you.



## PRODUCT OVERVIEW



### What's New In The AVM/MRX Line?

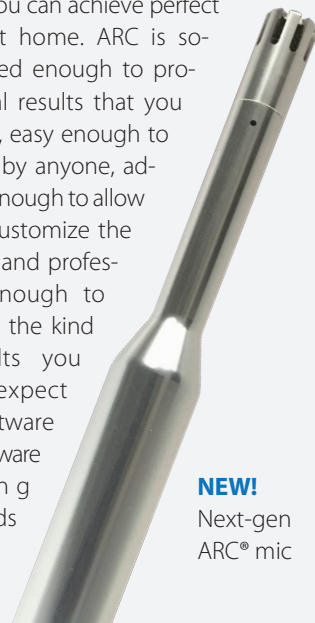
- An all-new platform agnostic streaming supports Apple AirPlay and AirPlay 2, Chromecast, Bluetooth, Spotify Connect (*Coming soon!*) and Roon (*Coming soon!*).
- ARC Genesis now features a more-precise microphone, ensuring better results in any listening environment.
- Modernized design with high-resolution front panel display with menu navigation.
- Includes Anthem Web User Interface, a web user interface for easy setup. Accessible via smartphone, tablet, or laptop via your favorite web-browser.
- Amp matrixing supports the reassignment of unused amplifier channels to Zone 2, surrounds, heights or to bi-amp even the most demanding speakers.
- All object-oriented audio codecs have been updated to the latest version of DTS Virtual:X.
- On select models (MRX 1140, AVM 90 and AVM 70), object-oriented audio codecs have been updated to the latest version of DTS:X Pro.
- New Electronics platform, up to 15.4 channels, HDMI 2.0b HDCP 2.2, hardware upgradeable to HDMI 2.1 (8K).
- Up to Four Independent sub outputs on select models, allow ARC Genesis to correct multiple subs individually for frequency response and time-alignment.
- Independent HDMI Zone 2 output on MRX 1140, MRX 740, AVM 90 and AVM 70.
- Enhanced Audio Return Channel allows for high resolution audio from your TV to be sent back to your Anthem AVM/MRX over a single HDMI cable.



### About Anthem Room Correction (ARC®)

ARC® puts the sophistication and power of an advanced audio lab in your hands so that you can achieve perfect sound at home. ARC is sophisticated enough to produce real results that you can hear, easy enough to be used by anyone, advanced enough to allow you to customize the settings, and professional enough to give you the kind of results you would expect from software and hardware costing thousands of dollars.

**NEW!**  
Next-gen  
ARC® mic

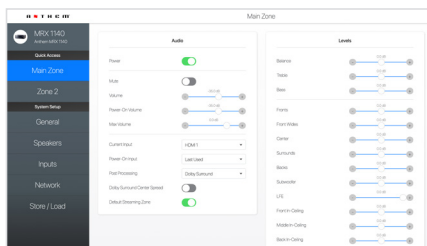
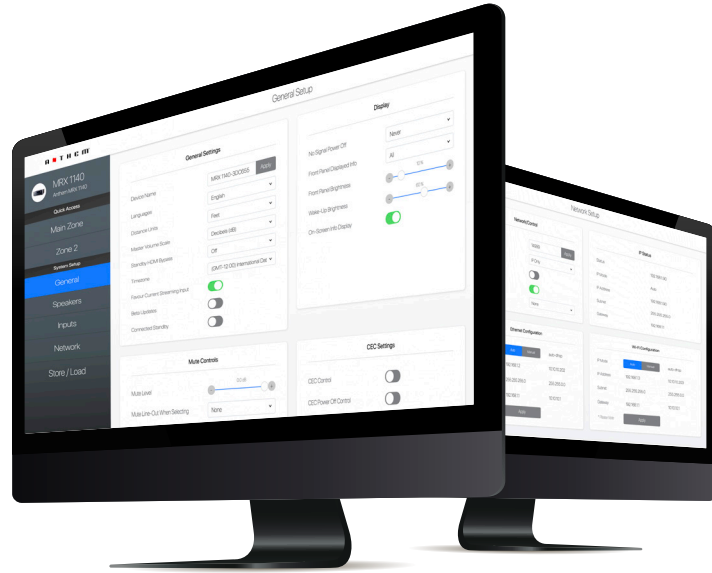


# NEW! ANTHEM WEB USER INTERFACE

The Anthem Web User Interface was specially designed for easy setup. Accessible via smartphone, tablet, or laptop via your favorite web-browser.

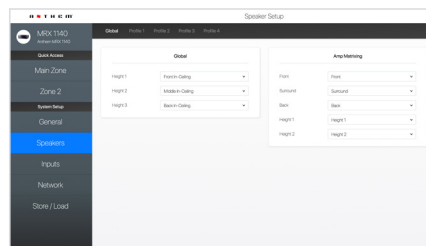
Nothing could be more simple than on-site configuration and calibration using our intuitive web-based controls. The specially designed, adaptive user interface works on any device. Custom configure everything the new AVM/MRX series has to offer.

Enthusiasts and installers alike can access all features and functions of the AVM/MRX units through a web browser. You can use a smartphone, tablet, or laptop for quick and easy setup or to make changes on the fly.



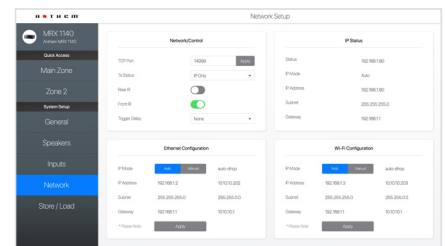
## Main Zone

- Toggle Power
- Adjust Volume
- Select Current Audio Mode
- On-The-Fly Level Adjustments
- Plus More



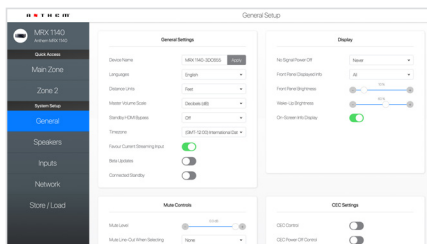
## Speakers

- Configure Speaker Profiles
- Custom Name Speaker Profiles
- Adjust Speaker Distances
- Toggle Super Sub Fronts
- Plus More



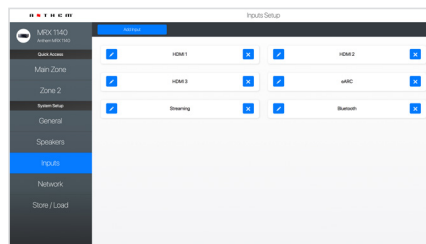
## Network

- Configure Network Settings
- Configure Trigger Settings
- Configure IR Settings
- Adjust Tx Status
- Plus More



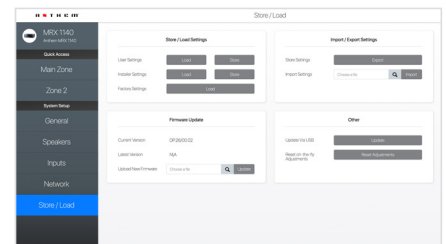
## General

- Custom Name Your Device
- Configure User Preferences
- Adjust Display Settings
- Adjust CEC Settings
- Plus More



## Inputs

- Add/Delete Inputs
- Customize Input Names
- Configure Input Settings
- Toggle ARC On/Off
- Plus More



## Store/Load

- Store/Load Settings
- Import/Export Settings
- Reset On-The-Fly Adjustments
- Update Firmware

# ANTHEM ROOM CORRECTION (ARC®) Optimize the sound in any space.



## NEW! ARC Genesis Software

ARC Genesis is the newest software that works with many ARC enabled Anthem or Paradigm products.

New features include support for both Mac and Windows; new target curve adjustment options including deep bass and high frequencies; improved algorithms and much more.

ARC Genesis is backwards compatible with many Anthem and Paradigm products that are ARC or PBK enabled. For a complete list, please visit [AnthemARC.com](http://AnthemARC.com). This third generation of Anthem Room Correction software represents a significant leap forward in room correction with the most comprehensive set of features yet. ARC Genesis transforms the audio performance of compatible speakers or electronics while retaining the unique character of any room. Proprietary Digital Signal Processing (DSP) software works in tandem with a calibrated microphone (provided with many ARC and PBK enabled products) to provide astonishing improvements to the sound you hear.



NEW! Next-gen ARC® microphone



ARC Genesis works with **Mac** or **PC** and is the most comprehensive method of transforming the sound in your room. Includes many new features. Download the FREE software at [AnthemARC.com](http://AnthemARC.com).

## ALL-NEW STREAMING PLATFORM

All Anthem AVM Processors and MRX Receivers include a robust set of streaming options which can pull your music in from local storage or from the Internet. Thanks to Anthem's high-speed processing and premium digital-to-analog conversion using high end DACs, sound quality can be every bit as good as dropping a CD into a dedicated disc player. In some cases, high resolution streams can sound even better than CDs, approaching the quality of SACD, DVD-A, and Blu-ray audio.



All AVM/MRX components support Apple AirPlay and AirPlay 2 which let the user stream content, plus songs stored on local networks, to any AirPlay-enabled device. AirPlay 2 adds support for multi-device play so you can hear your music throughout the home.



Google Chromecast, lets the user stream content from any Android device like a phone, tablet, or laptop to any AVM/MRX components. If you can listen to it on your phone, it can be Cast to your Anthem receiver or processor.



All AVM/MRX components support Bluetooth to stream songs stored on devices like phones, tablets, and laptops.

# BRING YOUR MOVIES TO LIFE, AS NEVER BEFORE

## IMAX<sup>®</sup> ENHANCED

### What is IMAX ENHANCED<sup>®</sup>?

IMAX ENHANCED is the only way to experience IMAX's signature picture, sound and scale in the home, IMAX Enhanced combines digitally remastered 4K HDR content and DTS audio technologies with best-in-class consumer electronics products and streaming platforms.



#### IMAGE

HIGHEST-QUALITY  
COLOR, CONTRAST  
& CLARITY



WATCH CLEARER  
PICTURES AND  
BRIGHTER IMAGES



#### SCALE

INCREASED ASPECT  
RATIO ON IMAX<sup>®</sup>  
ENHANCED CONTENT<sup>™</sup>  
\*ON SELECT FILMS



SEE MORE PICTURE ON  
THE LARGEST DISPLAYS



#### SOUND

IMAX<sup>®</sup> SIGNATURE  
SOUND MIX,  
DELIVERED BY DTS<sup>®</sup>



FEEL IMMERSIVE,  
HEART-POUNDING AUDIO,  
DELIVERED BY DTS<sup>®</sup>



#### CONTENT

OPTIMIZED FOR  
IMAX<sup>®</sup> DIGITALLY  
REMASTERED CONTENT



EXPERIENCE PREMIUM  
CONTENT DIGITALLY  
REMASTERED BY IMAX<sup>®</sup>

### What is IMAX Signature Sound?

For every film released in IMAX theatres, IMAX works in close collaboration with the filmmakers and original sound team to create a custom soundtrack fully optimized for IMAX theatres' point-source surround sound. Instead of using a "near-field mix"—which dulls the impact of IMAX's theatrical sound system—this proprietary IMAX audio mix is painstakingly recreated for a living room environment.

## dts X

### What is DTS:X<sup>™</sup>?

DTS:X is the next generation audio codec from DTS that leverages object-based audio to enable new audio experiences in immersion and interactivity.

DTS:X places sound where it would occur naturally in space, creating the most lifelike, multi-dimensional audio experience ever. Free from channel restrictions, sound can be placed and moved to where you would hear it in the real world. Because DTS:X doesn't require any specific speaker layout, you can arrange your home theater system however you want it. With DTS:X you're in control of your listening experience. That hard-to-hear line in a movie can be lifted out of the background sounds for a more personal entertainment experience.

### Backward Compatible



BACKWARD  
COMPATIBLE

DTS will play back all DTS formats including DTS Digital Surround and DTS-HD Master Audio. DTS:X bitstreams are backward-compatible with older DTS AVRs and sound great.

### Immersive



IMMERSIVE

DTS:X places sound where it would occur naturally in space, creating the most lifelike, multi-dimensional audio experience ever. Be prepared — this improved immersion and heightened realism makes horror movies scarier, comedies more laugh-out-loud, and car chase scenes even more real.

### Flexible



FLEXIBLE

The DTS:X solution adapts to practically any home theater speaker layout, so you have the freedom to choose what fits best in your home.

## DOLBY ATMOS<sup>®</sup>

### What is Dolby Atmos<sup>®</sup>?

Sound has never sounded this good. Feel a deeper connection to the stories and music you love with sound that moves all around you with breathtaking realism.

### Immersive Sound

Freed from channels, individual sounds are precisely placed in the room and can move around you, including overhead and down low, immersing you in each story and song.

### Crystal Clear Quality

Whether it's intimate dialogue or a complex soundscape, every detail comes alive in rich clarity and depth, so you won't miss a thing.

### Feel More

Turn up the volume on your emotions with audio so rich, so immersive, so pure, you'll feel a stronger connection to the characters and music.

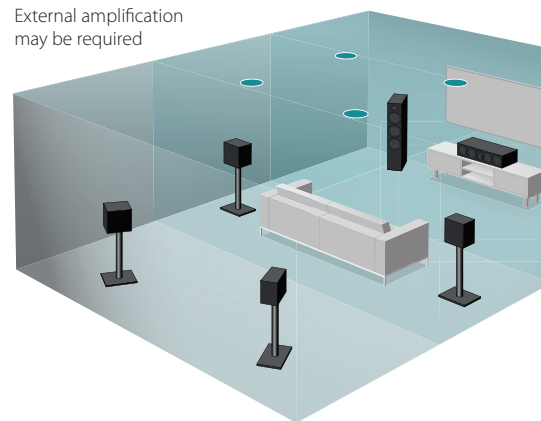
### Embraced by Artists

Dolby Atmos expands the creative palette for artists and creators. Instruments and vocals can be isolated and articulated with incredible clarity. And the use of multi-dimensional space makes listeners feel like they've stepped inside the song.

### Dolby<sup>®</sup> Height Speakers

2 or 4 may be used, 4 positions shown

External amplification  
may be required





# COMPARISON CHART

	AVM 90	AVM 70	MRX 1140	MRX 740	MRX 540
AUDIO FEATURES					
Preamplifier Channels	15.4	15.2	15.2	11.2	7.2
Amplifier Channels	-	-	11	7	5
Amp Matrixing	-	-	•	•	•
Amp Matrixing Channels	-	-	10	6	4
Subwoofer Outputs	4	2	2	2	2
Independent Subwoofer Outputs	4	2	2	1	1
Subwoofer Phase Adjustment	•	•	•	•	•
Subwoofer Polarity Adjustment	•	•	•	•	•
Dolby Atmos	•	•	•	•	•
Dolby HD	•	•	•	•	•
DTS:X Pro	•	•	•	-	-
DTS:X	•	•	•	•	•
DTS Virtual:X™	•	•	•	•	•
DTS-HD Master Audio	•	•	•	•	•
Anthem Room Correction	•	•	•	•	•
Speaker Profile Memories	4	4	4	4	4
Crossover Settings	40-200 Hz	40-200 Hz	40-200 Hz	40-200 Hz	40-200 Hz
Digital Signal Processor (DSP)	Multi-core	Multi-core	Multi-core	Multi-core	Multi-core
Lip-Sync Adjustment Range	500ms	500ms	500ms	500ms	500ms
Speaker Distance Increments	2" / 5 cm	2" / 5 cm	2" / 5 cm	2" / 5 cm	2" / 5 cm
Volume Adjustment	0.5 dB	0.5 dB	0.5 dB	0.5 dB	0.5 dB
Dolby Volume	•	•	•	•	•
Optical Inputs	3	3	3	3	3
Coaxial Inputs	2	2	2	2	2
Stereo Analog Inputs	4	4	5	5	5
Phono Input (MM)	•	•	-	-	-
Analog Direct Mode	•	•	-	-	-
Analog Sampling Rate	24-bit / 768 kHz	24-bit / 192 kHz	24-bit / 96 kHz	24-bit / 96 kHz	24-bit / 96 kHz
Balanced XLR Pre-Out	•	•	-	-	-
Optical Output (pass-through of coax/optical)	•	•	•	•	•
Line-Out Stereo Down-Mix	•	•	•	•	•
Zone 2 Audio/Video	•	•	•	•	-

# COMPARISON CHART

	AVM 90	AVM 70	MRX 1140	MRX 740	MRX 540
<b>STREAMING</b>					
AirPlay 2	•	•	•	•	•
Chromecast	•	•	•	•	•
Bluetooth	•	•	•	•	•
Spotify Connect <i>(Coming soon!)</i>	•	•	•	•	•
Roon <i>(Coming soon!)</i>	•	•	•	•	•
<b>LISTENING MODES</b>					
Anthem Logic	•	•	•	•	•
Dolby Surround	•	•	•	•	•
DTS Neural:X	•	•	•	•	•
Stereo	•	•	•	•	•
All Channel Stereo	•	•	•	•	•
Mono	•	•	•	•	-
All Channel Mono	•	•	•	•	•
<b>HDMI &amp; VIDEO PROCESSING</b>					
HDMI Inputs	7	7	7	7	7
HDMI Version	2.0b	2.0b	2.0b	2.0b	2.0b
HDMI Upgradeable	•	•	•	•	•
HDCP	2.2	2.2	2.2	2.2	2.2
Dolby Vision	•	•	•	•	•
IMAX Enhanced	•	•	•	•	•
4:4:4 Chroma Subsampling @ 4K60 (18.2 Gbps)	•	•	•	•	•
High Dynamic Range	•	•	•	•	•
BT.2020 Color	•	•	•	•	•
xvYCC, Adobe RGB, Adobe YCC601, sYCC601, Deep Color	•	•	•	•	•
Outputs (parallel)	2	2	2	2	2
Zone 2 Output	•	•	•	•	-
Consumer Electronic Control (CEC)	•	•	•	•	•
Enhanced Audio Return Channel (eARC)	•	•	•	•	•
Standby Pass-Through	•	•	•	•	•
<b>CUSTOM INSTALLATION</b>					
IP Control	•	•	•	•	•
RS-232 Control	•	•	•	•	•
Pre-made Control Drivers	•	•	•	•	•
IR Input	•	•	•	•	•
12V Trigger Output (40mA) (configurable)	3	3	3	3	3
Rackmount Kit (sold separately)	•	•	•	•	•

# COMPARISON CHART

	AVM 90	AVM 70	MRX 1140	MRX 740	MRX 540
NETWORK CONNECTION					
Wireless	•	•	•	•	•
Ethernet	•	•	•	•	•
Over-The-Air Updates	•	•	•	•	•
ADDITIONAL FEATURES					
Toroidal Transformer	•	•	•	-	-
Advanced Load Monitoring (ALM)	-	-	•	•	•
Input Configurations	30	30	30	30	30
Input Trim Adjustments	•	•	•	•	•
Power-On Input Assignment	•	•	•	•	•
Auto Power Off	•	•	•	•	•
Eco Mode (Standby)	•	•	•	•	•
Network Updates	•	•	•	•	•
USB Updates	•	•	•	•	•
Beta Update Options OTA	•	•	•	•	•
Backlit Remote Control	•	•	•	•	•
Anthem Web User Interface	•	•	•	•	•
Warranty (US/Canada)	3 Years	3 Years	3 Years	3 Years	3 Years