



MCA Series II

M U L T I - C H A N N E L A M P L I F I E R S

THE NEXT REVOLUTION



I N H I G H - E N D S O U N D

For more than a decade, Sonic Frontiers International (SFI) has manufactured award winning, high-end Preamplifiers, Power Amplifiers, CD players, CD transports and Digital-to-Analog Converters of the finest quality under both the Sonic Frontiers™ and Anthem™ brand names.

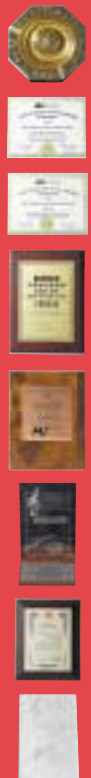
Throughout this time we have built an enviable reputation for products that truly recreate the passion you experience with a live musical performance; or the emotion, thrills and chills of a great movie. Our products allow you to virtually 'be there' every time you listen to music or theater surround-sound in the comfort of your own home. This success comes from a steely determination to deliver the best performance and value you can find in high-end product, anywhere in the world! Sonic Frontiers™ and Anthem™ offer, by far, the highest level of craftsmanship, design sophistication, quality of material, sleek industrial design and contemporary intuitive ergonomics — all of which make our products easy to operate and enjoy, and a pleasure to own.

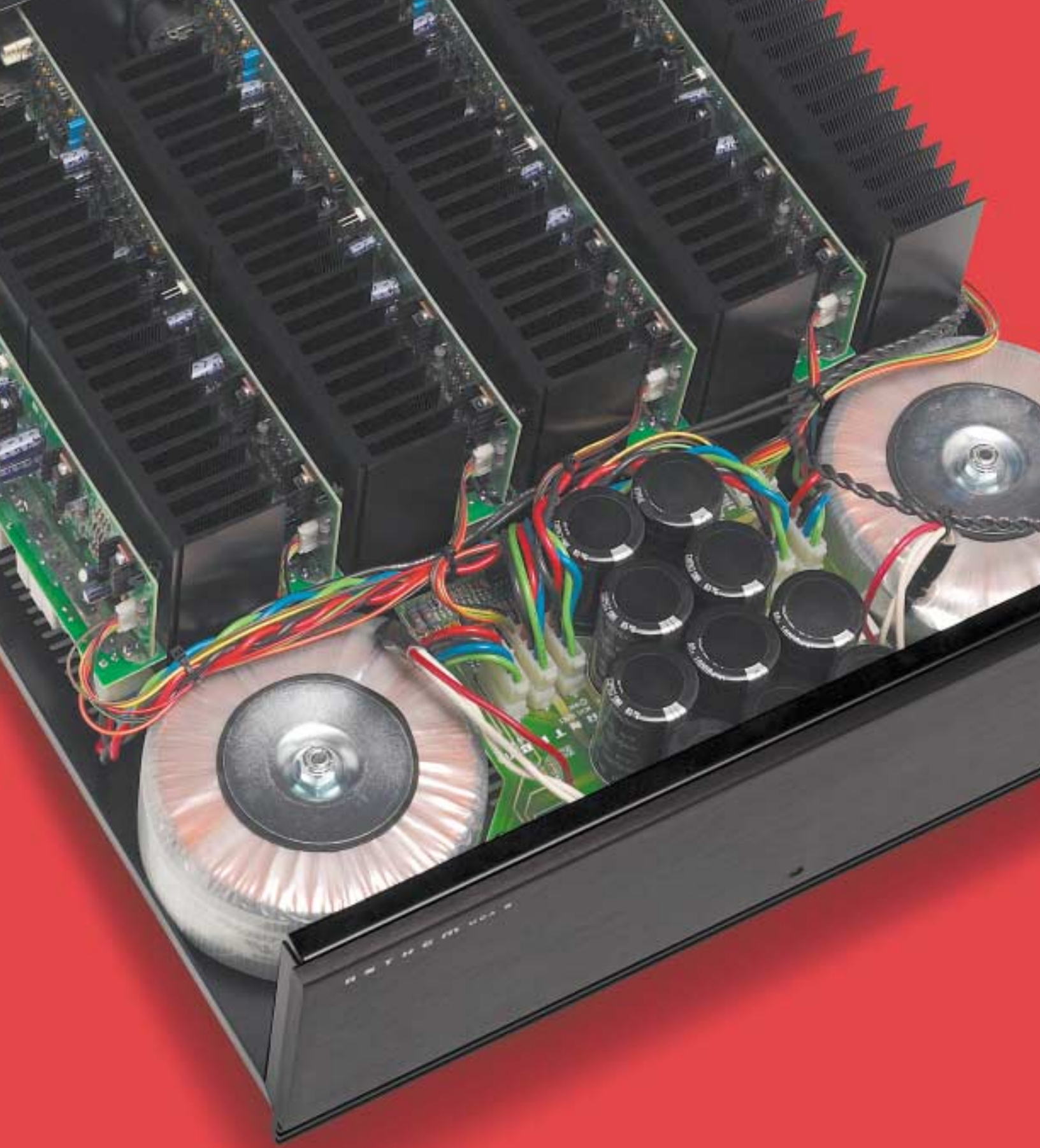
Our reputation in both analog and digital design is legendary and respected globally — establishing new high-end reference standards of performance, regardless of price. From Europe to Asia to North America, our products have received many international awards and have been acclaimed in the best known magazines. In the USA, Stereophile has praised us with numerous "CLASS A" recommendations and even honored us with their coveted, 'Digital Component of the Year' award!

Our products are used internationally at all levels of music reproduction, not only in homes but also recording studios and even in broadcasting! Europe 1, France's national radio station, uses three SFD-2 MKII D/A converters atop the Eiffel Tower for all their broadcast transmissions. NASA uses a Power 2 power amplifier for the Space Shuttle program in its testing laboratory in Key Largo, Florida. (These are just a couple of our more notable professional-use owners).

Anthem™ is "The Key To High End Audio-Video™" and MCA Series II amplifiers have the finesse, precision and seemingly unlimited power to unlock all of the great sound and dynamic capability of today's music recordings and home theater movie presentations. MCA Series II amplifiers are, in a word, overachievers, easily able to withstand the scrutiny of direct comparisons — both sonically and in build quality — with amplifiers costing two to three times as much! They are, by far, the best performance and best value amplifiers available!

The mark of a truly superior high-end amplifier is one that fulfills its task with complete ease and transparency. MCA Series II amplifiers are true to this ideal with stunningly clear and musical sound that appears out of a background of utter silence. They give you and your family the power and grace to enjoy high-end home entertainment as never before!





Eight Output Devices/Channel!



Solid state amplifiers get their power from the output devices used in the amplification stage. Like cylinders in a car's engine, the greater the number of devices per channel, the greater the available high-current power for the crescendos in music, or the thrills, thunder and explosions in movies – performance is simply more effortless. It also means that the amplifier will run cooler, making it more reliable.

MCA Series II amplifiers have a whopping EIGHT bipolar output devices per channel – that's 40 devices in the MCA 5 alone, ensuring tremendous current reserves and outstanding reliability.

Purity of Sound



MCA Series II amplifiers are designed following the 'Keep-It-Simple' principle, whereby we utilize the fewest possible number of parts in the signal path to fully maintain the integrity of sound. All parts are of the highest quality and tolerance. As a result these remarkable amplifiers offer the profound sense of musical purity, transparency and naturalness demanded by even the most discerning listener.

Mirror Imaged Channels



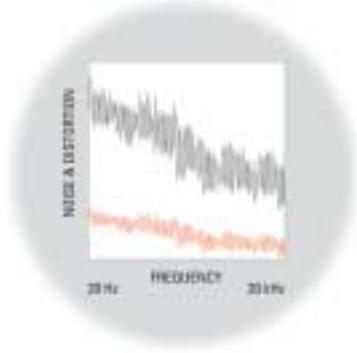
Already better than the norm in its previous series, frequency response channel-matching has been further improved in MCA Series II amplifiers making them virtually mirror imaged. This ensures that all channels have identical performance. The musical puzzle is even more seamless and detailed, and the multi-channel sound-stage more three dimensional and coherent.

Modular Design



MCA Series II amplifiers all share the benefit of a common modular design. Each amplifier channel is complete on its own self-contained board and heatsink. In the rare event that service should ever be required, it can be done quickly and easily by a technician, minimizing any possible 'down time' of your system.

Vanishing Noise and Distortion



The noise spectrum of MCA Series II amplifiers has been even further improved; and in a rare but very important feat, transformer-induced noise at the bass frequencies of 60 Hz, 120 Hz, and 180 Hz has been effectively eliminated. In addition, Total Harmonic Distortion (THD) has been cut in half from its previous very low level.

The reproduction of subtle harmonic structures are now vastly improved, allowing for a much more complete recreation of spatial ambience and soundstage dimension – it's enough to give you goose bumps!

A New Level of Quiet!



Signal-to-noise ratio is an incredible -122 dB, making these amplifiers the quietest you can find! At last, during even the most tranquil of musical passages, or dramatically quiet moments in a movie, the background is so 'black' that it is audibly gone. Music or movie soundtracks simply appears out of dead silence, allowing you to become completely lost in the emotion of the original performance.

Toroidal Power Supplies



MCA Series II amplifiers are capable of incredible dynamics thanks to massive 'audiophile-approved', conservatively-rated power supplies. Advanced-generation toroidal power transformers are used to ensure ultra-quiet performance by minimizing stray magnetic field radiation. This provides the pure, clean, low-noise power that is needed to reproduce the full dynamics of home theater or the most complex and dynamic music recordings.

Power to Spare



When it comes to power output, Anthem™ MCA Series II amplifiers are immense, muscular and fast. At 200 watts per channel into 8 ohm speaker loads (and 500 watts into 2 ohms, one channel driven), these amplifiers will 'Rock' your speakers and fill your room with the full dynamics of your favorite music or the thunderous effects of an adventure movie!

" ... the MCA 5 sounded exceedingly clean and detailed with plenty of power and excellent frequency extension on both ends ... able to deliver unexpected thrills ... exceedingly clean and tight without being the least bit bright or edgy. The MCA 5 sounds fast and transparent, meaning it paints a vivid sonic picture that has excellent clarity. As well, this amp is quiet, perhaps quieter than any other I've heard ... "

*- Doug Schneider, SoundStage! on the MCA 5**



" ... one of the few true high output, audiophile quality, multi-channel power amplifiers on the market today ... seems to be an endless supply of sheer power!"

*- Alan L. Maier, SMR Home Theater on the MCA 5**

" ... the MCA 5 is built like the proverbial tank ... really struts its stuff with action movies ... did an excellent job of making me wince along with actors. In summary, the Anthem MCA 5 is a very good amplifier regardless of the criteria for comparison, but at its price ... it is a remarkable one."

*- John Johnson Jr. , Secrets of Home Theater and High Fidelity on the MCA 5**





RCA Inputs, XLR Balanced Inputs

High-quality gold-plated female RCA jacks provide a very high-quality input connection, but MCA Series II amplifiers give you even more. XLR Balanced connections are commonly used in the professional recording and broadcast industries to ensure the lowest level of noise and hum possible. Now you can use this same high-quality connection for reference-quality high-end sound, since XLR Balanced inputs are included on all MCA Series II amplifiers!

Our unique auto-sensing circuit also makes input selection easy. Its default setting is the RCA input – plug in your RCA connector and it operates. If you choose to use the XLR Balanced input instead, just plug it in and our auto-sensing circuit automatically switches to the XLR input. No switches, no problems, it's simple.

Stable as a Rock

MCA Series II amplifiers are incredibly stable into difficult, low-impedance speaker loads, making these superb sounding dynamos also fantastically reliable performers, even in the toughest of circumstances.



Joules of Power

With 200 watts, large banks of capacitors are needed to store all of the energy required for the immense dynamic bursts of various special effects in a movie or the taxing crescendo of a solo piano. These amplifiers store an incredible 20,000 micro farads (μF) of capacitance, per channel (that's 100,000 μF for the MCA 5 Series II!). With so many Joules of power in reserve, when called upon, MCA Series II amplifiers are able to deliver full blasts of power that are both instantaneous and effortless.



Massive Heatsinks

To deliver full power and do so reliably, an amplifier must be able to dissipate the heat generated by its output devices quickly and efficiently. MCA Series II amplifiers use massive custom heatsinks that are computer designed and modeled to maximize contact area for exceptional heat transfer efficiency.



Better Output Connection

We have even improved our binding posts. They're easier to use and they now facilitate even larger speaker cable connectors. These oversized robust binding posts ensure full power delivery at all times.



Multiple Power Switches

MCA Series II amplifiers can be powered on/off three ways. Manually with the On/Off switch on the front panel, remotely via its 12 volt trigger input, or automatically with its patented Auto-On/Off circuit – with an audio signal (from Preamp or SSP) it immediately switches on; and when there is no audio signal after 20 minutes, it simply switches off.



Detachable Power Cord

While a detachable AC power cord is a welcome convenience when connecting various components, it is also more than that. High-end products have always offered consumers the freedom to use a variety of after-market power cords offered by various specialty cable manufacturers, if they so choose. MCA Series II amplifiers further show their true high-end pedigree by including IEC detachable AC female sockets and high power, high quality 14 awg AC cords.



Superior Craftsmanship

Whether it's our custom low-noise 550 VA toroidal power transformers (two in the MCA 5!), high-current bipolar output transistors, high-quality filter capacitors, advanced power supply regulation, over-sized aluminum heatsinks – for cool operation and long life, custom designed dual binding posts, or patented auto-on/off circuitry, MCA Series II amplifiers – designed and built in North America – are like no other amplifiers in the world!

** Quotes are from previous models. MCA Series II amplifiers have been further improved for even better sound!*

A FEW WORDS ON RELIABILITY

MCA Series II amplifiers are created to perform flawlessly, offering stunning musicality, tonal neutrality and dynamics, while driving any speaker reliably under real world conditions! Although our power supplies are conservatively rated and our amplifiers run cool for greater reliability, we didn't stop there.

These fabulous amplifiers also feature our ALM™ Advanced Load Monitoring circuitry which protects sensitive output devices, constantly monitoring temperature, current and voltage to ensure optimum long term performance. ALM™ is totally non-invasive – it is not in the signal path, and it only engages in the most extreme circumstances where it will prevent the amplifier from playing any louder, thereby maintaining the safe operating area (SOA) of the output devices to give you years of uninterrupted service.

Buyer beware! Not all manufacturers have a sophisticated load monitoring provision. Many save the added cost, take a chance and leave their output devices unprotected. If their outputs fail, it will require disconnecting the amplifier, shipping it back to the factory and then suffering the inconvenience of having your system 'down', simply because the manufacturer effectively chose to use the amplifier's output devices as 'fuses'. ALM™ is a far better design choice, and it is included with all MCA Series II amplifiers, making their value even that much more remarkable!

MCA Series II amplifiers are another stunning example of how Anthem™ is the key to high-end Audio/Video. Their sound rivals the finest available, at any price; but then account for price and their value is simply unprecedented!

TECHNICAL SPECIFICATIONS

INPUTS

MCA 2 Series II	2 Balanced, 2 Single-ended, 1 Relay Trigger (3.5 mm Stereo Jack)
MCA 3 Series II	3 Balanced, 3 Single-ended, 1 Relay Trigger (3.5 mm Stereo Jack)
MCA 5 Series II	5 Balanced, 5 Single-ended, 1 Relay Trigger (3.5 mm Stereo Jack)

OUTPUTS

MCA 2 Series II	2 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Stereo Jack)
MCA 3 Series II	3 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Stereo Jack)
MCA 5 Series II	5 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Stereo Jack)

SWITCHES (2)

Front Panel: Power On/Off
Rear Panel – 3 Modes: Auto-On/Off, Manual-On, Trigger-On

DIMENSIONS

MCA 2/3 Series II	17.25" (44 cm) Wide x 5.25" (13.5 cm) High x 12" (30.5 cm) Deep
MCA 5 Series II	17.25" (44 cm) Wide x 5.25" (13.5 cm) High x 17" (43 cm) Deep

NET WEIGHT (Unpacked)

MCA 2 Series II	36 lbs., (16 kg)
MCA 3 Series II	42 lbs., (19 kg)
MCA 5 Series II	56 lbs., (25.5 kg)

POWER OUTPUT

(Continuous RMS, 20 Hz - 20 kHz, <1.0% THD, AC line voltage held constant at full load)

# of Channels Driven	8Ω		4Ω		2Ω	
	One	All	One	All	One	All
MCA 2 Series II	200 W	185 W	350 W	270 W	500 W	400 W
MCA 3 Series II	200 W	170 W	350 W	250 W	500 W	325 W
MCA 5 Series II	200 W	170 W	350 W	250 W	500 W	325 W

HEADROOM

265 W (8 Ω); 475 W (4 Ω)

POWER BANDWIDTH

10 Hz - 80 kHz (-3 dB)

FREQUENCY RESPONSE

0.5 Hz - 20 KHz (-0.15 dB), 0.5 Hz - 80 kHz (-2 dB)

THD&N

0.03%, 20 Hz to 20 kHz at half power into 8 Ω
0.0015%, 1 kHz at half power into 8 Ω

INPUT SENSITIVITY

1.35 VRMS for 200 Watts into 8 Ω

INPUT IMPEDANCE

21 kΩ (RCA), 15 kΩ (XLR)

DAMPING FACTOR

130 @ 8 Ω

HUM & NOISE

-122 dBW, A-weighted @ 200 W

VOLTAGE GAIN

29 dB

SLEW RATE

20 V/μs

POWER REQUIREMENTS

MCA 2 Series II	800 VA @ maximum power output
MCA 3 Series II	1100 VA @ maximum power output
MCA 5 Series II	1800 VA @ maximum power output

NOTE: Measurements were performed with an Audio Precision System Two @ 120 VAC.

Designed and manufactured in North America by Sonic Frontiers International.
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Sonic Frontiers can be reached from 9:00 am to 5:30 pm (E.S.T.), or 24 hours a day by Fax.
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