INTRODUCING THE INTEGRATED 225

An all-in-one Anthem-quality 2-channel audiophile alternative to the cost (and complexity!) of separates

ANTHEM®

Anthem®: The #1 Brand overall*

"WARNING: Anthem gear may be addictive."

– Eric Hetherington, *GoodSound!*

Introducing the Integrated 225 phono stage/line stage/power amplifier. Music lovers, two-channel enthusiasts, vinyl afficionados … this one is for you. An all-in-one Anthem-quality two-channel analog solution offering the performance of high-powered separates without their associated costs and complexity.

The Integrated 225, with its sleek, high-end industrial design and minimalist look, doesn't call attention to itself, but you can't help noticing how great it sounds. Inside story? High-end quality component parts for ultra-low noise and vanishing low levels of distortion; BIG power (225 watts of Anthem power per channel!); the phono stage uses advanced RIAA topology to unlock all the magic hidden in those vinyl grooves; critical inputs are buffered to prevent crosstalk; and in addition to seven stereo audio inputs on the back panel (including one balanced input), there's an input on the front for portable media. Control flexibility includes a complete RS-232 interface as well as IR and a universal learning remote. What does all this add up to? A product that delivers a musical transparency, refinement, punch and detail that should be far more expensive, but isn't … simply because it's an Anthem product.

* Rated #1 Overall: 2008, 2007, 2006 — *Inside Track* Annual Dealer Survey. An annual independent nationwide survey of consumer electronics specialist retailers and custom installers.

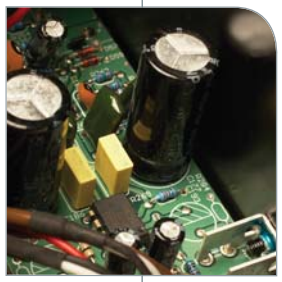
HIGH-QUALITY, CLOSE-TOLERANCE PARTS

As with all Anthem components, the Integrated 225 boasts all parts of high quality and close tolerance, including metal film resistors and high-quality film signal capacitors. The result is the lowest possible total harmonic distortion plus noise. To prevent one source from interfering with another, critical inputs are individually buffered.

BUILT-IN PHONO STAGE

Designed specifically to accommodate today's high-quality Moving Magnet phono cartridges, the Integrated 225's built-in phono stage will delight even the most die-hard vinyl enthusiast.

Since the job of the phono stage is to supply most of the gain, two factors are critical in achieving the highest level of playback quality: a superior approach to RIAA equalization and the quality of amplification used to step-up cartridge output to line-level voltage.



The Integrated 225's phono stage benefits from a split active/passive equalization topology. Active equalization of the low-frequencies occurs at the 50 Hz and 500 Hz roll-off points (as defined by the RIAA equalization curve). At the 2122 Hz mark (also defined by the RIAA curve) however, high-frequency equalization remains passive. The original signal passes through the curve in tact and with perfect linearity; no musical information is lost or distorted and the nuances of the original recording remain completely preserved.

In an effort to keep component parts to a minimum within the signal path, the non-inverting series feedback topology in this stage is designed around only two dual high-quality op-amps. The first provides all of the gain, while isolating the feedback network from the cartridge to ensure accuracy in frequency response. The second is configured as a buffer, isolating the equalization filter network from the volume control to prevent even the tiniest variation in frequency response when the volume level is adjusted.

The final result? Exceptional retrieval of all of the magic hidden in those vinyl grooves … from a silent background emerges tight, accurate bass, lightning fast transients, and a high-frequency detail and extension that will leave the listener aching for more.

THE POWER WITHIN

The Integated 225's main power supply boasts an advanced generation toroidal transformer, a major contributor to the low-noise floor. This massive transformer is conservatively rated and designed with high rail voltage. It feeds two oversized (51 mm x 80 mm) low-ESL, low-ESR Nichicon filter capacitors employing a total capacitance of 30,000 micro-farads. The main power supply also features ±15 V rails for the preamp audio circuits fed by two precision voltage regulators. An additional precison voltage regulator is used in the standby power supply. The Integrated 225's main power supply is active during "on" mode while standby power supply remains active in both "on" and "standby" modes.

Input and voltage amplifier stages are a differential design, however the output power stage, the stage most crucial to ultimate playback, benefits from Anthem's proven output stage topology: a fully symmetrical complementary Class AB design with three pair of high-quality bipolar output devices per channel. Designed to dramatically reduce distortion, this arrangement also ensures extreme linearity, effortless response and extensive bandwidth while minimizing overall power consumption.

HEATSINKS … COMPUTER-DESIGNED AND MODELED

Large custom heatsinks, one for each amplifier channel, ensure that the Integrated 225 dissipates heat quickly and efficiently. Computer designed and modeled, their job is to maximize heat transfer for efficient heat dissipation. The resulting cool operation means long term dependability and "no fans required."

105 dB SIGNAL-TO-NOISE RATIO

With a 105 dB signal-to-noise ratio, the Integrated 225 rivals the achievements of more expensive separates. Anthem's always meticulous attention was paid to groundplanes and the design of the power supply (see section on Power Supply). Circuit board traces were laid out by hand. From a rich and silent black background, the only thing the audiophile is aware of is the music—rich and refined, full and enveloping, leaving you to wonder why anyone would contemplate spending more.

AN ANALOG APPROACH TO VOLUME

In keeping with its audiophile purist roots, the Integrated 225 features a large motorized analog potentiometer style volume control which tracks exceptionally well, rivalling the performance of a stepped attenuator. Volume can be adjusted three ways: manually, with the remote control, or through the RS-232 interface.

HIGH-QUALITY OUTPUT CONNECTIONS

The Integrated 225's robust binding posts ensure full and uninterrupted power delivery to the loudspeakers at all times. They're very easy to use and will facilitate large speaker cable connections. In addition to these speaker outputs, the Integrated 225 also includes Pre-out (for possible bi-amping applications) and Rec-out line level outputs.

TONE CONTROLS WITH BYPASS FEATURE

The Integrated 225's bass and treble controls have been designed to affect the tonal extremes in a fairly undramatic way. They are particularly useful for taming poor recordings, without upsetting the musical balance. To adjust tone, Bass and Treble knobs are provided on the front panel. And for the purist (and the best recordings), the option is there to bypass these controls completely.

A TRIGGER RESPONSE

The Integrated 225's trigger feature allows the unit to be turned on or off remotely via a trigger from another component or control system. The 3.5 mm (.125 in) mini-jack input receives a 12V signal from the upstream component or system controller. The same trigger signal can be linked to other components through the trigger output.

PORTABLE MEDIA INPUT PLUS 7 MORE INPUTS!

A handy portable media input plus seven more stereo audio inputs include: Phono, CD, Balanced, AUX 1, AUX 2, AUX 3, and Recorder (Tape In). Each input can be connected via pairs of RCA connectors on the back panel of the Integrated 225, with two exceptions. The Balanced Input consists of two XLR connectors on the back panel and the portable media input is a 3.5 mm stereo jack and selector located on the front panel for quick and easy access. Any one of the inputs can be selected by pressing the appropriate button via the front panel, remote control or RS-232 command.

XLR BALANCED CONNECTION AND GOLD-PLATED RCA INPUTS

XLR balanced connections are common in both professional recording studios and broadcasting to ensure the lowest level of noise and hum. Now you can use this same high-quality connection since the Integrated 225 includes an XLR balanced input. Gold-plated female RCA jacks on this unit also provide high quality single-ended input connections.

Specifications

PHONO PREAMPLIFIER

The phono preamplifier is suitable for moving magnet and high-output moving coil cartridges

Input Impedance . . . . . 47 kΩ
Input Capacitance . . . . . 100 pF
Maximum Input . . . . . 18 mV at 20 Hz, 140 mV at 1 kHz, 160 mV at 20 kHz
Gain (at 1 kHz) . . . . . 35 dB
Crosstalk (at 1 kHz) . . . . . 80 dB
RIAA Response . . . . . ±0.5 dB (100 Hz to 20 kHz); -1 dB (20 Hz)
THD+N (at 1 kHz, 5 mV input) 0.05%
S/N Ratio (ref. 5 mV at 1 kHz, IEC-A filter) . . . . . 83 dB

PREAMPLIFIER

Input Impedance . . . . . 30 kΩ
'Pre-Out' Output Impedance . . . . . 560 Ω
'Rec-Out' Output Impedance . . . . . 100 Ω
Rated Input . . . . . 1.0 Vrms
Maximum Input . . . . . 7.6 Vrms
Minimum Load . . . . . 5 kΩ
Rated Output (100 kΩ load) . . . . . 1.0 Vrms
Maximum Output (100 kΩ load) . . . . . 7.6 Vrms
Headphone Output . . . . . 500 mW into 32 Ω at 0.03% THD+N
Channel Separation (at 1 kHz) . . . . . 75 dB
Crosstalk Between Inputs (at 1 kHz) . . . . . 72 dB
XLR Pin Configuration . . . . . Pin 1: Ground; Pin 2: Positive; Pin 3: Negative Frequency
Response and **Bandwidth** . . . . . 20 Hz to 20 kHz (+0, -0.1 dB); 1 Hz to 170 kHz (+0, -3 dB)
THD+N (at rated input and output, 80 kHz BW) 0.003%
IMD (CCIF at 15 kHz and 16 kHz) 0.0005%
S/N Ratio (A-weighted, ref 2.0 Vrms) . . . . . 105 dB

POWER AMPLIFIER

(per channel, continuous RMS, 20 Hz to 20 kHz, <1.0% THD)

Impedance	8 Ω		4 Ω	
# of Channels Driven	1	Both	1	Both
	240 W	225 W (FTC)	330 W	310 W*

*Short term

Frequency Response . . . . . 20 Hz to 20 kHz (+0, -0.15 dB)
Bandwidth . . . . . 1 Hz to 200 kHz (+0, -3 dB)
THD+N . . . . . 0.01% at 1 kHz, 0.03% at 20 kHz (100 W into Ω)
Power Bandwidth . . . . . < 10 Hz to 100 kHz (+0, -3 dB, 200 W into 8 Ω)
Slew Rate . . . . . 25 V/µs
Headroom . . . . . 1.4 dB (8 Ω), 2.8 dB (4 Ω)
Damping Factor . . . . . 80 at 1 kHz (ref. 8Ω)
S/N Ratio (A-weighted, ref. 225 W) . . . . . 105 dB
Crosstalk . . . . . > 57 dB (100 Hz to 10 kHz)
Voltage Gain . . . . . 29 dB

CONTROL

Infra Red
- **Carrier Frequency** . . . . . 38 kHz
- **Max. Emitter Current** . . . . . Pass-through of input

Trigger
- **Input Polarity** . . . . . Non-polarized
- **Output** . . . . . Pass-through of input

POWER REQUIREMENTS

Power Consumption (8 Ω load)
- **Maximum** . . . . . 800 W
- **Typical** . . . . . 300 W

Fuse Rating (fuse is internal) . . . . . Anthem serviceable only

Low Voltage Version: In countries where the line voltage is 120V, this product operates from a single phase AC power source that supplies between 108V and 132V at a frequency of 60 Hz.

High Voltage Version: In countries where the line voltage is 220V, 330V or 240V, this product operates from a single phase AC power source that supplies between 216V and 264V at a frequency of 50 or 60 Hz.

DIMENSIONS

Height . . . . . 5-7/8 inches (14.9 cm) including feet
Rack Mounting . . . . . 3 rack units, without feet (Optional Rack Kits available)
Width . . . . . 17-1/4 inches (43.8 cm)
Depth . . . . . 18 inches (45.7 cm)
Weight (unpacked) . . . . . 42.6 lb (19.4 kg)

We reserve the right to change specifications and/or features without notice as design improvements are incorporated. **www.anthemAV.com**