

“Pro” Styling, Features in an Integrated Scott

The Equipment: Scott Model A-436 integrated amplifier in wood case. Dimensions: 5 $\frac{5}{8}$ by 15 $\frac{3}{4}$ inches (front panel); 12 $\frac{7}{8}$ inches deep plus clearance for controls and connections. Price: \$299.95. Warranty: “limited,” three years parts and labor. Manufacturer: H. H. Scott, Inc., 20 Commerce Way, Woburn, Mass. 01801.

Comment: At the top of the Scott three-model amplifier line stands the A-436, a reasonably priced, medium-power integrated amp with “professional” styling. Its “unmatched pair” mate is the Scott T-526 tuner. Unusual in an amplifier of this price is the inclusion of dual output meters and separate bass and treble tone-control sliders for

each channel. The meters use a wide-range logarithmic scale, calibrated in percent of rated power output with 100% corresponding to full power: 42 watts (16 $\frac{1}{4}$ dBW) per channel. The calibrations descend in decades down to 0.001% of the maximum rating: the equivalent of -23 $\frac{3}{4}$ dBW, or 4.2 milliwatts.

The various inputs are selected via a five-position rotary switch in conjunction with a pair of two-position levers—one to choose between the two tape-deck inputs, the other to switch between the decks (MONITOR) and the other sources (NORMAL). A DIN input/output jack duplicates the TAPE 1 connections of the typical dual pin-jack array on the back panel. The front-panel mike inputs are phone jacks.

About the dBW . . .

We express output power and noise in terms of dBW—meaning power in dB with a reference (0 dBW) of 1 watt. We repeat herewith the conversion table so that you can use the advantages of dBW in comparing current products with those we have reported on in the past. You can, of course, use the figures in watts that accompany the new dBW figures for these comparisons, but then you lose the ability to compare noise levels for outputs other than rated power and the ability to figure easily the levels to which specific amplifiers will drive specific speakers—as explained in the June 1976 issue. If you do not have that issue and would like a reprint of the full exposition, send 25¢ (U.S.) to: dBW, c/o High Fidelity Magazine, The Publishing House, Great Barrington, Mass. 01230.

WATTS	dBW	WATTS	dBW	WATTS	dBW
1.00	0	10.0	10	100	20
1.25	1	12.5	11	125	21
1.6	2	16	12	160	22
2.0	3	20	13	200	23
2.5	4	25	14	250	24
3.2	5	32	15	320	25
4.0	6	40	16	400	26
5.0	7	50	17	500	27
6.3	8	63	18	630	28
8.0	9	80	19	800	29

You can wire two sets of speakers to push-to-insert color-coded posts designed for bared wires. Either left or right signals can be routed to both channels via the MODE switch, or they can be paralleled (normal mono) or reversed in connection (reverse stereo).

The output transistors of each channel are protected with a quick-blow 3½-amp fuse—which can be replaced by one of lower capacity when you use speakers whose power capacity is below the output capability of the A-436. You can disconnect the main amp from the preamp by removing jumpers on the rear panel; auxiliary equipment, such as a graphic equalizer, can thus be inserted into the system. Each of the two convenience outlets—one of them unswitched—is rated at 150 watts maximum.

Lab data taken at CBS Technology Center indicate that the Scott meets its power output ratings with a bit to spare. At the rated output the THD is below 0.11% across the board. IM distortion also stays below 0.11% from -9 dBW (½ watt) to +16½ dBW (44 watts) into an 8-ohm load. Into 4 and 16 ohms, the amp delivers better than 15 dBW (31½ watts) at comparable distortion. The damping factor of 40 is more than adequate.

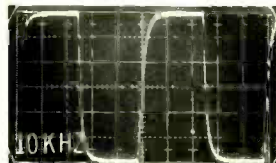
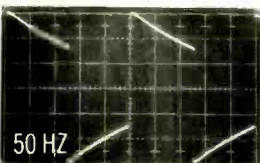
The frequency response and the accuracy of phono equalization are well within specs, and the noise levels are adequately low. From the phono input, the noise is 77¼ dB below a 10-millivolt input reference. Although the input sensitivities appear adequate for normal cartridges, tuners, and decks, they are low enough that you might be operating the volume control above midpoint for reasonably loud reproduction. The phono overload point should be sufficient to avoid clipping with normal cartridges and discs, but it is not exceptional.

The tone-control circuitry is of the typical Baxandall type, and the curves are similar to those of many amplifiers we have tested. The low filter slopes off gently (6 dB per octave), with a very high cutoff frequency (200 Hz); it certainly eliminates the effect of record warps but with it, unfortunately, much of the music's underpinning. The high filter (also 6 dB per octave) has a cutoff frequency (8.5 kHz) too high to do a really effective job on a noisy disc or tape.

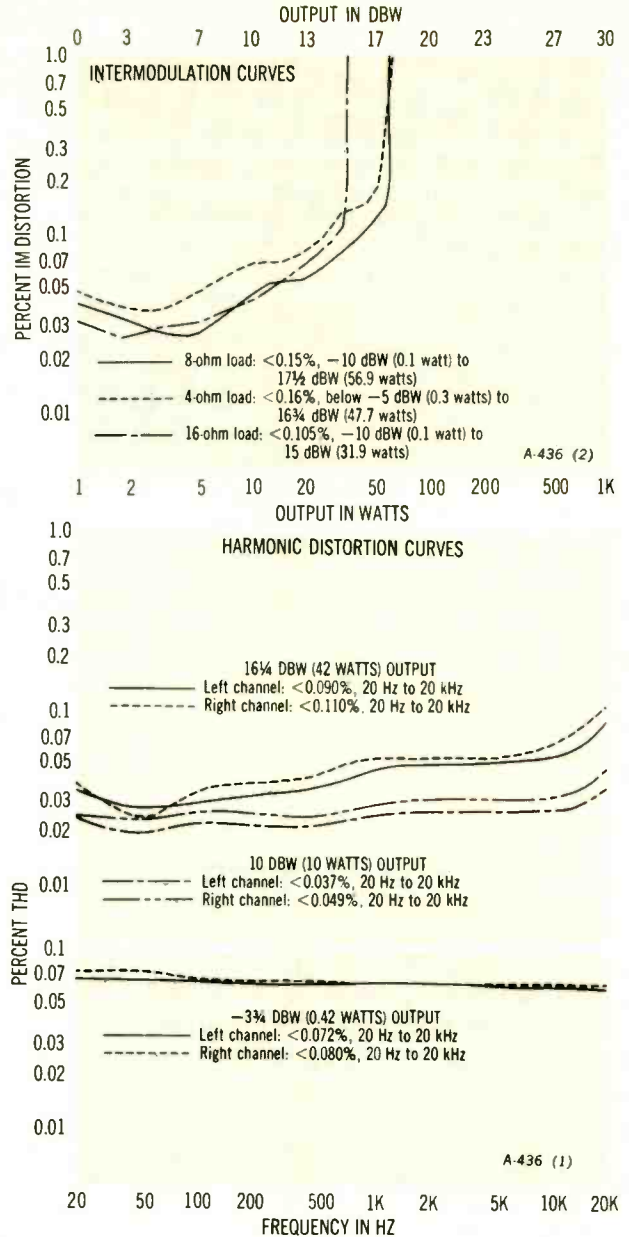
While the A-436 does not include a delay circuit to protect the speakers from turnon transients, it powers up smoothly; its "thumps" should prove innocuous to typical speakers. Switching between inputs is notably noise-free, and the residual noise from the phono input can barely be heard right at the speaker. We find it unnoticeable at listening positions. We experienced no signs of phono input overload using a Pickering XUV/4500Q and, over-all, would give high marks to the phono preamp section, which is fully comparable with others in this price range.

With 8-ohm speakers of average efficiency the output capability of the A-436 proves adequate to attain fairly loud listening levels in a fair-sized room. During loud passages with such a setup, the output meters peak somewhat above the 10% point. Unless you use speakers of very low efficiency, or multiple pairs of speakers, the A-436 should provide sufficient listening levels under most circumstances—along with some unusual features for an amp of this price class.

CIRCLE 131 ON READER-SERVICE CARD



Square-wave response



Scott A-436 Integrated Amp Additional Data

Power output at clipping (channels driven simultaneously)	
L ch	16½ dBW (46 watts) for 0.048% THD
R ch	16¼ dBW (47 watts) for 0.055% THD
Frequency response	+0, -1¼ dB, 20 Hz to 40 kHz +0, -3 dB, below 10 Hz to 60 kHz
RIAA equalization	+½, -2 dB, 20 Hz to 20 kHz
Input characteristics (for rated output at full gain)	
	Sensitivity Noise S/N ratio
phono 1, 2	3.6 mV -52¼ dBW 69 dB
mike	5.3 mV -57¾ dBW 74 dB
tuner, aux	170 mV -64¼ dBW 81 dB
Phono overload (clipping point)	60 mV at 1 kHz
Damping factor at 1 kHz	40
High filter	-3 dB at 8.5 kHz; 6 dB/oct.
Low filter	-3 dB at 200 Hz; 6 dB/oct.