

The Award Series by





narman kardon





The new T300X Award Tuner does not need a multiplex adapter



The T300X, AM/FM tuner, does not need a multiplex adapter. It has one. Right where it belongs-built-in. On the chassis and out of sight. The T300X is completely ready to receive multiplex (FM Stereo) broadcasts now.

What is the significance of multiplex? It represents a major technological advance in the technique of broadcasting. Now, for the first time, you can enjoy all of the color and genuine excitement of stereo with the fidelity that only FM can provide. And what a wonderful opportunity it presents for taping stereo selec-

tions right off the air.

The T300X is a striking example of Harman-Kardon's engineering leadership in the development of instruments for multiplex reception. It is designed with a wide-band Foster-Seeley discriminator and a 6BN6 limiter to insure freedom from distortion and noise. A total of 4 IF stages guarantee greater sensitivity. Automatic Frequency Control (AFC) with regulated voltage supply maintains oscillator stability regardless of line voltage variations. The T300X boasts superior impulse noise rejection plus uniform limiting and output at all signals. Here is a solid performer, rock stable and ideal for multiplex reception.

The T300X takes its place in the Award Series alongside the classic F500 tuner shown below. The F500 is a completely professional FM tuner designed with every provision for multiplex now or in the future. It has space on its chassis to accommodate the excellent

MX500 wide-band, plug-in multiplex adapter. No special controls are needed; no special adjustments. Just one simple connection converts the F500 into a completely integrated multiplex tuner.

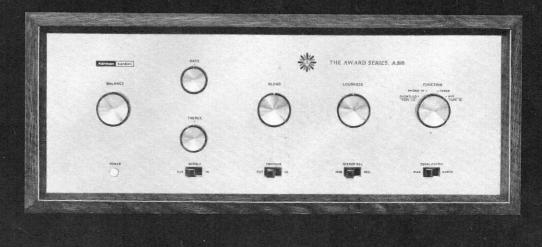
Either tuner will provide outstanding performance with the Award amplifiers shown on the opposite page. Both are beautifully finished in brushed gold.

The T300X, AM/FM stereo multiplex tuner, is \$149.95; the F500, FM/multiplex tuner-\$129.95. The MX500 multiplex adapter for use with the F500 \$39.95. Optional enclosures, which fit both, include the CX50 (metal)-\$12.95 and the WW50 (walnut)-\$29.95.



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The new A300
Award Amplifier
makes stereo
attractive and
inexpensive



The A300, 30 watt stereo amplifier, is a sparkling new addition to the widely acclaimed Award Series. Its strikingly handsome styling, professional features, solid performance and moderate price (\$99.95) make it clearly the best buy in a stereo amplifier.

It is designed with the same skill and precision reflected in the 50 watt A500—first of the great Award amplifiers. When the A500, shown below, was introduced it quickly established new performance standards for integrated stereo amplifiers. In its own power category, the A300 is certain to establish similar standards of excellence.

The A300 delivers 15 watts (Music Power) per channel with less than 1% distortion. Special grain-oriented cores in the output transformers provide wide-band response. At normal listening levels the frequency response is  $\pm 1$  db at 15 to 70,000 cps.

Its many features, unique for an amplifier in this price class, include: A zero to infinity balance control which permits balancing of speakers for virtually any listening position in the room; a variable blend control to eliminate undesirable "hole-in-the-middle" effect; ganged treble and bass tone controls provide 12 db boost and cut at 50 cycles and 10 db boost and cut at 10,000 cycles; dynamic loudness contour control; silicon diode power supply for excellent B+ regulation; RIAA phono and NARTB tape equalization

controls; two tape outputs (after tone and loudness controls) for recording; illuminated push-button on/off switch which permits unit to be turned on and off without upsetting carefully pre-set controls; stereo reverse/normal switch and rumble filter.

The A300 and A500 will perform superbly with either of the Award tuners shown on the opposite page. Both instruments are handsomely finished in brushed gold.

The A300 is \$99.95; the A500—\$159.95. Optional enclosures, which fit both, include the CX50 (metal)—\$12.95 and the WW50 (walnut)—\$29.95.



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# The Award Series



**TECHNICAL SPECIFICATIONS** 

#### The A300 30 Watt Integrated Stereophonic Amplifier

Circuits: Two 7408 tubes per channel, self-biased, pentode connected in Class AB, operation. D.C. on preamplifier and voltage amplifier filaments.

Music Power Output: 15 watts per channel. Continuous **Power Output:** 

12 watts per channel at less than 1% distortion. 5 watts at less than 1/2% distortion.

Peak Power Output: Frequency Response:

30 watts per channel.

±1 db 15-70,000 cycles per second at normal listening level.

Minimum Volume Hum: **Tone Controls:** 

80 db below rated output.

Ganged Bass and Treble Controls for both channels. 10 db boost and cut at 10, 000 cycles per second. 12 db boost and cut at 50 cycles per second.

Regulation:

Excellent B + regulation achieved by use of silicon diode power supply voltage doubler circuit with heavy duty power transformer

Phono Lo: 3.0 mv. Tape Head: 2.0 mv. Phono Hi: 125 mv. Tuner: 125 mv. Input Sensitivities:

2 low level inputs (Magnetic phono or Tape Head). 2 Phono Hi, 2 Tuner, 2 Tape Amp. Stereo Inputs:

(Aux.)

Stereo Outputs:

2 Tape outputs taken directly from the preamplifier stages. Unaffected by the volume and tone controls.

Special Feature: Continuously variable blend control.

(Total 9 plus two silicon rectifiers) 4-7408, 4-12AX7, 1-12AU7. Tubes:

**Power Consumption:** 90 watts.

Dimensions: 151/4" W x 51/6" H x 111/2" D (excluding knobs).

Shipping Weight: 25 lbs.

Finish: Brushed gold front panel.

### The T300X AM/FM Multiplex Tuner

Consists of a tuned grounded grid RF amplifier followed by a low noise triode mixer, 3 high gain wide band pentode IF stages and the renowned Gated Beam, zero time constant limiter. The circuit employs a wide band Foster-Seeley solid state detector, stable Colpitts oscillator and reactance type AFC circuit. Multiplex section has a two stage subcarrier, main carrier triode amplifier followed by a 19 KC amplifier, synchronous oscillator, m-derived L-R filter, high-Q L+R filter, dual phase L-R detector, precision matrix and special L-R noise filter switch. Circuit:

3.2 microvolts IHFM (usable sensitivity), 0.95 microvolts for 20 db of quieting. Sensitivity:

**Discriminator Peak** Image Rejection: Frequency Response:

to Peak Separation: 1 megacycle, ultra linear.

55 db.

±1 db 10-35,000 cycles per second.

MX Adapter Frequency Response: Distortion:

±1 db 15-15,000 cycles per second. Unmeasurable at 30% modulation. Less than 0.1% at 100% modulation.

Antenna: 300 ohms.

Hum Level: 60 db below 100% modulation. Radiation: Well within FCC requirements. 1.5 volt at 100% modulation. **Output Level:** AFC: Defeatable.

Low noise high gain RF pentode followed by a hep-tode converter, wide band IF stage and a high perveance tube detector with quick action AVC.

Selectivity:

Circuits:

Sensitivity: 80 microvolts per meter. Terminal sensitivity 10 mv. 10 KC. bandwidth: 6 db down.

Image Rejection: 50 db. IF Rejection: 55 db. Antenna Input:

Built-in low noise ferrite loopstick with low impedance terminal for external antenna.

1% harmonic. Distortion:

Hum Level: 45 db below 80% modulation.

(Total 9) 1-EZ81 rectifier, 1-6AJ8/ECH81, 1-ECC85, 3-6BL8/ECF80, 1-6EQ7, 1-6BN6, 1-12AX7 **Tube Complement:** 1-6AQ8/ 151/4" W x 51/16" H x 111/2" D (excluding knobs).

**Dimensions: Power Consumption:** 

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50 watts. Finish: Brushed gold escutcheon.

Shipping Weight: 25 lbs.

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#### The A500 50 Watt Integrated Stereophonic Amplifier

Two 7355 tubes per channel, self-biased, tetrode connected in Class AB, operation. D.C. on preamplifier and voltage amplifier filaments.

25 watts per channel.

**Music Power Output:** Continuous Power Output:

20 watts per channel at less than 0.5% distortion. 5 watts at less than 0.2% distortion.

**Peak Power Output:** 50 watts per channel.

 $\pm 1\!/\!_2$  db 12-35,000 cycles per second at normal listening level. Frequency Response:

Minimum Volume Hum: 85 db below rated output. **Tone Control Range:** 

 $\pm 10$  db at 50 and 10,000 cycles per second. Individual tone controls for each channel.

High Level: 200 mv. for rated output. Low Level: Phono (RIAA) 3 mv. Tape (NARTB) 2.5 mv. Input Sensitivities:

2 Magnetic Phono (RIAA), 2 Tape Head (NARTB), 2 Crystal Phono, 2 Tuner, 2 Tape Amplifier, 2 Auxiliary, 2 Tape Monitor. Stereo Inputs:

Outputs:

2 Tape Outputs, 1 Third Channel Output controlled by front panel Ambiance Control, Stereo Headphone Output on front panel and 1 A.C. convenience re-ceptacle (switched).

Ambiance gain control for center channel system or gain to feed any external delay network. Blend control with lamps to indicate exact degree of blend. Stereo Headphone Jack on front panel which automatically disengages speakers when headphones are plugged in. Illuminated Push-Button On/Off Switch. **Special Features:** 

(Total 9) 4-7355, 1-12AU7, 4-12AX7/ECC83. Tubes:

Power Consumption: 125 watts

151/4" W x 51/6" H x 12" D (excluding knobs). Dimensions:

Shipping Weight: 32 lbs.

Finish: Brushed gold front panel.

### The F500~FM/Multiplex Tuner

Circuit: Front end circuit tuned by two separate electrically and mechanically isolated tuning sections for maximum selectivity at lowest oscillator radiation. Also featured is the new Harman-Kardon cartridge which consists of a grounded grid triode RF stage, triode mixer and solid state AFC circuit and three wide band IF stages. A 6BN6 zero time constant gated beam limiter followed by a wide band Foster-Seeley discriminator. Special wide band audio output circuitry for extended frequency response with unmeasurable phase shift.

Standard: 0.85 mv. for 20 db of quieting. Usable Sensitivity: (IHFM) 3 microvolts.

Sensitivity: Discriminator Peak

To Peak Separation: Image Rejection:

66 db. 240 KC. 6 db down.

1 megacycle, ultra linear.

Selectivity: Frequency Response:

 $\pm 1$  db 10-52,000 cycles per second.

Distortion: Unmeasurable at 30% modulation. Less than 0.1% at 100% modulation.

Limiter: Gated beam, constant output. Antenna Input: 300 ohms, balanced or unbalanced. **Hum Level:** 60 db below 100% modulation.

Radiation-Well within FCC requirements.

On/Off Switch, FM/FM Multiplex Switch, Interchannel Muting Defeat Switch, AFC Defeat Switch and Counterweighted Flywheel Tuning Control. Front Panel Controls:

Interchannel Muting Threshold Control. Rear Panel Controls:

(Total 4) 2 FM Outputs, 1 Multiplex Output, 1 A.C. convenience receptacle. Rear Outputs: **Output Level:** 1 volt at 100% modulation.

**Power Consumption: Special Features:** 

45 watts.

Microbalance Tuning Meter for precise tuning. Function Selector Indicator Lights. Plug-in Multiplex Adapter provision on chassis.

151/4" W x 51/6" H x 12" D (excluding knobs). Dimensions: Shipping Weight: 22 lbs.

Finish: Brushed gold front panel.

### The MX500 Plug-In Multiplex Adapter

Circuit:

Consists of a two stage subcarrier, main carrier triode amplifier followed by a 19 KC. synchronous oscillator, m-derived L-R filter, high-Q L+R filter, dual phase L-R detector, precision matrix and special L-R noise filter switch.

**Output Level:** 1.25 volt.

Distortion: Less than 1% T.H.D. Frequency Response: ±1 db 15-15,000 c.p.s.

Tube Complement: 1-12AX7 and 1-6BL8/ECF80. Power Drain: 250 volts at 18 mils. 6.3 volts at 600 mils.

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