

AUDIO COMPONENTS

ONKYO



□ INTEGRA SERIES (AMPLIFIER · RECEIVER · TUNER)

□ SPEAKER SYSTEM □ STEREO PLAY BUCK SYSTEM





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Integra Series

Amplifier, Receiver, Tuner

Integra Series amplifiers accomplish the most basic yet essential function with ease... that of amplifying and transmitting input signals without unnecessary modulation. It is versatile, too, allowing speakers to develop their full potential. Conventional installation problems are reduced to a great extent by development of new ideas in engineering design. The inconvenient handling of rear terminals, for example, is eliminated by the use of a unique new top panel.

SPEAKER SYSTEM

How gratifying it is for the connoisseur from his stereo system to be able to distinguish a Stradivarius from a Guarnerius. We need superior electrical characteristics (including frequency and distortion), and we must provide a professional musical design sensitive to the most delicate features of music. We raise this issue only because after a series of hearing tests, acoustic and musical experts have certified our current series of speaker systems as most suitable for music listening.

TURNTABLE SYSTEM



BELT-DRIVE TURNTABLE SYSTEM

model ML-70P MULTIAC

The top performance ML-70p is a result of our never-ending pursuit for perfect sound reproduction. Superb-engineering and precision-made components make this unit one of the finest turntables you can buy. Excellent tracking combined with minimum wow and flutter provide for flawless sound reproduction. And to avoid the possibility of mechanical trouble, we've left out the costly automatic system. Instead we've employed a semi-automatic system equipped with automatic lifter to insure perfect contact between stylus and groove.

Specifications

Type: 2-speed belt-driven, auto-return, cut with arm lifter
Turntable: 12 1/4" (31cm) aluminum die-cast
Speeds: 33 1/3, 45 r. p. m.
Motor: 4-pole Synchronous
Cartridge: Moving Magnet
Stylus Pressure: 3.5gr (0~4gr adjustable with direct reading)
Stylus: Diamond
Arm: Static Balanced Pipe-arm
Attachment: Head-Shell exchangeable system, Lateral-Balancer, Anti-Skating system
Power Supply: AC 220V 50/60Hz
Dimensions: 18 1/2"W x 15"D x 7 1/8"H
Weight: 17.6Lbs

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SOLID-STATE INTEGRATED STEREO AMPLIFIER

model Integra 723

The circuits of this pre-and main amplifier were designed using electronic computers to achieve complete stability, especially in the low range. Deflection of RIAA in the equalizer circuit is less than 0.5 dB. The dynamic range is wide, with a maximum input of more than 220 mV. The distortion factor of the rated output is less than 0.3 %. Dynamic power 90 W. Frequency response 10Hz-70KHz ± 0 dB.

SOLID-STATE INTEGRATED STEREO AMPLIFIER

model Integra 725

In the main stage, direct coupling & differential amplifier contributes to this unit's outstanding distortion, frequency and damping characteristic. The equalizer stage is completely analyzed. The maximum input of the equalizer (1KHz:200mV) completely meets RIAA characteristics even in the higher range (10KHz:930mV). RIAA deflection is kept strictly within 0.5 dB. Therefore, there is no distortion due to clipping.

SPECIFICATIONS

	Integra 723	Integra 725
PREAMPLIFIER		
Harmonic Distortion (at Rated Output)	Less than 0.1%	Less than 0.05%
IM Distortion (70:7KHz=4:1 SMPTE 1V)	Less than 0.1%	Less than 0.05%
Frequency Response • PHONO-1, PHONO-2 • AUX, TUNER (1V ± 0 dB)	RIAA ± 0.5 dB (20~15,000Hz)	RIAA ± 0.5 dB (50~15,000Hz)
	10~70,000Hz	10~60,000Hz
PHONO Overload (1KHz)	220mV	200mV
Hum & Noise (IHF) • PHONO-1, PHONO-2 • AUX, TUNER	Better than 70dB	Better than 75dB
	Better than 90dB	Better than 90dB
Input Sensitivity & Impedance • PHONO-1 • PHONO-2 • AUX, TUNER	2.5mV(50~100Kohms)	2.4mV(50~100Kohms)
	100mV(50Kohms)	100mV(100Kohms)
BASS Control	± 10 dB at 125 250Hz 500	± 10 dB at 100Hz
TREBLE Control	± 10 dB at 2K 4KHz 8K	± 10 dB at 10KHz
Low Filter	70Hz, 12dB/oct	70Hz, 6dB/oct
High Filter	10KHz, 12dB/oct	8KHz, 6dB/oct
Muting	-20dB	-20dB

	Integra 723	Integra 725
MAINAMPLIFIER		
IHF Dynamic Power (at 8ohms)	90W	70W
RMS Continuous Power (at 8ohms)	33W/33W	22W/22W
Harmonic Distortion (at Rated Output)	Less than 0.3%	Less than 0.1%
IM Distortion (70:7KHz=4:1 SMPTE, 10W)	Less than 0.1%	Less than 0.05%
Power Bandwidth (IHF at 8ohms)	10~70,000Hz	10~100,000Hz
Frequency Response (at Rated Output)	10~70,000Hz	15~70,000Hz
Hum & Noise (IHF)	Better than 100dB	Better than 100dB
Input Sensitivity	1V	1V
Input Impedance	100Kohms	100Kohms
Load Impedance	4~16ohms	4~16ohms
Other Features	Loudness Control, MULTI-STEP-UP terminal (For multi-channel-amp), Speaker terminal (A-B), Headphone Jack, AC OUTLET	
Power Supply	AC 100/120 or 220/240V, 50/60Hz	
Dimensions (W×H×D)	17½"×5½"×13½"	12½"×5½"×13½"
Weight	28.6lbs	17.6lbs

Integra Series

□ SOLID-STATE STEREO RECEIVER

model Integra 225

Direct coupling in all stages is adopted for the main amplifier. The receiver is designed especially for tone quality with monolithic IC in the FM-MPX circuits. It has a 4-gang variable condenser, 6-element mechanical filter in the IF section, a 4-stage limiter and differential amplifier. Ultra stability and low distortion are obtained by direct coupling and differential circuitry.

□ SOLID-STATE AM/FM STEREO TUNER

model Integra 423

In an FM tuner, tone quality is as important as channel separation and sensitivity. This tuner is outstanding in all these characteristics. Satisfactory band width and ideal selectivity are made possible by 6-element mechanical filter. Image and interference are blocked by FET front-end circuitry with a high-frequency 2-stage 4-gang variable condenser and 4-stage limiter, 5-stage IF including 3-stage differential limiter.



□ SPECIFICATIONS

	Integra 225
AMPLIFIER	
IHF Dynamic Power (at 8ohms)	70W
RMS Continuous Power (at 8ohms)	22W/22W
Harmonic Distortion (at Rated Output)	Less than 0.3%
IM Distortion (70:7KHz=4:1 SMPTE 10W)	Less than 0.1%
Power Bandwidth (IHF, at 8ohms)	20~30,000Hz
Frequency Response (+0dB 1W)	15~30,000Hz
PHONO Overload (1KHz)	140mV
RIAA Characteristics	±0.5dB(20~15KHz)
Hum & Noise (IHF)	• PHONO Better than 70dB • AUX Better than 85dB
Input Sensitivity	• PHONO 2mV • AUX 100mV
Input impedance	• PHONO 50Kohms • AUX 100Kohms
BASS Control	+14dB (20Hz)
TREBLE Control	+11dB(20KHz)
Low Filter	70Hz (6dB/oct)
High Filter	7KHz (6dB/oct)
MUTING	-20dB

TUNER	Integra 225		Integra 423	
	FM	AM	FM	AM
Tuning Range	88~108MHz	530~1605KHz	88~108MHz	530~1605KHz
IHF Sensitivity	2.0 μV	40 μV	1.8 μV	20 μV
Image Rejection Ratio	70dB(8.3MHz)	40dB(1MHz)	85dB(8.3MHz)	70dB(1MHz)
IF Rejection Ratio	100dB(8.3MHz)	40dB(1MHz)	100dB(8.3MHz)	70dB(1MHz)
Signal to Noise Ratio	65dB(IHF)	45dB	70dB(IHF)	45dB
Harmonic Distortion	ST Less than 0.5%	Less than 0.8%	ST Less than 0.5%	Less than 0.8%
Adjacent Channel Attenuation		FM 65dB		FM 75dB
AM Suppression Ratio		FM 50dB		FM 55dB
Capture Ratio		FM 1.5dB		FM 1.5dB
Frequency Response		FM 20~15,000Hz(+0dB)		FM 20~15,000Hz(+0dB)
Stereo Separation		38dB(400Hz)		40dB(400Hz)
Rated Output			Fix. FM 0.75V, AM 0.2V	Variable, FM 0~2V, AM 0~0.6V
Other Features	FM MONO-ST Automatically Changed, FM-ST Indicator Tuning Meter, FM Muting, Headphone Jack Loudness Control, MULTI-STEP-UP terminal (For multi-channel-amp), Speaker terminal (A-B), AC OUTLET Low Pass Filter, SCA-Filter, Noise Filter			
Power Supply	AC 100/110 or 220/240V, 50/60Hz			
Dimensions (W×H×D)	17 1/4" × 5 3/8" × 13 1/2"		12 1/8" × 5 3/8" × 13 1/2"	
Weight	22.1lbs		17.6lbs	



3-WAY CLOSED SYSTEM

model E-83A《MK II》

Speakers made with newly developed materials provide excellent sound

E-83A MK-II is a three-way system with oiled walnut bookshelf cabinet. The three speakers of E-83A MK-II are a 12-inch woofer, a horn type mid-range and a 2 1/4 inch horn type tweeter.

This model is newly designed loudspeaker system. It aims at the highest level of performance, offering extremely wide and smooth frequency coverage, low distortion, and extended bass response.



3-WAY CLOSED SYSTEM

model E-63A《MK II》

Mounted two dome radiators with excellent dispersion

E-63A MK-II's woofer is a long-excursion with heavy cone and massive magnet assemblies.

The mid-range speaker and the tweeter have hemispherical dome, respectively 2 and 1 inch in diameter, offering an accuracy, dynamic transients and excellent instrument definition.

Overall quality of this system is superior and subtle orchestral nuances are offered as a real performance.



3-WAY CLOSED SYSTEM

model U-6000

Broad dispersion for live-presence sound

Dispersion, important in stereophonic listening, is outstanding in U-6000.

Optimum bass response is delivered by a high compliant 12 inch woofer, while middle and high frequencies are delivered crisp and clear by new horn type mid-range speaker and tweeter with wide dispersion.

Distortion is extremely low.

SPECIFICATIONS

Model Number	Enclosure Type	Speaker Complement			Frequency Response (Hz)	Impedance (ohms)	Fundamental Resonance (Hz)
		Woofer	Mid-range	Tweeter			
E-83A 《MK II》	Closed Type	12" Cone	3 1/2" x 10 1/2" Horn	2 1/4" Horn	30~20,000	8	45
E-63A 《MK II》	Closed Type	12" Cone	2" Dome	1" Dome	35~20,000	8	55
U-6000	Closed Type	12" Cone	3 1/2" x 10" Sectoral Horn	1 5/8" x 2 7/8" Sectoral Horn	35~20,000	8	55
U-5000	Closed Type	10" Cone	3 1/2" x 10" Sectoral Horn	1 5/8" x 2 7/8" Sectoral Horn	40~20,000	8	60
R-4000	Semi Bass-Reflex	10" Cone	5" Cone	1" Dome	45~20,000	8	—
R-3000	Semi Bass-Reflex	8" Cone	5" Cone	1" Dome	50~20,000	8	—

SPEAKER SYSTEM

3-WAY CLOSED SYSTEM

model U-5000

"Spherical" sound waves by new horn type speakers
 One of the outstanding characteristics of U-5000 is its excellent dispersion. This is due mainly to the new type exponential horn with well-designed drivers used to radiate tones in the middle and high range. Bass response by 10 inch woofer of high compliance is superb, vibrating with rich, full body that act ally can be felt... as though you were at a live performance.

3-WAY SEMI BASS-REFLEX SYSTEM

model R-4000

System with low distortion and uniform efficiency across a wide band

This three-way system, mounted a hemispherical dome for high range, is remarkably free of any particular sonic characteristic or coloration. A 10 inch woofer operating in a tuned port cabinet, offers extended bass response and low distortion.

Overall quality is extreme in its accuracy to 'live' music.

3-WAY SEMI BASS-REFLEX SYSTEM

model R-3000

Outstanding performances at low cost in this three-way system

"Spherical" sound waves are radiated by dome tweeter so that the R-3000 has an excellent dispersion at all frequencies.

The transient response of this speaker system is superb... the overall quality is extreme in its fidelity to 'live' music.



Crossover Frequency (Hz)	Recommended Amplifier Power (Watts)	Maximum Power Handling (Watts)	Dimensions (H x W x D) (Inches)	Weight (Lbs)	Level Controller	Remarks	Model Number
700 • 5,000	15	60	28½ × 16½ × 15½	51	3Steps(TW•MD Respectively)	With Multi-Terminals	E-83A (MK II)
700 • 6,500	10	60	26¾ × 15¾ × 13	46	5Steps(TW•MD Respectively)	With Multi-Terminals	E-63A (MK II)
700 • 6,500	10	50	26¾ × 15¾ × 13	44	3Steps(TW•MD Respectively)	With Multi-Terminals	U-6000
700 • 6,500	10	40	25½ × 14¾ × 11⅝	38	3Steps(TW•MD Respectively)	With Multi-Terminals	U-5000
700 • 6,500	10	40	23⅓ × 13½ × 11⅝	28	Variable (TW•MD Respectively)	With Multi-Terminals	R-4000
700 • 6,500	10	30	20⅞ × 12¼ × 10¼	24	Variable (TW•MD Simultaneously)	With Multi-Terminals	R-3000

COMBINATION EXAMPLES

Integra 423 






Integra 723 



Integra 725 



Enjoy a component stereo system of your original design. We have three examples:

-  70P-423-725
-  70P-423-723
-  70P-225

And you can select the most suitable speaker system among our high-fidelity systems.

Integra 225 



ML-70P
MULTIAC



E-83A(MK II)

E-63A(MK II)

U-6000

U-5000

R-4000

R-3000

ONKYO



● STEREO FACTORY






● ASSEMBLING LINES



● SHOW ROOM

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