NATIONAL

MODEL SA-52H

INSTRUCTION BOOK

FM MULTIPLEX M.F.B. STEREO AMPLIFIER

SPECIFICATIONS

Frequency Range :	MW.....525～1605 kc	
	SW .....3.9～12Mc	
	FM .....88～108Mc	
Intermediate Frequency :	AM .....455 kc	
	FM .....10.7 Mc	
Tubes & Diodes :	6AB9 ×1	FM RFA & CONV.
	6BE6 ×1	AM CONV.
	6BA6 ×1	FM & AM IF Amp.
	6AU6 ×2	FM LIM.
	6BA6 ×1	FM MPX AF Amp.
	12AT7 ×1	FM MPX 19 & 38 Kc Amp
	12AX7 ×1	FM MPX AF Amp.
	12AX7 ×3	AF Amp.
	12AU7 ×3	AF Amp.
	6BQ5 ×4	Power Amp.
	SD-1A ×4	Rectifier
	OA70 ×2	MPX RECT.
	OA79 ×5	AM FM DET. & MPX Doubler
	SC15 ×1	AFC

Sensitivity :	FM ..... 5μV / IHFM 300Ω
	MW..... 20μV / 50mW
	SW ..... 30μV / 50mW
AF Input Sensitivity :	AUX..... 120mV / 500KΩ for 16W
	MAG ..... 3.5mV / 33 KΩ for 16W
	CRYSTAL... 14mV / 133 KΩ for 16W
	REC-OUT... 0.1V / 500 KΩ
OUTPUT :	30W – 30W (Peak music power)
Frequency Response :	20～20000c/s ±0.5 dB...Amplifier section
S / N :	60 dB AUX input
Separation :	–35 dB
Power Source :	117V-220V 50～60 c/s
Power Consumption :	98W
Dimensions :	W 470mm, H 161mm, D 328 mm (W 18½". H 6¼". D 12⅞").
Weight :	15.0 kg (33 lb. 1 oz.)

OUTSTANDING FEATURES

HIGH POWER OUTPUT CIRCUIT

6BQ5 push-pull circuit, has high power output with little power consumption.
Have output terminals for MFB speakers as well as ordinary speakers from 4 to 32 ohms.

MFB CIRCUIT

When combined with MFB (motional feed back) speakers, the built-in MFB circuit automatically corrects distorition and insures full-throated bass.

DC OPERATED PRE-AMPLIFIER

To amplify magnetic and crystal pickup output, pre-amplifier must be highly sensitive. Tubes used in the pre-amplifier stage are all DC operated, to insure record reproduction at very low noise level.

LOUDNESS CONTROL SWITCH

To compensate for the aural sensitivity of human ears, which have less sensitivity to bass as the volume decreases, loudness control is provided for sufficient lows even played at low volume level.

STEREO RECORDING TERMINAL

Broadcasts or phono records can be recorded on your taperecorder, while listening, via the taperecorder recording terminal, regardless of the volume level at which it is being played.

3-BAND TUNER WITH BUILT-IN FM MULTIPLEX CIRCUIT

Highly sensitive (10 microvolts at 30 dB quieting) FM reception, free from noise or interference. FM stereo from the built-in FM multiplex circuit. Also enjoy overseas broadcasts on the short wave band.

TUNING INDICATOR

When the pointer of the meter rests in the middle of the scale, it means that an FM station is accurately tuned. On MW or SW bands when the meter points to the maximum on the scale, it is accurately tuned.

FM AFC CIRCUIT

Built-in AFC (automatic frequency control) circuit automatically corrects detuning and keeps the set accurately tuned to an FM station, for distortion-free reception.

FLYWHEEL TUNING MECHANISM

Flywheel on the tuning axis makes tuning much easier. With a twist of the tuning knob, the pointer effortlessly glides along the dial, from end to end.

FM STEREO EYE

When the set is tuned to an FM station broadcasting program in stereo, the STEREO EYE on the dial lights up in red. This indicates that the particular program is being broadcast in stereo. If the MODE switch has been set to MONO, turn the MODE switch to STEREO for full stereo reproduction.

FERRITE ANTENNA

Built-in ferrite antenna has outstanding high sensitivity and low noise characteristic. Ideal for reception on MW band.

REAL WOOD CABINET

The cabinet is made of real, oil-finished walnut with metal front panel in gold. A deluxe and handsome control center for your hi-fi system. The oil finish protects the cabinet from scratches and smear.

PUSH-PUSH POWER SWITCH

PUSH-it is switched on. PUSH again-it is switched off. The switch button glows when the set is switched on.

THE BEST PLACE IN YOUR HOUSE FOR YOUR STEREO SYSTEM IS WHERE :

* The floor is level and solid
* There is easy access to an electric outlet, ground wire, easy leading-in of FM and short-wave antennas
* It is away from fluorescent lamps, electric appliances and other noise sources
* The rear of the amplifier is to be approximately 10cm away from the wall (for ventilation).
* It is free from humidity, direct rays of the sun and room heats.