

TOSHIBA

DIGITAL SYNTHESIZER STEREO RECEIVER SA-850

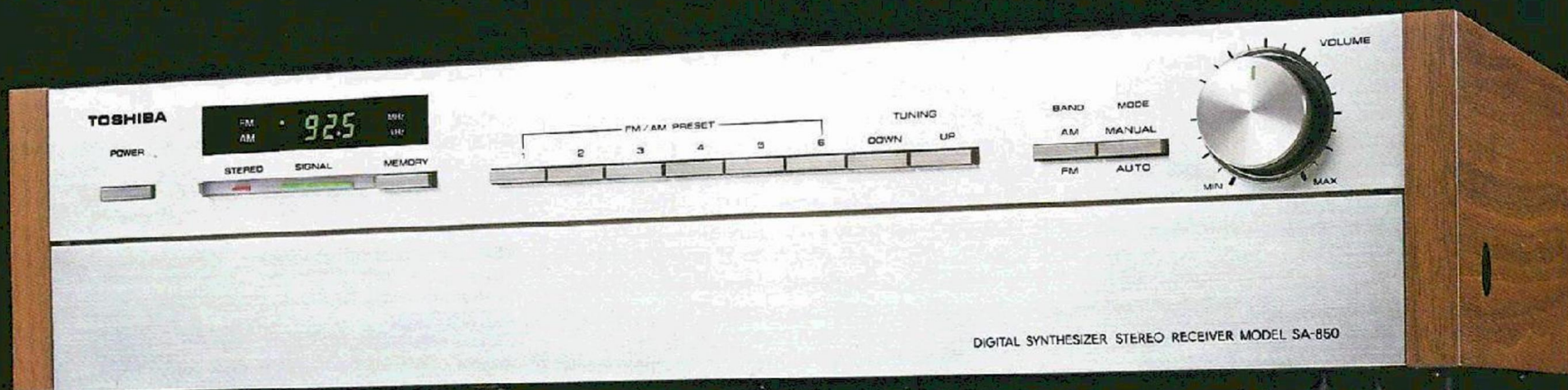
Absolutely Precise Digital Synthesizer Tuning with 12 Memory Positions,
4 Instant Selection of 6 FM and 6 AM Stations
50** Watts per channel with a Wide Selection of Sound Control Features.

** Continuous power output of 50 Watts minimum rms per channel, both channels driven, at 8 Ohms from 20 to 20,000 Hertz with no more than 0.03% total harmonic distortion. Beautifully styled with walnut side panels and brushed aluminum front panels. Lower half of front panel disappears into the unit to expose less often used controls. Double-pair speaker selection, tone control defeat (flat) switch, subsonic filter, loudness switch, stereo/mono mode selection, push-button source selection with full tape monitoring/duplicating facilities including a source-on/recording-off position.

Green LED tuner frequency, signal-strength, stereo and band displays. All push-button tuning system using quartz crystal digital synthesizer system providing manual and automatic tuning with six each preset memory stations for FM and AM.

A professional 41-position click-stop volume control is conveniently located at the upper right. Superb craftsmanship coupled with advanced technology — the essence of Toshiba's attitude toward high fidelity component design.

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Archiv Michael Otto*



DIGITAL SYNTHESIZER STEREO RECEIVER SA-850

Some of the reasons you should choose the SA-850 receiver:



Quartz Reference Frequency Synthesizer Tuner

Both the FM and AM tuner sections make use of quartz crystal reference frequency and digital frequency synthesizer circuits with PLL (Phase Locked Loop) system to insure essentially perfect station tuning each and every time. What's more, the ultra-stable control voltage of the PLL is used to tune the 3-gang variable capacitance diodes of the front-end for excellent sensitivity and adjacent channel rejection. This means more received signal power for higher signal-to-noise ratio and less phase distortion than from conventional tuners.



Manual and Automatic Tuning

You get your choice of tuning either manually or automatically with push-button selection. In the manual mode, you can tune up or down the FM band in 0.1MHz increments while for AM, the increments are 1kHz. In the automatic mode (FM: Auto tuning, AM: 10kHz step tuning), you have a choice of any of six preset stations and this holds true for either AM or FM giving you twelve preset stations in all. And more, presetting the station frequency is just as simple by manually tuning to the desired station and pressing two buttons (memory and channel). Channel frequencies are retained with power off and even for a good time with the power cord removed from the outlet!

Clean Stereo Amplification for Low Noise at High Power Levels

Full-complementary direct-coupled power amplifiers provide 50 Watts rms power per channel into 8 Ohms and are driven by low distortion differential amplifiers and powerful Darlington

drivers with plenty of feedback for inaudible distortion. Clean power supply designs using an extra-large triple-secondary power transformer and twin 10,000 μ Fd filter capacitors keep power line noise and hum out of the outputs and prevent back-coupling to the low level preamp and tuner stages.

Full Tape Monitoring/Duplicating

You get provisions for attaching two three-head (or other) tape decks to the SA-850 with full monitoring provisions plus duplicating switching between the decks either way, 1 to 2 or 2 to 1. And, to isolate the input amplifiers of the decks when their power is off, a special intermediate source monitoring switch position (REC OFF) has been added which eliminates the record output signals to the decks.

Wide Range Sound Quality Controls

A large, 41-position click-stop volume control is conveniently located at the top, right of the SA-850 to give you level control capability. Twin-pair speaker selection switching lets you fully utilize speakers in remote locations and provides silent operation for use with headphones. Bass/treble controls can be defeated by just pressing a single button as is also true for loudness control. A subsonic filter eliminates rumble and other low frequency player/disc problems which occur occasionally and a mode switch permits monaural deck playback through both speakers.

Extra Deluxe Features for Convenient and Precision Operation

Stereo FM reception, the selected band (AM or FM) and five levels of signal strength are indicated clearly using soft-green LEDs. The lower half the SA-850 is a slide-away cover exposing the controls less often used and yielding a clean, sophisticated look when closed.

Extra ground connections are provided at the rear with both switched and unswitched power outlets to make system connections more convenient. The SA-850 concept is the most technically advanced, moderately priced receiver available.

SA-850 SPECIFICATIONS:

MAIN AMPLIFIER SECTION

Power output (both channels driven):

Continuous power output of 50 Watts per channel, minimum rms into 8 Ohms from 20 to 20,000 Hertz and with no more than 0.03% total harmonic distortion. 55 Watts into 8 Ohms, 1,000Hz

Total harmonic distortion (20 to 20,000Hz, 8 Ohms):

0.03% or less at 50 Watts per channel
0.02% or less at 25 Watts per channel
0.02% or less at 1 Watt per channel

Intermodulation distortion

(50Hz + 7000Hz signals mixed at 4 : 1, 8 Ohms):

0.03% or less at 50 Watts per channel
0.02% or less at 25 Watts per channel
0.02% or less at 1 Watt per channel

Power bandwidth: 10 to 35,000Hz

Residual noise: 0.5mV rms into 8 Ohms

Damping factor: 50

PREAMPLIFIER SECTION

Frequency response:

AUX: +0.5, -1.0dB (10 to 40,000Hz)
PHONO: \pm 0.3dB (20 to 20,000Hz)

Total harmonic distortion: 0.025% or less

Filter: Subsonic (16Hz 6dB/octave)

Signal-to-noise ratios:

PHONO: 78dB (2.5mV), 90dB (10mV)
TAPE/AUX: 95dB

Phono overload level: 200mV rms 1,000Hz

Input sensitivity/impedance:

PHONO: 2.5mV 47k Ω
TUNER/AUX: 150mV 47k Ω
TAPE: 150mV 47k Ω

Output level: TAPE REC: 150mV

Tone control: BASS: \pm 10dB at 100Hz

TREBLE: \pm 10dB at 10,000Hz

Loudness control (-40dB position):

+8dB at 100Hz, +4dB at 10,000Hz

FM TUNER SECTION

Usable sensitivity: 10.3dBf (1.8 μ V)

50dB quieting sensitivity:

STEREO: 38.2dBf (45 μ V), MONO: 15.3dBf (3.2 μ V)

Signal-to-noise ratios: STEREO: 68dB

MONO: 72dB

Distortion (1,000Hz): STEREO: 0.2%

MONO: 0.15%

Frequency response: 20 to 15,000Hz, +0.5 -1.5dB

Capture ratio: 1.0dB

Selectivity: 80dB

Spurious rejection: 75dB

Image rejection: 60dB @ 98MHz

Subcarrier rejection: 60dB

IF rejection: 90dB

AM suppression: 50dB

Muting threshold: 13.3dBf (2.5 μ V)

Stereo separation:

45dB @ 1,000Hz, 30dB 30 to 15,000Hz

Antenna: 75 Ohm unbalanced coaxial cable or

300 Ohm balanced twin-line feeder

AM TUNER SECTION

Sensitivity: 300 μ V/m (IHF, ferrite antenna)

Selectivity: 35dB

Signal-to-noise ratio: 50dB

Image rejection: 35dB

IF rejection: 30dB

GENERAL

Power required: AC 120V, 60Hz

Power consumption: 220W (UL TEST OUTPUT)

Current consumption: 2.7A (CSA TEST OUTPUT)

Dimensions (WxHxD):

480 x 115 x 390mm (18.9 x 4.5 x 15.4")

Weight: 12.0kg (26.4 lbs.)

Design and specifications subject to change without notice.

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...In Touch with Tomorrow

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