

Technics

SE-C01

Stereo/Mono DC Power Amplifier

SU-C01

Stereo Preamplifier

ST-C01

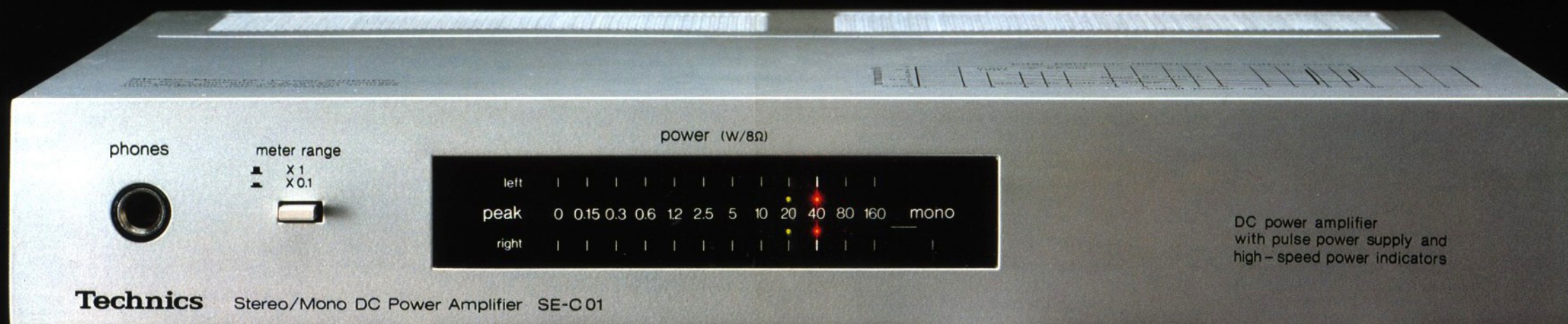
FM/AM Stereo Tuner

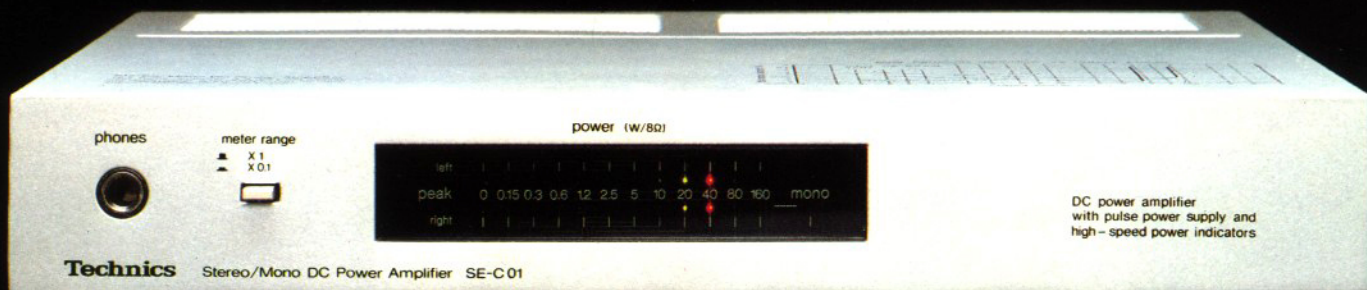


ACTUAL SIZE

of Technics "Micro Series" shown here.
ONLY 2" × 12" but packed with quality performance.

These "Micro Series" are designed for those with space restrictions, but who refuse to sacrifice high fidelity sound. Stack them, spread them out or distribute them in available corners. It doesn't matter. You'll still be getting performance that totally defies their size. More precisely, you'll get 40 watts per channel with both channels driven (or 55 watts in mono) from the SE-C01, a well designed stereo preamplifier in the SU-C01 and a sensitive, selective and stable tuner in Model ST-C01. All this and much, much more.





SE-C01 Stereo/Mono DC Power Amplifier

Big Power in Compact Form

The new SE-C01 may be a micro component but puts out the kind power you expect from a much larger amplifier. And it does this in the high fidelity tradition, with virtually flat response over the entire audible range and total harmonic distortion of only 0.03%. It's a true DC amplifier that can handle the nuances and power of a full orchestra.

DC Amplifier for Realism in Sound

This DC (direct coupled) amplifier was designed without any coupling capacitors. You won't find any in the signal path nor in the feedback loop. Nor will you encounter DC drift and instability, problems often arising from this type of design. They have been controlled by the following design measures: a current-mirror loaded differential first amp stage using thermally balanced dual transistors; a voltage amp stage with purely resistive load and excellent open-loop characteristics; and a power amp stage

which, by utilizing the diode-like behavior between transistor base and emitter, provides accurate thermal compensation over an extremely wide range of temperatures. Other features of special note are the current limiter and the short circuit protection circuit.

Delivers 40 W+ 40 W continuous power both channels driven into 8 ohms, 20 Hz to 20 kHz with no more than 0.03% THD

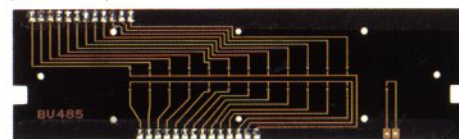
This DC amplifier illustrates that big things can come in small packages. The SE-C01 has ultra-compact dimension but delivers 40 watts per channel minimum r.m.s. power into 8 ohms with no more than 0.03% total harmonic distortion from 20 Hz to 20,000 Hz. Except in the most "power hungry" installations, it easily handles the dynamics and detail of a full orchestra. And should you wish to operate the SE-C01 as a mono amplifier, it will deliver 55 watts per channel, with no more than 0.05% total harmonic distortion.

Pulsed Power Supply Operates More Efficiently in Less Space than Conventional Type

One of the main reasons for the micro size of this component is the pulsed power supply. It rectifies the AC line current, then converts it into a 20 kHz square wave pulse which drives the power supply transformer. Because of this high primary frequency, a transformer that is only a fraction of the size of a conventional transformer can be used. The secret to the pulsed power supply is the development of a reliable high voltage high speed switching transistor. In addition, spurious high frequency leakage has been prevented by efficient shielding in the diecast cabinet.

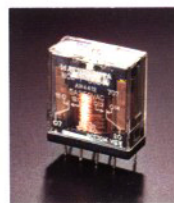
Easy-To-Read, Color-Coded LEDs to Meter Power

These easy-to-read LEDs let you use the full power and dynamism of the SE-C01 without driving it to the point where excessive distortion is introduced. A single circuit board contains a pair of 12-LEDs, with each pair having 9 yellow and 3 red light emitting diodes. They provide true peak power indication with extremely fast attack. The meter scale goes from 0 to 160W/ch (into 8 ohms) can be switched to read from 0 to 16W/ch for more accurate readings at lower power output.



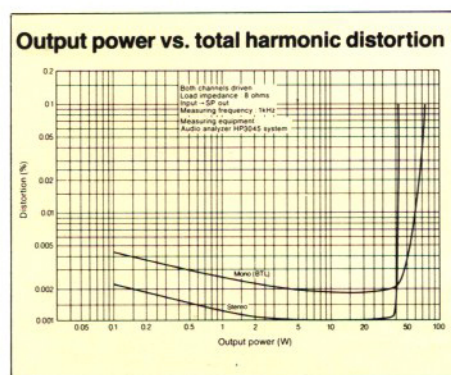
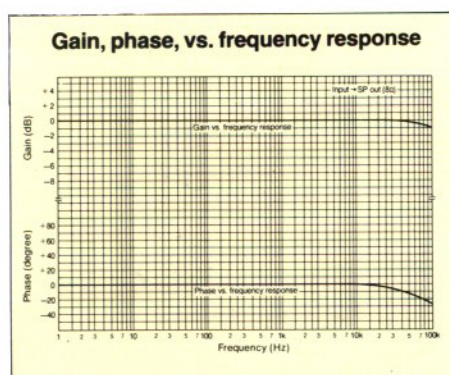
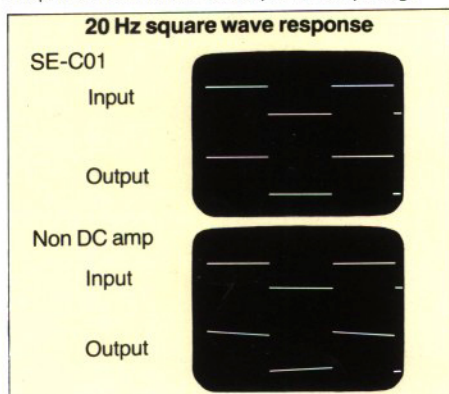
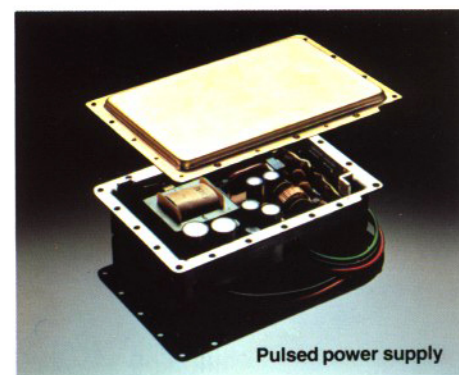
Relay in Protection Circuit Handles Muting

This circuit provides positive protection in the case of malfunction and will cut off the speakers at the first sign of trouble. The relay in the protection circuit also functions for muting and eliminates click noises when turning the unit on or off.



Precision-Machined Diecast Cabinet

The cabinet is a unitized diecast construction with a very finely machined and finished front panel. It offers the elegant appearance and style that indicates the high quality and performance of the components it contains.



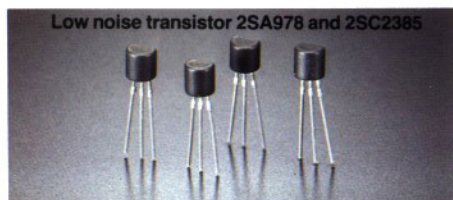


SU-C01 Stereo Preamplifier

This Stereo Preamp is a perfect complement to the SE-C01 in micro size and superior performance. It brings you clear, precise sound reproduction and has its own built-in MC pre-preamplifier, a feature often lacking even on large units. The use of low noise transistors and other components makes it an ideal link in the chain from music source to high fidelity reproduction.

Built-in Moving-Coil (MC) Cartridge Pre-preamplifier

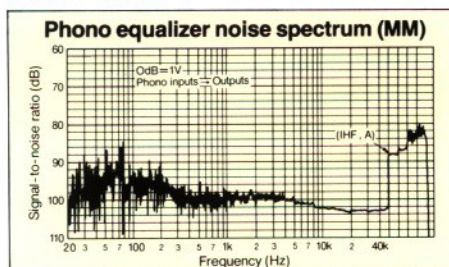
The increasingly popular MC cartridges can be used with the SU-C01 without purchasing a separate MC pre-preamp because it already has one built in. This built-in MC pre-preamplifier is a push-pull design from the front stage, with its low noise 2SA978 and 2SC2385 transistors, to the voltage amp output stage. Referenced to a $250\mu\text{V}$ input, it has an impressive signal-to-noise ratio of 78 dB.



Phono Equalizer with S/N Ratio of 88 dB (at 2.5 mV, MM input)

When you use a moving-magnet type cartridge,

you can expect an even better signal-to-noise ratio, thanks to the ultra-low noise transistors used in a differential first stage with current mirror loading. Referenced to an input of 2.5 mV, the S/N ratio is 88 dB, which in practical terms indicates that you simply won't hear phono circuit noise when listening to a record. Distortion is an amazingly low 0.005% at 3V output (VR: -20 dB, 20 Hz ~ 20 kHz). RIAA equalization is within ± 0.2 dB from 20 Hz to 20 kHz due to



specially selected metal film resistors (1% tolerance) and polypropylene capacitors (tolerance 2%). And with a phono overload spec of 200 mV, you have plenty of dynamic range to handle the most difficult discs.

Subsonic Filter Cuts Rumble

This -12 dB/oct. subsonic filter cuts off unwanted noise below 30 Hz, such as arm resonances, record warp, platter rumble and so forth. It makes use of the tone control circuit and performs its function without additional components or degradation of the signal-to-noise ratio.

Tone Controls with Center-Defeat Positions

Both the bass and treble control circuits are defeated, i.e. completely switched out of the signal path, when their knobs are turned to the click-stopped center. The signal goes straight to the flat amplifier stage without encountering any response altering components.

Power Supply Designed for Low Noise, High Stability

The SU-C01's power transformer is mounted in an iron shielding case to prevent AC hum from entering any of the circuits. Zener diodes are employed for voltage regulation, further protecting against the effects of AC line induced noises. The result is virtually noiseless power supply that permits the ultra-low noise preamp circuits to perform to their full capacity.

Gold Plated Connection Jacks

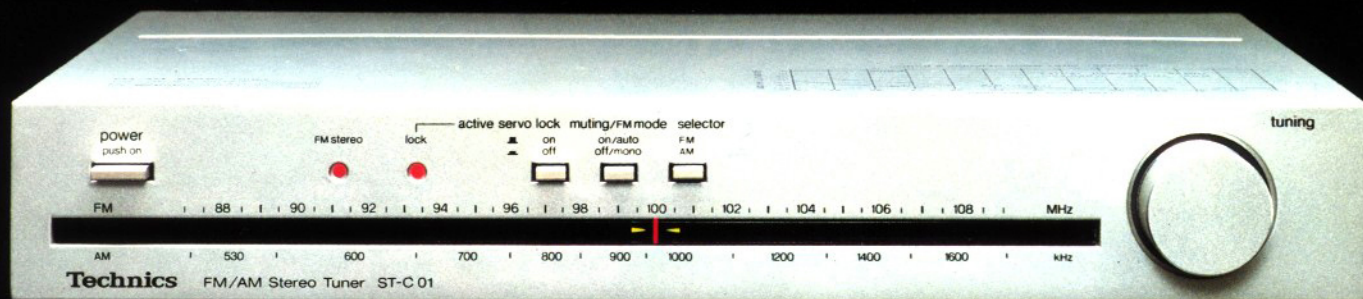
All jacks are gold plated to ensure low-resistance electrical contact under all conditions and after years of repeated use. This gold plating is especially critical in the MC phono inputs where the generated signals are in microvolts.

Finely Machined Diecast Cabinet

This cabinet is precision machined and features a unitized diecast construction just like that of the power amp. The feel of solidity and precision engineering reflects the technical excellence of the circuits and their components.



Optional rack

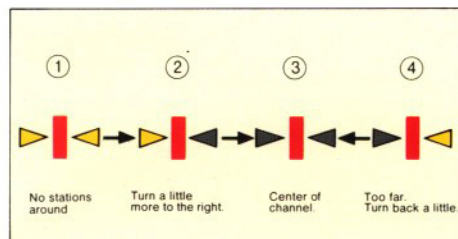


ST-C01 FM/AM Stereo Tuner

This "Micro Series" tuner complements the preamplifier and power amplifier, both in size and performance, because it can reproduce the signals broadcasted by the radio station with striking fidelity. Its sensitivity, selectivity, channel separation, signal-to-noise ratio and frequency response are all of high technical standards. The secret is, of course, in Technics' choice of high performance components and advanced design.

Active Servo Lock for Precise Tuning

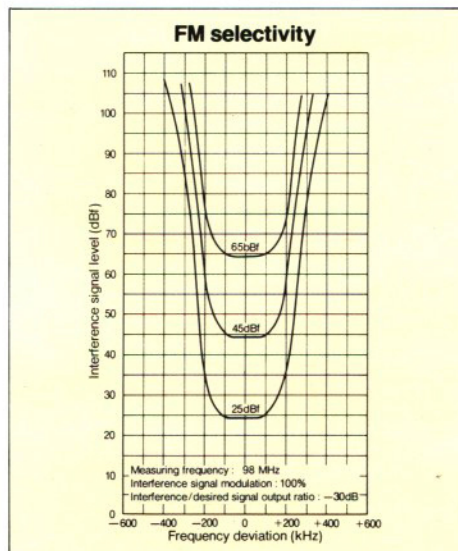
Outstanding stability, sensitivity and spurious rejection are provided by dual gate junction type FETs in the front end, a unitized coil-plus-capacitance construction of the local oscillator for high stability and other circuit features. But the main work is done by the Active Servo Lock which maintains optimum tuning under all conditions. This circuit eliminates drift problems not only in the local oscillator but also in the IF stage and the FM discriminator. The Technics Active Servo Lock eliminates drift problems so completely that even unattended recordings from FM can be made without worry that the tuner will drift and the recording will be less than perfect.



which direction you should tune. If you overshoot the station, a yellow LED will again light up to tell you which way to turn. When the station is tuned in perfectly, both yellow arrows go out and only the thin red line stays on. Explaining this feature in words makes it sound slightly complicated, but it is actually very simple. In addition, if the servo tuning switch is in the ON position, the "lock" LED will light up to indicate that the station is properly tuned and locked in. Tuning for AM is similar. The yellow LEDs dim when a station is being received and their dimmest position indicates best reception.

Well Designed "IF" Stage for Sensitive, Low Distortion Reception

Three flat group delay ceramic filters ensure high selectivity and still maintain phase coherency in the IF stage. The five-stage differential amplifier in the IF stage displays excellent limiting characteristics. Other important design factors



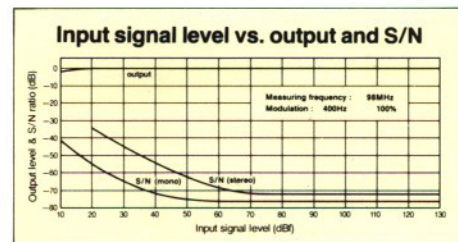
for stable and distortion-free FM stereo reception include a quadrature detector and PLL MPX stereo decoder.

Power Supply with New 3-Pole Regulator

The ST-C01 uses a 3-pole regulator. The result is a very stable supply voltage that permits all circuits and stages to operate to their optimum performance potential.

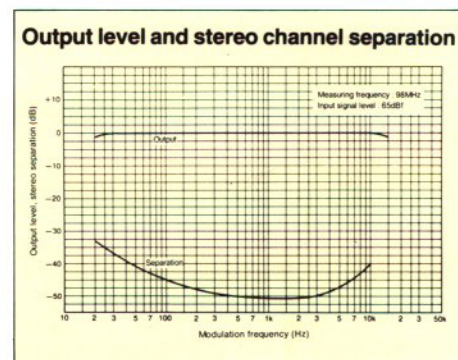
High Sensitivity Front End

The RF stage uses a dual gate junction FET for the sensitivity needed to pick up weak stations. Unitized construction of oscillator coil and capacitors prevents drift caused by temperature and humidity changes. Usable sensitivity is 10.8 dBf (1.9μV at 300 ohms) and 50 dB stereo quieting sensitivity is 38.3 dBf.



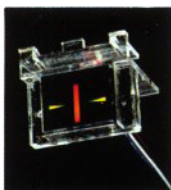
Precision Machined Diecast Cabinet

The cabinet of this tuner has the same unitized, diecast construction and undergoes the same high-precision machining as the other components in this Micro Series components. In addition, this diecast cabinet provides effective shielding against extraneous, undesired electromagnetic waves.



Easy-To-Read LEDs Replace Signal Meters

Three LEDs, 2 arrow shaped yellow ones and one thin-line red one, replace the usual signal strength or tuning meters you normally see on tuners. This feature provides super easy tuning. When no FM station is being received, all three are lit. When a station is approached, one of the yellow arrows goes out and the other indicates in



SE-C01

1. Dual transistors for initial stage differential amplifiers
2. Current-mirror circuits
3. Driver circuits
4. Heat sinks
5. Power transistors
6. Pulsed power supply
7. LED peak power meter
8. Electrolytic capacitors
9. Rectifier diodes
10. LED power meter drive circuit

SU-C01

1. Tone control circuits
2. Stabilizer circuit
3. Power transformer
4. Rectifier diodes
5. Electrolytic capacitors
6. Muting relay
7. Super low-noise-transistors for differential amplifiers
8. Current-mirror circuits
9. MC pre-preamp
10. Phono equalizer
11. Subsonic filter

ST-C01

1. LED tuning dial pointer
2. Power transformer
3. Variable tuning capacitor
4. FM RF circuit
5. FM front end
6. FM IF, AM converter circuit
7. Flat group-delay ceramic filters
8. FM MPX circuit
9. FM IF circuit
10. LED tuning drive circuit
11. Servo lock circuit

Technical Specifications



SE-C01

Rated minimum sine wave RMS power output

20 Hz~20 kHz both channels driven
0.03% total harmonic distortion
40 W per channel (8 ohms)
20 Hz~20 kHz mono [BTL] driven
0.05% total harmonic distortion
55 W per channel (8 ohms)
1 kHz continuous power output
both channels driven
45 W per channel (8 ohms)
60 W per channel (8 ohms) mono [BTL]

Total harmonic distortion
rated power 0.03% (20 Hz~20 kHz)
half power 0.008% (20 Hz~20 kHz, 8 ohms)
0.005% (1 kHz, 8 ohms)
Intermodulation distortion 0.03%
Frequency response 20 Hz~20 kHz, +0, -0.1 dB
DC~100 kHz, -1 dB
S/N (IHF, A) 110 dB
Residual hum & noise (IHF, A) 0.1 mV
Input sensitivity & impedance 1 V/47 kΩ
Damping factor 40 (8 ohms)
Load impedance 4~16 ohms
8~16 ohms mono [BTL]

GENERAL

Power consumption 293 VA, 202 W
Power supply AC 120, 60 Hz
Dimensions (H×W×D) 1-15/16"×11-11/16"×9-27/32"
(49×297×250 mm)
Weight 7.7 lb (3.5 kg)



SU-C01

Input sensitivity & impedance

PHONO MM 2.5 mV/47 kΩ
PHONO MC 100 μV/47 Ω
TUNER 150 mV/47 kΩ
AUX 150 mV/47 kΩ
TAPE 1 PLAYBACK 150 mV/47 kΩ
Phono maximum input voltage (1 kHz, RMS)
PHONO MM 200 mV
PHONO MC 8 mV
Total harmonic distortion
TUNER, AUX, TAPE
0.003% (3 V output at vol. max.)

PHONO MM, MC 0.005% (3 V output at vol. -20 dB)
S/N (IHF, A)
PHONO MM 88 dB
PHONO MC 78 dB (250 μV), 70 dB (100 μV)
TUNER, AUX 100 dB
Frequency response
PHONO RIAA standard curve ±0.2 dB
TUNER, AUX 20 Hz~20 kHz, +0, -0.05 dB
3 Hz~100 kHz, -1 dB
Tone controls
BASS 50 Hz, +10 dB~-10 dB
TREBLE 20 kHz, +10 dB~-10 dB

Subsonic filter 30 Hz, -12 dB/oct
High filter 7 kHz, -6 dB/oct
Loudness control (-30 dB) 50 Hz, +9 dB

GENERAL

Power consumption 9 W
Power supply AC 120 V, 60 Hz
Dimensions (H×W×D) 1-15/16"×11-11/16"×9-1/4"
(49×297×241 mm)
Weight 6.6 lb (3.0 kg)



ST-C01

FM TUNER SECTION

Frequency range 88~108 MHz
Sensitivity 10.8 dBf (1.9 μV IHF '58)
50 dB quieting sensitivity
MONO 17.0 dBf (3.9 μV IHF '58)
STEREO 38.3 dBf (45 μV IHF '58)
Total harmonic distortion
100 Hz 0.1% (mono), 0.25% (stereo)
1 kHz 0.1% (mono), 0.15% (stereo)
6 kHz 0.15% (mono), 0.25% (stereo)
S/N
MONO 75 dB
STEREO 70 dB

Frequency response

20 Hz~15 kHz, +0.5, -1.5 dB
Alternate channel selectivity 75 dB
Capture ratio 1.0 dB
Image rejection at 98 MHz 50 dB
IF rejection at 98 MHz 85 dB
Spurious response rejection at 98 MHz 75 dB
AM suppression 55 dB
Stereo separation
1 kHz 45 dB
10 kHz 35 dB
Carrier leak -40 dB (19 kHz, 38 kHz)
Antenna terminals 300 Ω (balanced)
75 Ω (unbalanced)

AM TUNER SECTION

Frequency range 525~1605 kHz
Sensitivity 30 μV, 250 μV/m
Selectivity 30 dB
Image rejection at 1000 kHz 50 dB
IF rejection at 1000 kHz 40 dB

GENERAL

Output voltage 0.5 V (fixed)
Power consumption 8 W
Power supply AC 120 V, 60 Hz
Dimensions (H×W×D) 1-15/16"×11-11/16"×10-1/32"
(49×297×255 mm)
Weight 6.4 lb (2.9 kg)

Technics

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