
TOA RADIO TUNER

SYNTHESIZED AM/FM TUNER

DT-920



DESCRIPTION

TOA DT-920 is a mono, frequency synthesized, AM/FM tuner for use in a variety of commercial background and foreground music systems. Attractively styled, it provides a number of useful functions, is easy to operate and has low noise, excellent sensitivity and stability. It has a large digital display to indicate the selected station, memory preset, tuning mode and the frequency band selected.

The frequency ranges and frequency steps for both the AM and FM bands can be changed using a simple power-up procedure to accommodate differing world broadcast standards. These can be changed independently for each band.

Featuring 40 memory presets for stations (CH 1—CH 40), the DT-920 provides several useful ways to scan for and select stations using either station frequencies or the memory preset numbers for the scanning. A scan level switch selects between local or distant reception sensitivities and can be set independently for the AM and FM bands. An automatic up or down station scan selects the next used frequency or preset. Stations can also be selected manually with the up/down tuning bar. Both these tuning methods can be set independently for the AM and FM bands. Alternately, a station can be selected by directly entering its frequency or memory preset number into the display. Selected stations can be stored in any combination to the 40 memory presets that are retained in a non-volatile memory when power is turned off.

A fourth, unique method for selecting stations, particularly useful on job-sites where the local station frequencies are unknown, is Automatic Preset Tuning (APT).

Functioning in either the local or distant mode, the tuner will start at the low end of the selected frequency range and scan upward. The first 20 stations received will be automatically entered in order into 20 of the memory presets. This can be done for each band, AM and FM, to automatically program all 40 presets.

The audio output features two RCA type jacks wired in parallel and provides a -10dBV output (-8dB ref 0.775V) capable of driving 10k ohm or higher loads. This provides a proper match to line inputs on the TOA 900 Series mixers and amplifiers. The DT-920 includes a 300 ohm FM dipole antenna and an AM loop antenna, although an outdoor antenna can be connected in weak or fringe reception areas. The antennas connect via push-type terminals. The optional MB-DT920 rack mount kit allows the tuner to be mounted in a standard 19" E.I.A. equipment rack occupying two rack spaces.

FEATURES

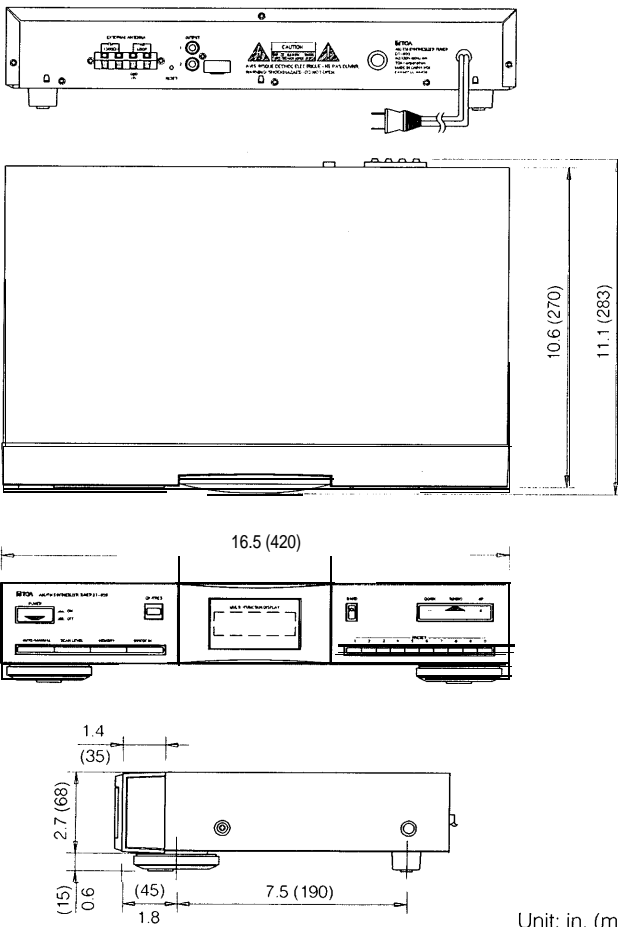
1. Presets for 40 AM and/or FM stations.
2. Frequency synthesized digital tuning with multi-function digital display.
3. Automatic station scan (local or distant) and manual tuning.
4. Automatic station storage to memory using auto-scan mode.
5. Tuning by direct entry of the station frequency.
6. Includes an FM dipole and AM loop antenna.
7. Optional rack mount kit available.

SPECIFICATIONS

Configuration	
Model Number	DT-920
Inputs	FM and AM antenna
Output	Mono
Performance	
AM Input	Loop or long wire antenna
FM Input	300 ohm antenna
Sensitivity	26 μ V AM/3 μ V FM
Nominal Output	-8dB unbalanced
Noise	-70dB min
Physical	
Enclosure	Black
Dimensions (W x H x D)	16.5 x 3.3 x 10.6in. (420 x 83 x 270mm)
Rack Spaces	2
Power Consumption	6W
Weight	6.2lbs. (2.8kg)

* 0dB = 0.775V

APPEARANCE AND DIMENSIONAL DIAGRAM



Unit: in. (mm)

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The tuner shall be a frequency synthesized AM and FM mono radio receiver with all electronic controls. It shall receive the AM frequency band from 520 to 1,710kHz in 10kHz steps and FM frequency band from 87.9 to 107.9MHz in 200kHz steps. The receiver capability can be changed, using a power up function, to receive AM frequencies from 522 to 1,710kHz in 9kHz steps and FM frequencies from 87.5 to 108.0MHz in 50kHz steps. This selection shall be independently selectable for each band. AM sensitivity shall be 26 μ V and FM sensitivity shall be 3 μ V. A scan level switch shall select between low and high sensitivity for local/distant type reception and be independently selectable for each band. The nominal audio output shall be -8dB unbalanced with a noise level at least -70dB at maximum FM quieting. Inputs shall be provided for AM loop and 300 ohm FM antennas.

The tuner shall provide four station selection modes: direct entry, manual scan, automatic scan and automatic memory entry scan. Station selection can be by station frequency or memory preset channel and this function along with the first three selection modes shall be independently selectable for the AM and FM bands. The fourth automatic memory entry scan shall scan the selected AM or FM band, starting from the lowest end of the frequency range and automatically enter the first 20 stations received into the memory presets. AM stations shall be so stored in preset channels CH 21 to CH 40 and FM stations into presets CH 1 to CH 20.

The front panel shall have the following controls BAND switch to select the AM or FM band and changing reception frequency ranges; a up/down tuning bar for station selection; an AUTO/MANUAL tuning selector, a SCAN LEVEL selector for local or distant sensitivity; a MEMORY switch for entering a station into memory and for changing scan modes; a DIRECT IN for selecting manual entry of the station frequency; a CH/FREQ switch to select between scanning frequencies and memory presets; ten PRESET switches for recalling memory presets and entering station frequencies and a POWER on/off switch. The rear panel shall have two RCA type jacks wired in parallel for the audio output and four push-type terminals for connection of the AM and FM antennas. One AM antenna terminal shall also connect internal to chassis ground. A 300 ohm twin-lead dipole and AM loop antennas shall be included.

An optional rack mount kit, the MB-DT920, shall allow mounting the tuner in a standard 19" E.I.A. equipment rack, occupying two rack spaces. The tuner shall be enclosed in a durable, painted, black steel enclosure with a black anodized, aluminum front panel. AC line voltage shall be 120V, 60Hz. Power consumption shall be 6W. Overall dimensions shall be 16.54 x 3.27 x 10.63 in. (420 x 83 x 270mm). Weight shall be 6.17lbs. (2.8kg).

The tuner shall be the TOA DT-920.



TOA Corporation

Specifications are subject to change without notice.

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