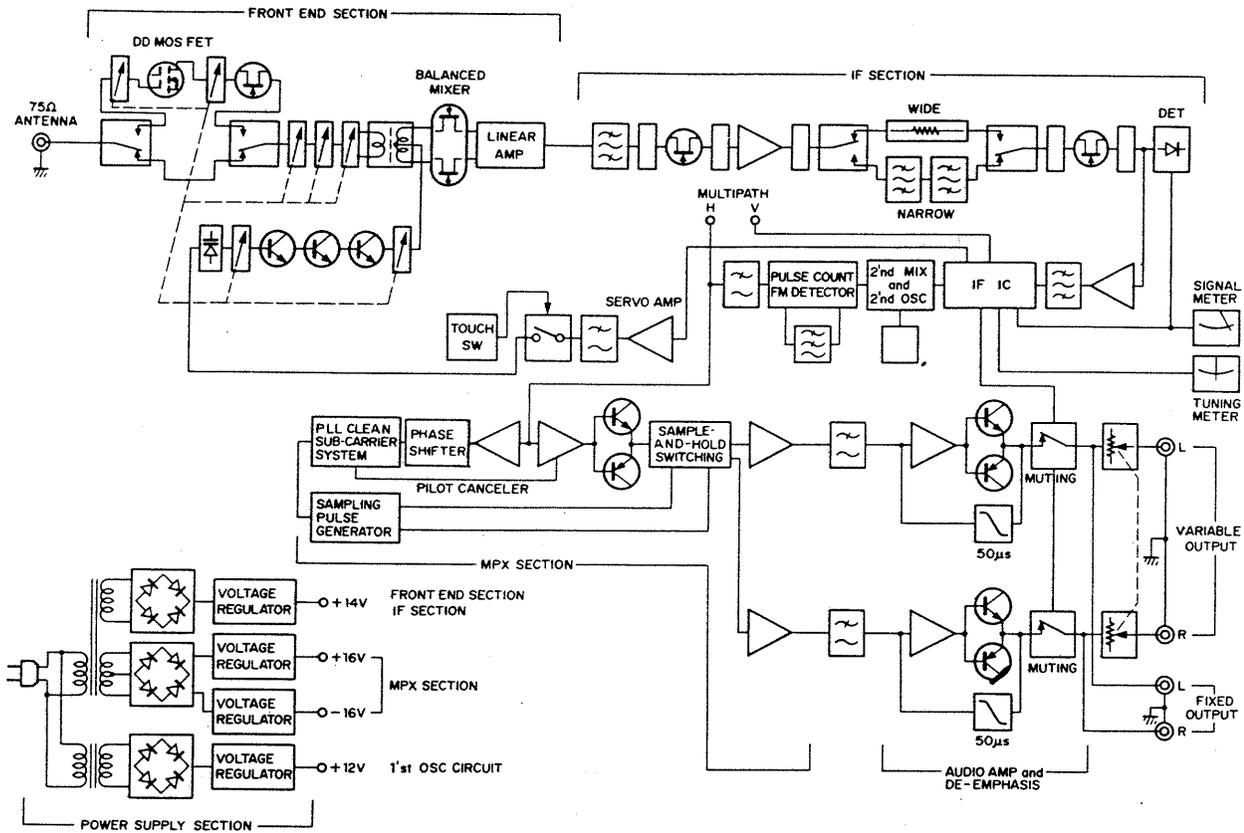


BLOCK DIAGRAM

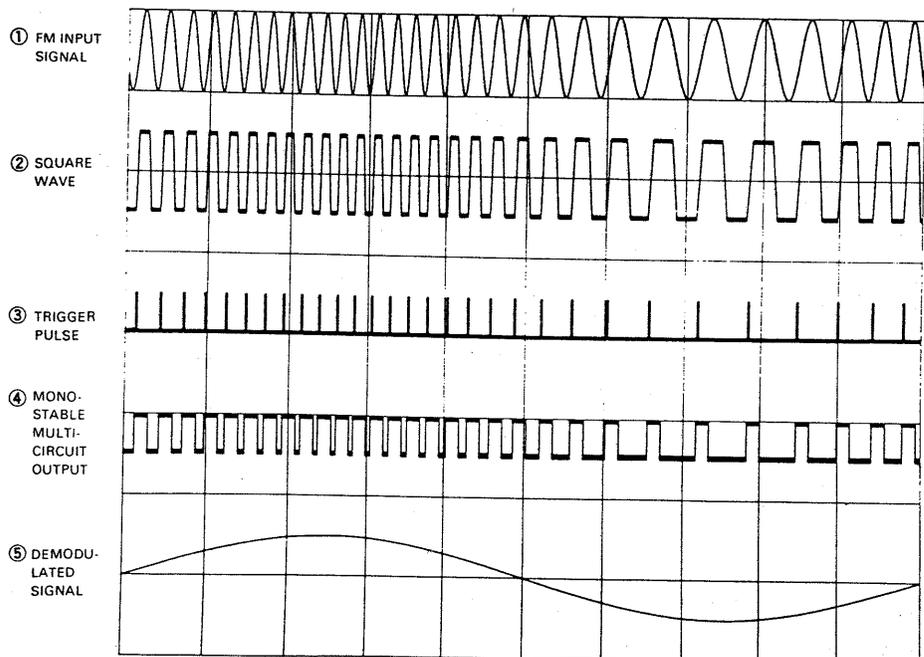
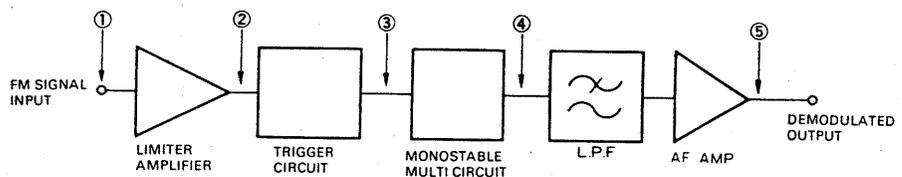


PULSE COUNT DETECTOR SYSTEM

FM tuner's audible quality largely depends on the linearity of its FM detector. The L-01T has employed in its detector a Pulse Count system which has essentially a linear response over the entire detecting band.

The simplified operating principle of the Pulse Count system is illustrated by the block diagram and signal waveforms at right. The frequency-modulated input signal ① is waveform shaped into a square wave ② by the limiter. The square wave then passes through a differentiator circuit to produce narrow spikes ③ that drive a trigger circuit. Those spikes trigger a mono-stable multivibrator, which produces precision square waves with a constant pulse width. The final demodulation signals ⑤ are obtained by detecting those square waves.

The detector output remains at zero volts when there is no trigger input applied, and it increases in direct proportion to the input triggering frequency to produce linear output.



SPECIFICATIONS

FM TUNER SECTION

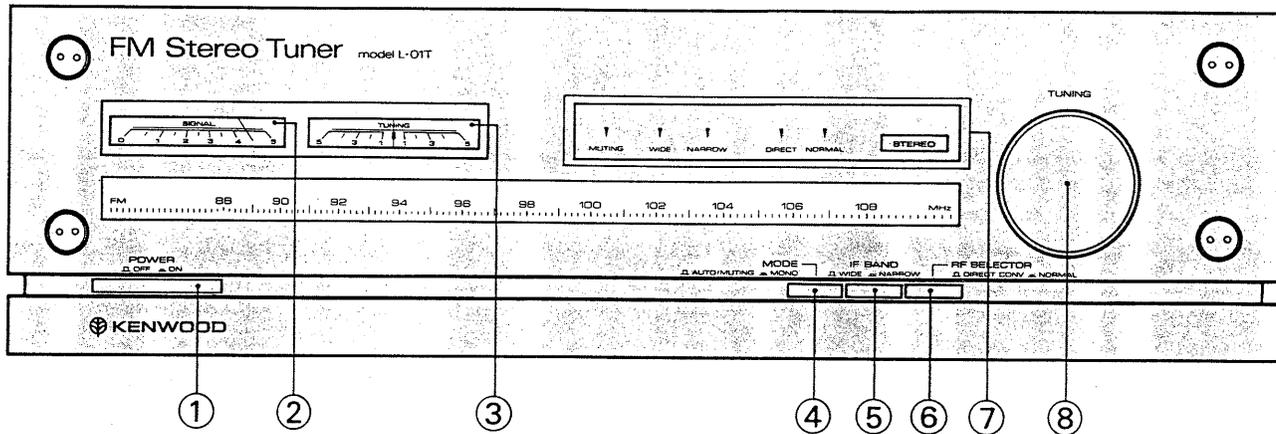
	NORMAL	DIRECT
Usable Sensitivity	10.3 dBf (1.8 μ V)	20.7 dBf (6.0 μ V)
50 dB Quieting Sensitivity:		
Mono	15.8 dBf (3.4 μ V)	26.7 dBf (12 μ V)
Stereo	37.2 dBf (40 μ V)	48.1 dBf (140 μ V)
Signal to Noise Ratio:		
Mono	86 dB	
Stereo	80 dB	
Total Harmonic Distortion	WIDE	NARROW
Mono at 100 Hz	0.02%	0.04%
1000 Hz	0.02%	0.15%
6000 Hz	0.04%	0.2%
15000 Hz	0.04%	0.05%
50 Hz ~ 10000 Hz	0.04%	0.3%
Stereo at 100 Hz	0.03%	0.3%
1000 Hz	0.03%	0.2%
6000 Hz	0.05%	0.3%
15000 Hz	0.18%	
50 Hz ~ 10000 Hz	0.08%	0.4%
Capture Ratio	0.9 dB	2.5 dB
Alternate Channel Selectivity	45 dB	65 dB (300 kHz)
Stereo Separation		
1000 Hz	60 dB	47 dB
100 Hz ~ 10000 Hz	48 dB	35 dB
15000 Hz	45 dB	
Frequency Response	15 Hz ~ 15000 Hz, +0.5 dB, -0.5 dB	
Spurious Response Ratio	120 dB	
Image Response Ratio	120 dB	
IF Response Ratio	120 dB	
AM Suppression Ratio	65 dB	
Sub Carrier Product Ratio	70 dB	
Antenna Impedance	75 Ω unbalanced	
FM Frequency Range	88 MHz ~ 108 MHz	
Output Level		
Fixed	0.75V, 150 Ω	
Variable (1000 Hz, 100% Mod.)	0 ~ 1.5V, 150 Ω	
Multipath Output		
Vertical	100 mV, 1.0 k Ω	
Horizontal	300 mV, 10 k Ω	

GENERAL

Power Requirements	60 Hz 120V (U.S.A. and Canada Model) or 50Hz/60 Hz 110-120V/220-240V, switchable
Power Consumption	50 Watts
Dimensions	W: 440 mm (17-5/16") H: 136 mm (5-11/32") D: 452 mm (17-25/32")
Weight (Net)	9.1 kg (20 lb)

Note: Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

CONTROLS AND INDICATORS



① POWER switch

Set this switch to "ON" to turn on the tuner. Set this switch to "OFF" to turn off the tuner.

② SIGNAL meter

This meter indicates the strength of FM signals received. It is used as a tuning aid for FM tuning and very useful in making antenna adjustments. Releasing the TUNING knob will turn off the meter lighting. If you wish the meter to be lit always, set the CONTINUOUS DIAL LIGHT switch on the rear panel to ON.

③ TUNING meter

This meter gives a precise indication of correct FM tuning. Maximum stereo separation and minimum distortion are obtained when the tuner is tuned to center the pointer on the meter scale. When the TUNING knob is released, the meter lighting will go off. If you wish to always illuminate the meter, set the CONTINUOUS DIAL LIGHT switch on the rear panel to ON.

④ MODE switch

AUTO/MUTING — The tuner switches automatically between stereo and monaural operation in accordance with the manner in which the selected station is operating. In addition, noise is silenced as you tune between channels.

MONO — Turns off muting and provides monaural operation regardless of the manner of transmission. Use this setting (press in) for best reception of signals that are too weak to overcome the muting threshold or provide noise-free stereo.

⑤ IF BAND selector

WIDE — Increases bandwidth for those cases where the selected signal is unaffected by strong stations at nearby dial settings or other forms of interference.

NARROW — Increases selectivity to reduce the effect of a very strong station operating at a frequency close to the frequency you have selected.

⑥ RF SELECTOR switch

This switch is intended to combat adjacent signal interference such as RF intermodulation or intermodulation distortion. For the best reception it is recommended to use this switch together with the IF BAND selector.

DIRECT CONV — This setting will provide the best possible reception quality, free from RF intermodulation or intermodulation distortion.

NORMAL — This position enables weak stations to be received with the best signal-to-noise ratio.

⑦ INDICATORS

MUTING — Lights when the MODE switch is set to AUTO/MUTING.

WIDE — Lights when the IF BAND selector is set to WIDE.

NARROW — Lights when the IF BAND selector is set to NARROW.

DIRECT — Lights when the RF SELECTOR switch is set to DIRECT CONV.

NORMAL — Lights when the RF SELECTOR switch is placed in NORMAL.

STEREO — Lights only when stereo broadcasts are received and the MODE switch AUTO/MUTING.

⑧ TUNING knob

Selects the desired FM station. When this knob is touched, the dial scale and SIGNAL and TUNING meters light. The dial and meters remain lit until 2 seconds after the TUNING knob is released. When you wish to light the dial and meters continuously, set the CONTINUOUS DIAL LIGHT switch on the rear panel to ON.