

NTE1801 Integrated Circuit TV dbx Noise Reduction System

Description:

The NTE1801 Multiplexed Sound dbx Noise Reduction Decoder is a single-chip linear IC in a 28-Lead DIP type package suitable for US NTSC System use. The device incorporates two RMS-level sensors and VCA circuits, as well as five operational amplifiers and two buffer circuits.

A complete multiplexed sound system for US NTSC System television sets can be built by interfacing the NTE1801 with the NTE1800 Multiplexed Sound Decoder.

Features:

- Low Distortion Ratio, Low Interference
- Low Power Supply Current
- Single, 8V to 15V Power Supply
- 100mV_{rms} (300Hz, 0dB) Input Voltage (Pin4)
- Easily Interfaced to the NTE1800

Functions:

- On-Chip dbx Noise Reduction Decoder and VCA Circuits
- On-Chip RMS Level Sensor
- L + R Signal Buffer Amplifier

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Supply Voltage, V_{CCmax}	15V
Power Dissipation ($T_A = +75^\circ\text{C}$), P_D	580mW
Operating Temperature Range, T_{opr}	-20° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+125^\circ\text{C}$

Recommended Operating Conditions: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Supply Voltage	V_{CC}		8.0	12.0	13.5	V
Input Signal Voltage	V_{IN}	$f = 300\text{Hz}$, Pin4	–	100	–	mV _{rms}
Amp 1 Gain	AV1		0	10.3	30.0	dB
Amp 2 Gain	AV2		0	–	20	dB

