

NTE1730 Integrated Circuit Dual Preamp

Features:

- Dual Pre Amplifier for Car or Home Stereo Use.
- High Voltage Gain: $G_{VO} = 100\text{dB}$ (Typ) @ $f = 1\text{kHz}$
- Excellent Channel Separation and High Ripple
- Rejection: CH Sep. = 70dB (Typ)
R.R = 50dB (Typ)
- Low Noise: $V_{NI} = 1.0\mu V_{\text{rms}}$ (Typ) at $R_g = 2.2\text{k}\Omega$, BW = 15Hz to 30kHz
- Built-In Muting Circuit: $2\text{V} \geq V_g \geq 0.9\text{V}$
- Wide Operating Supply Voltage Range; $V_{CC} = 7\text{V}$ to 18V .

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

Supply Voltage, V_{CC}	18V
Power Dissipation (Note), P_D	700mW
Derated Above 25°C	$5.6\text{mW}/^\circ\text{C}$
Operating Temperature Range, T_{opr}	-25° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$

Electrical Characteristics: ($T_A = 25^\circ\text{C}$, $V_{CC} = 10\text{V}$, $f = 1\text{kHz}$, $R_g = 600\Omega$, $R_L = 10\text{k}\Omega$ unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}	$V_{IN} = 0$	—	5.5	8.5	mA
Voltage Gain	G_{VO}	$C_f = 100\mu\text{F}$, $R_F = 0$	—	100	—	dB
Maximum Output Voltage	V_{OM}	THD = 0.5%, NAB EQ	2.0	2.8	—	V_{rms}
Input Resistance	R_{IN}	$V_O = 1V_{\text{rms}}$	—	100	2.5	μV_{rms}
Channel Separation	CH_{sep}	$f = 10\text{kHz}$, $R_g = 2.2\text{k}\Omega$, $V_O = 1V_{\text{rms}}$	—	70	—	dB
Ripple Rejection	R.R.	$f = 100\text{Hz}$, $V_{IN} = 1V_{\text{rms}}$, CB = NO Connection	—	50	—	dB
Muting Ratio	M.R.	$V_g = 1\text{V}$, $0\text{dB} = 1V_{\text{rms}}$	—	80	—	dB

Pin Connection Diagram
(Front View)

