



ELECTRONICS, INC.

44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748-5089
<http://www.nteinc.com>

NTE1170 Integrated Circuit Dual Preamp for Car Radio

Features:

- Fewer Peripheral Parts
- Low Noise
- 8-Lead SIP Type Package

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

Maximum Supply Voltage, V_{CCmax} 18V
 Allowable Power Dissipation, P_{Dmax} 200mW
 Operating Temperature Range, T_{opg} -20° to $+75^\circ\text{C}$
 Storage Temperature Range, T_{stg} -40° to $+125^\circ\text{C}$

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

Recommended Supply Voltage, V_{CC} 9V
 Load Resistance, R_L 10k Ω

Electrical Charactersitics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 9\text{V}$, $R_L = 10\text{k}\Omega$, $R_g = 600\Omega$, $f = 1\text{kHz}$, NAB)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Current Dissipation	I_{CC}		–	4	6	mA
Voltage Gain	VG	closed looped	–	35	–	dB
		open looped, $V_O = 0.77\text{V}$	76	80	–	
Output Voltage	V_O	THD = 1%	1.1	1.8	–	V
Total Harmonic Distortion	THD	$V_O = 0.5\text{V}$	–	0.1	0.3	%
Input Resistance	r_i		70K	100K	–	Ω
Noise Voltage Converted to Input	V_{NI}	$R_g = 2.2\text{k}\Omega$	–	1.25	2.0	μV
Cross Talk	CT		–50	–65	–	dB

Pin Connection Diagram
(Front View)

