



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

## **NTE1631**

### **Integrated Circuit**

### **FM Stereo Multiplexer w/ Soft Muting**

#### **Features:**

- Compact Package
- Channel separation as well as high-frequency cutting can be controlled by means of control inputs
- A control input is used to force monaural operation and inhibit oscillations when the applied voltage is low ( $V_{CC} = 0V$ )
- For a fixed-input waveform phase shift (sub-signal reduced 20%) channel separation is set to maximum using an internal resistance.
- Setting the AM switching input to high forces monaural operation, inhibits oscillations, and cancels the high-cut function.
- Setting the forced monaural input to high forces monaural operation and inhibits oscillations
- Precautions have been taken to eliminate abnormal operation as well as pop noise occurring with power supply and mode switching functions
- Independent high-impedance demodulating and PLL inputs have been provided to enable either directly connected or independent operation
- Wide dynamic range
- +3dB input/output gain
- Low distortion (0.1%)
- Wide supply voltage range (6V to 12V)

#### **Applications:**

- Car Stereo
- Music Center
- Stereo audio Cassette Tape Recorder
- Other Stereo Equipment

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

Supply Voltage, $V_{CC}$	14V
Power Dissipation, $P_D$	550mW
Operating Temperature Range, $T_{opr}$	$-25$ to $+75^{\circ}C$
Storage Temperature Range, $T_{stg}$	$-55$ to $+125^{\circ}C$

**Electrical Characteristics:** ( $T_A = +25^{\circ}\text{C}$ ,  $V_{CC} = 9\text{V}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Supply Voltage	$V_{CC}$		6	9	12	V
Quiescent Current	$I_Q$		–	11	–	mA
Channel Separation	Sep		30	40	–	dB
Total Harmonic Distortion	THD	200mVrms MAIN	–	0.1	0.9	%
Input Voltage	$V_{IN}$	THD = 2%	2	–	–	$V_{p-p}$
Voltage Gain	$G_V$		–	3	–	dB
Pilot On Level	$P_{IN}$		–	8	14	mVrms
Input Impedance	$Z_{IN}$		–	40	–	k $\Omega$



