

**S. I. Tech Product Brief  
Model 2237-T and 2237-R  
Audio over Fiber Bit-Driver®**

The S. I. Tech Model 2237-T (transmit) and Model 2237-R (receive) pair provide high quality audio across up to 2 kilometers of fiber optic cable. The 2237-T and 2237-R Bit-Drivers have several options meeting the needs of many audio applications.

**2237-T**

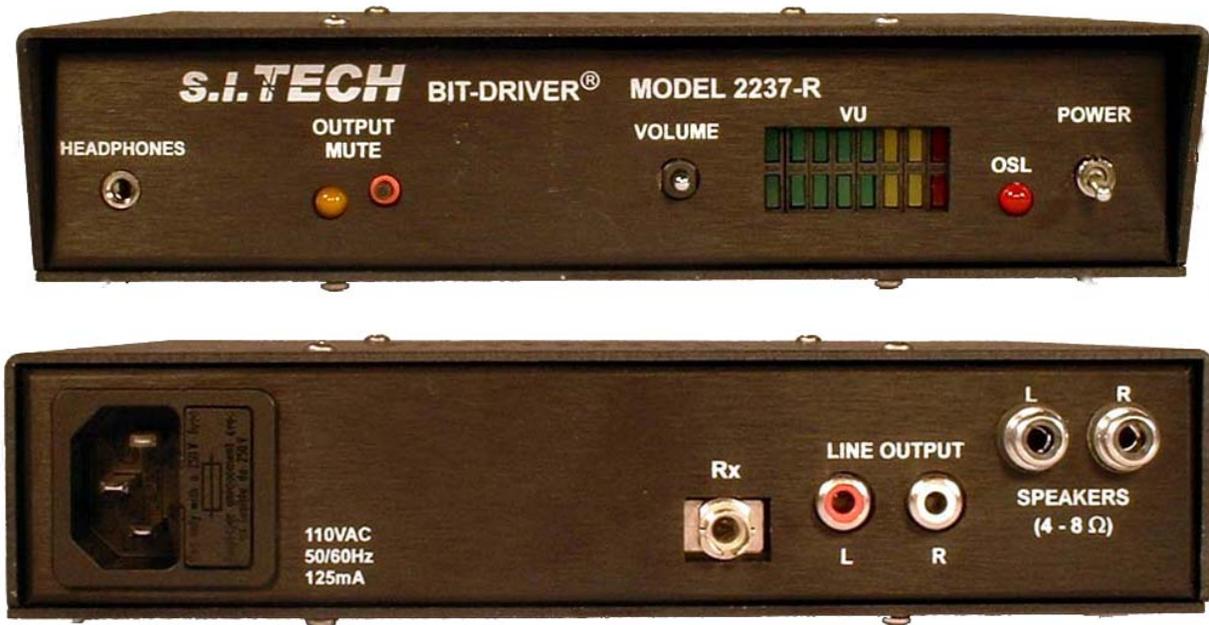


The 2237-T performs analog to digital conversion on the audio input and transmits the signal across a fiber optic cable.

The 2237-T supports audio inputs from either a microphone (monaural) or the line (stereo). When using the microphone, the output at the 2237-R is the same monaural signal on both left and right channel outputs. The microphone input is connected through a standard 3.5mm front panel jack. The microphone input level can be boosted by 20dB with a rear panel toggle switch. The left and right channel line inputs are through standard phono jacks on the rear panel. The line input levels can be adjusted from -34.5 dB to +12dB in 1.5dB steps through a front panel three-position toggle switch.

The above photos show the front and rear of a 2237-T.

## 2237-R



The 2237-R receives the fiber optic signal and performs digital to analog conversion for the audio output.

The 2237-R supports audio outputs on headphones, speakers or line. The headphone outputs are through a standard 3.5mm stereo front panel jack. The speaker and line outputs are through left and right channel standard phono jacks in the rear panel. Plugging into the headphone jack disables the speakers and the line outputs are always enabled. The output volume of the headphones and speakers can be adjusted in 1dB steps through a front panel three-position toggle switch.

The above photos show the front and rear of a 2237-R.

The 2237-T and 2237-R front panels contain a 2 x 8 LED display used as 'VU' meter or volume level. In normal operation, the 'VU' meter shows the fullness of the digitized audio signal. The red LED lights when the digitized audio signal is saturated and the audio signal is distorting. When the input level or output volume is adjusted, the LED display shows the relative adjustment level.

Model 2237-T and 2237-R power input can be ordered from the factory for operation from +12 to +24 VDC, or from either 110 or 220 VAC.

Model 2237-T and 2237-R fiber optic interfaces can either be multimode ST (850nm) or single mode (1310nm). The optic connectors can be ST or SC for single mode.

## Specifications

2237-T	Microphone Input No boost Boosted	6k $\Omega$ input 350 mV <sub>RMS</sub> max 35 mV <sub>RMS</sub> max
	Line Input	10k $\Omega$ input 2 V <sub>RMS</sub> max
	Optics Output Multimode (850nm) Single mode (1310nm)	20 $\mu$ W typical -17 dBm typical
	Power Input	2.5W max
2237-R	Headphone Output	1 V <sub>RMS</sub> max
	Line Outputs	0.9 V <sub>RMS</sub> max into 10k $\Omega$ 0.7 V <sub>RMS</sub> max into 600 $\Omega$
	Speaker Outputs, each	1 W average into 8 $\Omega$
	Optic Input Sensitivity Multimode Single mode	2 $\mu$ W typical -27 dBm typical
	Power Input	7W max
2237-T and 2237-R	Audio bandwidth	10 to 20,000 Hz 16-bit samples at 48kHz rate
	Ambient Temperature	0 to 50 $^{\circ}$ C
	Power supply	12 to 24VDC Nominally 110VAC Nominally 220VAC

## Ordering Information

Product	Category	Item	Option
2237-T	Audio with microphone and line inputs		
	Power (Select one)	12 – 24 VDC	-DC
		110 VAC *	
		220 VAC	-V
	Optics (Select one)	Multimode *	
Single Mode		-SM	
2237-R	Audio with headphone, speaker and line outputs		
	Power (Select one)	12 – 24 VDC	-DC
		110 VAC *	
		220 VAC	-V
	Optics (Select one)	Multimode *	
Single Mode		-SM	

\* Default options.

The 2237-T and 2237-R audio products can be ordered directly from S. I. Tech by mail, telephone, or the web Bit-Driver Store on the S. I. Tech website.

S. I. Tech 1101 N. Raddant Road 1 630 761 3640  
Batavia, IL 60510 USA <http://www.sitech-bitdriver.com>