

# PIGTRONIX

## Quantum Time Modulator - Users Guide

Welcome to the realm of Pigtronix! Your new Quantum Time Modulator is an all analog, double bucket brigade time stretching device with dual modulation sources. This pedal is designed to produce a wide range of unique modulation effects, from multi-dimensional chorusing to horror film pitch vibrato as well as envelope controlled Doppler shift and pick controlled whammy bar sounds.

The SENSITIVITY knob controls how hard you have to hit the string in order to produce a modulation voltage from the envelope circuit. Lower settings will be appropriate for hotter pickups or in situations where you want only a small amount of envelope modulation to occur. Higher settings will be needed for low output pickups or when you want to produce significant amounts of modulation via envelope.

The SPEED knob controls the rate of the LFO (Low Frequency Oscillator) modulation. Slower speeds will create more spatial washes while faster speeds accentuate rotary and vibrato sounds.

The SOURCE control determines which of the two modulation sources (LFO or ENVELOPE) is acting on the bucket brigade delay line. When the SOURCE knob is turned fully counter-clockwise (pointing towards the SENSITIVITY knob) the Envelope is the only modulation source. When the SOURCE knob is turned full clockwise, (pointing towards the SPEED knob) the LFO is only the modulation source. Parked anywhere in between the two extremes, the SOURCE knob causes the bucket brigade delay line to be modulated by a mixture of both Envelope and LFO.

The CHORUS / VIBRATO switch determines if the effect output carries a mixture of clean and modulated audio (Chorus) or just a pure modulated signal (Vibrato).

The output from the Quantum Time Modulator can be either Mono using a standard patch cable or Stereo using a TRS cable. In Stereo, the effect becomes even more intense. A third possibility is to run the Quantum in mono, on one side of a two amp, stereo setup. This arrangement, favored by Dweezil Zappa, will produce a dramatic 3 dimensional pulling effect that jumps across the stage.

DC Power - The Quantum Time Modulator comes with an 18VDC, neg. tip power supply. The 18VDC power provides a huge amount of headroom for crystal clear tones with any type of instrument. Quantum does not take batteries.

It is worth mentioning that the Quantum Time Modulator pedal was directly inspired by Dweezil Zappa who's encouragement for us to re-create the "DynaFlinger" sound from Frank Zappa's Shut Up and Play Yer Guitar album spurred us on the long and fruitful journey that has resulted in the creation of the Quantum Time Modulator.

#### Pigtronix Limited Warranty:

Your Pigtronix effect pedal comes with a 1 year limited warranty on parts and workmanship. During the warranty period we will repair or replace, at our option, defective parts or pedals free of charge, and return them to the owner. Warranty service does not include damaged, modified, or misused pedals and such pedals will be subject to a standard repair charge.

What you must do: First, contact us directly via email and describe the problem to us. If the problem cannot be resolved we will have you send the pedal directly to us for servicing.

How to contact us for warranty service:

Email: [tech@pigtronix.com](mailto:tech@pigtronix.com)

Phone: 631-331-PIGS (7447)

Warranty Limitations: This warranty does not cover defects resulting from improper or unreasonable use, accident, unauthorized tampering or modifications; and, warranty shall be considered void if chassis has been opened.

To validate your 1-year, limited warranty, please register your Quantum Time Modulator, within 30 days of purchase, on the web at:

[www.pigtronix.com/warranty](http://www.pigtronix.com/warranty)