

# CircuitWerkes DT-232

## Dial-up Controller & Universal DTMF-to-ASCII Transceiver



The DT-232 is an inexpensive dial-up remote control with amazing capabilities! It gives you DTMF access to four, user programmable relays that can be momentary, latching, etc. Relays can be programmed to respond to any DTMF tone or sequence.

The DT-232 can output serial data, in your user-defined format, so it can interface to virtually any piece of hardware that requires serial control or input. The DT-232 receives DTMF tones from either its audio input connector or from its built-in telephone autocoder. The DTMF tones are converted to, user defined, ASCII data and transmitted to the host computer or remote equipment.

In addition to receiving DTMF tones, the DT-232 can accept ASCII input from its serial port and generate DTMF tones that are transmitted to a phone line for controlling equipment in remote locations.

A free Windows program makes control and programming incredibly simple. You can also operate the DT-232's basic functions from any terminal program on almost any type of computer. \*The free software Lets you upload, download & save your DT-232 configurations. It is required for the advanced programming functions.



\*Windows is a registered trademark of MicroSoft Corp.

### DT-232 FEATURES AT A GLANCE:

- Accepts DTMF from either its audio input port or the built-in autocoder.
- Telephone audio can be sent or received via the audio port.
- Receives single or sequences of DTMF tones.
- Built-in password protection & inactivity hang-up
- Converts DTMF tones to ASCII and sends them out via serial port.
- Decodes up to 19 user-defined, DTMF, sequences.
- Each sequence can have up to 7 actions, including: Close relay, open relay, timed closure/timed open, toggle relay, pause, send ascii & jump to sequence ##.
- Serial outputs can be up to 32 characters and are completely user-programmable. Using action sequences, strings can even be combined.
- Accepts serial data input & sends DTMF tones for controlling remote equipment on phone lines.
- Four on-board SPST relays can be controlled via DTMF tones or sequences.
- Windows™ based user interface for PC users simplifies control and programming & lets you save your DT-232 configurations.

## CircuitWerkes

(352) 335-6555 · Fax (352) 380-0230

<http://www.circuitwerkes.com/>

2805 NW 6th Street · Gainesville, FL 32609

# The DT-232 Interface & Setup Software

DTMF Sequence to be Decoded

Actions to be Taken

Action Sequence Compiler

ASCII Output Editor. If desired, any ASCII characters can be entered by numeric value, not just the ones that you can type from the keyboard.

Terminal Window

The software is required to program the DT-232's advanced features, but is not necessary for actual operation of the product.

In the DTMF Sequence Mode, actions can include the following functions:

- Send ASCII - ASCII strings can be up to 32 characters long and can include any of the 255 standard ascii values.
- Output DTMF Tone - Transmits a DTMF tone down the line. Use this function to handshake with remote equipment or to control other peripheral devices.
- Close Relay - Latches a relay on
- Open Relay - Unlatches a relay (turns the relay "off").
- Toggle Relay - Changes the current relay latch state
- Momentary Relay - closes a relay for the duration of the last tone in the sequence
- Timed Closure - Similar to momentary, this mode closes a relay for a defined period
- Timed Open - When a relay is latched, this function opens it for a defined period.
- Pause - Do nothing for a specified period (seconds & milliseconds)
- Jump Sequence - Jump to another action sequence & combine with the current one.

**For more information, please call us, or download the DT-232 Technical manual at [www.circuitwerkes.com/support](http://www.circuitwerkes.com/support)**