

*These notes are an evolving information sheet on operation of Digitrax DCC systems.* The source of this information comes from customer questions, personal experience, the internet, Digitrax manuals and technical information.

### The UT4 Series Throttles

Digitrax continues to expand their line of handheld throttles with the newest, the UT4 and UT4R. The UT4 series is the fourth in a line of utility throttles. These throttles are designed for running trains. They are low cost and easy to operate. Both these throttles have provisions to operate either tethered on the LocoNet or wireless. The UT4 comes with a long coiled cord and the UT4R comes with a short flat cord. The UT4 uses the IR (infrared) link and the UT4R is a radio (wireless) version of the UT4.

The UT4 series is designed for basic locomotive operations. They have two or four digit addressing and functions F0 to F12. They can select, steal or dispatch a locomotive or run a consist. Since the the UT4 is designed for operation it lacks the ability to address accessory decoders or program a decoder. Most of the keys serve a dual function.



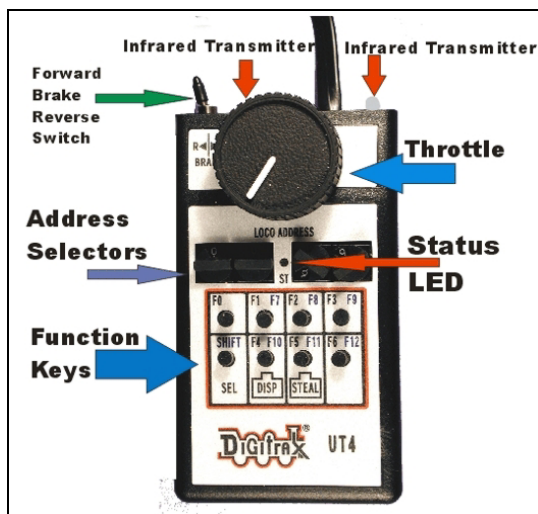
Two models are available. The UT4R adds radio wireless operation. (Digitrax Photo)

Locomotive address selection is done with four 10 position rotary switches. Simply dial an address press **SELECT** key and then connect the UT4 to the LocoNet. In a couple of seconds the status LED will change from red to green indicating you are ready to go. A red status means the locomotive is already in use. If a locomotive address is already in use you can take control with the **STEAL** key. Unplug the UT4 from the LocoNet, hold down the **STEAL** key and plug back into the LocoNet. A locomotive address can be released or dispatched with the same unplug/plugin sequence using the **DISPATCH** key instead of the **STEAL** key.

Addressing is 2 or 4 digit and done with the four rotary switches. For a two digit address the switches would be set as 0000 to 0127. Four digit addresses would be 0128 to 9983. If a decoder has been programed for a four digit address of 0001 to 0127 the UT4 is not able to address this low four digit address range.

### CONSISTS

The UT4 will also operate a consist. To take control of a consist dial the top locomotive in the consist then select it. Advance consistng also uses two digit address from 1 to 127. The UT4 can not setup a consist.



### SPEED CONTROL

Speed is controlled with a large knob. It is easy to see the speed setting by the white line on the knob. The large knob make it easy to operate with your thumb using only one hand. The knob has a positive stop at the lowest setting.

### DIRECTION/BRAKE SWITCH

A three position switch on the top left of the throttle controls direction and the brake. The right position is forward and the left for reverse. The center position set the brake. This switch is also easy to operate holding the UT4 in one hand.

### BATTERY

The UT4 will operate without the battery. A battery is needed to run either in the IR or radio mode. The UT4 and the UT4R both use a standard 9 volt battery. The battery compartment is accessed by sliding

off the door at the back bottom. It is a tight fit, but slides down with a little pull.

When finished with the throttle the UT4 can be put into a "sleep" mode for increased battery life. Deep sleep is accomplished by unplugging from the LocoNet then pressing one of the function keys then moving one of the address switches to the next digit. The UT4 will wake up when connected to the LocoNet. If the UT4 will not be used for an extended period of time the battery should be removed.

## WIRELESS INTERFACES

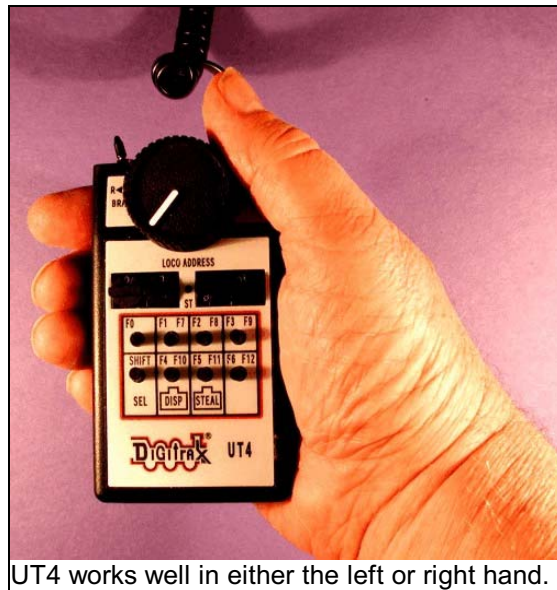
The IR operation requires a UR90 throttle panel to receive the signals from the UT4. Radio wireless needs the UR91 to receive the radio signals from the UT4R. The UR91 will receive the radio signals for F0 to F12. When plugged in to the UR90 functions F0 to F12 are OK. When using the IR operating the UR90 is limited to F0 to F8. When using the IR function with the UT4 I noticed that the response LED on the UR90 IR LED would blink to acknowledge functions F0 to F8. When F9 to F12 were pressed there was no response. The UT4 has two IR LEDs for better transmission.

## RUNNING THE UT4

My layout is setup with a Zephyr connected to a UR90 throttle panel. This allows checking out the operations of the LocoNet. For computer connections I also have a LocoBuffer I connected to the LocoNet to my PC. I also have an older DT100. The UT4 is in the same size case as the older DT100 and has the same number of keys. One thing that is much different between the two is the ease of operation with the UT4. The DT100 is designed to provide more functions, but can be a bit confusing to use. (The newer DTX00 series throttles are a lot easier and less confusing to use.) Once you have used the various features of the UT4 you can put the manual away as the operation is easy to remember.

A red/green status LED is squeezed in between the address rotary switches. Red when the locomotive is not selected and green when you have the locomotive addressed selected.

The way the UT4 controls are laid out makes it easy to operate a locomotive with either the left or right hand. This is very useful when a the other hand is needed for uncoupling, turnout operation or holding a coffee cup. The four small address selection switches have ten positions from 0 to 9. The switch position are a bit hard to read especially in a dark room. The way the numbers are laid out makes it easy to confuse the 6 with a 9. The small switches are a bit hard to operate if you have large fingers.



UT4 works well in either the left or right hand.

After operating I found that once a locomotive is selected it could be re-selected by dialing the address and pressing the **SEL** key without unplugging and re-plugging to the LocoNet. You can not setup consists with the UT4, but can operate consists if they are already setup.

I visited a very large home layout where at least 10 UT4Rs were used by the operators. On this layout the turnouts were control by either a toggle switch on the fascia or by a dispatcher sitting at a computer. The dispatcher operates the turnouts with a mouse using two 17inch monitors.

If you have turnouts with DCC accessory decoders and no fascia or other switches you'll miss the capability to operate the turnouts with the UT4.

### Here is a list of Can Do Can't Do with the UT4

#### CAN DO

- Select addresses 1 to 127 (2 digit) 128 to 9983 (4 digit)
- Control Functions F0 to F12
- Run Consists
- Dispatch (release) or Steal (take control) of a loco
- Easy to hold and learn to operate
- Wireless operation (Radio or IR) or with Cord
- Speed and Direction control

#### CAN'T DO

- Select 0001 to 0127 (4 digit addresses)
- F8 to F12 with IR on UR90
- Setup or Delete Consists
- Operate Stationary Decoders (Turnouts)
- Decoder Programing

For price and availability check our website. [www.tonystrains.com](http://www.tonystrains.com)