Derby City Express 2008

Digitrax UT4 Throttle

Summary Operating Instructions

These pages provide summary operating instructions and helpful hints for the Digitrax UT4R throttle that will be used on the Red Line Route at Derby City Express. Operation of the UT4 tethered throttle is similar. If you are not sure how to do something with the throttle you are using refer to these pages for help.

General Information

The UT4R throttle is a simpler throttle to use than the DTxxx throttles. It integrates intuitive operation with simple design so everyone can run trains. It features a large knob for speed control and 3 position toggle switch for direction control and braking, either 2- or 4-digit addressing and Control Functions F0-F12.

This throttle is ideal for the Basic and Advanced Consisting to be used at Derby City Express.

The following information on the use of Digitrax UT4R throttle will provide improved performance and radio signal reception.

Throttle Knob Movements

When operating in the radio mode, throttle knob tracking will feel slightly different than when connected to LocoNet. *When in the radio mode, slow movement of the throttle knob will result in improved response.* It will also provide less congestion to the radio receivers and LocoNet.

Throttle Orientation

The optimum orientation to hold the UT4R in normal usage is from horizontal to 30º upward in a natural hand position about 12" out from your body. This gives the best radio coverage. Although there are several radio receivers located in and about the layout, occasionally wiring, metal plumbing, HVAC ducting and other items may cause small areas of poor radio reception. Moving about 6" – 24" in any direction or varying the orientation of the UT4R will typically overcome any dropouts.

Throttle Operations — Select Locomotive to Drive

Locomotive Selection	Forward/Brake/Reverse	Function Buttons
• Install 9V battery into the unit. • With the UT4R unplugged from LocoNet, dial up the 2- or 4-digit address using the 4 rotary address selectors (use the 2 rightmost selectors for 2-digit addresses). • Plug the UT4R into a LocoNet port and Auto selection occurs — a green status light confirms selection. or • If you are already plugged into LocoNet dial up the address as above. • Press the SEL button and look for the green status light confirmation. • For radio operations simply unplug the UT4R from LocoNet.	Changing the Direction switch from Forward (F) to the center Brake position causes the locomotive to stop at the locomotive's programmed deceleration rate. Changing quickly from F to R causes the locomotive to stop at the programmed deceleration rate, then reverse direction and accelerate at the locomotive's programmed acceleration rate.	There are 8 physical buttons assigned for functions F0–F12. The blue F7–F12 function buttons share the same buttons as the F1 through F6 function buttons. To use function F7–F12 you must *press and hold down* the SHIFT button on the lower left row as you push the F7 through F12 buttons. The function buttons work exactly like all other Digitrax throttles

When finished operating a train with the UT4R dispatch the locomotive so another user can use the Command Station memory slot. Do the following:

- Unplug the UT4R from LocoNet
- Press ***and hold*** the **Dispatch** button
- Plug the UT4R back into a LocoNet port.

Throttle Problems and Maintenance

If you have problems with your throttle during the Convention please check the following items. If these do not solve your problem bring your throttle to the on-duty Digital Master, who will check it out.

Battery

If the throttle does not operate as expected when the throttle is unplugged from LocoNet check to be sure the battery is installed with in the correct orientation — positive terminal to positive contact.

A good battery is key to successful operation in the radio (tetherless) mode. A battery is not needed when the throttle is plugged into LocoNet. Whatever may appear to be wrong with a throttle, the first thing to suspect is the battery. Replace the 9V battery with a new or known good battery. Try two or three batteries before deciding there is a fault with the throttle. Examples of problems caused by weak or dying batteries include:

- The throttle operates correctly when plugged into LocoNet, but you cannot control the train after it is unplugged.
- The throttle loses control of a train after a period of time.
- The throttle makes beeping noises.

Don't assume that a newly purchased battery will always be a good battery. A new battery can have a high internal resistance that prevents it from putting out sufficient voltage and/or current to operate the throttle. Always purchase batteries from a store that sells lots of batteries and therefore always has fresh batteries on hand. Batteries have a "shelf life" as they will deteriorate even if not used.

RJ12 Plug

There are 3 potential problems relating to the RJ12 plug on the end of the stubby LocoNet cable:

- The locking tab breaks off,
- The contacts on the plug are bent or otherwise damaged (rare), or
- The wires are not making a good connection with the contacts in the plug.

The solution to any of these problems is to replace the RJ12 plug. The on-duty Digital Master is equipped to replace your damaged RJ connector.