

XR1300 Plug-In Throttle Operating Tips - *continued*

If Using Walk-around Memory - Don't Touch The Speed Knob

The XR1300 throttle does not have an internal memory for speed. Instead, it relies on the current position of the speed knob when changing to a new location. So, don't change the speed or direction when the throttle is unplugged. When plugged in at its new location, the locomotive will resume the original speed and direction.

Turning The Speed Knob Faster And Harder Will Not Stop Loco Quicker

To avoid breaking the speed control's mechanical stop, don't rotate the knob any further or harder once it reaches the stop. The stop is plastic and will break if the knob is turned hard enough. Although the speed potentiometer can be replaced, there is a repair charge plus the inconvenience of not having the throttle to use. Instead, take some time to train your operators to be gentle with the equipment and not rotate a speed control past its mechanical stop.

Throttle ID Record Sheet

Use this sheet to record the serial numbers and ID numbers for each of your throttles. If it has a special assignment or a dedicated train, record that information as well.

<u>Serial Number</u>	<u>ID Number</u>	<u>Assignment or Notes</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

XR1300 Plug-In Throttle Operation Guide

Before using the plug-in throttle, with the **EASYDCC** System, it must be programmed with a unique ID number, called a "Throttle ID" number. This is done only once and the selected ID number is stored inside the throttle. It can be changed at any time. We strongly recommend labeling the throttle with its ID number in case somebody accidentally changes it.

Throttle ID Numbers are in the range of 17 to 31

As delivered from the factory, the default throttle ID number for the unused plug-in throttle is 17 and the initial locomotive address is 03. Plug-In throttles can use any number from 01 to 31. Do not use ID numbers 1-16 because those IDs are reserved for wireless throttles. Do not use ID 0 - it is reserved.

The first plug-in throttle should be ID number 17, the second throttle should be ID number 18 and so on. Insure that no two throttles have the same ID number. See page 3 for how to use the Command Station to see the assigned ID number.

Setting or Changing The Throttle ID Number

1. First, make sure the throttle is plugged in.
2. Push the # key. Watch for the two direction LEDs to flash slowly.
3. Now push the DIRECTION key. Notice the direction LEDs are flashing at a faster rate.
4. Now enter the number for the desired ID number and push the key labeled # (called the pound key) to complete the procedure.
5. Before you forget, put a label on the throttle and write the ID number on the label. You might remember today, but what about 6 months from now.

If you want to change the throttle ID number, just repeat the above sequence. The old ID number will be overwritten with the new ID number.

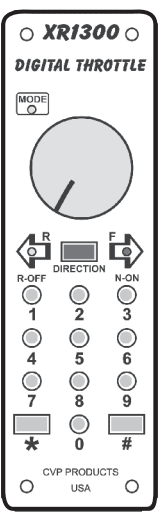
Indicator Meanings

- MODE LED:** When on, indicates the throttle is controlling accessory decoder addresses. This mode is selected by pushing * key. To go back to controlling the locomotive functions, push the * key again.
- Slow Alternate Flash of R and F LEDs:** Initiated by pushing the # key. The slow flashing indicates the throttle is waiting for an address to be entered.
- R and F LEDs both on dim:** throttle is waiting for Command Station to answer after new locomotive address is selected or when first plugged in. This does not occur when selecting accessory addresses.
- Dim or flickering LEDs indicates problems with the throttle signal.** Check for a bad throttle cord, loose connections on the fascia panel or some other mechanical problem.

Using The Throttle

- Speed Control Knob:** This single turn knob provides speed control. Turning the knob fully counterclockwise sends the STOP speed command. Full clockwise sends the full speed command. How the locomotive interprets the command is dependent on the decoder programming. Leave the speed control knob unchanged when moving or unplugging the throttle.
- Direction Key:** The direction key toggles between forward and reverse with the direction LEDs indicating which direction is selected. This key is a push button, not a rocker switch. Push on the center of the key. When the throttle is disconnected, the throttle will remember which direction was active upon plugging it in.

continued on next page



Low Functions 0-9: The 0 through 9 keys control functions 0 through 9 on decoders that offer extra functions. 0 is usually the headlight control. See the decoder manual for programming details and to determine which functions are supported. F2 is momentary and is for sound decoders with horns or whistles. **High Functions 10-12:** These are accessed by first pressing the # key and then the * key. Think of this as setting up F1x with the throttle waiting for you to press the 0, 1, or 2 key. Upon pressing the desired key, the throttle reverts back to the low function keys being active.

Plug-In Throttle Memory: When the controlling throttle is unplugged, a moving locomotive will continue to move. However, the memory is actually inside the decoder. If there is momentary interruption of power, the decoder may halt. Reconnect the throttle to start the locomotive again.

Selecting A Locomotive Addresses

For this example, the locomotive address will be 39. The throttle must be plugged in before selecting addresses.

Step 1: Push the # key (R & F LED slow alternate flash). The LEDs indicate the throttle is waiting for the address to be entered.

Step 2: Enter the address. For this example, Push the 3 key and then the 9 key for address 39. The address is remembered even with the throttle unplugged.

Step 3: Push the # key. This completes the entry. Wait for the green LED to turn on solid.

Decoder Function Control

This is easy; just push the numeric key for the desired function for the low function group of F0 through F9. For example, if you want function 0, sometimes called the headlight control function, push the 0 key. All function keys are active as long as you are not in the middle of loading an ID number of an address. To access the high function group of F10 through F12, first press the # key and then the * key followed by either 0, 1 or 2.

Accessory Decoder Control

The CVP Products AD4 accessory decoder can be accessed and controlled by the XR1300 plug-in throttle. It only takes a few keystrokes and the locomotive speed and direction control remain active while in the accessory mode. For the example below, the #6 address of the AD4 accessory decoder will be operated from the throttle.

Step 1: Push the * key to enable the Accessory mode. This will turn on the MODE LED. To turn off the Accessory Mode, just push * again. For this example accessory decoder output number 6 will be controlled. Note: You still retain full control of the locomotive while using accessory decoders.

Step 2: Push the # key. Notice that the R and F begin to alternately flash. This is your sign that the throttle is waiting for a decoder number to be entered.

Step 3: Enter the number for the decoder address, 6 in this example, and push the # key again. Notice the R and F LEDs stop flashing. The Mode LED stays on.

Step 4: At this time the number 1 key will now throw the turnout in the reverse direction. The number 3 key will throw the turnout in the normal direction. You may still control the locomotive speed and direction but you will not have access to locomotive functions 1 and 3. The other locomotive functions remain available.

Step 5. For another accessory address, push the # key and go back to step 3. If you are done, push the * key to exit the accessory mode. Notice the mode turns off.

Restore Throttle To Factory Defaults

To reset the throttle to factory defaults, assign the ID to 0. Then unplug the throttle and plug it back in. Once plugged back in, the XR1300 throttle resets to ID=17, and loco address =3 and the accessory address is 1.

Strange Locomotive Behavior

If you discover your train doesn't run smoothly or stops the moment you unplug a walk-around throttle, you probably have the Command Station throttle or another plug-in throttle assigned to the same address. De-assign the Command Station throttle before using a walk-around on the same address. Likewise, if another plug-in or wireless throttle is on the same address, the locomotive will perform poorly or not at all. Remember, only one address per throttle!

Assign Throttle To An Unused Address Before Unplugging

To allow another throttle to use the current address on the throttle, set the throttle to an unused and easy to remember address such as 99 or 9999. Do not use 0. When this is done, the Command Station stops updating the locomotive address making it immediately available for a new throttle. If this step is not done, you must wait for about 2 minutes before attempting to use the locomotive with another throttle.

Beware Of Duplicate ID Numbers

Sometimes operators will inadvertently assign their throttle to another ID number. If a throttle suddenly stops working or suddenly has poor control of the locomotive, there may be another throttle with the same ID number. Make sure that all throttles have unique ID numbers. If you program two throttles with the same ID, locomotives will not operate properly. Fortunately, no harm will be done so make sure each throttle ID is unique.

Mark the Throttle ID Number On The Throttle

Take a moment and label the ID number on the back of the throttle. The ID number must be unique – no two throttles can have the same ID number. With the ID number on the throttle, it becomes relatively easy to check the ID number with the Command Station.

Determining Throttle's ID Number Using The Command Station

For this command to work properly, only one XR1300 throttle can be plugged in. All other throttles, including wireless throttles must be unplugged and turned off. This is very important since with more than one throttle plugged in, the throttle having the lowest ID number will be displayed. For this example, the throttle has ID number 18 and is assigned to loco address 4891.

Push the keys in sequence shown to show the throttle's ID.

○SHOW,

○ID [*the number 9 key*]

```
Throttle ID = 18
Loco No.   = 4891
```

If there is no throttle plugged in, only the first line is displayed and the number is replaced by a blinking cursor. If checking several throttles (one at a time of course) push the ENT key to refresh the display.

○ESC,

Monitoring Throttle's Locomotive Speed, Direction and Function Status

You can monitor the status of any selected plug-in throttle including its current address through the use of the throttle ID number. For this command to work properly, you must know the desired throttle's ID number in advance. For this example, ID number 18 will be used.

○SHOW,

○R-ON, ○1, ○8, ○ENT

```
Enter ID# _____
```

The loco or consist address plus the status of the function keys is shown. Speed value and direction or shown on the bottom line. The display automatically updates whenever a change takes place.

```
L#4891 Steps=028
Fn=ooooooooooooo
```

If an unused or inactive throttle ID number is used, the display will display no data.

○ESC