Operating your Rapido Sound-Equipped Locomotive with DCC

Changing the Address on your Rapido Tsunami-equipped locomotive

The Tsunami supports both short (CV 1) and long (CV 17,18) addresses. Short addresses have a range of 1-127 while long addresses have a range of 0001-9,999. The address on your decoder can be changed on either the programming track (in most cases you will need a PTB-100 programming track booster available from SoundTraxx) or on the mainline. Since the procedure for programming varies from command station to command station, you will need to refer to the owner's manual for specific instructions.

Programming Track:

When programming the address on the programming track simply change the corresponding CVs to the desired address.

Example: Changing the address from 3 to 50, set CV 1=50 and the locomotive will now respond to address 50 when placed on the mainline.

Mainline Programming (Ops Mode):

If you do not have a PTB-100, you can still change the address on the mainline.
When programming the address on the mainline it is important to note that you must know the current address of the locomotive or else it will not program that locomotive since it only sends the programming packets (CV adjustments) to the selected locomotive. It is also important to notice what type of address you currently are using as the decoder will not allow you to change the type of address currently in use. For example, a Rapido Tsunami-equipped locomotive comes with a default value of short address 3. To change the address you must first change it to a long address.

Example: Changing the address from 3 to 50

Step 1: First, select address 3. Now change the address to a long address not being currently used that is easy to remember (such as 1000), by using either the long address option found on most command stations or manually via CVs 17,18, and 29.

*Note most command station will just ask the address you want and will change the CVs internally.

Step 2: Next, exit out of mainline programming and select locomotive 1000 and make sure the engine runs on its new address.

Step 3: Return to mainline programming (still with address 1000) and change CV 1 = 50, and change CV 29 = 6.

Step 4: Exit programming mode and select locomotive 50. The locomotive will now be on address 50.

Function Assignments:
Rapido sound-equipped locomotives contain many of the sound features found on any aftermarket Tsunami, however there are some sound functions found only on the Rapido Tsunami. The differences between the decoders are listed below:

Diesel:

Function	Rapido HO	Tsunami Aftermarket
F0 (f)	Headlight	Headlight
F0 (r)	Backup light	Backup light
F 1	Bell	Bell
F2	Horn	Horn
F3	Straight to 8	Short Horn
F4	Dynamic Brake	Dynamic Brake
F5	Effect light	Effect Lighting
F6	Effect light	Effect Lighting
F7	Dimmer	Dimmer
F8	Mute	Mute
F9	Effect Light	Radiator Fans/RPM+
F10	Effect Light	Air Compressor/RPM-
F11	Brake Squeal	Brake Squeal
F12	Doppler Airhorn	Coupler

If you want to program your Rapido sound-equipped locomotive to have some of the same function assignments as Tsunami-equipped models in which yourself or an installer performed the installation, refer to the default CV values listed below, however be aware some of the features will not match due to the Rapido Tsunami's increased lighting outputs, addition of a straight to 8 function and Doppler airhorn:

After Market Tsunami

CV	Default Value
33	1
34	2
35	8
36	4
37	16
38	8
39	2
40	4
41	16
42	32
43	8
44	32
45	64
46	128