



Guide to

SoundTraxx Product Identification

Using CV Read-Back

The Process

We know how it goes – you’ve purchased a decoder, taken it out of the package to install it, but – you’re interrupted and that decoder gets put aside for a while. Two months later, you return to your workbench and have no recollection of what type of decoder it is!

Here are some simple steps to verify the product type using the CV read-back feature of your command station. Please be aware that not all command stations provide CV read-back, so confirm that your command station has this capability before going on. Also, read-back may not work properly with a CurrentKeeper or similar added-capacitance product connected to the decoder.

Step 1: Read-Back CV 8

CV 8 is the manufactured ID. A value of 141 indicates that the product manufacturer is SoundTraxx. If the value is not 141, the information in this document is not relevant.

Step 2: Read-Back CV 7

CV 7 is the product family. This value can be used to determine the type of product (i.e. Tsunami, Tsunami2, Econami, Blunami, etc.). The following is a list of SoundTraxx product families and their corresponding values:

Value	Product Family	Value	Product Family
64	Tsunami	80	OEM Tsunami
65	MC1	81	OEM MC1
66	MC2	82	Sound Value, RTR, Mainline
68	Crummy Light	83	TSX (Two-Piece Sound Decoder)
69	SoundCar	84	Piko Sound System
70	Econami	85	OEM SoundCar
71	Tsunami2	86	Bachmann Large Scale Thomas
72	Blunami		

Note: The above product families, in purple, are linked to their primary documentation sources on our website. OEM product documentation can be found by visiting the [Factory Installed Decoders](#) page in the Reference section of our website and choosing your locomotive manufacturer.

Step 3: Read-Back CVs 105 & 106

Read back CVs 105 and 106. These CVs contain information about the firmware (part of the decoder’s permanent memory, like the BIOS of a computer).

Blunami, Tsunami2 and Econami: CVs 105 and 106 contain the major and minor firmware versions, respectively. For example, reading a value of 1 in CV 105 and a value of 3 in CV 106 would indicate firmware version 1.3.

All other decoders: CV 105 contains the firmware version and CV 106 contains the default CV set (i.e., CV 106 can be used to determine the OEM part number).

Step 4: Read-Back CVs 253, 254, 255, 256

For Econami, Blunami and Tsunami2 only, CVs 253, 254, 255 and 256 contain unique values for every product.

CV 253 indicates customer code. Most of the time this will be a value of 1 for SoundTraxx, but if you purchased the decoder installed in a model, the value will be different.

The Process

CV 254 indicates the type of sound.

Value	Sound Type	Value	Sound Type
1	Steam	5	UK Steam
2	Diesel	6	UK Diesel
3	Electric		

CV 255 bits 3 through 7 contain the product revision. If you are having a problem or your decoder doesn't seem to respond as you expect, SoundTraxx Customer Support may ask you to read back this value.

CV 256 is the product ID. Note that table below refers to SoundTraxx product purchased outside of the model; in other words the table does not reference product purchased as part of a locomotive.

Value	SoundTraxx Product ID	Value	SoundTraxx Product ID
1	ECO-100 Steam	32	TSU-PNP Diesel EMD
2	ECO-100 Diesel	33	TSU-PNP Diesel GE
3	ECO-100 Electric	34	TSU-PNP Diesel ALCO
4	ECO-400 Steam	35	TSU-PNP Diesel Baldwin & Others
5	ECO-400 Diesel	36	TSU-4400 Diesel EMD
6	ECO-400 Electric	37	TSU-4400 Diesel GE
7	ECO-21P Steam	38	TSU-4400 Diesel ALCO
8	ECO-21P Diesel	39	TSU-4400 Diesel Baldwin & Others
9	ECO-21P Electric	40	TSU-1100 Electric
10	ECO-200 Steam	41	TSU-2200 Electric
11	ECO-200 Diesel	42	TSU-21PNEM Electric
12	ECO-200 Electric	43	TSU-4400 Electric
13	ECO-PNP Steam	44	ECO-100 UK Steam
14	ECO-PNP Diesel	45	ECO-100 UK Diesel
15	ECO-PNP Electric	46	ECO-200 UK Steam
16	TSU-1100 Steam	47	ECO-200 UK Diesel
17	TSU-2200 Steam	48	ECO-21PNEM UK Steam
18	TSU-21PNEM Steam	49	ECO-21PNEM UK Diesel
19	TSU-4400 Steam	50	ECO-400 UK Steam
20	TSU-1100 Diesel EMD	51	ECO-400 UK Diesel
21	TSU-1100 Diesel GE	52	ECO-21PNEM Steam
22	TSU-1100 Diesel ALCO	53	ECO-21PNEM Diesel
23	TSU-1100 Diesel Baldwin & Others	54	TSU-1100 Diesel EMD-2
24	TSU-2200 Diesel EMD	55	TSU-2200 Diesel EMD-2
25	TSU-2200 Diesel GE	56	TSU-21PNEM Diesel EMD-2
26	TSU-2200 Diesel ALCO	57	TSU-PNP Diesel EMD-2
27	TSU-2200 Diesel Baldwin & Others	58	TSU-4400 Diesel EMD-2
28	TSU-21PNEM Diesel EMD	59	TSU-1100 Steam-2
29	TSU-21PNEM Diesel GE	60	TSU-2200 Steam-2
30	TSU-21PNEM Diesel ALCO	61	TSU-21PNEM Steam-2
31	TSU-21PNEM Diesel Baldwin & Others	62	TSU-4400 Steam-2

Value	SoundTraxx Product ID	Value	SoundTraxx Product ID
63	TSU-PNP8 Diesel EMD	90	BLU-2200 Steam-2
64	TSU-PNP8 Diesel GE	91	BLU-2200 EMD
65	TSU-PNP8 Diesel ALCO	92	BLU-2200 GE
66	TSU-PNP8 Diesel Baldwin & Others	93	BLU-2200 ALCO
67	TSU-PNP8 Diesel EMD-2	94	BLU-2200 Baldwin & Others
68	TSU-21PNEM8 Steam-2	95	BLU-2200 EMD-2
69	TSU-21PNEM8 Diesel EMD	96	BLU-2200 Electric
70	TSU-21PNEM8 Diesel GE	97	BLU-4408 Steam-2
71	TSU-21PNEM8 Diesel ALCO	98	BLU-4408 EMD
72	TSU-21PNEM8 Diesel Baldwin & Others	99	BLU-4408 GE
73	TSU-21PNEM8 Diesel EMD-2	100	BLU-4408 ALCO
74	TSU-21PNEM8 Electric	101	BLU-4408 Baldwin & Others
75	TSU-KN1 Diesel	102	BLU-4408 EMD-2
76	TSU-N18 Steam-2	103	BLU-4408 Electric
77	TSU-N18 Diesel EMD	104	BLU-PNP8 EMD
78	TSU-N18 Diesel GE	105	BLU-PNP8 GE
79	TSU-N18 Diesel ALCO	106	BLU-PNP8 ALCO
80	TSU-N18 Diesel Baldwin & Others	107	BLU-PNP8 Baldwin & Others
81	TSU-N18 Diesel EMD-2	108	BLU-PNP8 EMD-2
82	TSU-N18 Electric	109	BLU-21PNEM8 Steam-2
83	TSU-1100 Big Steam	110	BLU-21PNEM8 EMD
84	TSU-2200 Big Steam	111	BLU-21PNEM8 GE
85	TSU-21PNEM8 Big Steam	112	BLU-21PNEM8 ALCO
86	TSU-BH2 Steam-2	113	BLU-21PNEM8 Baldwin & Others
87	TSU-BH1 Diesel EMD	114	BLU-21PNEM8 EMD-2
88	TSU-BH1 Diesel GE	115	BLU-21PNEM8 Electric
89	TSU-BH1 Diesel ALCO		

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