## USING JMRI DECODER PRO TO PROGRAM YOUR ENGINES



# Program a new engine Duplicate an existing engine

Ron St.Laurent April 14, 2019 Division 5 NMRA NCR Lansing Model Railroad Club

File Edit Settings Actions NCE Window Help										
- New Loco Carlos Identify Relp										
ID	DCC Address	Icon	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified	
Amtrak 20	20		SDH166D	Amtrak	20	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM	
BC 30	30		D13J	BC Rail	30	Proto 1000	RDC	Ron S	Apr 4, 2019 10:33:47 AM	
Amtrak 36	36		SDH166D	Amtrak	36	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM	
B&O 167	167		D13J	Baltimore & Ohio	167	Proto 1000	RDC	Ron S	Apr 4, 2019 12:58:04 PM	
NYC 464	464		D13J	New York Central	464	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:36 AM	
NYC 499	499		SDH166D	New York Central	499	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:45 AM	
B&O 1951	1951		SDH166D	Baltimore & Ohio	1951	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:14 AM	
B&O 6516	6516		D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:24 AM	



#### Program a new engine.

🅦 DecoderPro: All Entries

From your computer home screen double click on the Decoder Pro Icon. Now click the New Loco button.



Create New Loco File Roster Programming Mode Direct -Decoder installed: I NMRA +--ANE Model Co, Ltd +---Arnold - Rivarossi +---Atlas Broadway Limited Imports, LLC +---Bachmann Trains (H) CML Systems **CT Elektronik CVP** Products DCCconcepts DCC Concepts Digirails Digitrax Doehler und Haass Electronic Solutions Ulm GmbH Fleischmann GFB Designs Gaugemaster Haber and Koenig Electronics GmbH Harman-DIY Harman DCC Hattons Model Railways Hornby Kato + Kuehn Ing. ÷ LDH ÷ LaisDCC ÷. Lenz ÷ MERG +--MGP ÷ MRC ÷ MTH Electric Trains, Inc. Massoth Elektronik, GmbH ÷ Mistral Train Models +--MvLocoSound North Coast Engineering ÷ New York Byano Limited PpP Public-domain and DIY OSIndustries **QElectronics GmbH** Read type from decoder Al OMatched Only



- On this screen you'll select the engine/decoder manufacturer.
- For this clinic we will select North Coast Engineering (NCE).
- Alternatively you can place your engine on the track and select Read type from decoder.
- This should narrow the list down with your decoder among those in the shortened list.

K Create New Loco File Roster Programming Mode Direct -Decoder installed: CML Systems CT Elektronik CVP Products DCCconcepts DCC Concepts Digirails Digitrax Doehler und Haass Electronic Solutions Ulm GmbH Fleischmann **GFB** Designs Gaugemaster Haber and Koenig Electronics GmbH Harman-DIY Harman DCC Hattons Model Railways Hornby Kato Kuehn Ing. LDH LaisDCC Lenz MERG MGP MRC MTH Electric Trains, Inc. Massoth Elektronik, GmbH Mistral Train Models MyLocoSound ---orth Coast Engli Non silent drive directional Lights +--Non silent drive non-directional lights ÷. Silent Drive decoders ÷... Silent Running w/ Torque Compensation Silent Running BEMF +--🐵 📕 Signal and Lighting New York Byano Limited PpP Public-domain and DIY QSIndustries **QElectronics GmbH** Read type from decoder O All O Matched Only Open Comprehensive Programmer Tit 1:41 PM Pa

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Double clicking on North Coast Engineering will bring up a list of "types" of decoders. Again for this clinic we'll use "Silent Running With Torque Compensation" which describes most of the new decoders.

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4/4/2019

File Roster

Programming Mode Direct

Decoder installed	
Decoder instaled: Sterict Running w/ Torque Compensation D12IP D12IP D13IN D13NHJ D13NHP D13SRP D13SRP D13SRP D13SRP D13SRP D14SR D14SRP D14SR D15SRP D15SRP D15SR D15	Read type from decoder  All  Matched Only
	EN . In an an an an 1:44 PM
	►N ▲ 陸 閏 40

This in turn brings up a list of decoders. I want D13J and I find it in the list. I double click on this decoder.

赌 Program < new loco> in Service Mode (Programmed Programmed Prog	ming Track)		
File Reset Window Help			
Lights Analog Controls C	onsist Advanced Sound Sou	d Levels CVs NCE	Unknown Programming Mode Direct
Roster Entry Basic Motor	Basic Speed Control Speed Ta	e Function Map	mar Data Madfad
ID:	<new loco=""></new>		when Date modified
Road Name:			n S Apr 4, 2019 11:31:18 AM
Road Number:			in S Apr 4, 2019 2:55:21 PM
Manufacturer:			In S Apr 4, 2019 11:31:18 AM
Owner:	Ron S		In S Apr 4, 2019 10:34:36 AM
Model:			n S Apr 4, 2019 10:35:14 AM
DCC Address:	3 DCC Short 🔻		n S Apr 4, 2019 10:35:24 AM
Throttle Speed Limit:	100 %	_	
Comment:		^	
		-	
Deceder Family	Cleat Running w/ Targue Componentian		
Decoder Family: Decoder Model:	D13J		
Decoder Comment:		*	
		<del>.</del>	
	4		
Date Modified:			
	Save to Roster Reset to defaults		
Read changes on all sheets	Write changes on all sheets Read all sheets	Write all sheets	
	Programming Mode Direct 👻		
	idle		
	ID:		Organoming Track
Roj	ad Name:		
Road	Number:		
Manu	Owner:		© Edit Only
	Model:		
DCC	Address:		Program
Decod	er Family: ler Model:		Lahek & Media Throttle
	Filename:		
Service Mode Programmer NCE Is Online Ope	erations Mode Programmer NCE Is Online Programm	er Status: Idle Active Profile: I	/y JMRI Railroad
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This sheet will pop open. You will now place your engine on the programming track. At this point you will want to click on the tab Read All Sheets.

This will dump all the basic settings existing in the decoder to the program.

🙀 Program <new loco=""> in Service Mode (Programming Track)</new>	
File Reset Window Help	
Lights Analog Controls Consist Advanced Sound Sound Levels CVs NCE	Unknown Programming Mode Direct
Roster Entry         Basic         Motor         Basic Speed Control         Speed Table         Function Map	
	wher Date Modified
	IN S Apr 4, 2019 11:31:18 AM
	n S Apr 4, 2019 11:51:18 AM
C Short (one bute) address	n S Apr 4, 2019 11:31:18 AM
	In S Apr 4, 2019 10:34:36 AM
Cong (two byte) address	In S Apr 4, 2019 10:34:45 AM
30	n S Apr 4, 2019 10:35:24 AM
User ID #1 (0-255) 0	
Primary Address 3 User ID #2 (0-255) 0	
Extended Address 30	
Address Format Long (two byte) address 🔹	
Manufacturer ID: 0	
Dewar Source Conversion DC conversion analysis	
Read changes on sheet Write changes on sheet Read full sheet Write full sheet	
Read changes on all sheets Write changes on all sheets Read all sheets Write all sheets	
Programming Mode Direct 🔹	
idle	
	Conservations Track
ID: Road Name:	Programming Track
Road Number:	© Programming On Main
Manufacturer:	© Edit Only
Model:	
DCC Address:	Program
Decoder Model:	Labels & Media Throttle
Filename:	
Service Mode Programmer NCE Is Online Operations Mode Programmer NCE Is Online Programmer Status: Idle Active Profile: M	/ JMRI Railroad

On the Basic Tab we will select Long (two byte) address and change the active address to 30, our engine number. Click Write Full Sheet. You will notice that our orange highlighted boxes turn to red then lose their color once the changes are programmed into the engine.



Now go through the rest of the tabs and select your preferences. For instance on the Lights Tab I changed from Incandescent Bulbs to LEDs.



Once you are satisfied with your changes select Write all sheets. Your engine is now programmed.

M DecoderPro: A	II Entries						
File Edit Setti	ings Actions NCE W	indow Help					
New Lo	co 🔍 Identify 🕐	Help				<ul> <li>Unknown Programming Mode Direct</li> </ul>	•
ID	DCC Address Icon	Decoder Model	Road Name Road N	lumber Manufacturer	Model	Owner Date Modified	
Amtrak 20	20	SDH166D	Amtrak 20	Proto 1000	RDC	Ron S Apr 4, 2019 11:31:18 AM	
BC 30	30	D13J	BC Rail 30	Proto 1000	RDC	Ron S Apr 4, 2019 2:46:36 PM	
Amtrak 36	36	SDH166D	Amtrak 36	Proto 1000	RDC	Ron S Apr 4, 2019 11:31:18 AM	
B&O 167	167	D13J	Baltimore & Ohio 167	Proto 1000	RDC	Ron S Apr 4, 2019 12:58:04 PM	
NYC 464	464	D13J	New York Central 464	Proto 1000	RDC	Ron S Apr 4, 2019 10:34:36 AM	
NYC 499	499	SDH166D	New York Central 499	Proto 1000	RDC	Ron S Apr 4, 2019 10:34:45 AM	
B&O 1951	1951	SDH166D	Baltimore & Ohio 1951	Proto 1000	RDC	Ron S Apr 4, 2019 10:35:14 AM	
B&O 6516	6516	D13J	Baltimore & Ohio 6516	Proto 1000	RDC	Ron S Apr 4, 2019 10:35:24 AM	
		ID:	B&O 167				Programming Track
		Road Name:	Baltimore & Ohio				Programming On Main
		Road Number:	16/ Proto 1000				C Edit Only
		Owner:	Ron S				Clucony
		Model:	RDC				
		DCC Address:	167				Program
		Decoder Family:	Silent Running w/ Torque Compen	sation			
		Decoder Model:	D13J				Labels & Media Throttle
		Filename:	B_O_167.xml				
Service Mode P	rogrammer NCE Is Online	e Operations Mod	le Programmer NCE Is Online Progra	ammer Status: Idle Activ	/e Profile: I	My JMRI Railroad	
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TIP: On the roster sheet you can simply double click on any of the column headings to sort on that column. This is an easy way to find if someone else is using that engine number on the layout.

## Brain purge . . .



### ... Switch Gears

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ile Edit Setti	ings Actions NCE W	/indow Help									
New Loc	co 🔍 Identify 🔞	) Help					🕑 Un	known Programming Mo	ode Direct		•
ID	DCC Address Icon	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified			
Amtrak 20	20	SDH166D	Amtrak	20	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18	AM		
BC 30	30	D131	BC Rail	30	Proto 1000	RDC	Ron S	Apr 4, 2019 10:33:47	AM		
Amtrak 36	36	SDH166D	Amtrak	36	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18	AM		
NYC 464	464	D13J	New York Central	464	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:36	AM		
NYC 499	499	SDH166D	New York Central	499	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:45	AM		
B&O 1951	1951	SDH166D	Baltimore & Ohio	1951	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:14	AM		
B&O 6516	6516	D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:24	AM		
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											1
											1
			-							One and marine - To-	ale
		ID:	B&U 6516							Programming Tra	СК
		Road Name:	Baiumore & Onio							Programming On	Main
		Manufacturer:	0510 Proto 1000							C Edit Only	
		Owner:	Piolo 1000							Cultoniy	
		Model	RDC							ſ	1
		DCC Address	6516							Program	1
		Decoder Family:	Silent Running w/ Tor	que Compensation						ogran	
		Decoder Model	D131	que compensadon						Labels & Media	Throttle
		Filename	B O 6516.xml							Labels & media	moue
Service Mode Pr	rogrammer NCE Is Onlin	Operations Mod	de Programmer NCE Is O	nline Programmer S	tatus: Idle Activ	e Profile	My IMRI	Railroad			
Der nee mode Ti	rogrammer nee 13 Omm	- verticities mot	Se Fregrammer NCE 15 O	inne Trogrammer 5	Corast Tole   Activ	e rionie.	ing shirts	num odu		 و رو محمد به مید	
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#### Duplicate an existing engine.

You have an engine with settings that are "just right" and you have a similar engine in which you want to install the same programming.

Click on the engine you want to duplicate. In this case B&O 6516.

4	Cut Copy	tify 🕐 Help											
ID	Paste	s	Icon	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified			
Amti	Newsland	20		SDH166D	Amtrak	20	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM			
BC 3	New Loco	30		D13J	BC Rail	30	Proto 1000	RDC	Ron S	Apr 4, 2019 10:33:47 AM			
Amti	Duplicate Loco	36		SDH166D	Amtrak	36	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM			
NYC	Delete Loco	164		D13J	New York Central	464	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:36 AM			
NYC		199	6	SDH166D	New York Central	499	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:45 AM			
B&O	Preferences	951		SDH166D	Baltimore & Ohio	1951	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:14 AM			
B&O 651	6	6516		D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:24 AM			



On the menu select Edit then Duplicate Loco.

M DecoderPro: All Entries

File Edit Setti	ngs Actions N	CE W	indow Help							
- New Loc	co 🔍 Identify	?	Help					🕑 Uni	known Programming Mode Direct	
ID	DCC Address	Icon	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified	
Amtrak 20	20		SDH166D	Amtrak	20	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM	
BC 30	30		D13J	BC Rail	30	Proto 1000	RDC	Ron S	Apr 4, 2019 10:33:47 AM	
Amtrak 36	36		SDH166D	Amtrak	36	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM	
NYC 464	464		D13J	New York Central	464	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:36 AM	
NYC 499	499		SDH166D	New York Central	499	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:45 AM	
B&O 1951	1951		SDH166D	Baltimore & Ohio	1951	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:14 AM	
B&O 6516	6516		D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:24 AM	

🅦 DecoderPro: All Entries

Input		X
?	Enter id for new roster entry: B&O 167	
	OK Cancel	

ID	B&O 6516	Programming Track
Road Name	Baltimore & Ohio	Programming On Main
Road Number	6516	Edit Oply
Manufacturer		© Edit Offiy
Model	RDC	
DCC Address	6516	Program
Decoder Family	Silent Running w/ Torque Compensation	
Decoder Model	DI3J	Labels & Media Throttle
Filename	: B_O_6516.xml	
Service Mode Programmer NCE Is Online Operations M	ode Programmer NCE Is Online Programmer Status: Idle Active Profile: My JMRI Railroad	
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Enter your new ID, typically this is your road name and road number, e.g. B&O 167. Click OK.

File Edit Settir	e Edit Settings Actions NCE Window Help											
Hew Loc	o 🔍 Identify 🤅	Эн	lelp					🕑 Unl	known Programming Mode	Direct		-
ID	DCC Address Ico	on (	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified			
Amtrak 20	20	S	SDH166D	Amtrak	20	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM			
BC 30	30	C	D13J	BC Rail	30	Proto 1000	RDC	Ron S	Apr 4, 2019 10:33:47 AM			
Amtrak 36	36	S	SDH166D	Amtrak	36	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM			
NYC 464	464	D	D13J	New York Central	464	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:36 AM			
NYC 499	499	S	SDH166D	New York Central	499	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:45 AM			
B&O 1951	1951	S	SDH166D	Baltimore & Ohio	1951	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:14 AM			
B&O 167	6516		D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 12:22:08 PM			
B&O 6516	6516		D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:24 AM			
• •		-	10.									Programming Track
			Road Name:									
			Road Number:									Programming On Main
			Manufacturer:									Edit Only
			Owner:									
			Model:									Dragaran
			DCC Address:									Program
		L	Decoder Family:									
			Filename:									
Service Mode Pro	ogrammer NCE Is On	line	Operations Mode	Programmer NCE Is Online	Programmer St	atus: Idle 🛛 Active	Profile: N	My JMRI I	Railroad			
(a) (b)							<u> </u>					EN 🛛 📭 🖬 🎝 🕺 12:22 PM

🎬 DecoderPro: All Entries

You now have B&O 167 as a roster item but you see that you still have the original engine number so we need to change that.

🗮 B&O 167	-		-					J	
File Reset Window Help								1	
Function Map Lights	Analog Control	s Consist	Advanced	Sound	Sound Levels	CVs	NCE	9 Mode Direct	•
Roster Entry	Basic	Motor	Basic Speed	Control		Speed Table			
I	D:	B&O 167						10 444	
R	load Name:	Baltimore & Ohio						47 AM	
R	oad Number:	6516						18 AM	
M	lanufacturer:	Proto 1000						36 AM	
0	wner:	Ron S						45 AM	
M	lodel:	RDC						08 PM	
D	OCC Address:	6516 DCC Lon	] -					24 AM	
T	hrottle Speed Limit:	100 % ≑							
C	Comment:			*					
				-					
D	ecoder Family:	Silent Running w/ 1	orque Compensatio	n r					
D	ecoder Model:	D13J							
D	ecoder Comment:			^					
				+					
		<		Þ					
D	ate Modified:	Apr 4, 2019 12:22	08 PM	1					
		Save to Roster	Reset to defaults	J					
Read char	nges on all sheets	Write changes on	all sheets Read	all sheets Wi	ite all sheets				
		Programming Mo	de Direct 🔹						Programming Track
		idl	9					]	Programming On Main
	Manufacturer:	0516 Proto 1000		_	_	_	_		
	Owner:	Ron S							~ ,
	Model:	RDC							Program
	Decoder Family:	Silent Running w/ To	rque Compensation						riogram
	Decoder Model:	D13J	-1						Labels & Media Throttle
	Filename:	B_O_167.xml							
Service Mode Programmer NCE Is Onlin	e Operations Mode	Programmer NCE Is	Online Programme	r Status: Idle /	Active Profile: My 2	IMRI Railroad			
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Double click on B&O 167 will bring up this screen. Click on the Basic tab will bring up the following screen.



Click the radio button for Long Address. Now change your Active Address to 167.

This will also change your Extended Address to 167.

On the lower tabs click Write changes on sheet.

🚆 B&O 167	and the second se			
File Reset Window Help				
Function Map Lights Analog Controls	s Consist Advanced Sound S	Sound Levels CVs NCE	9 Mode Direct	•
Roster Entry Basic M	lotor Basic Speed Control	Speed Table		
ID:	B&O 167			
Road Name:	Baltimore & Ohio		18 AM	
Road Number:	167		18 AM	
Manufacturer:	Proto 1000		36 AM	
Owner:	Ron S		45 AM	
Model:	RDC		14 AM 08 PM	
DCC Address:	167 DCC Long *		24 AM	
Throttle Speed Limit:	100 %			
Comment:				
Decoder Family: Decoder Model: Decoder Comment: Date Modified:	Silent Running w/ Torque Compensation D133       Apr 4, 2019 12:22:08 PM       Save to Roster       Reset to defaults   Write changes on all sheets Read all sheets Write Programming Mode Direct	all sheets		
			•	Programming Track
Koga Number: e	0100		C	) Programming On Main
Manufacturer: F	Proto 1000		0	) Edit Only
Owner: F	RDC		Г	
DCC Address: 6	6516			Program
Decoder Family: 5	Silent Running w/ Torque Compensation			
Decoder Model: E	013J B. O. 167 xml			Labels & Media Throttle
Service Mode Programmer NCE Ts Online Operations Mode I	Programmer NCE Is Online Programmer Statue: Idla Acti	ive Profile: My IMRI Railroad		
	Activities and the solution of the Activities and t			
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Go back to the Roster Entry tab and you will see that your DCC Address has changed. Now edit your Road Number to 167.

Close this window with the red X and select save and close.

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File Edit Settings Actions NCE Window Help											
🕂 New Loco 🔍 Identify 🕜 Help 🕐 Unknown Programming Mode Direct									Direct		
ID	DCC Address	Icon	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified		
Amtrak 20	20		SDH166D	Amtrak	20	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM		
BC 30	30		D13J	BC Rail	30	Proto 1000	RDC	Ron S	Apr 4, 2019 10:33:47 AM		
Amtrak 36	36		SDH166D	Amtrak	36	Proto 1000	RDC	Ron S	Apr 4, 2019 11:31:18 AM		
B&O 167	167		D13J	Baltimore & Ohio	167	Proto 1000	RDC	Ron S	Apr 4, 2019 12:52:59 PM		
NYC 464	464		D13J	New York Central	464	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:36 AM		
NYC 499	499		SDH166D	New York Central	499	Proto 1000	RDC	Ron S	Apr 4, 2019 10:34:45 AM		
B&O 1951	1951		SDH166D	Baltimore & Ohio	1951	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:14 AM		
B&O 6516	6516		D13J	Baltimore & Ohio	6516	Proto 1000	RDC	Ron S	Apr 4, 2019 10:35:24 AM		



You now have B&O 167 in your roster.

🙀 B&O 167	And the second		
File Reset Window Help			
Function Map Lights Analog Contr	ols Consist Advanced Sound Sound L	Levels CVs NCE 9 Mode Direct	•
Roster Entry Basic	Motor Basic Speed Control	Speed Table	
ID:	B&O 167		
Road Name:	Baltimore & Ohio	18 AM 47 AM	
Road Number:	167	18 AM	
Manufacturer:	Proto 1000	59 PM	
Owner:	Ron S	36 AM	
Model:	RDC	14 AM	
DCC Address:	167 DCC Long 👻	24 AM	
Throttle Speed Limit:	100 %		
Comment:			
Decoder Family: Decoder Model: Decoder Comment: Date Modified: Read changes on all sheets	<ul> <li>*</li> <li>Silent Running w/ Torque Compensation</li> <li>D133</li> <li>Apr 4, 2019 12:52:59 PM</li> <li>Save to Roster Reset to defaults</li> <li>Write changes on all sheets Read all sheets Write all sheet</li> </ul>	2 <u>ts</u>	
	in the second seco		Programming Track
L ROACTNUMDER:	idie		Programming On Main
Manufacturer:	Proto 1000		C Edit Only
Owner:	Ron S		
DCC Address:	167		Program
Decoder Family:	Silent Running w/ Torque Compensation		
Decoder Model:	D13J		Labels & Media Throttle
Filename:	D_U_10/.XIII de Programmer NCE Is Online Programmer Statue: Idle Active Profil	lo: My IMPI Pailroad	
	re rrogrammer NCE IS Omme   Programmer Status, Idle   Active Prome		1 <mark>00</mark> 0000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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Place your new engine on the programming track, double click on the roster for B&O 167. This screen will appear.

Click on Write all sheets. When complete your new engine is now programmed.

#### Benefits of having your engines in the roster:

- Easily change your engine's characteristics.
- You can duplicate any existing engine's programming to your new engine.
- If your decoder gets scrambled (sometimes happens with shorts) you can easily reprogram your engine by using Write all sheets to get back to where you were.
- You can see if that engine number is being used by another club member.

#### Resources: JMRI Website <u>http://jmri.org/</u> JMRI Users Group <u>https://groups.io/g/jmriusers</u>





