Decoder Test	Manufacturer:			Other Notes:							
	Decoder:										
Test Procedure Rev: D1											
Date:	Command Station / F										
Test #	Inspection	Applicable (Y/N)	Inspection/Test Procedure	Status (C/NC)				Notes			
Physical Inspection											
1	Wire Color Code		Inspect to verify that decoder wiring color code conforms to RP-9.1.1								
2	NMRA Plug		If decoder provides a plug to connect an NMRA socket, inspect to verify that plug meets RP-9.1.1; indicate which plug in Notes column								
Ken's Tests											
3	Itemize all Decoder Baseline Test Suite Tests (Test #s 3A, 3B, 3C,)		Run all Decoder Baseline Test Suite Tests; note each test result in status column								
3A	DCC 1 Margin test	Y	Column								
3B	DCC 1 Duty Cycle Test	Y									
3C	Ramp Test	Y									
3D	Packet Acceptance Test	Y									
3E	Bad Address Test	Y									
3F	Bad Bit Test	Y									
3G	Single Stretched 0 Test	Y									
3H	Truncated Packet Test	Y									
31	Prior Packet Test	Y									
	Add the additional tests										

	Functional Tests - Verify Fac	tory Set CV Values									
Test #								Values	Tested		
		Inspection	Applicable (Y/N)	Inspection/Test Procedure	Programming Mode Used	Status (C/NC)	Read	Write	Read	Write	Notes
4		CV1 is set to 3 from the factory	Y	Using Programming track read the value of CV1 and verify that it is 3							
5		Record Factory Set Values of CV29 if CV29 is supported		Using Programming Track, read the value of CV29 and record the factory set values							
6A		Manufacturer ID (CV8) - Register Mode	Y	If the manufacturer supports Register Mode programming, using Programming Track, verify that CV8 contains the value assigned to the manufacturer of this decoder	Rgister Mode						
6B		Manufacturer ID (CV8) - Direct Mode	Υ	If the manufacturer support Direct Mode programming, using Programming Track, verify that CV8 contains the value assigned to the manufacturer of this decoder	Direct Mode						
6C		Manufacturer ID (CV8) - Page Mode	Y	If the manufacturer support Page Mode programming, using Programming Track, verify that CV8 contains the value assigned to the manufacturer of this decoder	Page Mode						
7A		Manufacturer Version Number CV7) - Register Mode	Y	If the manufacturer supports Register Mode programming, using the Programming Track, verify that CV7 contains a decoder value indicating the manufacturer's assigned version; compare to any similar information on the manufacturer's accompanying decoder documentation	Rgister Mode						
7B		Manufacturer Version Number CV7) - Direct Mode	Y	If the manufacturer support Direct Mode programming, using the Programming Track, verify that CV7 contains a decoder value indicating the manufacturer's assigned version; compare to any similar information on the manufacturer's accompanying decoder documentation	Direct Mode						
7C		Manufacturer Version Number CV7) - Page Mode	Y	If the manufacturer support Page Mode programming, using the Programming Track, verify that CV7 contains a decoder value indicating the manufacturer's assigned version; compare to any similar information on the manufacturer's accompanying decoder documentation	Page Mode						

Functional Te	sts - Verify Factory Set CV Values (continu	<u>ed)</u>					_		
Test #							_		
		Applicable					_		
	Inspection	(Y/N)	Inspection/Test Procedure	Testing Method	Status (C/NC)	Testing	Notes		Notes
8	Factory Set CV Values	Y	For each CV supported by the decoder, record the CV below, and check it's factory set value; also confirm if this matches the manufacturer's documented factory set value.						
				Programming	Value in				
			CV Name	Mode	Decoder	Value	in Docum	entation	Notes
	CV1								
	CV2	2							
	CV3	3							

	Functional Tests - Operation	<u>s</u>								
Test #										
		Inspection	Applicable (Y/N)	Inspection/Test Procedure	Testing Method	Status (C/NC) Testin	g Notes			Notes
9		Basic Speed/Direction/F0			DOSPKT with		•			
		Test		Inspect for conformance using DOSPKT with script NEWLV101.TXT	NEWLV101.TXT script					
10		Itemize CV tests		documented CV. If the CV has max & min and note if CV matches specifications; if C	is documer epending o n, then che	part of the submission), itemize and test each nented implementation specifications in RP-9.2.2, check g on values entered in the CV; if CV is marked as heck if matches specification and note results; In all n & cab, etc.)				
				CV Name	Testing Method	Status (C/NC) Testin	g Notes			Notes
		CV1								
		CV2								
		CV3								
11		Check for use of NMRA Reserved CVs		may be granted if the DCC WG Chair has Recommended Practice for a given use, a	formally notified the I nd said notification is	DCC WG that the specific publicly available, and se	CV(s) are in itably detail	n the proces ed for C&I i	ssed of bein	atically fails the C&I inspection. A waiver on this area g formally added to an NMRA Standard or unposes; Document source of confirmation of use of ecific NMRA reserved CVs are used by this decoder.
		CVxx		CV Name						
					Testing Method	Status (C/NC) Testin	g Notes		•	Notes
12		Consist Address Test		Load a Consist Address and test operation at load consist address (recommended testing procedure is to load and test all possible consist addresses to ensure no gaps)						

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	Functional Tests - Programm										
	(All Tests in this section to busing multiple command state		ore NMRA DCC	Command Stations that have Conforman	ce Warrants); Issu	es will more likel	y be disc	overed if t	hese tests	are run	
								Values	Tested		
Test #		Inspection	Applicable (Y/N)	Inspection/Test Procedure	Programming Mode Used	Status (C/NC)	Read	Write	Read	Write	Notes
13		Programming on the programming track		Short Address: Verify ability to set CV1 to a value between 1 and 125							
14		Programming on the programming track		Verify error on short address greater than >127 (e.g., 135)							
15		Programming on the programming track		CV29: Set CV29 to 255; inspect that all supported bits are set; note any bits set in excess of those supported							
16		Programming on the programming track		Long Address: Verify ability to set long address; write long address; set CV29=?? to enable long address and test on operating track							
17		Register Mode Programming on the Programming Track		Short Address: Verify ability to set R1 to a value between 1 and 99; use address different than test #above	Register Mode						
18		Page Mode Programming on the Programming Track		Short Address: Verify ability to set CV1 to a value between 1 and 99; use address different than test #above	Paged Mode						
19		Page Mode Programming on the Programming Track		Select any supported equal to or greater than CV5; read value on programming track, compare to documented factory default. Using paged mode set it to an acceptable value (per the documentation). Now verify that the value has changed (using Direct programming mode if available, otherwise used paged mode to verify)	Page Mode						
20		Operations Mode Programming		Verify ability to set a CV value (other than 1, 19, and CV29) using operations mode programming; Set value using operations mode, move decoder test fixture to programming track, and read value to verify that the correct value was written in operations mode	Operations Mode						
	Functional Tests - Bi-Direction	nal Communications									
3D	Not Yet Available Add the ap	propriate Bi-Directional Commi	unications tests	here	·						-
	<u> </u>	<u> </u>				1				l	