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TO: All Members
FROM: Stan Efron, Vice President and Secretary
DATE: April 28, 2008
RE: Decoders

Attached are lists of NCE HO Decoders and Digitrax HO Decoders. These are for your assistance in fitting decoders to models that do not have them now.

If you already have experience with decoders, then you can add to the comments in these lists or your experiences with another brand of decoders. We would appreciate your comments to distribute to our other members.

SE:rls 339403.DOC

A handwritten signature in black ink, appearing to be 'Stan Efron'.

NCF HO Decoders

	P42 Genesis	N12KOa	
	RDC	N12SR	
	RS2, RSC2	N12SR	
	SD40, SD40-2	N12SR	
	SD70 Mac	N12K1a	
	SD80, SD80 Mac	N12SR	
ER Models	Sharknose	N12SR	
Intermountain	FT-A	NIMFT-A	
	FT-B	NIMFT-B	
	SD40T	N12A0e	
LifeLike	Alco S-1	Z14SR	
	2-8-8-2	Z14SR	
	FA1, FB1	Z14SR	
	F7	Z14SR	
	F40PH	Z14SR	
	GP18	Z14SR	
	GP20	Z14SR	
	GP38-2	Z14SR	
	SD7	Z14SR	
	SW1200	Z14SR	
Micro Trains	FT	Z14SR	
MDC	FT	Z14SR	
HO Scale			
Athearn	Genesis F3-7	DASR	
	Genesis 2-8-2	D13SRJ	
	Genesis 4-6-2	D13SRJ	
	Genesis SD70-75	DASR	
	GP60M	D13SRJ	
	Genesis RS3	D15SR	
	All EZ Plug DCC	D13SRJ	
Atlas	AEM7	Z14SR	
	B40-8	D13SR	
	C30-7	D14SR	DASR
	C424, C425	DASR	
	Dash 8-40B	D15SRP	
	Dash 8-40C	D15SRP	
	GP7 Pre 2003	DASR	D14SR
	GP7 2003 on	D14SR	
	GP38	DASR	
	GP40	DASR	D14SR
	H-15-44	D14SR	
	RS1, RS3	DASR	
	RSD 4/5	DASR	
	RS-11	DASR	
	RSD4, 5, 12	DASR	

	S-2, S-4	ATLS4	N12SR	
	SD24	D14SR		
	SD35	DASR		
	U23B	D14SR	DASR, KRS-SR	
	U33C, U36C	DASR	D14SR	
	MP15DC	N14IP		Without sound
	Silver Series Locomotives	N12SRP		Without sound
Bachmann	2-10-0	D14SR		Cut orange capacitor off of Bachmann board
	4-8-2 Mtn.	D14SR		
	Acela	D14SR		
	K4	D14SR		
	3 truck Shay	N12SRP		Bachmann light board
	Spectrum Steam	N12SRP		"
	4-6-0	D14SR		"
	GE E-33 Electric	N12SRP		"
	Hogwart's Express	D15SR		"
	Thomas the Tank	D15SR		"
	DCC Equipped Diesels	BachDSL		
Broadway Limited Blue Line	EMD SD40-2	N14IP		
	EMD SD-9	N14IP		
	PRR M1a/b	N14IP		
	GE AC6000	N14IP		
Con-Cor	Zephyr	P2KSR		Mounts underside
ER Models	Baldwin Sharknose	D15SRP		
	FP7	D15SRP		
Bowser		D15SR		
Intermountain	F3 - F9	D14SR		
	F7	D14SR	KRS-SR	
Kato	C44-9W	D14SR	KRS-SR	
	Dash 8	D14SR		
	C424, C1425, ATAS	DASR		
	GP35	DASR		
	NW-2	N12SR		Fits in Cab
	RS2, RSC-2	D14SR	KRS-SR	
	SD40-2	DASR		
	SD45	D14SR		
	SD70	D14SR	KRS-SR	
	SD80, SD90	D14SR	KRS-SR	
LifeLike	0-6-0	P2KSR		
	0-8-0	P2KSR		
	20804	PRKSR		
	2-8-8-2	D14SR	D13SRP	
	BL2	D13SR		

	RDC, Budd	D13SRP	
	DL109	D13SR	
	FA1, FB1	D14SR	
	FA2, FB2	D13SRP	
	E6, E7 P2K	N12SRP	
	E8, E9 P2K	D13SRP	
	F3A, F3B	D15SR	
	GP7	P2KSR	
	GP9	P2KSR	
	GP18	P2KSR	
	GP20	P2KSR	
	GP30	P2KSR	
	GP38-2	P2KSR	
	GP60	P2KSR	
	GP60	P2KSR	
	PA, PB	D13SRP	
	P1K C Liner	D13SR	Wire to exist. Light bd.
	P1K Erie Built	D13SR	Wire to exist. Light bd.
	P1K D109	DASR	
	P1K F7	DASR	
	S1	N12SR	Shorten Wire Harness
	S3	N12SR	Shorten Wire Harness
	SD7	D13SR	
	SD9	D13SRP	
	SD45	P2KSR	
	SD60, SD60M	P2KSR	
	SW8, 600, 900, 1200	SW9SR	
MDC	Shays	N12SR	
Riverossi	Allegheny	D13SRP	
	Heisler	N12SR	
Stewart	AS16	DASR	
	C628	D13SR	
	C630	D13SR	
	F3-7, F9 A&B	DASR	
	FT	D13SRP	
	U25B	N12SR	DASR
	U25C	DASR	
	AS16	DASR	
	VO1000	N12SR	KRS-SR
Trix	Big Boy	D13SRP	D14SR
Walthers	All	D13SR	
O Scale			
Atlas	RS1	D408 w/Atlas Harness	
	GP35	D408 w/Atlas Harness	
	SW8, 9	D13SRP	

DIGITRAX HO DECODERS

Manufacturer	Loco Model	Premium Decoder Recommended	Basic Decoder Recommended
Athearn	Genesis F3-7	DH163A0	DH123D
	Genesis 2-8-2	DH163D	DH123D
	Genesis 4-6-2	DH163D	DH123D
	Genesis SD70-75	DH163A0, DH163D	DH123D
	GP60M RTR* Plus AND all other RTR Plus	DH163D	DH123D
	Regular Diesels	DH163AT	DH123AT
RTR* - "Ready To Roll"			
Atlas	AEM7	DZ143	DZ125
	B40-8 (Decoder Upgrade)	DH165A0	
	C30-7	DH163IP	DH123P, DZ125PS
	C424, C425	DH165K0, DH163IP,	DH123PS, DZ125PS
	DASH 8-40B	DH163PS	DH123PS
	DASH 8-40C	DH163PS	DH123PS
	GP7 (Pre 2003)	DH165A0, DH163D	DH123D
	GP7 (2003 and later)	DH163IP, DH163PS	DH123PS, DZ125PS
	GP38 (Decoder Upgrade)	DH165A0	
	GP40 (Decoder Upgrade)	DH165A0	
	H-15-44	DH163PS	DH123PS
	RS1 & RS3	DH165A0, DH165K0	
	RS3	DH165A0, DH163K0	
	RSD4/5	DH165A0, DH163K0	
	RS-11	DH165A0, DH163K0	DH123D
	RSD4, RSD5, RSD12	DH165A0, DH165K0	
	S-2, S-4	DZ143	DZ125
	SD24	DH163PS	DH123PS
	SD35 (Decoder Upgrade)	DH165A0	
	U23B	DH163IP	DH123P, DZ125PS
	U33C & U36C	DH165A0, DH163P	DH123P, DZ125PS

Bachmann	Spectrum 2-10-0	DH163IP	DH123P, DZ125PS
	Spectrum 3 Truck Shay	DZ143	DZ125
	Spectrum Steam Engines	DZ143	DZ125
	4-6-0	DH163PS	DH123PS
	GE E-33 Electric	DH163PS	DH123PS
	Hogwart's Express (Installation Instructions)	DH163D	DH123D
	Thomas the Tank (Installation Notes)	DH163D	DH123D

ER Models	Baldwin Sharknose	DH163D	DH123D
	FP7	DH163D	DH123D
Bowser locos with Pittman Motors		DH163D	DH123D
HAG Locos		HAG501 factory installed or DH140Uxx Retrofit	
InterMountain	F3-F9	DZ143PS	DZ125PS
	F7	DH163IP	
Kato	C44-9W	DH163IP	DZ125PS
	Dash 8	DH163IP	
	C424 C1425 ATAS	DH163K0	
	GP35	DH163K0	DH123D
	NW-2	DH163D with Replacement Frame, DZ143	DH123D
	RS2/RSC-2	DH163IP or DZ143PS	DZ125PS
	SD40-2	DH163K0, DN142, DH163D, DH163IP w/frame mod	DH123D
	SD45	DH163K0, DH163IP	
	SD70	DH163IP	
	SD80/90	DH163P	DH123P
	Kato Note RE: DCC Installation		

Life-Like	0-6-0	DH165L0	DH123D
	0-8-0	DH165L0	DH123D
	2-8-4	DH165L0	DH123D
	2-8-8-2	DH163IP	DZ125PS
	BL2	DH16D	DH123D
	BUDD Units (RDC)	DH163D	DH123D
	DL109	DH163D	DH123D
	FA1/FB1	DH163P	DH123P, DH123D
	FA2/FB2	DH163D	DH123D
	E6/E7 (Proto 2000) Mars Light Installation Note	DH163P	DH123P
	E8/E9 (Proto 2000) App Note	DH163D	DH123D
	F3A/B (Proto 1000)	DH163D	DH123D
	GP7 (Proto 2000)	DH165L0	DH123D
	GP9 (Proto 2000)	DH165L0	DH123D
	GP18	DH165L0	DH123D
	GP20	DH165L0	DH123D
	GP30	DH165L0	DH123D
	GP38-2	DH165L0	DH123D
	GP60 (Proto 2000) See app note	DH165L0	DH123D
	PA/PB	DH163D	DH123P, DH123D
	P1K C Liners	DH163D	DH123D
	P1K Erie Builts	DH163D	DH123D
	S-1 See application note	DH163PS	DH123PS or DZ125PS
	S-3 Alco (Proto 2000)	DZ143PS	DZ125PS (Change Bulbs to 12V)
	SD7	DH163D	DH123D
	SD9	DH163P	DH123D
	SD45	DH165L0	DH123D
	SD60/SD60M See app note	DH165L0	DH123D
	SW8/900/600	DZ143	DZ125
	Life Like Diesels with DCC Medium Socket	DH163PS	DH123PS or DZ125PS
Marklin Trinary AC Digital		Any decoder & bridge rectifier (see pp 29-30 in the Digitrax Big Book of	

		DCC for instructions)	
MDC	Four Truck Shay	DZ143PS	DZ125PS
Rivarossi	Allegheny	DH163PS	DH123PS or DZ125PS
	Heisler	DZ143PS	
Stewart	Baldwin AS16 (Kato drive)	DH163K0, DH163D	DH123D
	C628	DH163D, DH163P	DH123P, DH123D
	C630	DH163D, DH163P	DH123P, DH123D
	F3-7, F9 A&B	DH163K0	DH123D
	FT	DH163P	DH123P
	U25B	DZ143PS	DZ125PS
	U25C (Kato drive)	DH163K0, DH142	DH123D
	Baldwin AS16 (Kato drive)	DH163K0, DH142	DH123D
	VO1000	DZ143PS	DZ125PS
Trix	Big Boy	DH163PS	DH123PS or DZ125PS
Walthers	All Locomotives	DH163D, DZ143	DH123D
HO Locomotives with DCC Medium Socket		DH163P	DH123P
Most HO Locomotives Not Listed Above		DH163D	DH123D

For HO applications, most modern high efficiency can motors draw less than 1/2 amp when running and less than 1 amp when stalled at 12V DC. These motors are suitable for use with 1.5 amp (DH163, DH121, DH150 plug n'play decoders), or 1 amp (DN142, DN121, or DZ143) decoders.

Note: Some older HO motor designs (older Athearn open frame motors, Pittman motors, etc.) may exceed the 1.0 amp limit and you may need to use a 1.5 amp, 2.0 amp or other higher current decoder such as the 3.0 amp DG380L in these applications.

G Scale Selection Chart:

Manufacturer	Locomotive Model	Recommended Digitrax Decoder
LGB	All	DG583S