

Backed by our famous "GOOF-PROOF" Warranty



Scale	Functions	Function Rating
All	2	200 mA



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This Function only decoder is designed to add extra lighting functions for any scale where extra lighting functions are needed. These decoders are commonly used to add smoke coils, firebox flicker, or ditch and step lights.

Light Function Wires

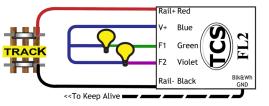
5			
CV #	Def't	Wire Color	F#
CV 51	32	Green	F1
CV 52	32	Violet	F2

Rule 17 Dimming Control

Rule 17 Dimming is turned on and off by button 4 as the default, but this value can be remapped via CV 123. See the Function Remapping guide in the lighting section of <u>docs.tcsdcc.com</u> for more info.

Available Lighting Effects	fwd	rev	both
Constant Bright Light	0	16	32
Random Flicker (fire box) 1	1	17	33
Mars Light	2	18	34
Flashing Light	3	19	35
Single Pulse Strobe	4	20	36
Double Pulse Strobe	5	21	37
Rotary Beacon	6	22	38
Gyra Light	7	23	39
Rule 17 (dimmable light)	8	24	40
Ditch Light (Left or Right)	10	26	42
Ditch Light (Other side)	11	27	43
Constant Dim Light	12	28	44
Brake Light(s)	14	30	46

MORE ITEMS NOT SHOWN!







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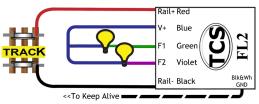
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WIRING DIAGRAM







BASIC CONFIGURATION

Α		figur	ration				
	0	1	Reverse the direction the engine runs.				
B	4	4	Enable analog (DC) operation.				
C	0	32	Make the decoder address 128 or higher.				
CV 29	6		Program the sum of the values you choose into CV 29				
2 Digit	_	dress					
CV 1	3		Record your choice here.				
4 Digit	: Add	iress	Make sure 4-digit Addressing is enabled in CV29				
CV 17	0		Record your four digit address here				
CV 18	0		Your command station will assign the values of CV 17 and CV18				
Consis	st Ad	Idres	Add 128 to reverse the loco when in consist.				
CV 19	0		Use a 2 digit address when in a consist (Multiple units).				
Decoc	ler L	ock					
CV 15	0		All unlocked = 0 Decoder to unlock = 1 - 6 All locked = 7				
CV 16	1		Mobile = 1 Sound = 2 Light Only = 3 4 5 6				
			nformation on decoder features or programming visit:				
W	ww.tc	sdcc.	com and check out the Complete Programming Guide.				
NOTE	:Wh st hav	en at /e a 5	<u>com</u> and check out the Complete Programming Guide . tempting to read back CV's on the programming track the 50-100 ohm resistor in series between the blue wire and Inction wires.				
NOTE FL2 must any of t WARF This d 1. 2.	: Wh st hav he lig RANT lecode For r	en at ve a 5 ght fu Y PRC er mus egistr out a	tempting to read back CV's on the programming track the 50-100 ohm resistor in series between the blue wire and				
NOTE FL2 mu: any of t WARF This d 1. 2. 3.	: Wh st hav he lig ANT ecode For r For r . Print Retu	en at ve a 5 ght fu Y PRC er mus egistr out a rn dec	tempting to read back CV's on the programming track the 50-100 ohm resistor in series between the blue wire and inction wires. OCEDURE: All decoders are covered by a one-year warranty. St be returned in a small box. ation, more details, and disclaimers, visit <u>tcsdcc.com/warranty</u> copy of the Warranty Registration and include it in the box				

BASIC CONFIGURATION

c. ..

CV 29	Con	figur	ation						
Α	0	1	1 Reverse the direction the engine runs.						
В	4	4	Enable analog (DC) operation.						
C	0	32	Make the decoder address 128 or higher.						
CV 29	6		Progra	m the sum o	of the values you	choc	ose into	CV 29	
2 Digit	t Ad	dress	ι	Use if the ad	dress is 127 or le	ss.			
CV 1	3		Reco	ord your choi	ce here.				
4 Digit		dress			ddressing is enabl		n CV29		
CV 17	0				digit address here				
CV 18	0		Your commar	nd station wi	ll assign the value	s of (CV 17 ar	nd CV1	
-									
Consis	st Ac	Idres	1		se the loco when				
CV 19	0		Use a 2 di	git address v	when in a consist (Mult	tiple uni	its).	
_									
Decoc									
CV 15	0	4	All unlocked = 0	Decoder	r to unlock = 1 - 6		All loc	ked =	
CV 16	1		Mobile = 1 Sour	nd = 2 Light	Only = 3 4		5	6	
Factor	ry Ro		ogram a value of	f 2 or 8 to pe	rform a Factory Re	eset.			
<u>wv</u> NOTE FL2 mu	ww.to : Wh st ha	en att	<u>com</u> and check tempting to re	out the Co ad back CV	tures or program mplete Program ''s on the progra ries between the	min Imm	g Guide	e. Ick the	
WARF This d 1. 2.	RANT lecod	Y PRO er mus registra : out a	CEDURE: All de t be returned in ation, more detai copy of the Warr	n a small box ils, and discl ranty Registr	overed by a one-ye aimers, visit <u>tcsdc</u> ation and include the address below.	<mark>c.co</mark> it in	m/warr	anty	
Comp	atible	with N	MRA DCC stand	ards	Designed & Built I	ov T(CS in th	e USA	

Compatible with NMRA DCC standards

Train Control Systems P.O. Box 341 845 Blooming Glen Rd. Blooming Glen, PA 18911



Designed & Built by TCS in the USA

Phone 215-453-9145 Fax 215-257-0735 Email tcs@tcsdcc.com Web www.tcsdcc.com