

Backed by our famous "GOOF-PROOF" Warranty



Scale	Functions	Function Rating
All	4	200 mA

Dimensions .556"x.356"x.12" or 14.17mm x 9.06mm x 3.06mm

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
CV 53	32	Brown	F3
CV 54	32	Pink	F4

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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WIRING DIAGRAM



<To Keep Alive



Stripe (Ground

Dail.

BASIC CONFIGURATION

		100	KATION					
CV 29	Con	figu	ration					
Α	0	1	Reverse the direction the engine runs.					
В	4	4	Enable analog (DC) operation					
С	0	32	Make the decoder address 128 or h					
CV 29	6		Program the sum of the values you contained.	hoose into CV 29				
2 Digit	: Ad	dres	5 Use if the address is 127 or les	s.				
CV 1	3		Record your choice here.					
4 Digit CV 17	Ad	dres	5 Make sure 4-digit Addressing is enable Record your four digit address here	ed in CV29				
CV 17	0	-	Your command station will assign the values	of CV 17 and CV18				
CT 10								
Consis	+ .	Idro		n consist				
CONSIS CV 19		Jule						
CV 19	0		Use a 2 digit address when in a consist ()	Aultiple units).				
Decod	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				
			ake CV 15 = 0 or CV 15 = CV 16. To lock a decoder, mak address decoders, make CV 15 = 7.	e CV 15 not equal to				
Factor	y R	<u>es</u> et						
CV 8	15	3 F	rogram a value of 2 or 8 to perform a Factory Re	set.				
			nformation on decoder features or programmed and check out the Complete Program					
FL4 mus	st ha	ve a	tempting to read back CV's on the program 50-100 ohm resistor in series between the Inction wires.	nming track the blue wire and				
This d 1.	ecod For i	<mark>er mu</mark> registi	DCEDURE: All decoders are covered by a one-ye st be returned in a small box. ation, more details, and disclaimers, visit <u>tcsdcc</u> copy of the Warranty Registration and include it	.com/warranty				

- Print out a copy of the Warranty Registration and include it in the box
 Return decoder(s) directly to TCS using the address below.

Compatible with NMRA DCC standards

Designed & Built by TCS in the USA

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



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

BASIC CONFIGURATION

CV 20 C *c*. ...

CV 29	Con	nfigu	ration							
Α	0	1		Rev	erse the	direction	the engin	e rur	ıs.	
В	4	4		Enable analog (DC) operation.						
С	0	32				oder addre				
CV 29	6		←	 Program 	the sun	n of the va	alues you	cho	ose into	o CV 29
2 Digit	: Ad	dres	5	Us	e if the	address is	127 or le	ess.		
CV 1	3		_ ←	- Record	your ch	oice here.				
4 Digit	: Ad	dres	5	Make sure	e 4-digit	Addressin	g is enab	led i	in CV29)
CV 17	0			- Record	d your fo	our digit ad	dress her	e		
CV 18	0		Your	command	station	will assign	the value	es of	CV 17 a	and CV18
Consis	st Ao	ddre	5S	Add 12	8 to rev	erse the lo	oco wher	in c	onsist.	
CV 19	0		U	se a 2 digi	t addres	s when in a	a consist	(Mul	tiple ur	nits).
										,
Decoc	ler l	_ock								
CV 15	-		All unloc	ked = 0	Decod	ler to unlo	ck = 1 - 6	,	All lo	cked = 7
CV 16	1				= 2 ic	sht Only = 3	3 4		5	6
		-				. To lock a d				
CV 8	15					perform a				
						eatures or				
W١	vw.to	<u>csdcc.</u>	.com and	d check o	ut the C	Complete	Progran	nmir	ng Guic	le.
						-	-		-	
	• • • • •					n / /				
						CV's on th				
					tor in s	eries bet	ween th	ie bl	ue wir	e and
any of t	he li	ght fu	Inction	wires.						
WARE	ΔΝΤ			F• All deco	ders are	covered b	v a one-v	/ear	warrant	·v
				urned in a			y a one y	cui	warrand	. y•
						sclaimers,	visit tcsd	cc.cc	m/war	rantv
						stration an				
						ng the addr				
Comp	atible	with N	MRA DC	CC standar	ds	Designe	ed & Built	by T	CS in th	ne USA
Train C	ontr	ol Sve	tems			-		bono	215 4	
P.O. Bo							C			53-91/5
845 Blo							F			
	omina		Rd.					Fa	x 215-2	57-0735
Bloomin		g Glen	Rd. 18911		'C	S	Ema	Fa: ail tc :	x 215-2 s@tcsd	53-9145 57-0735 cc.com