

STaging Yard Control System (STYCS) CV Worksheet

Staging Yard Name: _____

Lock Address: (1)_____ (Lock = N, Unlock = R)

		Track		CV	Switch Position (N or R)							Don't Move	Don't Move								
		Inputs	CV#	Value	Relay	SW7	SW6	SW5	SW4	SW3	SW2	SW1	CV Value	CV#							
Switch #					Output	(8)	(7)	(6)	(5)	(4)	(3)	(2)									
Wire Color																					
Outputs					D7	D6	D5	D4	D3	D2	D1	D0									
Track Name	Wire Color	CV Weight			128	64	32	16	8	4	2	1									
T1		A0	81	(N's)									(X's)	98							
T2		A1	82	(N's)									(X's)	99							
T3		A2	83	(N's)									(X's)	100							
T4		A3	84	(N's)									(X's)	101							
T5		A4	85	(N's)									(X's)	102							
T6		A5	86	(N's)									(X's)	103							
T7		B0	87	(N's)									(X's)	104							
T8		B1	88	(N's)									(X's)	105							
Lock (L/U)		E0 out	97	(L's)																	
Relay Activation (Seconds)												Seconds	106								
Relay Activation Table (Y/No)												B1	B0	A5	A4	A3	A2	A1	A0	CV Value (Y's)	107
		+5/GND			Note: N=Normal, R=Reverse, X=Don't Move, L=Locked, U=Unlocked, Y=Yes, No=No																

Instructions:

1. Enter on Worksheet header the Staging Yard Name and Lock Address. (Staging Yard Name is an optional entry.) Lock Address and Switch # address range is 0-2047.
2. Enter on Worksheet the Switch #'s, Track Names, and Wire Colors. Leave unused switches and tracks blank. (Track Names and Wire Colors are optional entries.)
3. Enter on Worksheet the required Switch Position (N, R, or X) for each Track. (Ask yourself: when **A0** is pressed, what position should **SW1** go to? **SW2**? **SW3**? Etc.)
4. Enter on Worksheet an "L" in the Lock row for each switch you want the dispatcher to be able to lock (that is, disable local control). Enter a "U" otherwise. (See Note 2)
5. Enter on Worksheet the amount of time you want the relay activated after a button push in the Relay Activation (Seconds) cell.
6. Enter on Worksheet a "Y" in the Relay Activation Table for each input (**A0 to B1**) that you want to have actuate the relay. Enter a "No" otherwise.
7. Calculate the CV values by adding the CV Weight (1,2,4,8,etc.) for each entry of **N's** and **L's** in the left CV Value column, for **X's** and **Y's** in the right CV Value column.
8. Place the Jumper on the STYCS board in "Program" position. (Jumper 1-2)
9. Program* the Lock and Switch #'s using your throttle in "Switch Mode" in the following order: Lock, SW1, SW2, ... (Select address, press either N or R to program)
10. Program* the CV#s and their corresponding CV Values with your throttle in "Ops Mode". Use a non-existent locomotive address number - but not zero.
11. Replace the Jumper on the STCYCS board to "Default" position. (Jumper 2-3)

Note:

1. The Lock Address and Switch #'s should be unique on the layout. Exceptions may exist when multiple activations for the same address are desired.
2. The Lock Address and Switch #'s must always be entered in order (Lock, SW1, SW2, etc.). CV Values may be entered in any order.
3. Outputs **D0 to D6** are switch outputs (**N=Hi=1, R=Lo=0**); **E0 Out** is a lock indicator output (Locked=Hi=1, Unlocked=Lo=0)
4. Inputs **A0 to B1** are pushbutton inputs and must be pulled low for local operation. **Lock Address** locks switches indicated by "L" in CV97 (**N-->Locks, R-->Unlocks**)
5. For some DCC systems: **N(Normal)=C(Closed), R(Reverse)=T(Thrown), "Switch Mode"="Select Acc", "Ops Mode"="Program On The Main"**
6. *Power LED will flash from **GREEN** to **RED** then back to **GREEN** when a program operation is accepted.