

Special Function Output Setup by Time of Day Tech Note 1110

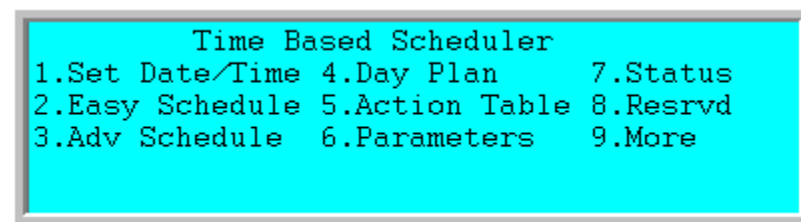
This Tech Note explains the steps necessary to set up a Special Function Output to drive an external device by time of Day. Devices such as signs, beacons, strobe lights, etc. can be outputted via a Load Switch output and turned/on Off by time of day.



Controller Programming Notes

In this example, we will wire channel 9 Yellow in the cabinet to the output device. We will map the Special Function # 1 Output to Channel 9 Yellow. Whenever channel 9 Yellow is ON, the device will be turned on. The following steps are needed to program Time-of day programming in the controller to program special function outputs.

2) Go to MM->4 Scheduler.



3) Go to the Easy schedule (MM->4-2) **or** the Advanced Schedule (MM->4->3) menu and program the controller to run Day Plan #1 all year long

#	Day	Mo:From-Thru	DOM:From-Thru	Plan
1	ALL	01-12	01-31	1
2	OFF	00-00	00-00	1
3	OFF	00-00	00-00	1
4	OFF	00-00	00-00	1
5	OFF	00-00	00-00	1
6	OFF	00-00	00-00	1
7	OFF +	00-00	00-00	1

MM->4->2 Easy Scheduler

#	Day	Month	more~
1	SMTWTFSS	JFMAMJJASOND	
2	XXXXXXXX	XXXXXXXXXXXXXXXX	
3	.....	.....
4	.....	.....
5	#.....	.....
6+	.....	.....

#	Date	1	2	3	Day
1	1234567890123456789012345678901				Plan
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				1
3	.....				1
4	.....				1
5	.....				1
6+	.....				1

MM->4->3 Advanced scheduler

4) Set up the Day plan table - Action 99 is free pattern 254 and action 1 is Pattern that will turn on Special Function #1 (Channel 9 Yellow). In this example the output will be on between the hours of 2:00 pm to 8:00 pm.

Plan- 1	Evt	Time	Actn	Evt	Time	Actn
Link: 0	1	00:00	99	2	14:00	1
	3	20:00	99	4	00:00	0
	5	00:00	0	6	00:00	0
	7	00:00	0	8	00:00	0
	9	00:00	0	10	00:00	0
	11	00:00	0	12	00:00	0
	+ 13	00:00	0	14	00:00	0

MM->4->4 Day plan table # 1

5) Set up the action table for Action 1 to run the NTCIP Free pattern with Special Function Output 1 ON and Action 99 to run the NTCIP Free pattern with Special Function Output 1 OFF.


Actn	Patr	Aux-123	Spec-12345678	Pre.1.2
1	254	...	X.....	0 0
2	0	...	.....	0 0
3	0	...	.....	0 0
4	0	...	.....	0 0
5	0	...	.....	0 0
6	0	...	.....	0 0
7 +	0	...	.....	0 0

Actn	Patr	Aux-123	Spec-12345678	Pre.1.2
94 -	0	...	.....	0 0
95	0	...	.....	0 0
96	0	...	.....	0 0
97	0	...	.....	0 0
98	0	...	.....	0 0
99	254	...	.....	0 0
100	255	...	.....	0 0

MM->4->5 Action Table

6) Next we must Map channel 9 Yellow to Special Function Output #1. We will do this by using IO Logic found under menu MM->1->8->7.

Result	Fcn	Oper	Fcn	Oper	Fcn	Timer
0 33	=	0 39	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0
I 0	=	I 0	I	0	I	0 DLY 0



Where

0 33 = Channel 9 Yellow and **0 103** = Special Function Output # 1

General Cabinet and MMU Notes

Wire Channel 9 Yellow to your device. You must also not monitor Channel 9 in your MMU.

Summary

The procedure above is a simple and easy way of turning ON/OFF external devices via the ATC software.