

**Comment**

dwnlded prgrm 9-1-20 with a used old leftover smart relay, ALL CNTS TO ZERO, the vocalarm input comes from a box and relay in hall by dayroom, the high volt 277 volt circuit is in the basement panel- EHB2, circuit #6, need keys from Glendale, there are high volt fuses (5amp) in the grey jbox by app bay door. The Smart relay turns on the lights slower to keep fuses from blowing and still be extra safe with the high 277 volt.  
The light each have there own individual #14 awg wire and relay.

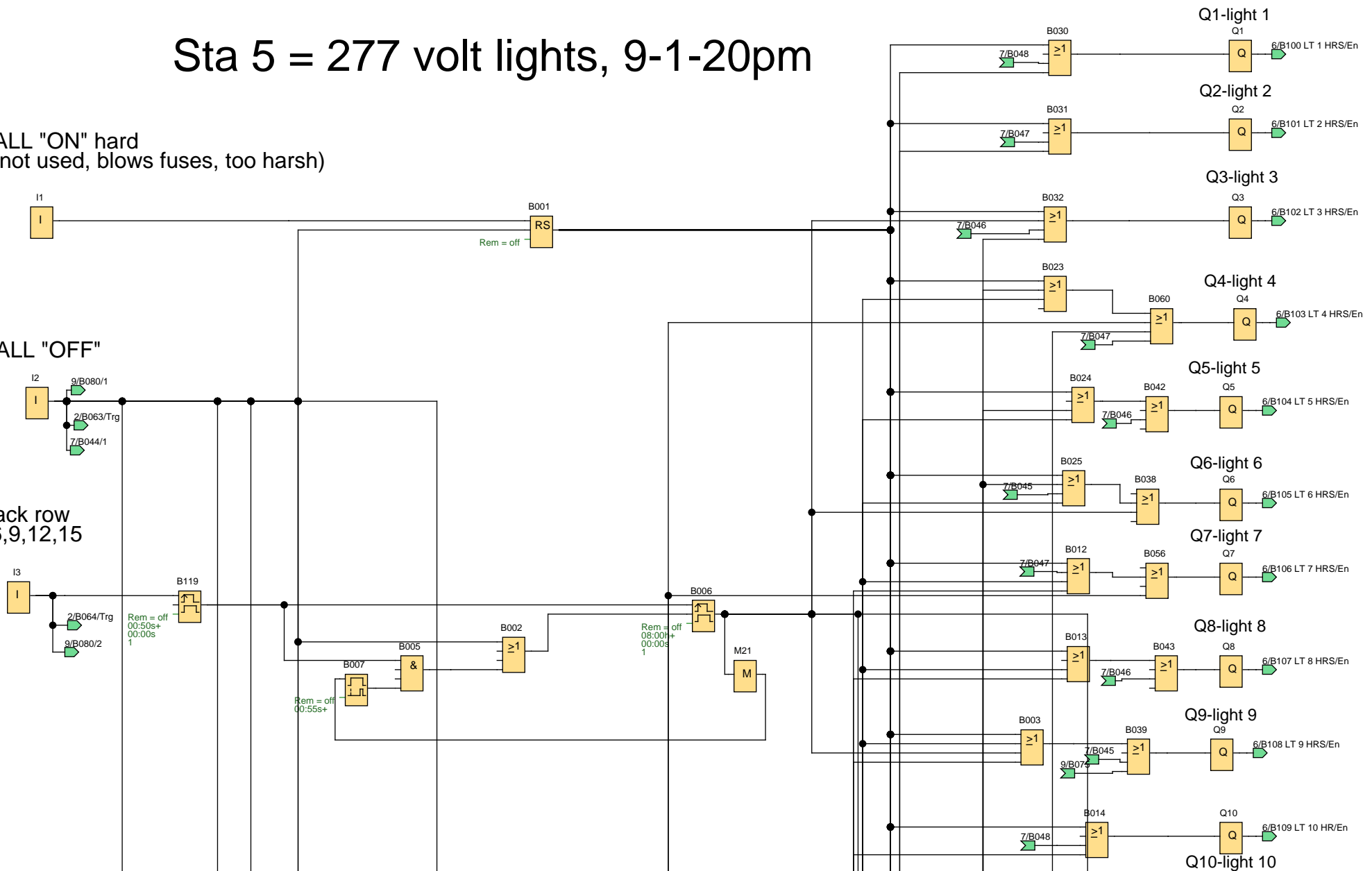
Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	1 / 19

# Sta 5 = 277 volt lights, 9-1-20pm

I1- ALL "ON" hard  
(not used, blows fuses, too harsh)

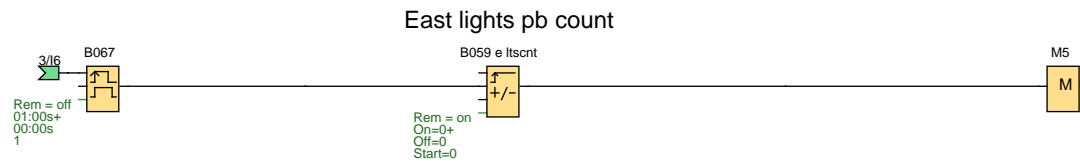
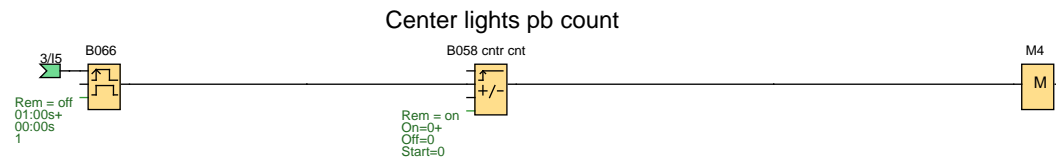
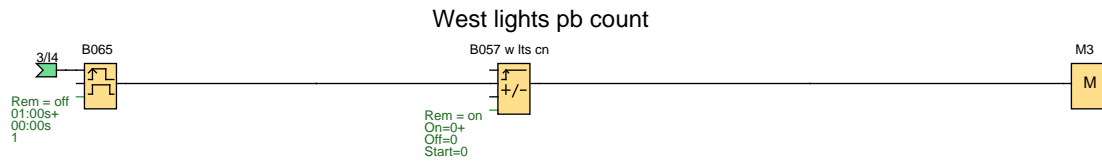
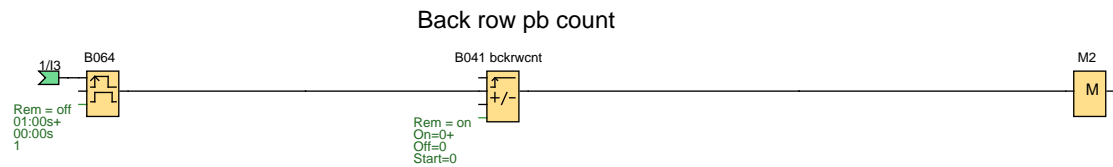
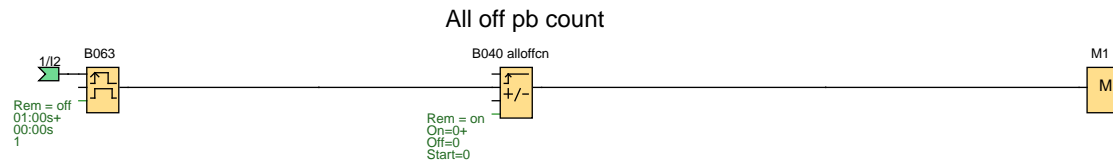
I2-ALL "OFF"

I3-Back row  
3,6,9,12,15



Creator:	John Ledbetter	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20	Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM	File:	Sta 5 lights 9-1-20.isc	Page:	2 / 19
	DFD Lineshop				

# Sta 5 pushbutton counters



Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	3 / 19

### Sta 5 lights

14-West lights  
7,8,9,10,11,  
12,13,14,15

15-Center lights  
4,5,6,7,8,9

16-East lights  
1,2,3,4,5,6

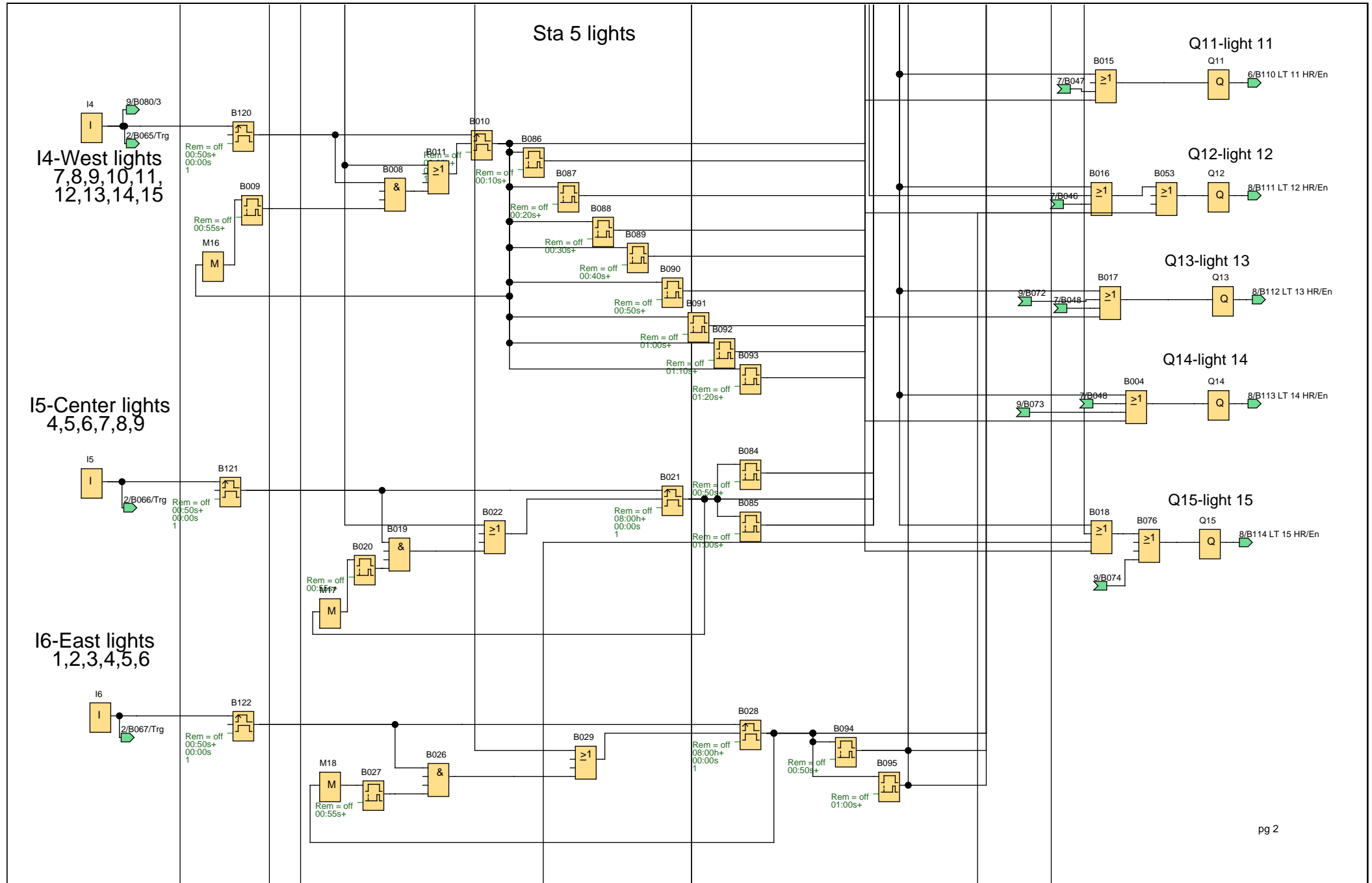
Q11-light 11

Q12-light 12

Q13-light 13

Q14-light 14

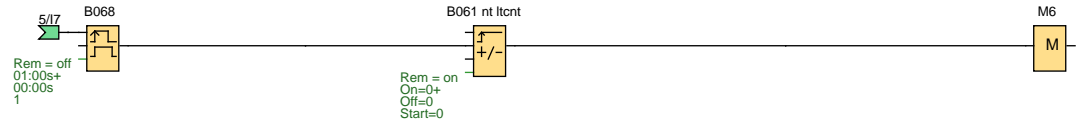
Q15-light 15



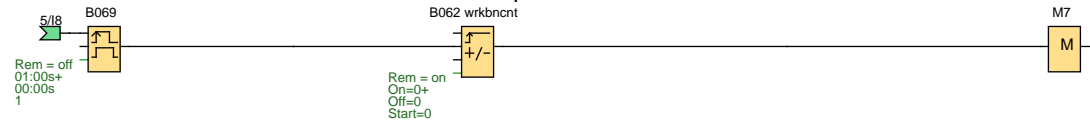
Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.isc	Page:	4 / 19

# Sta 5 pushbutton counters

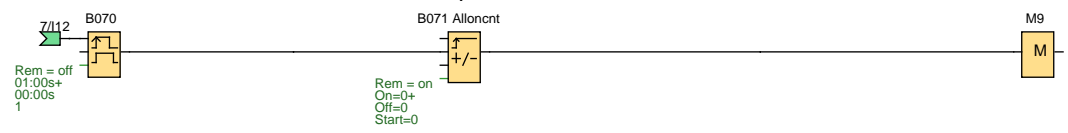
## Night light pb count



## Work bench pb count



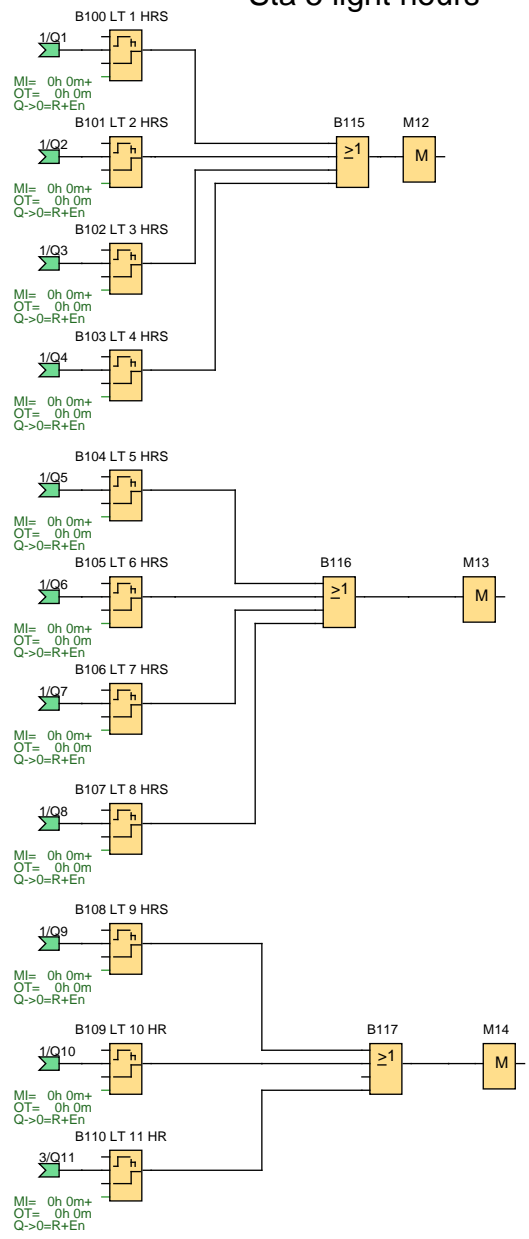
## All on pb count



Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	5 / 19



# Sta 5 light hours

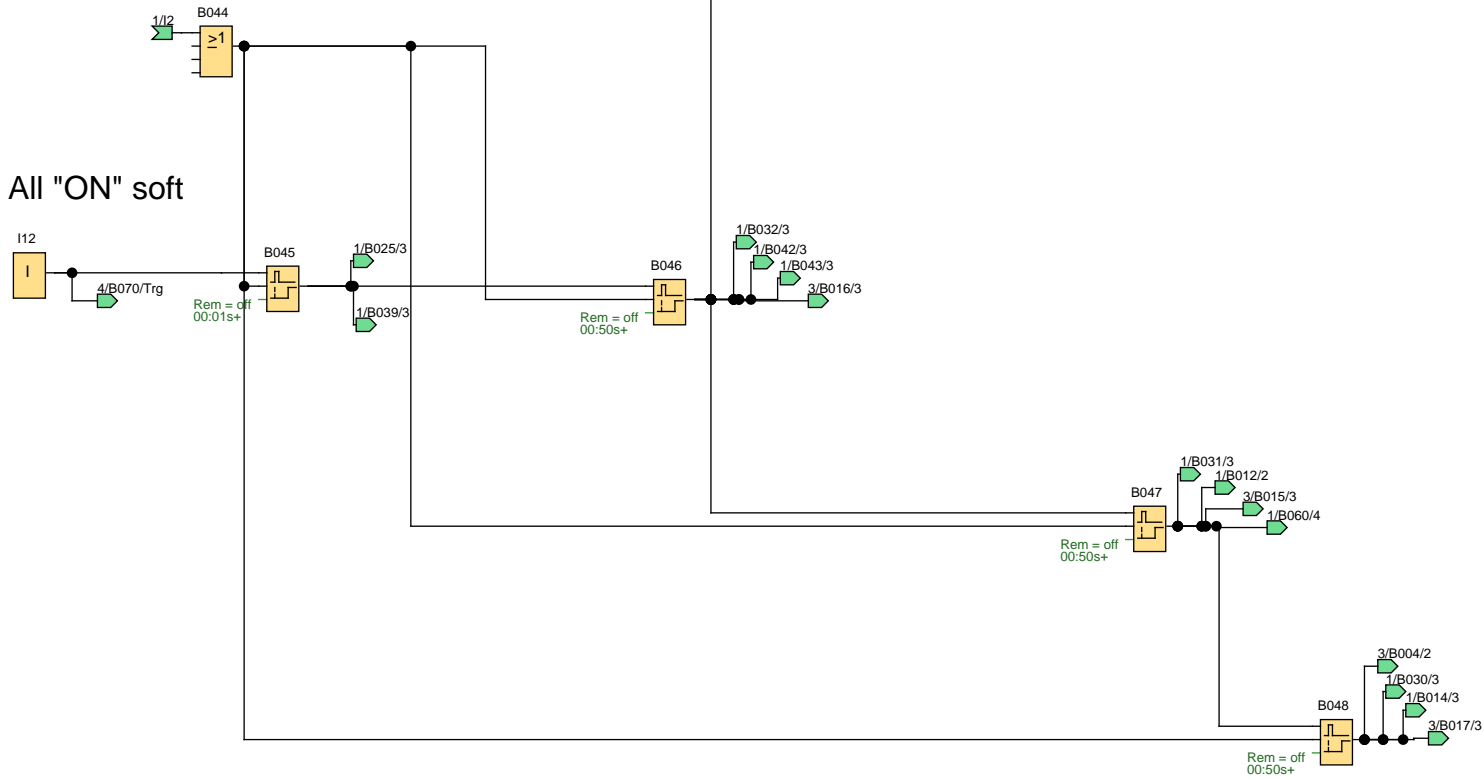


Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	7 / 19

# Sta 5 lights

All "ON" soft turns on lights slowly so it helps with not blowing fuses, and easing stress on control transformer

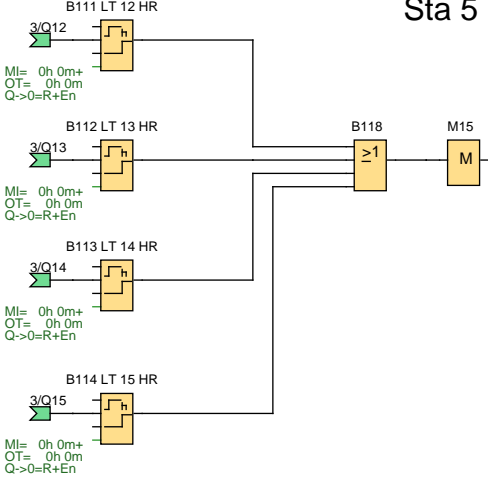
I12- All "ON" soft



Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.isc	Page:	8 / 19



# Sta 5 light hours

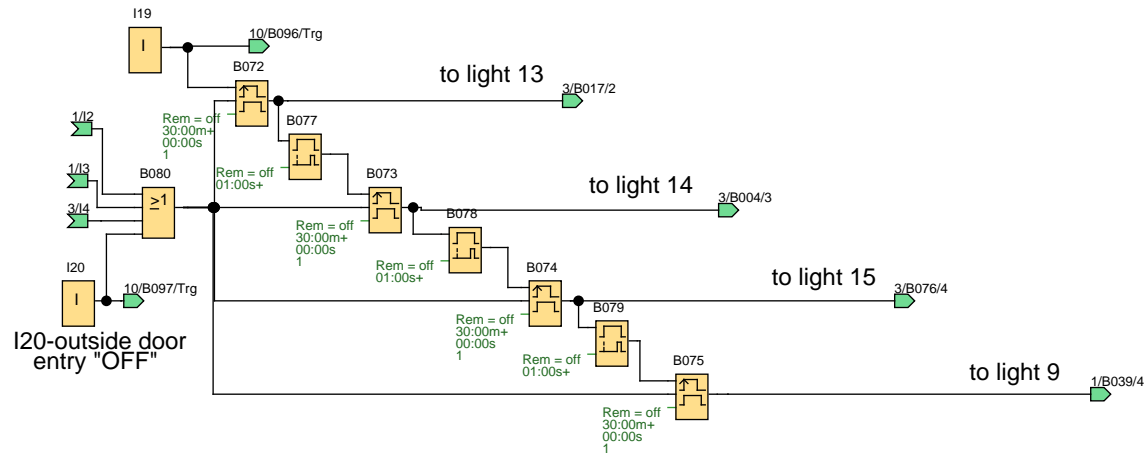


Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	9 / 19

# Sta 5 lights

This switch is over by the app bay public door entrance by dumpsters, parkside grass

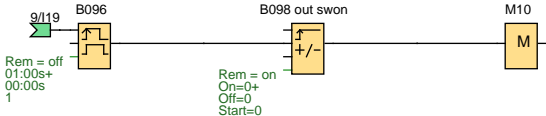
I19-outside door entry switch "ON"  
lts 13,14,15,9



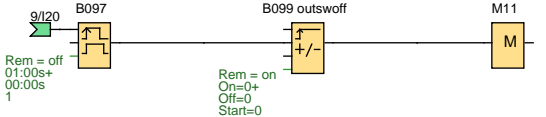
Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	10 / 19

# Sta 5 Public Entry switch counts

Out sw on pb count



Out sw off pb count



Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	11 / 19

Block Number (Type)	Parameter
B001(Latching relay) :	Rem = off
B006(Edge-triggered interval time-delay relay) :	Rem = off 08:00h+ 00:00s 1
B007(On-delay) :	Rem = off 00:55s+
B009(On-delay) :	Rem = off 00:55s+
B010(Edge-triggered interval time-delay relay) :	Rem = off 08:00h+ 00:00s 1
B020(On-delay) :	Rem = off 00:55s+
B021(Edge-triggered interval time-delay relay) :	Rem = off 08:00h+ 00:00s 1
B027(On-delay) :	Rem = off 00:55s+
B028(Edge-triggered interval time-delay relay) :	Rem = off 08:00h+ 00:00s 1
B033(Edge-triggered interval time-delay relay) :	Rem = off 03:00m+ 00:00s 1
B035(On-delay) :	Rem = off 00:55s+
B036(Edge-triggered interval time-delay relay) :	Rem = off 16:00h+ 00:00s 1
B040_alloffcn(Up/Down counter) : All off pb count	Rem = on On=0+ Off=0 Start=0
B041_bckrwcnt(Up/Down counter) : Back row pb count	Rem = on On=0+ Off=0 Start=0
B045(Retentive on-delay) :	Rem = off 00:01s+
B046(Retentive on-delay) :	Rem = off 00:50s+
B047(Retentive on-delay) :	Rem = off 00:50s+
B048(Retentive on-delay) :	Rem = off 00:50s+
B050(On-delay) :	Rem = off 00:55s+
B051(Edge-triggered interval time-delay relay) :	Rem = off 08:00h+ 00:00s 1

Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	12 / 19

Block Number (Type)	Parameter
B054(Seven-day time switch) :	+ MTWTFSS 08:00h 08:01h ----- -:-:- -:-:- ----- -:-:- -:-:- ----- Pulse=N
B055(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B057 w lts cn(Up/Down counter) : West lights pb count	Rem = on On=0+ Off=0 Start=0
B058 cntr cnt(Up/Down counter) : Center lights pb count	Rem = on On=0+ Off=0 Start=0
B059 e lts cnt(Up/Down counter) : East lights pb count	Rem = on On=0+ Off=0 Start=0
B061 nt lts cnt(Up/Down counter) : Night light pb count	Rem = on On=0+ Off=0 Start=0
B062 wrkbcnt(Up/Down counter) : Work bench pb count	Rem = on On=0+ Off=0 Start=0
B063(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B064(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B065(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B066(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B067(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B068(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B069(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B070(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B071 All on cnt(Up/Down counter) : All on pb count	Rem = on On=0+ Off=0 Start=0
B072(Edge-triggered interval time-delay relay) :	Rem = off 30:00m+ 00:00s 1

Block Number (Type)	Parameter
B073(Edge-triggered interval time-delay relay) :	Rem = off 30:00m+ 00:00s 1
B074(Edge-triggered interval time-delay relay) :	Rem = off 30:00m+ 00:00s 1
B075(Edge-triggered interval time-delay relay) :	Rem = off 30:00m+ 00:00s 1
B077(On-delay) :	Rem = off 01:00s+
B078(On-delay) :	Rem = off 01:00s+
B079(On-delay) :	Rem = off 01:00s+
B084(On-delay) :	Rem = off 00:50s+
B085(On-delay) :	Rem = off 01:00s+
B086(On-delay) :	Rem = off 00:10s+
B087(On-delay) :	Rem = off 00:20s+
B088(On-delay) :	Rem = off 00:30s+
B089(On-delay) :	Rem = off 00:40s+
B090(On-delay) :	Rem = off 00:50s+
B091(On-delay) :	Rem = off 01:00s+
B092(On-delay) :	Rem = off 01:10s+
B093(On-delay) :	Rem = off 01:20s+
B094(On-delay) :	Rem = off 00:50s+
B095(On-delay) :	Rem = off 01:00s+
B096(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B097(Edge-triggered interval time-delay relay) :	Rem = off 01:00s+ 00:00s 1
B098 out swon(Up/Down counter) : Out sw on pb count	Rem = on On=0+ Off=0 Start=0
B099 outswoff(Up/Down counter) : Out sw off pb count	Rem = on On=0+ Off=0 Start=0

Block Number (Type)	Parameter					
B100 LT 1 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B101 LT 2 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B102 LT 3 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B103 LT 4 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B104 LT 5 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B105 LT 6 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B106 LT 7 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B107 LT 8 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B108 LT 9 HRS(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B109 LT 10 HR(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B110 LT 11 HR(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B111 LT 12 HR(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B112 LT 13 HR(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B113 LT 14 HR(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B114 LT 15 HR(Operating hours counter) :	MI= 0h 0m+ OT= 0h 0m Q->0=R+En					
B119(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1					
B120(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1					
B121(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1					
B122(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1					
B123(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1					
Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	15 / 19

Block Number (Type)	Parameter
B124(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1
I1(Input) : I1- ALL "ON" hard (not used, blows fuses, too harsh)	
I2(Input) : I2-ALL "OFF"	
I3(Input) : I3-Back row 3,6,9,12,15	
I4(Input) : I4-West lights 7,8,9,10,11, 12,13,14,15	
I5(Input) : I5-Center lights 4,5,6,7,8,9	
I6(Input) : I6-East lights 1,2,3,4,5,6	
I7(Input) : I7-night light #4	
I8(Input) : I8-Work bench light #12	
I10(Input) : I10- Drop lights, back in lights 4, 7	
I12(Input) : I12- All "ON" soft	
I19(Input) : I19-outside door entry switch "ON" lts 13,14,15,9	
I20(Input) : I20-outside door entry "OFF"	
Q1(Output) : Q1-light 1	
Q2(Output) : Q2-light 2	
Q3(Output) : Q3-light 3	
Q4(Output) : Q4-light 4	
Q5(Output) : Q5-light 5	
Q6(Output) : Q6-light 6	
Q7(Output) : Q7-light 7	
Q8(Output) : Q8-light 8	
Q9(Output) : Q9-light 9	
Q10(Output) : Q10-light 10	



Block Number (Type)	Parameter
Q11(Output) : Q11-light 11	
Q12(Output) : Q12-light 12	
Q13(Output) : Q13-light 13	
Q14(Output) : Q14-light 14	
Q15(Output) : Q15-light 15	

Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	17 / 19

Connection	Label
I1	
I2	
I3	
I4	
I5	
I6	
I7	
I8	
I9	
I10	
I12	
I19	
I20	
M1	
M2	
M3	
M4	
M5	
M6	
M7	
M9	
M10	
M11	
M12	
M13	
M14	
M15	
M16	
M17	

Creator:	John Ledbetter	DFD Lineshop	Project:	Sta 5 LED overhaul	Customer:	Denver Fire Dept.
Checked:	JBL 9-1-20		Installation:		Diagram No.:	
Date:	7/30/20 12:49 PM/6/10/22 8:30 AM		File:	Sta 5 lights 9-1-20.lsc	Page:	18 / 19

Connection	Label
M18	
M19	
M20	
M21	
Q1	
Q2	
Q3	
Q4	
Q5	
Q6	
Q7	
Q8	
Q9	
Q10	
Q11	
Q12	
Q13	
Q14	
Q15	

