

EMERGENCY VEHICLE PREEMPTION
PROGRAMMING DETAIL

(program controller as shown below)

From Main Menu press 'A' (Preemption), then '1' (Standard Preemptions). Press 'NEXT' as needed to advance to Preempts 3 and 5.

PREEMPTION #3	SETTINGS (NEXT:1-10)
INTERVAL/TIMING	CLEAR/DWELL PHASES
GRN YEL RED	12345678910111213141516
1 255 0.0 0.0	X X
2 0 0.0 0.0	
3 0 0.0 0.0	
4 0 0.0 0.0	
5 1 0.0 0.0	X X

EXIT CALLS	OPTIONS
PRIORITY (Y/N TO SELECT)	MED
DELAY TIMER (0-255 SEC)	0
MIN GREEN BEFORE PRE (0= DEFAULT)...	1
PED CLEAR BEFORE PRE (0= DEFAULT)...	0
YELLOW CLEAR BEFORE PRE (0= DEFAULT)...	0
RED CLEAR BEFORE PRE (0= DEFAULT)...	0
DWELL MIN TIMER (0-255 SEC)	12
DWELL MAX TIMER (0=OFF,1-255MIN) ...	0
DWELL HOLD-OVER TIMER (0-255)	0
LATCH CALL?	N
LINK TO NEXT PREEMPT?	N
ENABLE BACKUP PROTECTION?	N
HOLD CLEAR 1 PHASES DURING DELAY? ...	N
FAST GREEN FLASH DWELL PHASES?	N
PED CLEARANCE THROUGH YELLOW?	Y
INHIBIT OVERLAP GREEN EXTENSION?	N
SERVICE DURING SOFTWARE FLASH?	N
REST IN RED DURING DWELL INTERVAL? ..	N
FLASH DWELL INTERVAL?	N
ALLOW PEDS IN DWELL INTERVAL?	N
RE-TIME DWELL INTERVAL?	N
OVERLAPS:	ABCDEFGHIJKLMNOP
DWELL INT FLASH YELLOW	
OMIT OVERLAPS:	

PRESS 'NEXT' TWICE

PREEMPTION #5	SETTINGS (NEXT:1-10)
INTERVAL/TIMING	CLEAR/DWELL PHASES
GRN YEL RED	12345678910111213141516
1 255 0.0 0.0	X X
2 0 0.0 0.0	
3 0 0.0 0.0	
4 0 0.0 0.0	
5 1 0.0 0.0	X X

EXIT CALLS	OPTIONS
PRIORITY (Y/N TO SELECT)	MED
DELAY TIMER (0-255 SEC)	0
MIN GREEN BEFORE PRE (0= DEFAULT)...	1
PED CLEAR BEFORE PRE (0= DEFAULT)...	0
YELLOW CLEAR BEFORE PRE (0= DEFAULT)...	0
RED CLEAR BEFORE PRE (0= DEFAULT)...	0
DWELL MIN TIMER (0-255 SEC)	12
DWELL MAX TIMER (0=OFF,1-255MIN) ...	0
DWELL HOLD-OVER TIMER (0-255)	0
LATCH CALL?	N
LINK TO NEXT PREEMPT?	N
ENABLE BACKUP PROTECTION?	N
HOLD CLEAR 1 PHASES DURING DELAY? ...	N
FAST GREEN FLASH DWELL PHASES?	N
PED CLEARANCE THROUGH YELLOW?	Y
INHIBIT OVERLAP GREEN EXTENSION?	N
SERVICE DURING SOFTWARE FLASH?	N
REST IN RED DURING DWELL INTERVAL? ..	N
FLASH DWELL INTERVAL?	N
ALLOW PEDS IN DWELL INTERVAL?	N
RE-TIME DWELL INTERVAL?	N
OVERLAPS:	ABCDEFGHIJKLMNOP
DWELL INT FLASH YELLOW	
OMIT OVERLAPS:	X

PROGRAMMING COMPLETE

Program extend time
on optical detector
unit for 2.0 seconds.

LOGICAL I/O PROCESSOR PROGRAMMING DETAIL
TO PRODUCE FYA SUPPRESSION

(program controller as shown below)

- FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE ACT LOGIC COMMANDS 1, 2, 3, 4, 5 AND 6.
- FROM MAIN MENU PRESS '6' (OUTPUTS), THEN '3' (LOGICAL I/O PROCESSOR).

LOGICAL I/O COMMAND #1 (+/-COMMAND#)
IF ACTIVE PHASE #2 IS OFF
AND PED CALL ON PHASE #2 IS ON
↓
SCROLL DOWN
↓
THEN:
SET LOGIC FLAG #2 ON

NOTE: LOGIC FOR
FYA SUPPRESSION
FOR HEAD 23.

LOGICAL I/O COMMAND #2 (+/-COMMAND#)
IF ACTIVE PHASE #2 IS ON
AND LOGIC FLAG #2 IS ON
↓
SCROLL DOWN
↓
THEN:
SET OUTPUT ASSIGNMENT #42 ON
SET OUTPUT ASSIGNMENT #43 OFF
SET OUTPUT ASSIGNMENT #44 OFF

NOTE: LOGIC FOR
FYA SUPPRESSION
FOR HEAD 23.

LOGICAL I/O COMMAND #3 (+/-COMMAND#)
IF ACTIVE PHASE #2 IS ON
AND LOGIC FLAG #2 IS ON
↓
SCROLL DOWN
↓
THEN:
DELAY FOR 7.0 SECONDS
SET LOGIC FLAG #2 OFF

NOTE: LOGIC FOR
FYA SUPPRESSION
FOR HEAD 23.

LOGICAL I/O COMMAND #4 (+/-COMMAND#)
IF ACTIVE PHASE #4 IS OFF
AND PED CALL ON PHASE #4 IS ON
↓
SCROLL DOWN
↓
THEN:
SET LOGIC FLAG #4 ON

NOTE: LOGIC FOR
FYA SUPPRESSION
FOR HEAD 43.

LOGICAL I/O COMMAND #5 (+/-COMMAND#)
IF ACTIVE PHASE #4 IS ON
AND LOGIC FLAG #4 IS ON
↓
SCROLL DOWN
↓
THEN:
SET OUTPUT ASSIGNMENT #39 ON
SET OUTPUT ASSIGNMENT #40 OFF
SET OUTPUT ASSIGNMENT #41 OFF

NOTE: LOGIC FOR
FYA SUPPRESSION
FOR HEAD 43.

LOGICAL I/O COMMAND #6 (+/-COMMAND#)
IF ACTIVE PHASE #4 IS ON
AND LOGIC FLAG #4 IS ON
↓
SCROLL DOWN
↓
THEN:
DELAY FOR 7.0 SECONDS
SET LOGIC FLAG #4 OFF

NOTE: LOGIC FOR
FYA SUPPRESSION
FOR HEAD 43.

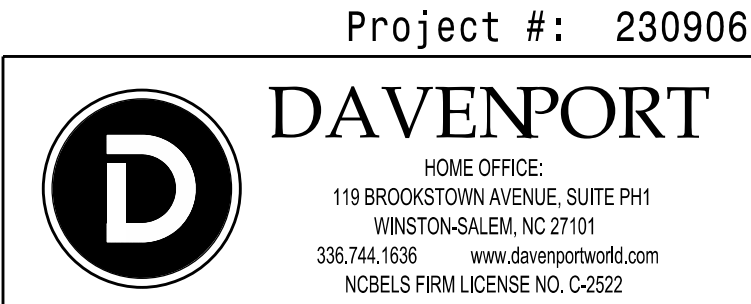
LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

OUTPUT REFERENCE SCHEDULE

OUTPUT 39 = Overlap D Red
OUTPUT 40 = Overlap D Yellow
OUTPUT 41 = Overlap D Green
OUTPUT 42 = Overlap C Red
OUTPUT 43 = Overlap C Yellow
OUTPUT 44 = Overlap C Green

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 03-0090
DESIGNED: July 2026
SEALED: 07-21-2026
REVISED: N/A

Electrical Detail - Sheet 3 of 3



US 17 Bus. (Marine Boulevard)
at
SR 1308 (Gum Branch Road/
Bell Fork Road)

Division 03	Onslow County	Jacksonville
PLAN DATE: July 2026	REVIEWED BY: D. Bennett	
PREPARED BY: B. Dowell	REVIEWED BY:	
REVISIONS	INIT.	DATE

