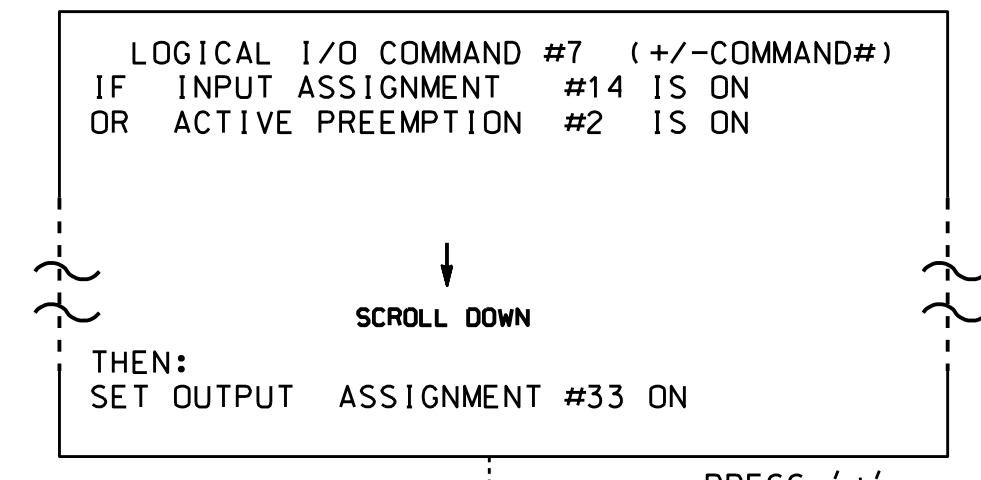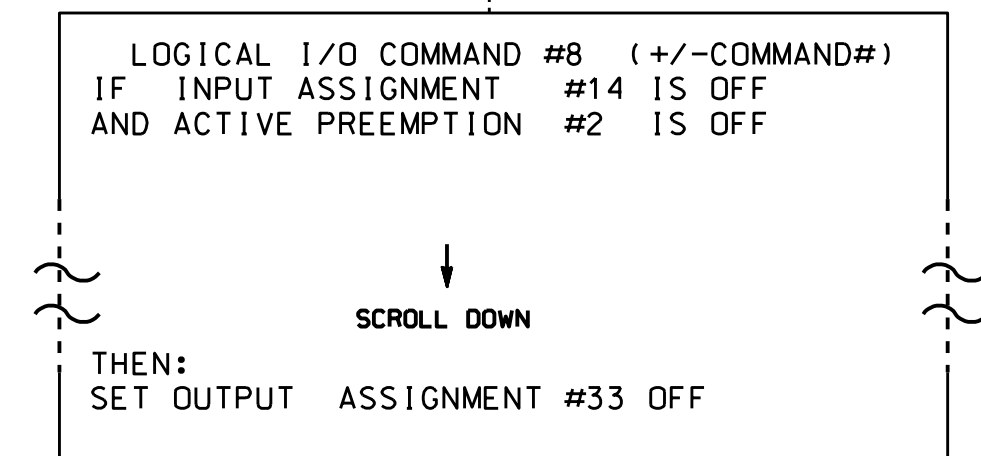## LOGICAL I/O PROCESSOR PROGRAMMING DETAIL
FOR FIRE HOUSE LAMP CONTROL
(program controller as shown below)

1. From Main Menu press '2' (Phase Control), then '1' (Phase Control Functions). Scroll to the bottom of the menu and enable Act Logic Commands 7 and 8.

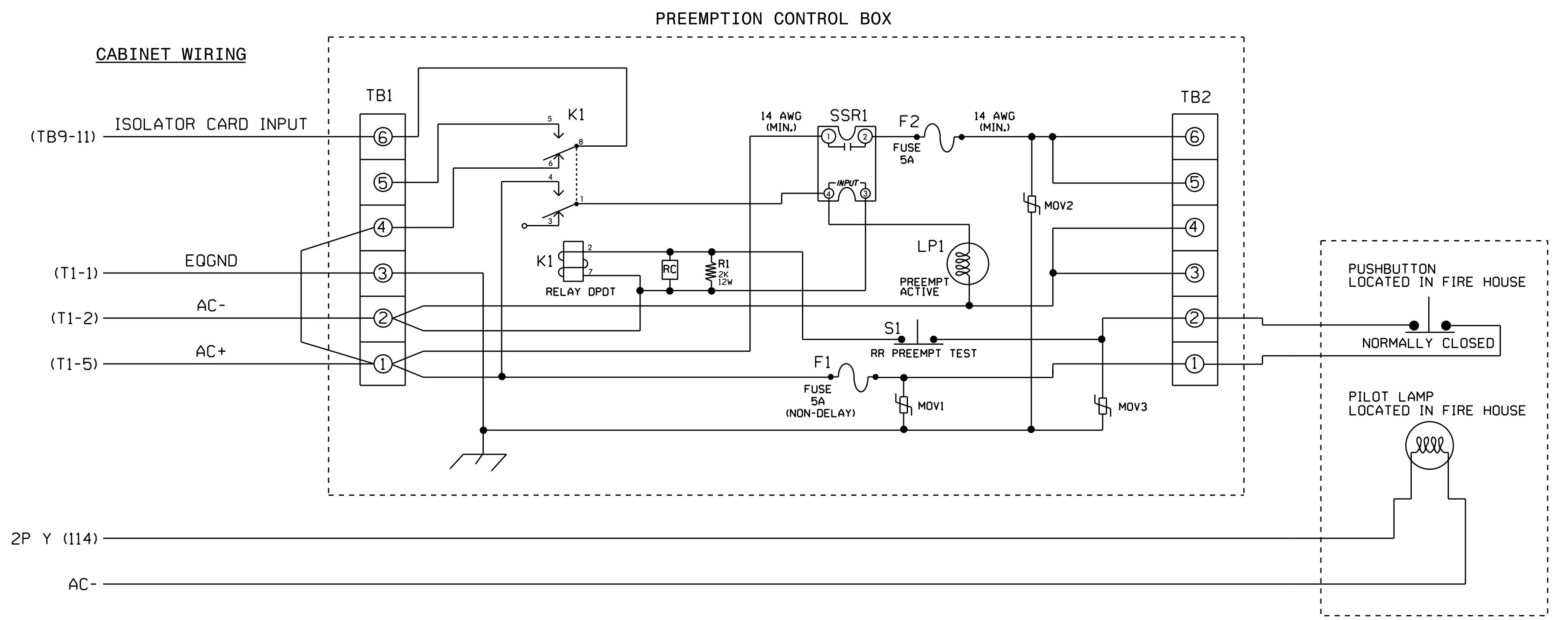2. From Main Menu press '6' (Outputs), then '3' (Logical I/O Processor).

```
LOGICAL I/O COMMAND #7  (+/-COMMAND#)
IF  INPUT ASSIGNMENT   #14 IS ON
OR  ACTIVE PREEMPTION  #2  IS ON
```
NOTE: FIRE HOUSE PILOT LAMP LOGIC (ON).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #33 ON
```

PRESS '+'

```
LOGICAL I/O COMMAND #8  (+/-COMMAND#)
IF  INPUT ASSIGNMENT    #14 IS OFF
AND ACTIVE PREEMPTION   #2  IS OFF
```
NOTE: FIRE HOUSE PILOT LAMP LOGIC (OFF).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #33 OFF
```

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

```
OUTPUT REFERENCE SCHEDULE
   OUTPUT 33 = Phase 2 PED Yellow
   INPUT  14 = Preempt 2 Input
```
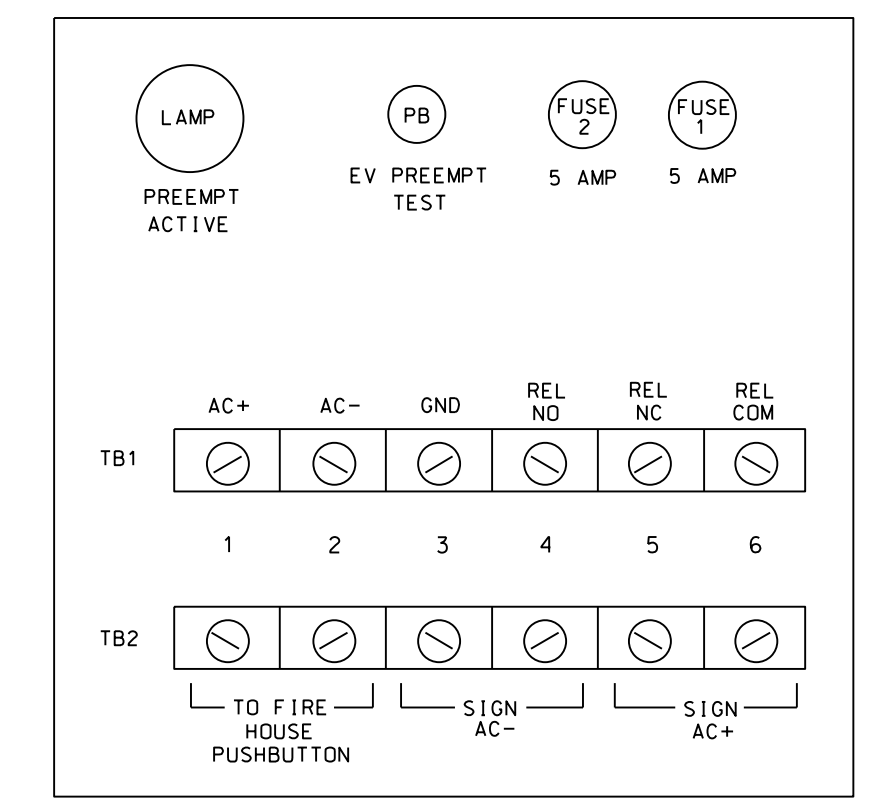
PREEMPT 2 AC ISOLATOR (MODEL 252) OUTPUT PROGRAMMING DETAIL
(set DIP switches as shown below)

```
PDC MODEL 252 AC ISOLATOR CARD
     (COMPONENT SIDE)

              ON →
      1 NORM          1
      1 INV           2
      2 NORM          3
      2 INV           4
```

■ DENOTES POSITION OF SWITCH

SETTING = INVERTED OUTPUT ON CHANNEL 2.

252 AC ISOLATOR TO BE INSTALLED IN SLOT J-14 OF INPUT FILE.

NOTE: IF ANOTHER MANUFACTURER TYPE OF AC ISOLATOR IS USED, OUTPUT PROGRAMMING IS LIKELY NOT TO EQUATE TO THAT SHOWN ABOVE.

EMERGENCY VEH. PREEMPTION PUSHBUTTON AND INDICATOR LAMP WIRING DETAIL USING PREEMPT CONTROL BOX

PREEMPTION CONTROL BOX

CABINET WIRING

(TB9-11) ISOLATOR CARD INPUT
(T1-1) EQGND
(T1-2) AC-
(T1-5) AC+
2P Y (114)
AC-

TB1 / K1 / SSR1 / F2 FUSE 5A / 14 AWG (MIN.) / TB2
RELAY DPDT / RC / R1 2K 2W / K1 / LP1 PREEMPT ACTIVE
MOV2 / MOV1 / MOV3
S1 RR PREEMPT TEST
F1 FUSE 5A (NON-DELAY)

PUSHBUTTON LOCATED IN FIRE HOUSE
NORMALLY CLOSED
PILOT LAMP LOCATED IN FIRE HOUSE

EMERGENCY VEHICLE PREEMPTION PROGRAMMING DETAIL
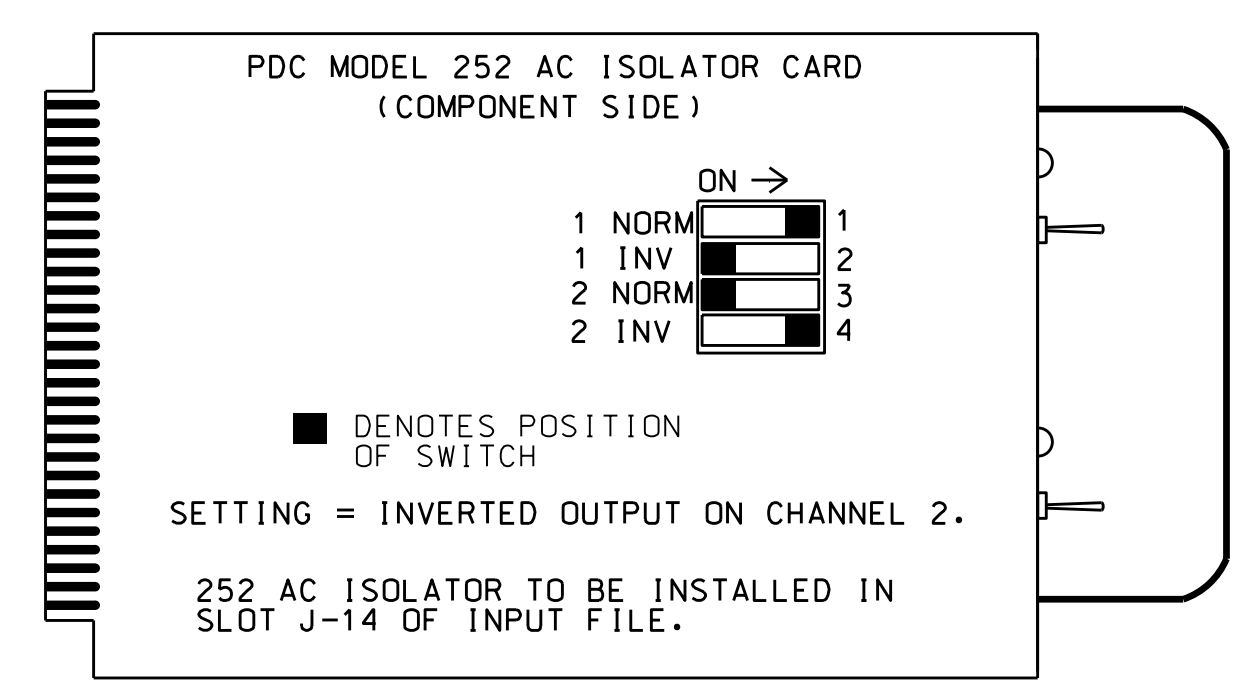*(program controller as shown below)*

From Main Menu press 'A' (Preemption), then '1' (Standard Preemptions). Press 'NEXT' to advance to Preemption #2.

```
         PREEMPTION  #2  SETTINGS (NEXT:1-10)
     INTERVAL/TIMING  : CLEAR/DWELL PHASES
      GRN YEL  RED    :123456789101112131415 16
   1 255 0.0  0.0     : 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
 EXIT CALLS
                 OPTIONS
 PRIORITY (Y/N TO SELECT) ...........MED
 DELAY TIMER (0-255 SEC) ............*
 MIN GREEN BEFORE PRE (0= DEFAULT)...1
 PED CLEAR BEFORE PRE (0= DEFAULT)...0
 YELLOW CLEAR BEFORE PRE (0= DEFAULT).0.0
 RED CLEAR BEFORE PRE (0= DEFAULT)...0.0
 DWELL MIN TIMER (0-255 SEC) ........*
 DWELL MAX TIMER (0=OFF,1-255MIN) ...0
 DWELL HOLD-OVER TIMER (0-255) ......0
 LATCH CALL? ........................Y
 LINK TO NEXT PREEMPT? ..............N
 ENABLE BACKUP PROTECTION? ..........N
 HOLD CLEAR 1 PHASES DURING DELAY? ..Y
 FAST GREEN FLASH DWELL PHASES? .....N
 PED CLEARANCE THROUGH YELLOW? ......N
 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? ............Y
 OVERLAPS:              ABCDEFGHIJKLMNOP
 DWELL INT FLASH YELLOW:
 OMIT OVERLAPS:
```

* Denotes timing to be determined in field.

NOTES

1. Relay K1 is shown in the energized (Preempt not active) normal operation state.

2. Relay K1 is a DPDT with 120VAC coil with octal base.

3. Relay SSR1 is a SPST (normally open) Solid State Relay with AC input and AC (25 amp) output.

4. AC Isolator Card shall activate preemption upon removal of AC+ from the input (as shown above). To accomplish this set invert dip switch on AC Isolator Card.

5. IMPORTANT!! Terminal TB9-12 (on input panel) shall be connected to AC neutral (jumper may have to be added).

FRONT VIEW


```
   LAMP         PB        FUSE   FUSE
 PREEMPT    EV PREEMPT     2      1
 ACTIVE       TEST      5 AMP  5 AMP

          AC+  AC-  GND  REL  REL  REL
                           NO   NC  COM
 TB1        1    2    3    4    5    6

 TB2
       ⌐TO FIRE⌐  ⌐SIGN⌐  ⌐SIGN⌐
        HOUSE      AC-     AC+
      PUSHBUTTON
```

PREEMPTION CONTROL BOX

```
THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 13-0514
DESIGNED: July 2016
SEALED: 9/13/2016
REVISED:
```