PROJECT REFERENCE NO.	SHEET NO.
U-4715 B	Sig.176.2

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 1 and 2.

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

```
  LOGICAL I/O COMMAND #1  (+/-COMMAND#)
IF  INPUT ASSIGNMENT   #14 IS ON
OR  ACTIVE PREEMPTION  #2  IS ON

          SCROLL DOWN

THEN:
SET OUTPUT  ASSIGNMENT #33 ON
```

NOTE: FIRE HOUSE PILOT LAMP LOGIC (ON).

PRESS '+'

```
  LOGICAL I/O COMMAND #2  (+/-COMMAND#)
IF  INPUT ASSIGNMENT   #14 IS OFF
AND ACTIVE PREEMPTION  #2  IS OFF

          SCROLL DOWN

THEN:
SET OUTPUT  ASSIGNMENT #33 OFF
```

NOTE: FIRE HOUSE PILOT LAMP LOGIC (OFF).

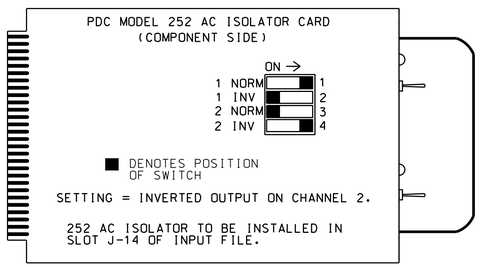
LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

OUTPUT REFERENCE SCHEDULE

OUTPUT 33 = Phase 2 PED Yellow
INPUT 14 = Preempt 2 Input

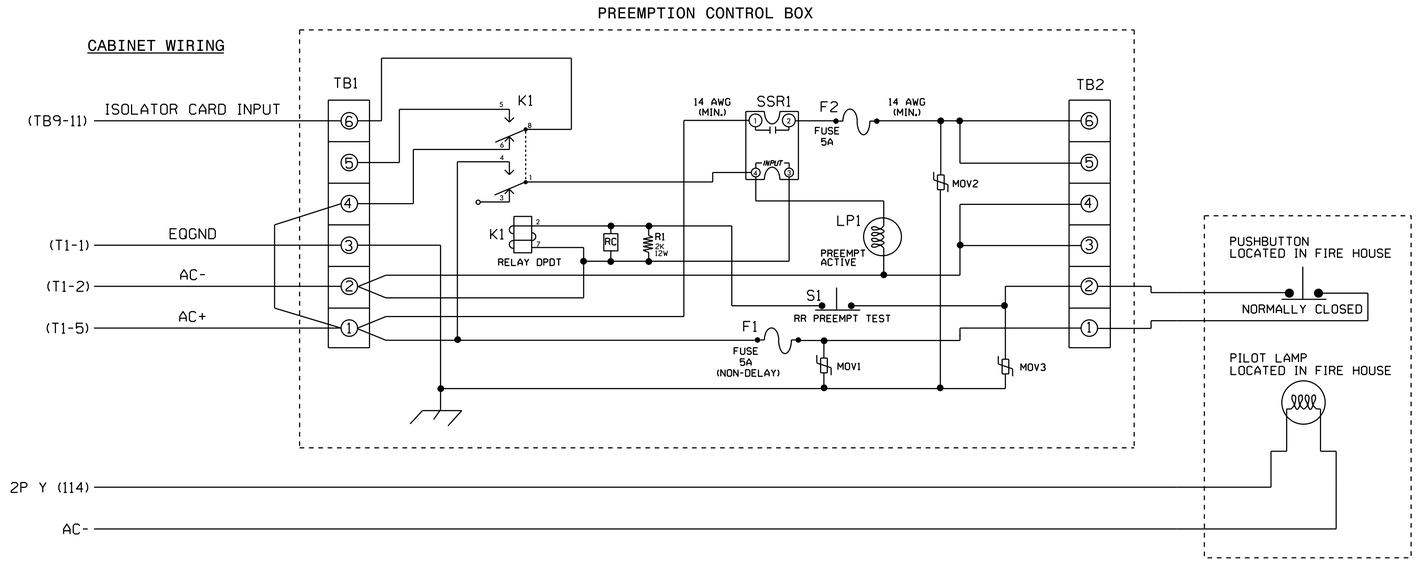
PREEMPT 2 AC ISOLATOR (MODEL 252) OUTPUT PROGRAMMING DETAIL

(set DIP switches as shown below)



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

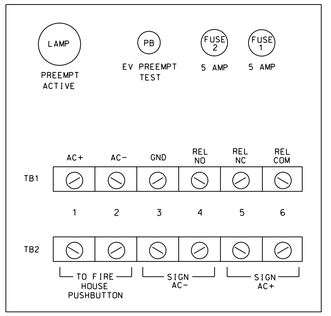
EMERGENCY VEH. PREEMPTION PUSHBUTTON AND INDICATOR LAMP WIRING DETAIL USING PREEMPT CONTROL BOX



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



PREEMPTION CONTROL BOX

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   | 12345678910111213141516
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   X
EXIT CALLS       |
          OPTIONS
PRIORITY (Y/N TO SELECT) .............MED
DELAY TIMER (0-255 SEC) ..............5*
MIN GREEN BEFORE PRE (0= DEFAULT)....1
PED CLEAR BEFORE PRE (0= DEFAULT)....5
YELLOW CLEAR BEFORE PRE (0= DEFAULT).0.0
RED CLEAR BEFORE PRE (0= DEFAULT)....0.0
DWELL MIN TIMER (0-255 SEC) .........40*
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? .......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? ..............Y
OVERLAPS:          | ABCDEFGHIJKLMNOP
DWELL INT FLASH YELLOW
OMIT OVERLAPS:
```

* Denotes timing to be determined in field.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 13-0977
DESIGNED: February 2016
SEALED: 9/26/2016
REVISED:

Electrical Detail - Sheet 2 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

US 25 (Hendersonville Road)
at
Caribou Road

Prepared in the Offices of:
North Carolina Department of Transportation, Mobility and Safety Division, Signal Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

Division 13 | Buncombe County | Asheville

PLAN DATE: September 2016 | REVIEWED BY: T. Joyce
PREPARED BY: C. Strickland | REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 030530 ENGINEER ZACHARY M. LITTLE

DocuSigned by: Zachary M. Little 9/27/2016
DC21EFD9AF5341F... DATE

SIG. INVENTORY NO. 13-0977

26-SEP-2016 14:26
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