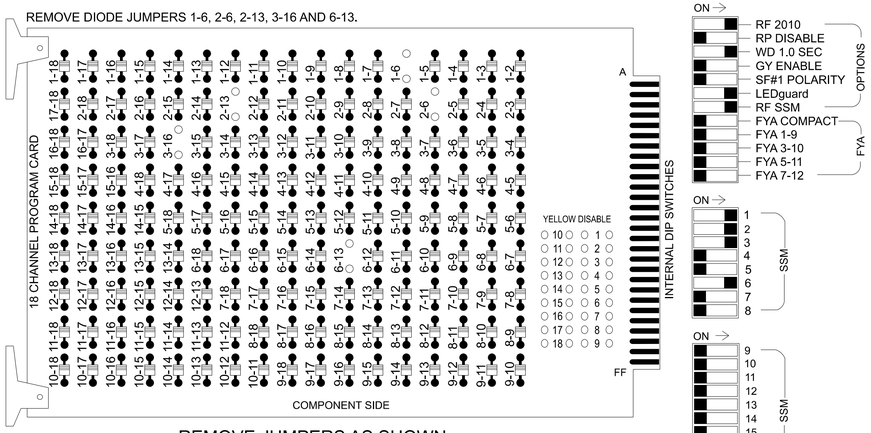
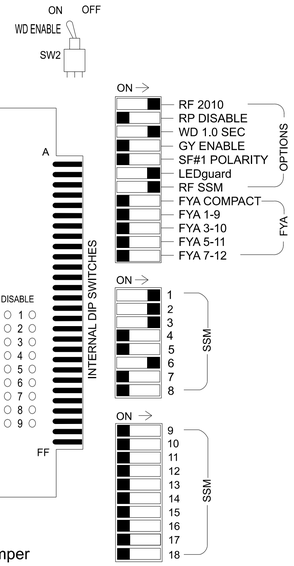
Docusign Envelope ID: 79B3A8A1-0FC4-4E1A-B88D-18F38FA00C9B

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| R-5600 | Sig-5.1 |

## 18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)




REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.

## NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
4. The cabinet and controller are part of the NC 107 Time Based System.

## EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S1, S2, S3, S4, S8, S12
Phases Used.....1, 2, 2PED, 3, 3PED, 6
Overlap "1".....NOT USED
Overlap "2".....NOT USED
Overlap "3".....NOT USED
Overlap "4".....NOT USED
Overlap "5".....NOT USED
Overlap "6".....NOT USED
Overlap "7".....*

*See overlap programming detail on sheet 2.

## SIGNAL HEAD HOOK-UP CHART

| LOAD SWITCH NO. | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 | AUX S1 | AUX S2 | AUX S3 | AUX S4 | AUX S5 | AUX S6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CMU CHANNEL NO. | 1 | 2 | 13 | 3 | 4 | 14 | 5 | 6 | 15 | 7 | 8 | 16 | 9 | 10 | 17 | 11 | 12 | 18 |
| PHASE | OL7 | 2 | 2 PED | 3 | 4 | 4 PED | 5 | 6 | 6 PED | 7 | 8 | 3 PED | OL1 | OL2 | SPARE | OL3 | OL4 | SPARE |
| SIGNAL HEAD NO. | 11 | 22,23 | P21, P22 | 31,32 | NU | NU | NU | 61,62 | NU | NU | NU | P31, P32 | NU | NU | NU | NU | NU | NU |
| RED | | 128 | | | | | | 134 | | | | | | | | | | |
| YELLOW | | 129 | | | | | | 135 | | | | | | | | | | |
| GREEN | | 130 | | | | | | 136 | | | | | | | | | | |
| RED ARROW | 125 | | | 116 | | | | | | | | | | | | | | |
| YELLOW ARROW | 126 | | | 117 | | | | | | | | | | | | | | |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | | | | | | |
| GREEN ARROW | 127 | | | 118 | | | | | | | | | | | | | | |
| ✋ | | | 113 | | | | | | | | | 110 | | | | | | |
| 🚶 | | | 115 | | | | | | | | | 112 | | | | | | |

NU = Not Used, NC = Not Connected
* Denotes install load resistor. See load resistor installation detail this sheet.

## INPUT FILE POSITION LAYOUT

(front view)

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1O | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FILE "I" | U | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | ∅ 2 PED DC ISOLATOR | NOT USED | FS DC ISOLATOR |
| | L | | | | | | | | | | | | NOT USED | ∅ 3 PED DC ISOLATOR | ST DC ISOLATOR |
| FILE "J" | U | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY | SLOT EMPTY |
| | L | | | | | | | | | | | | | | |

EX. : 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

## INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO. | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | INPUT POINT | DETECTOR NO. | CALL PHASE | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | DELAY DURING GREEN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PED PUSH BUTTONS | | | | | | | | | | | | |
| P21,P22 | TB8-4,6 | I12U | 67 | 33 | 2 | PED 2 | | | | | | |
| P31,P32 | TB8-8,9 | I13L | 70 | 36 | 8 | PED 3 | | | | | | |

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

## MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

| StartUp Clearance Hold |
|---|
| 6 |

Unit Flash Parameters

| All Red Flash Exit Time |
|---|
| 6 |

## SPECIAL DETECTOR NOTE

Install a multi-zone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

## COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 14-0397T3
DESIGNED: Aug 2025
SEALED: 8/26/2025
REVISED: N/A

Plans Prepared By:

DRMP
DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR.
SUITE 220
CHARLOTTE, NC 28262
NC LICENSE NO. F-1524 (704) 549-4260

Electrical Detail - Sheet 1 of 2
Temporary Design 3 - TMP Ph1, S4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details For:

US 23 Bus./NC 107 (Main Street)
at
US 23 Bus. (Asheville Highway) /
SR 1355 (Sunrise Park)

Division 14 Jackson County Sylva

| PLAN DATE: | August 2025 | REVIEWED BY: | ZM Esposito |
|---|---|---|---|
| PREPARED BY: | DJ White | REVIEWED BY: | BN Groome |

| REVISIONS | INIT. | DATE |
|---|---|---|
| | | |

Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
ITS & Signals Management Section
750 N. Greenfield Pkwy, Garner, NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N GROOME

Signed by: Brittany Groome 8/26/2025
1E0934DE1D9458...

SIG. INVENTORY NO. 14-0397T3

25-AUG-2025 12:32
pw://pwdesktop.com:HDR_US_East_01/Documents/NCDOT/NCDOT_Western_Div_Dr-Coll_M_/NCDOT_6170_R5600_NC170_US23BUS/6.0_CAD_BIM/6.2_Work_In_Progress/R-5600 NCDOT File Structure/Traffic/Signals/Design/Signal Management/14-0397/14039T3_sm_ele_2024mmdd.dgn
kjones AT CHAKJONES