

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
2. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
3. REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

MAXTIME OVERLAP PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1	2	3	4
Type	FYA - 4 Section	Normal	FYA - 4 Section	Normal
Included Phases	2	1	6	2
Modifier Phases	1	-	-	-
Modifier Overlaps	-	-	-	-
Trail Green	0	0	0	7
Trail Yellow	0.0	0.0	0.0	3.5
Trail Red	0.0	0.0	0.0	4.2
FYA Ped Delay	0.0	0.0	6.0	0.0

SDLC NON - INTRUSIVE
DETECTION CHART

Detector Rack #3		
Input Point	Det # (Index)	Detector Zone
1	33	NU
2	34	3A
3	35	NU
4	36	NU
5	37	NU
6	38	NU
7	39	NU
8	40	NU
9	41	NU
10	42	NU
11	43	NU
12	44	NU
13	45	NU
14	46	NU
15	47	NU
16	48	NU

NU = Not Used

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

BACKUP CALL PHASE PROGRAMMING

Front Panel
Main Menu >Controller >Sequence & Phs Config>Backup Prevention > Backup Call Phase Plans

Web Interface
Home >Controller >Backup Prevention >Backup Calls Phase Plans >

Sequence 1

Serve Phase	Backup Call Phase
1	-
2	4
3	-
4	-
5	-
6	-
7	-
8	-

SPECIAL DETECTION IO MODULE PROGRAMMING

The Enhanced Out of Pavement Detection requires adjustments to the IO Modules in use. Follow the programming instructions below to ensure desired operation.

Front Panel
Main Menu >Controller >More >Advanced IO >IO Modules

Web Interface
Home >Controller >Advanced IO >Cabinet Configuration >IO Modules

IO Module	Type	Fault Response
1	Caltrans 332	Default
2	TS2 DR3 BIU	Default
3	TS2 MMU	Default

Advanced Cabinet Options

☒ Disable TS2 Cabinet Alarms

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channels Configuration

Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	3				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE PHASE 3 PED
ASSIGNED TO CHANNEL 16 ➡

BACKUP PREVENTION PROGRAMMING

Front Panel
Main Menu >Controller >Sequence & Phs Config >Backup Prevention > Backup Protection Plan

Web Interface
Home >Controller> Backup Prevention >Backup Protection Plan

Sequence 1

No Backup Phase	1	2	3	4	5	6	7	8
Serve Phase 1	-	-	-	-	-	-	-	-
Serve Phase 2	X	-	-	-	-	-	-	-
Serve Phase 3	-	-	-	-	-	-	-	-
Serve Phase 4	-	-	-	-	-	-	-	-
Serve Phase 5	-	-	-	-	-	-	-	-
Serve Phase 6	-	-	-	-	-	-	-	-
Serve Phase 7	-	-	-	-	-	-	-	-
Serve Phase 8	-	-	-	-	-	-	-	-

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 11-1012
DESIGNED: NOVEMBER 2023
SEALED: 08/05/2026
REVISED:

HNTB

HNTB NORTH CAROLINA, P.C.
4000 Center at North Hills St
Suite 500
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

PED 3 PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Detector >Ped Det Plans

Web Interface
Home >Controller >Detector Configuration >Pedestrian Detector

Plan 1

Detector	Descripton	Call Phase	Call Overlap
2		2	0
4		4	0
6		6	0
8		3	0

NOTICE PHASE 3 PED
ASSIGNED TO
DETECTOR 8 PED ➡

Signal Upgrade
Electrical Detail - Sheet 2 of 2

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR: US 421 Bus-NC 18-268 (Second St) at US 421 Bus-NC 115 (Statesville Rd) /"D" Street and SR 2333 (River Rd) Division 11 Wilkes County Wilkesboro		SEAL  WILKISHA R. SIMMONS ENGINEER
PLAN DATE: November 2023 PREPARED BY: E.E. Tillier		REVIEWED BY: N.K. Vlanich REVIEWED BY: N.R. Simmons
REVISIONS		INIT. DATE
750 N. Greenfield Pkwy, Garner, NC 27529		8/5/2026
SIGNATURE		DATE
SIG. INVENTORY NO.		11-1012