

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Administration

General Specifications

Customer Name	Hampshire County Council	Customer Order No.	9002134437
Intersection/ General Description	M27 Junctin 5 Westbound Off Slip (HAS009)	Controller/ Serial Number	
		S.T.S. /EM Number	30255 Issue 1
Controller	☒ New ☐ Modification	Equipment Installation by	Siemens
Area Specifications/ Customer Drawings		Slot Cutting by	Siemens
Specification Section		Civil Works by	Mildren Construction
Contract/Tender Ref.		Customer's Engineer	Simon Brownlie
Quotation No.	RS32269	Telephone Number	01962 845341
Works Order No.	5791214		

Signal Company Use Only

Signal Engineer	Hazel Davis	(IF PROM Label as >) PROM Number	16766	PROM Variant	255
		Configuration Check Value	92 29 F0 BA		

Controller Options

Hardware	ST900 ELV	Firmware Type and Issue	PB801 ISS 7	Other Options	
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ST950/ST900/ST750 Series Cabinet Options

Cabinet/Rack	Cabinet	Kit Type Options	☒ UK-Std ☐ Non-UK ☐		
Cabinet/Rack Variant	Grey	Cuckoo Options	None	Gemini Unit Fitted	☐

Mains Supply	230	Volts	50	Hz				
Peak Lamp Current	7	Amps	Dimming Voltage	27.5	Answer Issue	0	Date Created	28/04/10
Average Lamp Power	324	Watts	Low Inrush Transformer	☐	Edit Issue	2		
Total Average Power	0	Watts						

Power feed fuse rating: requires 30 Amp minimum for controller, 15 Amp minimum for pelican/lightly loaded controller

Phases, Stages and Streams

Phases, Stages and Streams

Add/Delete/Insert Streams:

Streams

Current Number of Streams

1

Phases

Current Total Number of Phases

4

Number of Real Phases

3

Number of Dummy Phases

1

Stages

Current Number of stages
(inc. ALL-RED stages)

3

Switched Signs

Number of Switched Signs

0

Action

Add At

Delete At

Facilities/Modes Enabled and Mode Priority Levels

Facilities

UTC

☒ Serial/Internal UTMC OTU

☐ Free-standing OTU

☐ Integral TC12 OTU

☒ Serial MOVA

☒ Master Time Clock

☐ Holiday Clock

☒ FT To Current MAX

☐ Linked Fixed Time

☒ Lamp Monitoring

☐ RED Lamp Monitoring

☐ Pelican/Puffin/Toucan

☐ Standalone Manual

☐ Extend All Red

☐ Speed Measurement

☐ Ripple Change

☐ London IMU

☐ Non-UK

☐ Fail to Part Time

☐ Fail To Hardware Flashing

☐ Download To Level 3

8

Starting Intergreen

Mode Priority

	1	2	3	4	5	6	7	8	9	10	11	12	13
☐ Part Time	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ Emergency Vehicles	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Hurry Call	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ Priority Vehicle	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Manual Control	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ Manual Step On	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Selected FT or VA or CLF	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ UTC	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ CLF (Non-Base Time)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ CLF (Base Time)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Vehicle Actuated	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
☒ Fixed Time	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐

Configuration Complexity

☐ Low

☐ Medium

☐ High

☒ Maximum

standardPB801.8df

Default PROM data file

Correspondence Monitoring to inc.

☒ Reds

☒ Ambers

☐ Switched Signs

☐ Ignore Reds and Ambers during Fail t

Flash Rate (ms)

400

Off

400

On

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Phases in Stages

Phases					
In Stages	A	B	C	D	
	0				
	1				
	2				

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Stages in Streams

Stages in Streams

01234567

Phase or Stage to revert to in absence of demands/extensions

Startup Stage

Switch Off Stage

Standalone Pedestrian

1

1

012

0

Note: For a Stand-Alone Stream, the reversion must be to All Red stage or Traffic stage/phaset o meet the relevant standard or specification.

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Phase Type and Conditions

Phase Type and Conditions

☒ Phases A to P

☐ Manual Output Allocation ☒

Phase	Title	Type	App. Type	Term. Type	Assoc. Phase	No. of Drive Outputs		
						"R"	"A"	"G"
A	CIRCULATORY AT WESTBOUND OFF SLIP	0 - UK Traffic	0	0 - E		1	1	1
B	M27 WESTBOUND OFF SLIP	0 - UK Traffic	0	0 - E		1	1	1
C	M27 WESTBOUND OFF SLIP LEFT TURN	0 - UK Traffic	0	0 - E		1	1	1
D	DUMMY IN ALL RED	2 - UK Green Arrow	0	0 - E				

1) App Types: 0 = Always Appears, 1 = Appears if dem'd prior to interstage, 2 = If dem'd, 3 = If dem'd before end of window time
2) Term Types: 0 = Term's at end of stage, 1 = Term's when Assoc phase gains R.O.W, 2 = Term's when Assoc phase loses R.O.W.
3) The H/W Fail Flash fields are for information only on all but ST900ELV Controllers. For other controllers, physical switches or links (etc.) select which aspects flash and these need to be set up manually.

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Opposing and Conflicting Phases

Select Stream(s) To Configure

☐ All ☐ 0 ☐ ☐ ☐ ☐ ☐ ☐ ☐

Initialse

☒ Amber Conflict Monitoring

To Phase

From Phase

	A	B	C	D
A		Co	o	o
B	Co		o	o
C	o	o		o
D	o	o	o	

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Phase Minimums, Maximums, Extensions, Ped Leaving Periods

Note: For Standalone Streams see Help for use of Max Sets.

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Phase Intergreen Times

Select Stream(s) To Configure

☐ All ☐ 0 ☐ ☐ ☐ ☐ ☐ ☐ ☐

Note: On a Stand Alone Pelican/Toucan/Puffin Stream the Intergreens between Pedestrian and Traffic Phases are controlled by the timings (PBT, PIT, CMX, CDY, CRD and PAR), therefore 0 should be entered for the appropriate intergreen times in grid below.

To Phase		A	B	C	D
From Phase	A		7		3
	B	7			3
	C				3
	D	2	2	2	

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Intergreen Handset Limits

HIGH 199

Copy Intergreen Values

To Phase

From Phase

	A	B	C	D
A		5		3
B	5			3
C				3
D	2	2	2	

Phase Timing Handset Ranges

Phase Timing Handset Ranges

Initialise Min Green Limits

Phase	Min. Green	
	Min.	Max.
A	5	255
B	5	255
C	5	255
D	3	255
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		
O		
P		

Phase	Min. Green	
	Min.	Max.
Q		
R		
S		
T		
U		
V		
W		
X		
Y		
Z		
A2		
B2		
C2		
D2		
E2		
F2		

Max. Green

Min. 0Max. 255

Vehicle Extension

Min. 0.0Max. 10.0

Phase Delay

Min. 0Max. 10

Starting I/G

Min. 4Max. 12

Min Pedestrian Clearance (PBT)

Min. 0Max. 12

Traffic Phase Leaving

Min. 3.0Max. 3.0

Traffic Phase Red/Amber

Min. 2Max. 2

VA Demand and Extend Definitions

VA Demand and Extend Definitions

Phases

A

B

C

D

Demands

For Unlatched demands precede the name with a #.
Conditioning MUST be used to specify unlatched demands.

AZ1	AZ2		
BZ1	BZ2		
CSL			

☒ Phases AtoP

☐

Extensions

AZ1	AZ2		
BZ1	BZ2		

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Phase Internal/Revertive Demands

Phase Internal/Revertive Demands

Start-up Vehicle Responsive Demands

A	☒	B	☒	C	☒	D	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐

Demands Inserted When Leaving Manual and Fixed Time Modes

A	☒	B	☒	C	☒	D	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐

Unlatched Demands that Start Max Timers

A	☒	B	☒	C	☒	D	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐

Revertive Phase Demands

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A	B														
Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2

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Fixed Time

Fixed Time

Stage Moves & Times (Not Fixed Time to Current Max)

Current Stage	0	1	2	3	4	5	6	7
Next Stage								
Time								
Current Stage	8	9	10	11	12	13	14	15
Next Stage								
Time								
Current Stage	16	17	18	19	20	21	22	23
Next Stage								
Time								
Current Stage	24	25	26	27	28	29	30	31
Next Stage								
Time								

Phases Demanded and Extended under Fixed Time to Current Max.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Demand	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Extend	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Q	R	S	T	U	V	W	X	Y	Z	A2	B2	C2	D2	E2	F2
Demand	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Extend	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

UTC General Data

UTC General Data

Type of UTC

☒ 106

☐ 316

Integral OTU Address

2

Number of Control Words

2

Number of Reply Words

☐

Controller to respond to TC bit.

☐

Introduction of UTC to be disabled by Priority and LRT M

Non UTC RTC synchronisation input name

RTC Synchronisation Times

Clock Synchronise Time (UTC TS input)

Day

Time

Saturday

00:00:00

Clock Confirm Time (UTC RT output)

Day

Time

Saturday

00:00:00

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UTC Control and Reply Data Format

UTC Control and Reply Data Format

	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Bit 8
Control Words								
Word 1	F1	F2						
Word 2								
Word 3								
Word 4								
Reply Words								
Word 1	G1	G2						
Word 2								
Word 3								
Word 4								
Word 5								
Word 6								
Word 7								
Word 8								
Word 9								
Word 10								
Word 11								
Word 12								
Word 13								
Word 14								

UTC Stage and Mode Data Definitions

UTC Stage and Mode Data Definitions

Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit	Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit
0				16			
1	F1	G1		17			
2	F2	G2		18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

Mode Data Definitions

Manual Mode Operative:
☐ G1/G2 ☐ RR ☐

Manual Mode Selected:
☐ G1/G2 ☐ RR ☐

No Lamp Power, or Lamps Off due to RLM or Part Time:
☐ G1/G2 ☐ ☐

Detector Fault:
☐ ☐ ☐ DF

Normal NOT selected on the Manual Panel:
☐ G1/G2 ☐ RR ☐

RR Button Selected:
☐ G1/G2 ☐ RR ☐

If UTC Reply Confirms are required for a Controller Fault (CF) OR for separate MC and RR replies, Conditioning must be used.

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☒ Combined

Set Selection

☐☐☐☐☐

1	X1	2	X2	3	X3	4	X4	5	X5	6		7		8	
9		10		11	IN11	12	IN12	13	IN13	14	IN14	15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53		54		55		56	
57		58		59		60		61		62		63		64	

Note - only 32 detectors available on MOVA 4.0

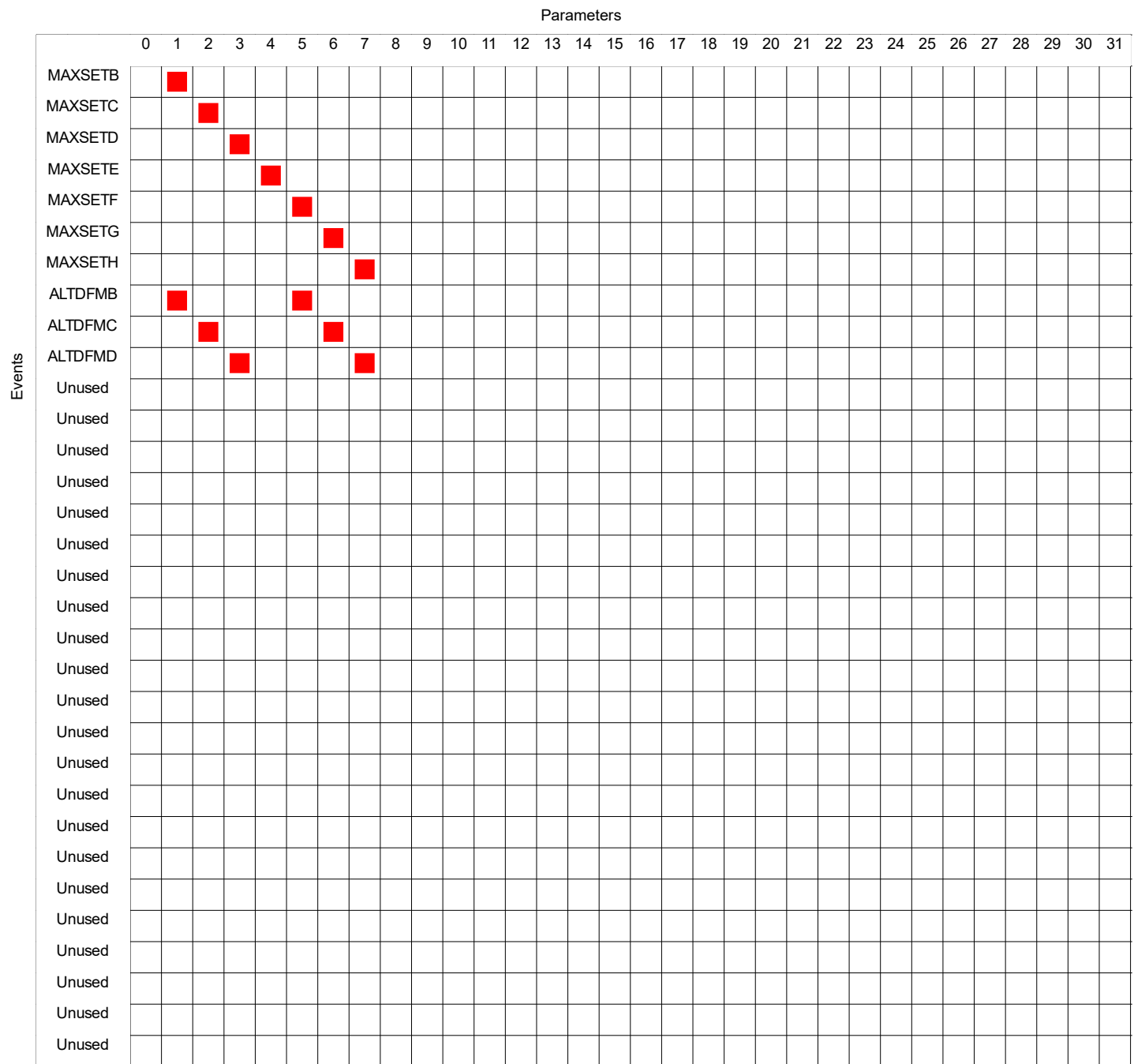
MTC - Time Switch Parameters

MTC - Time Switch Parameters

	Type	Event		Type	Event
0	Alternate Max	MAXSETB	16	No Action	
1	Alternate Max	MAXSETC	17	No Action	
2	Alternate Max	MAXSETD	18	No Action	
3	Alternate Max	MAXSETE	19	No Action	
4	Alternate Max	MAXSETF	20	No Action	
5	Alternate Max	MAXSETG	21	No Action	
6	Alternate Max	MAXSETH	22	No Action	
7	Alternate DFM	ALTDFMB	23	No Action	
8	Alternate DFM	ALTDFMC	24	No Action	
9	Alternate DFM	ALTDFMD	25	No Action	
10	No Action		26	No Action	
11	No Action		27	No Action	
12	No Action		28	No Action	
13	No Action		29	No Action	
14	No Action		30	No Action	
15	No Action		31	No Action	

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MTC - Time Switch Parameters Array



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MTC - Day Type

MTC - Day Type

No.	Mon	Tue	Wed	Thu	Fri	Sat	Sun
0	☐	☐	☐	☐	☐	☒	☐
1	☐	☐	☐	☐	☐	☐	☒
2	☒	☐	☐	☐	☐	☐	☐
3	☐	☒	☐	☐	☐	☐	☐
4	☐	☐	☒	☐	☐	☐	☐
5	☐	☐	☐	☒	☐	☐	☐
6	☐	☐	☐	☐	☒	☐	☐
7	☒	☒	☒	☒	☒	☒	☒
8	☒	☒	☒	☒	☒	☒	☐
9	☒	☒	☒	☒	☒	☐	☐
10	☐	☐	☐	☐	☐	☐	☐
11	☐	☐	☐	☐	☐	☐	☐
12	☐	☐	☐	☐	☐	☐	☐
13	☐	☐	☐	☐	☐	☐	☐
14	☐	☐	☐	☐	☐	☐	☐
15	☐	☐	☐	☐	☐	☐	☐

MTC - Timetable

MTC - Timetable

View Timetable Settings

☒ 0 - 15

☐ 16 - 31

☐ 32 - 47

☐ 48 - 63

No.	Day Type	Time	Description	Function Code	Plan/Parameter
0	9	07:00:00	MAXSETA	2	0
1	9	09:30:00	MAXSET B	2	1
2	9	16:00:00	MAXSET C	2	2
3	9	19:00:00	MAXSET D	2	3
4	0	07:30:00	MAXSETA	2	0
5	0	10:00:00	MAXSET B	2	1
6	0	19:00:00	MAXSET D	2	3
7	1	08:00:00	MAXSET B	2	1
8	1	19:00:00	MAXSET D	2	3
9	0			0	0
10	0			0	0
11	0			0	0
12	0			0	0
13	0			0	0
14	0			0	0
15	0			0	0

Function Codes:

0 = Isolate From CLF

1 = Introduce a CLF Plan

2 = Introduce a Parameter
(Combination of event switches)

3 = Selects an Individual event
switch to be set

4 = Selects an Individual event
switch to be cleared.

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LMU - General

LMU - General

Lamp Monitoring - LMU Voltage

☐

☒ 48

☐

Max Red Bulb Wattage

☐
☐
☐

First Red Lamp Fault Speed

Minimum

Maximum

☐☐☐☐☐☐☐☐

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Integral LMU Onboard Sensors

Integral LMU Onboard Sensors

No. of LSLS cards fitted
1

HPU Connection
1

Sensor Configuration For LSLS 1 (Cabinet 1)

Phase	Aspect	Sensor #	Sensor Type	Phase	Aspect	Sensor #	Sensor Type
A	Red	1	As Seq.	N/A	N/A		
A	Amber	1	As Seq.	N/A	N/A		
A	Green	1	As Seq.	N/A	N/A		
B	Red	2	As Seq.	N/A	N/A		
B	Amber	2	As Seq.	N/A	N/A		
B	Green	2	As Seq.	N/A	N/A		
C	Red	3	As Seq.	N/A	N/A		
C	Amber	3	As Seq.	N/A	N/A		
C	Green	3	As Seq.	N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		
N/A	N/A			N/A	N/A		

Note : A (*) character next to a sensor number indicates that the sensor would also be available on the External sensors screen. Please be sure you wish to use these sensors here, as they will then become unavailable for Regulatory Signs.

Integral LMU External Sensors for Regulatory Signs

Integral LMU External Sensors for Regulatory Signs

External Sensors (1)

Sensor	Sensor Type
48	Regulatory Sign
47	Regulatory Sign
46	Regulatory Sign
45	Regulatory Sign

External Sensors (2)

Sensor	Sensor Type
--------	-------------

External Sensors (3)

Sensor	Sensor Type
--------	-------------

External Sensors (4)

Sensor	Sensor Type
--------	-------------

External Sensors (5)

Sensor	Sensor Type
--------	-------------

External Sensors (6)

Sensor	Sensor Type
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Note: Sensors which have been used as Onboard sensors will not be available here.

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LMU Sensor Load Types

LMU Sensor Load Types

Screen Select

1 of 1

Sensor	Phase	Sensor Type	LED R+W	Load Type	LLF Profile
1	A	As Seq.		1: Siemens Helios ELV	
2	B	As Seq.		1: Siemens Helios ELV	
3	C	As Seq.		1: Siemens Helios ELV	
45	N/A	Regulatory Sign		4: Siemens ELV Regulatory Sign	
46	N/A	Regulatory Sign		4: Siemens ELV Regulatory Sign	
47	N/A	Regulatory Sign		4: Siemens ELV Regulatory Sign	
48	N/A	Regulatory Sign		4: Siemens ELV Regulatory Sign	

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Hurry Call

Hurry Cal

Hurry Call	Stage Called	Call Input Name	Cancel Input Name	Confirm Output Name	Delay Time	Hold Time	Prevent Time
0	2	*SCRT12			0	40	120
1	1	*SCRT11			0	30	120
2					0	0	0
3					0	0	0
4					0	0	0
5					0	0	0
6					0	0	0
7					0	0	0

Hurry Call Limit Values

	Min.	Max.
Call Delay	0	255
Call Hold	0	255
Call Prevent	0	255

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Manual Panel

Manual Panel

Stage Buttons and LEDs

Button No.	Title	Called Stage for Stream
		01234567
0	ALL RED	0
1	CIRCULATORY	1
2	M27 WESTBOUND OFF SLIP	2
3		
4		
5		
6		
7		

General LEDs

	AUX 1	AUX 2	AUX 3	AUX 4 (Hurry Call)	AUX 5 (Higher Priority)
Conditioned	☐	☐	☐	☐	☒

General Buttons

	None	SW1	SW2	SW3
Momentary		☐	☐	☐
Dim Override	☒	☐	☐	☐
RR	☒	☐	☐	☐

Manual Signals On

☐ Immediate Signals On

☒ As Start-Up

Manual Mode Enable

☒ Always

☐ When Handset Plugged in (Note 1)

☐ When 'MIND' Command Entered

NOTE:
For this to operate Special Conditioning is required.

Mode Select Switches Disabled

☐ VA

☐ Fixed Time

☐ CLF

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Special Conditioning

```
; DELAYED LATCHED DEMANDS
; =====
;
(CCTO0+CCTO1+CCTO2)=+LCPHA
(CCTO3+CCTO4)=+LCPHB

; HURRY CALLS AFTER DELAY
; =====
;
; CCTO5 = QUB1 (HURRY CALL 0 - HIGHEST PRIORITY)
;
CCTO5=SCRT12 ; HURRY CALL STAGE 2 AFTER DELAY OF 6 SECONDS


; QUA1 GENERATED BY LOOPS SC23 AND SC24.
; THESE LOOPS HAVE BEEN CONFIGURED AS CALL LOOPS
; WITH A DELAY TIME OF 6 SECONDS.
;
; CCTO6 = SC23 } - (HURRY CALL 1)
; CCTO7 = SC34 }
;
(CCTO6+CCTO7)=SCRT11 ; LOOPS ACTIVE AFTER DELAY TIME, CALL STAGE 1


; MOVA DETECTORS
; =====
;
CCTO0+=MOVADET8 ; ACTIVATE MOVADET8
CCTO1+=MOVADET9 ; ACTIVATE MOVADET9
CCTO2+=MOVADET10 ; ACTIVATE MOVADET10
CCTO3+=MOVADET18 ; ACTIVATE MOVADET18
CCTO4+=MOVADET19 ; ACTIVATE MOVADET19
CCTO5+=MOVADET32 ; QUB1 ACTIVE SET MOVADET32
(CCTO6+CCTO7)=+MOVADET31 ; SC23 OR SC24 ACTIVE SET MOVADET31


; MANUAL PANEL LEDs
; =====
;
(MODE0 EQL<6>)=MIL17 ; UTC/MOVA ACTIVE LIGHTS LED5


; MOVA CRB TOGGLE CONDITIONING
; =====
;
; THIS BLOCK OF CONDITIONING WILL PULSE CRB BIT FOR TWO
; SECONDS EVERY THREE MINUTES IF MOVA IS NOT IN CONTROL
; IT WILL ALSO DROP CRB IF LAMPS ARE OFF FOR MORE THAN
; 1 SECOND (PIR 0), OR NORMAL NOT SELECTED
;
( (RTCMIN EQL <0>) + (RTCMIN EQL <3>) + (RTCMIN EQL <6>) + $
(RTCMIN EQL <9>) + (RTCMIN EQL <12>)+ (RTCMIN EQL <15>)+ $
(RTCMIN EQL <18>)+ (RTCMIN EQL <21>)+ (RTCMIN EQL <24>)+ $
(RTCMIN EQL <27>)+ (RTCMIN EQL <30>)+ (RTCMIN EQL <33>)+ $
(RTCMIN EQL <36>)+ (RTCMIN EQL <39>)+ (RTCMIN EQL <42>)+ $
(RTCMIN EQL <45>)+ (RTCMIN EQL <48>)+ (RTCMIN EQL <51>)+ $
(RTCMIN EQL <54>)+ (RTCMIN EQL <57>)) . (RTCSEC GRT<57>) = 2SCRT0

IFT (MODE0 EQL <6>) THN
```

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Conditioning

```
;
  CNDTMA0.(NOT(SSMAN+SSVA+SSFIX+SSCLF))=MOVACRB
;
ELS
;
  CNDTMA0.(NOT(SSMAN+SSVA+SSFIX+SSCLF+2SCRT0))=MOVACRB
;
END
;
IFT PRSLMPRA+PRSLMPAA+PRSLMPGA THN
  RUN <0>
END
```

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Conditioning Timers

Special Conditioning Timers

Timers

0-31

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
0	1	0	255	☐	LAMPS OFF TIMER	16		0	255	☐	
1		0	255	☐		17		0	255	☐	
2		0	255	☐		18		0	255	☐	
3		0	255	☐		19		0	255	☐	
4		0	255	☐		20		0	255	☐	
5		0	255	☐		21		0	255	☐	
6		0	255	☐		22		0	255	☐	
7		0	255	☐		23		0	255	☐	
8		0	255	☐		24		0	255	☐	
9		0	255	☐		25		0	255	☐	
10		0	255	☐		26		0	255	☐	
11		0	255	☐		27		0	255	☐	
12		0	255	☐		28		0	255	☐	
13		0	255	☐		29		0	255	☐	
14		0	255	☐		30		0	255	☐	
15		0	255	☐		31		0	255	☐	

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Instructions

The items list is provided for reference purposes.
Only items marked with ** will be supplied by Poole.

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Instructions

30255							
Card Type	Rack	Posn	Addr.	Port	Type	Line	Term Posn
Intelligent Backplane 16/0	Rack		01	0	I	000 - 007	2 LT1
Intelligent Backplane 16/0	Rack		01	1	I	008 - 015	2 LT1
Intelligent Backplane 16/0	Rack		02	2	I	016 - 023	2 LT2
Intelligent Backplane 16/0	Rack		02	3	I	024 - 031	2 LT2
CPU	A						

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Instructions

ST900 ELV CONTROLLER ITEMS LIST SHEET 1 (*I*L*)

ITEM	DRAWING NUMBER	DESCRIPTION	QTY	TOT	REMARKS
1					
2	667/1/32900/020	ST900 ELV Cabinet UK 20A 1 LSLS - Grey	1		
3	667/1/32900/040	ST900 ELV Cabinet UK 40A 1 LSLS - Grey			
4	667/1/32900/021	ST900 ELV Cabinet UK 20A 1 LSLS - Black			
5	667/1/32900/041	ST900 ELV Cabinet UK 40A 1 LSLS - Black			
6					
7					
8					
9	667/1/32943/001	ELV Lamp switch (LSLS) kit			
10	667/1/32960/001	ELV Lamp switch (LSLS) backplane kit			
11	667/1/32995/002	ST900 I/O card kit (4 outputs)			
12	667/1/32995/001	ST900 I/O card kit (16 outputs)			
13					
14					
15					
16	667/1/27004/000	Integral TC12 OTU kit			
17	667/1/27005/000	SDE Facility kit			
18	667/1/32910/000	ST900 Intelligent detector backplane kit	2		
19	667/1/33002/000	ELV detector 6U rack expansion kit			
20	667/1/33074/000	ST900 ELV 24 V detector supply Kit (6A)			
21	667/1/20690/001	19" Detector Rack			
22					
23	667/1/32985/000	ELV 20A to 40A upgrade kit			
24					
25					
26	667/1/33070/000	ELV Regulatory Sign expansion kit			
27	667/1/32950/000	ELV Audible supply kit			
28	667/1/33009/000	ST900 300mA RCD kit			
29					
30	667/1/32900/001	Expansion cabinet kit - Black			
31	667/1/32900/000	Expansion cabinet kit - Grey			
32	667/1/33072/000	Cabinet mounted cut-out connection kit			
33					
34					
35					
36	667/1/27056/001	Manual Panel Full kit			
37	667/1/27110/000	Manual Panel RS232 kit			
38					
39					
40	667/1/16766/255	Configuration Eprom (Issue 1. 0)	** 1		

Note 1:
Please refer to special instruction pages for additional information on items marked with an '**'.

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Instructions

ST900 ELV CONTROLLER ITEMS LIST SHEET 2 (*I*L*)

ITEM	DRAWING NUMBER	DESCRIPTION	QTY	TOT	REMARKS
41					
42	667/1/32900/920	ST900 ELV cuckoo Kit - T200			
43	667/1/32900/921	ST900 ELV cuckoo Kit - T400			
44	667/1/32900/922	ST900 ELV cuckoo Kit - T800			
45	667/1/32900/923	ST900 ELV cuckoo Kit - Microsense			
46	667/1/32900/925	ST900 ELV cuckoo Kit - Peek			
47					
48					
49					
50					
51					
52	667/1/33073/000	ST900 Isolator locking kit			
53	667/2/20234/000	Screw Lock Key			
54					
55					
56	667/1/27104/000	ST800 / ST900 DFM Lens Kit			
57	667/1/21150/002	ST800 / ST900 Gas Plinth			
58	667/2/27096/000	ST800 / ST900 Mounting Stool			
59					
60					
61					
62	667/1/26271/000	Telephone Kit (Lightning protection)			
63	667/1/27118/000	Surge Arrester (Lightning protection)			
64					
65					
66					
67	667/1/32900/120	ST900 ELV Cabinet Export 20A 1 LSLS - Grey			
68	667/1/32900/140	ST900 ELV Cabinet Export 40A 1 LSLS - Grey			
69	667/1/32900/121	ST900 ELV Cabinet Export 20A 1 LSLS - Black			
70	667/1/32900/141	ST900 ELV Cabinet Export 40A 1 LSLS - Black			
71					
72					
73	667/1/32900/900	ST900 ELV export rack Kit			
74	667/1/32945/000	ST900 ELV additional LSLS rack wiring kit			
75					
76	667/1/27007/000	IRM Facility			
77					
78					
79					
80					

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Special Instructions

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Call Cancel

Call Cancel

Unit No.	Input Name	Call Delay	Cancel Delay	Phase Demanded (Unlatched Demand)
0	ASL8	2	0	
1	ASL9	2	0	
2	ASL10	2	0	
3	BSL18	2	0	
4	BSL19	2	0	
5	QUB1	6	0	
6	SC23	6	0	
7	SC24	6	0	

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 1

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	0	0	I	AZ1	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	A1
☐	1	1	I	AZ2	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	A2
☐	2	2	I	BZ1	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	A3
☐	3	3	I	BZ2	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	A4
☐	4	4	I	ASL8	☒	☒	☐	☐	☐	A	0	0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT1	B1
☐	5	5	I	ASL9	☒	☒	☐	☐	☐	A	0	0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT1	B2
☐	6	6	I	ASL10	☒	☒	☐	☐	☐	A	0	0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT1	B3
☐	7	7	I	BSL18	☒	☒	☐	☐	☐	A	0	0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT1	B4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 1

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	8	0	I	BSL19	☒	☒	☐	☐	☐	A	0	0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT1	C1
☐	9	1	I	X1	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	C2
☐	10	2	I	X2	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	C3
☐	11	3	I	X3	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	C4
☐	12	4	I	X4	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	D1
☐	13	5	I	X5	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	D2
☐	14	6	I	IN11	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	D3
☐	15	7	I	IN12	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT1	D4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 2

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	16	0	I	IN13	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	A1
☐	17	1	I	IN14	☒	☒	☐	☐	☐	Y	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	A2
☐	18	2	I	CSL	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	A3
☐	19	3	I	QUB1	☒	☒	☐	☐	☐	Y	0	0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT2	A4
☐	20	4	I	SC11	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	B1
☐	21	5	I	SC12	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	B2
☐	22	6	I	SC13	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	B3
☐	23	7	I	SC14	☒	☒	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	B4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 2

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	24	0	I	SC15	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	C1
☐	25	1	I	SC16	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	C2
☐	26	2	I	SC23	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☒	☐	☐	☐	2LT2	C3
☐	27	3	I	SC24	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☒	☐	☐	☐	☐	2LT2	C4
☐	28	4	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	D1
☐	29	5	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	D2
☐	30	6	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	D3
☐	31	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2LT2	D4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 5791214
EM Number : 30255
Engineer : Hazel Davis
Intersection : M27 Junctin 5 Westbound Off Slip (HAS009)

Aspect Drives (ELV Controllers)

Aspect Drives (ELV Controllers)

☐ Card Reversed

HPU Connection

1

Aspect Drive Configuration for LSLS 1 of 1 cards (Cabinet 1)

Output	Phase	Aspect	Use	Output	Phase	Aspect	Use
32	A	Red	Phase	16	N/A	N/A	N/A
31	A	Amber	Phase	15	N/A	N/A	N/A
30	A	Green	Phase	14	N/A	N/A	N/A
29	B	Red	Phase	13	N/A	N/A	N/A
28	B	Amber	Phase	12	N/A	N/A	N/A
27	B	Green	Phase	11	N/A	N/A	N/A
26	C	Red	Phase	10	N/A	N/A	N/A
25	C	Amber	Phase	9	N/A	N/A	N/A
24	C	Green	Phase	8	N/A	N/A	N/A
23	N/A	N/A	N/A	7	N/A	N/A	N/A
22	N/A	N/A	N/A	6	N/A	N/A	N/A
21	N/A	N/A	N/A	5	N/A	N/A	N/A
20	N/A	N/A	N/A	4	N/A	N/A	N/A
19	N/A	N/A	N/A	3	N/A	N/A	N/A
18	N/A	N/A	N/A	2	N/A	N/A	N/A
17	N/A	N/A	N/A	1	N/A	N/A	N/A

I/O - DFM Group Timings

I/O - DFM Group Timings

Input Group	State	SET A	SET B	SET C	SET D
Group 0	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 1	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 2	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 3	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 4	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 5	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 6	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 7	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18

Note - 255 or blank disables DFM monitoring of that state (active or inactive) during that timeset (A to D)

Handset Limiting Values

State	Min	Max
Active (Mins)	0	255
InActive (Hrs)	0	255

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