

Solution Ultima 880

Quick Reference Guide

ISSUE 1.51



BOSCH

Solution Ultima 880

Quick Reference Guide

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This documentation is provided to suit the *Solution Ultima 880* control panels.

Firmware Revision 1.00 – 1.09

Hardware Revision A - J

Alarm Link required = 2.74 or higher

Control Panel Software Version 1.00 – 1.09 = S488_V10

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Introduction

Thank you for choosing the Solution control panel for your installation. We are sure that you will find this system extremely flexible, reliable and easy to use. The quick reference guide is supplied with the system to provide users with enough basic information to wire, configure and program the system. Due to the systems many programmable features and options, we suggest that you obtain the complete installation manual that provides detailed information on system options and functions and programming methods.

Programming

The programming options of the system are stored in a non-volatile EPROM. This memory will hold all information during a total power loss and can be changed as many times as required.

In general, the entire programming sequence will consist of entering a location number and then change the data as required.

Programming the system can be via the following methods:

- Codepad
- Hand Held Programmer
- Alarm Link Software

Programming Using A Codepad

The system needs to be disarmed (with no active alarm) to program the system. If there is an active alarm or the system is armed, enter the code for User 1 (Default = 2580) followed by the # key (User Code 1 is factory default as the Master Code).

To enter installer's programming mode, enter the installer code (Default = 1234) followed by the # key. Two beeps will be heard and both the STAY and AWAY indicators will flash simultaneously to indicate that you have entered programming mode. The codepad indicators will display the current data programmed in LOCATION 000 (First location of the Primary Telephone Number).

To move to another programming location, enter the location number followed by the # key. The data in the new location will now be displayed via the codepad indicators (eg. If you entered 34#, the system will jump you to LOCATION 034, the beginning of the Subscriber ID Number For Receiver 1).

To move to the next location, press the # key. This will step you to the next location. The data in the next location will now be displayed via the codepad indicators (eg. If you are currently positioned at LOCATION 034, pressing the # key will take you to LOCATION 035).

To step back one location, press the * key (eg. If you are currently positioned at LOCATION 35, pressing the * key will take you back to LOCATION 34).

To change data in the current location, enter the new value (0 – 15) followed by the * key. This will store the new data into the location and leave you at the same location (eg. If you enter the value 14*, both the Zone 4 indicator and the MAINS indicator will display to represent the new data value).

To move to the next location, press the # key. The data in the next location will now be displayed.

To exit Installer's Programming Mode, enter 960#. Two beeps will be heard and the STAY and AWAY indicators will no longer display. The system has now returned to the disarmed state and is now ready for use.

The table below is a quick guide to programming:

Enter Installer's Programming Mode	1234#
Exit Installer's Programming Mode	960#
Step To Next Location	#
Step Back One Location	*
Program New Data Into Location	Data + * (Data = 0 – 15)
Jump To Another Location	Location No. + #

Codepad Indicators

Data Value	Zone 1 Indicator	Zone 2 Indicator	Zone 3 Indicator	Zone 4 Indicator	Zone 5 Indicator	Zone 6 Indicator	Zone 7 Indicator	Zone 8 Indicator	MAINS Indicator
0									
1	X								
2		X							
3			X						
4				X					
5					X				
6						X			
7							X		
8								X	
9	X							X	
10									X
11	X								X
12		X							X
13			X						X
14				X					X
15					X				X

Programming Option Bits

You will notice option bits throughout the quick reference guide. This allows you to program any combination of the four different options in the one location by adding the options together. Programming a zero (0) will disable all four options.

Example

If at LOCATION 177 you only want options 1, 2 and 4, add the numbers together and the total is the number to be programmed. In this example, the number to be programmed is 7 (eg. 1 + 2 + 4 = 7).

Option	Description
1	Dialler Reporting Functions Allowed
2	Remote Arming Via Telephone Allowed
4	Answering Machine Bypass Only When Armed
8	Use Bell 103 For FSK Format (Disabled = CCITT V21)

Installer's Programming Commands

These commands can only be used when you enter Installer's Programming Mode. Enter the command followed by the # key.

Command	Description
958	Enable/Disable Zone Status (Hand Held Programmer Required)
959	Test Programming Key
960	Exit Installer's Programming Mode
961	Default System Back To Factory Settings
962	Copy Panel Memory To Programming Key
963	Copy Programming Key To Panel Memory
964	Erase Programming Key
965	Default System For Domestic Dialling Format
966	Enable/Disable Automatic Stepping Of Locations When Programming
999	Display Software Version (Hand Held Programmer Required)

Arming The System (On)

AWAY Mode

1. Press and hold the # key until two beeps are heard.

Or
2. Enter your code followed by the # key.
[eg. 2580 + #].

STAY Mode 1

1. Press and hold the * key until two beeps are heard.

Or
2. Enter your code followed by the * key.
[eg. 2580 + *].

STAY Mode 2

1. Press and hold the 0 key until two beeps are heard.

Arm All Areas In AWAY Mode

1. Enter your code followed by 0 and then the # key [eg. 2580 + 0 + #].

This function allows a code to arm all areas that the code is assigned to in AWAY Mode at the same time without the need to arm each area individually.

Disarming The System (Off)

AWAY Mode

1. Enter your code followed by the # key.
[eg. 2580 + #].

STAY Mode 1

1. Press and hold the * key until two beeps are heard (Only if no alarm).

Or
2. Enter your code followed by the # key.
[eg. 2580 + #].

STAY Mode 2

1. Press and hold the 0 key until two beeps are heard (Only if no alarm).

Or
2. Enter your code followed by the # key.
[eg. 2580 + #].

Disarm All Areas

1. Enter your code followed by 0 and then the # key [eg. 2580 + 0 + #].

This function allows a code to disarm all areas that the code is assigned to at the same time without the need to disarm each area individually.

Isolating Zones

Standard Isolating

1. Press the * key twice.
2. Enter the zone number that you want to isolate followed by the * key.

Repeat step 2 if more than one zone is required to be isolated.
3. Press the # key to exit when finished.

Code To Isolate

1. Press the * key once.
2. Enter your user code, followed by the * key .
3. Enter the zone number that you want to isolate followed by the * key.

Repeat step 2 if more than one zone is required to be isolated.
4. Press the # key to exit when finished.

Add/Delete RF Devices (Wireless Zones)

Add RF Device

1. Enter the Installer Code followed by 0 and the # key [eg. 1234 + 0 + #].
2. Enter the Device Number (1 – 16) that you want to add followed by the # key.
3. Enter the 9-digit RF device ID number followed by the # key.

Delete RF Device

1. Enter the Installer Code followed by 0 and the # key [eg. 1234 + 0 + #].
2. Enter the Device Number (1 – 16) that you want to delete followed by the # key.
3. Press the * key to delete the RF device.

Set First Test Report

1. Enter the Installer Code followed by 1 and the # key [eg. 1234 + 1 + #].
2. Enter the Number Of Days (0 – 15) to wait until first test report followed by the # key.

Event Memory Recall

1. Enter the Installer Code or Master Code followed by 8 and the # key.
[eg. 1234 + 8 + #].

The last 40 events (non partitioned) or last 10 events (partitioned) will be displayed in reverse order (i.e. most recent to least recent).

Walk Test Mode

1. Enter the Installer Code or Master Code followed by 7 and the # key.
[eg. 1234 + 7 + #].
2. Test each zone as required.
3. Press the # key to exit.

Satellite Siren Service Mode

1. Enter the Installer Code followed by 5 and the # key [eg. 1234 + 5 + #].

Telephone Monitor Mode (Toggle On/Off)

1. Enter the Installer Code followed by 6 and the # key [eg. 1234 + 6 + #].
2. Press and hold the 9 key until two beeps are heard to send a test report.

Zone LED	Dialling Event
1	Telephone Line Seized
2	Dialling Telephone Number
3	Handshake Received
4	Data Being Sent
5	Kiss-Off Received
None	Released Telephone Line

Add A User Code

1. Enter the Master Code followed by 1 and the # key [eg. 2580 + 1 + #].
2. Enter the User Number (1 – 16) that you want to add / change followed by the # key.
3. Enter the New Code followed by the # key.

Add RF Keyfob

1. Enter the Master Code followed by 1 and the # key [eg. 2580 + 1 + #].
2. Enter the User Number (9 – 16) that you want to add followed by the # key.
3. Enter the 9-digit RF keyfob ID number followed by the # key.

Delete A User Code / RF Keyfob

1. Enter the Master Code followed by 1 and the # key [eg. 2580 + 1 + #].
2. Enter the User Number (1 – 16) that you want to delete followed by the # key.
3. Press the * key to delete the user code.

Change Domestic Telephone Numbers

1. Enter the Installer Code or Master Code followed by 2 and the # key.
[eg. 1234 + 2 + #].
2. Enter the digits for the telephone number.
3. If more than one telephone number, press the * key followed by the 4 key (inserts break between phone numbers) and repeat Step 2, else press the # key to exit.

Turn Outputs On/Off

1. Enter the Master Code followed by 5 and the # key [eg. 2580 + 5 + #].
2. Enter the Output Number (1 – 3) that you want to toggle on or off.
3. Press the # key to toggle On or the * key to toggle Off.
4. Press the # key to exit.

Setting Date and Time

1. Enter the Master Code followed by 6 and the # key [eg. 2580 + 6 + #].
2. Enter the day (DD), month (MM) and year (YY) followed by the hour (HH) and minute (MM).
3. Press the # key to exit.

Day Alarm – Toggle On/Off

1. Press and hold the 4 key until two beeps are heard. Day alarm will toggle on or off.

STAY Mode 2 Zones - Program

1. Enter the Installer Code or Master Code followed by 8 and the # key.
[eg. 1234 + 4 + #].
2. Enter the Zone Number that you want the system to automatically isolate followed by the * key.

Repeat if more than one zone to be automatically isolated when armed in STAY Mode 2.

3. Press the # key to exit.

Fault Analysis

1. Press and hold the 5 key until two beeps are heard.
2. Zone Indicators will display FAULT condition (see table below).
3. Press # key to exit.

Zone LED	FAULT Condition	
1	System Fault	Press and Hold Button 1 To Determine Fault 1 = Battery Fail 2 = Date/Time 3 = RF Rx Jamming RF Rx Tamper RF Rx Comm's Fail 4 = Horn Speaker Fail 5 = Telephone Line Fail 6 = E2 Fail 7 = Fuse Fail 8 = AC Fail
2	RF Low Battery	Press and Hold Button 2 To Determine Fault Displays Zones (1 – 8) that registers RF Low Battery
3	Zone Tamper	Press and Hold Button 3 To Determine Fault Displays Zones (1 – 8) that registers Zone Tamper
4	Sensor Watch	Press and Hold Button 4 To Determine Fault Displays Zones (1 – 8) that registers Zone Tamper
5	RF Sensor Watch	Press and Hold Button 5 To Determine Fault Displays Zones (1 – 8) that registers Zone Tamper
6	Communication Fail	Press and Hold Button 6 To Determine Fault 1 = Receiver 1 Fail (Dialler) 2 = Receiver 2 Fail (Dialler)

Modem Call (Alarm Link)

1. Press and hold the 6 key until two beeps are heard.

Latching Outputs (Reset)

1. Press and hold the 7 key until two beeps are heard.

Codepad ID / Buzzer Tone

1. Press and hold the 8 key until the desired buzzer tone has been reached.

If the system has been partitioned (CC488 Only), the Codepad will display a number to identify which area the Codepad belongs to (see table below).

2. Press the # key to exit.

Zone LED	Codepad Assignment
1	Area 1
2	Area 2
7	Master Partitioned Codepad

Test Report

1. Press and hold the 9 key until two beeps are heard.

Speaker Test

1. Press and hold the 1 key until two beeps are heard. The speaker will sound for two seconds.

Bell Test

1. Press and hold the 2 key until two beeps are heard. The piezo will sound for two seconds.

Strobe Test (Toggle On/Off)

1. Press and hold the 3 key until three beeps are heard to turn the strobe on.
2. Press and hold the 3 key until two beeps are heard to turn the strobe off.

Telco Arm Sequence (Call Forward On)

1. Enter your Installer Code or Master Code followed by 3 and the # key.
[eg. 1234 + 3 + #].
2. Press 1 followed by the # key.
3. Enter the Call Forward On sequence.
4. Press the # key to exit.

Telco Disarm Sequence (Call Forward On)

1. Enter your Installer Code or Master Code followed by 3 and the # key.
[eg. 1234 + 3 + #].
2. Press 2 followed by the # key.
3. Enter the Call Forward Off sequence.
4. Press the # key to exit.

Location 177

Dialler Options 1

1 = Dialler Reporting Functions Allowed
 2 = Remote Arming Via Telephone Allowed
 4 = Answering Machine Bypass Only When Armed
 8 = Use Bell 103 For FSK Format (Disabled = CCITT V21)

9

Location 178

Dialler Options 2

1 = Open/Close Reports Only If Previous Alarm
 2 = Open/Close Reports For STAY Mode 1 and STAY Mode 2
 4 = Delay Siren Until Transmission Complete
 8 = Extend Handshake Wait Time From 30 To 55 Seconds

0

Location 179

Dialler Options 3

1 = Set DTMF Dialling Pulses To 1 Digit/Second
 2 = Lockout Telephone Line Fail Alarm (V1.03+)
 4 = Change Decadic Dialling To 60/40
 8 = Reserved

0

Location 179

Dialler Options 3 (V1.04+)

1 = Set DTMF Dialling Pulses To 1 Digit/Second
 2 = Lockout Telephone Line Fail Alarm (V1.03+)
 4 = Change Decadic Dialling To 60/40
 8 = External Modem Module (CC811) Required For FSK (V1.09+)

2

Location 180

Alarm Link Options

1 = Upload/Download Allowed
 2 = Call Back Phone Number Required For Upload/Download
 4 = Exit Upload/Download Connection On Alarm
 8 = External Modem Module (CC811) Required For Alarm Link

3

Location 181 - 184

Installer Code

1 2 3 4

Location 185 - 264

User Codes

User #01 Location 185 - 188 <div>2 5 8 0</div> 189 <div>10</div> Authority Level	User #02 Location 190 - 193 <div>15 15 15 15</div> 194 <div>2</div> Authority Level	User #03 Location 195 - 198 <div>15 15 15 15</div> 199 <div>2</div> Authority Level
User #04 Location 200 - 203 <div>15 15 15 15</div> 204 <div>2</div> Authority Level	User #05 Location 205 - 208 <div>15 15 15 15</div> 209 <div>2</div> Authority Level	User #06 Location 210 - 213 <div>15 15 15 15</div> 214 <div>2</div> Authority Level
User #07 Location 215 - 218 <div>15 15 15 15</div> 219 <div>2</div> Authority Level	User #08 Location 220 - 223 <div>0 15 15 15</div> 224 <div>3</div> Authority Level	RF User #09 Location 225 - 228 <div>15 15 15 15</div> 229 <div>2</div> Authority Level
RF User #10 Location 230 - 233 <div>15 15 15 15</div> 234 <div>2</div> Authority Level	RF User #11 Location 235 - 238 <div>15 15 15 15</div> 239 <div>2</div> Authority Level	RF User #12 Location 240 - 243 <div>15 15 15 15</div> 244 <div>2</div> Authority Level
RF User #13 Location 245 - 248 <div>15 15 15 15</div> 249 <div>2</div> Authority Level	RF User #14 Location 250 - 253 <div>15 15 15 15</div> 254 <div>2</div> Authority Level	RF User #15 Location 255 - 258 <div>15 15 15 15</div> 259 <div>2</div> Authority Level
RF User #16 Location 260 - 263 <div>15 15 15 15</div> 264 <div>2</div> Authority Level		

Authority Level	Description
0	Arm/Disarm
1	Arm Only
2	Arm/Disarm + Open/Close Reports
3	Arm Only + Close Reports
4	Arm/Disarm + Code Required To Isolate
6	Arm/Disarm + Open/Close Reports + Code Required To Isolate
8	Master Code + Arm/Disarm
10	Master Code + Arm/Disarm + Open/Close Reports
12	Master Code + Arm/Disarm + Code Required To Isolate
14	Master Code + Arm/Disarm + Code Required To Isolate + Open/Close Reports

Location 265

Day Alarm Zones

1 = Zone 1
2 = Zone 2

4 = Zone 3
8 = Zone 4

0

Location 266

EOL Resistor Value

0 = No EOL
1 = 1K
2 = 1K5
3 = 2K2
4 = 3K3
5 = 3K9

6 = 4K7
7 = 5K6
8 = 6K8
9 = 10K
10 = 12K
11 = 22K

12 = Reserved
13 = Reserved
14 = Split EOL (3K3/6K8 With Tamper (1K)
15 = Split EOL (3K3/6K8)

15

Location 267 - 322

Zone Defaults

Location Zone #01 (Default = Delay-1)	267 Zone Type 2	268 Zone Pulse Count 0	269 Zone Pulse Count Time 0	270 Zone Options 1 1	271 Zone Options 2 14	272 Report Code 1	273 Dialler Options 1
Location Zone #02 (Default = Handover)	274 Zone Type 1	275 Zone Pulse Count 0	276 Zone Pulse Count Time 0	277 Zone Options 1 1	278 Zone Options 2 14	279 Report Code 1	280 Dialler Options 1
Location Zone #03 (Default = Handover)	281 Zone Type 1	282 Zone Pulse Count 0	283 Zone Pulse Count Time 0	284 Zone Options 1 1	285 Zone Options 2 14	286 Report Code 1	287 Dialler Options 1
Location Zone #04 (Default = Handover)	288 Zone Type 1	289 Zone Pulse Count 0	290 Zone Pulse Count Time 0	291 Zone Options 1 1	292 Zone Options 2 14	293 Report Code 1	294 Dialler Options 1
Location Zone #05 (Default = Instant)	295 Zone Type 0	296 Zone Pulse Count 0	297 Zone Pulse Count Time 0	298 Zone Options 1 1	299 Zone Options 2 14	300 Report Code 1	301 Dialler Options 1
Location Zone #06 (Default = Instant)	302 Zone Type 0	303 Zone Pulse Count 0	304 Zone Pulse Count Time 0	305 Zone Options 1 1	306 Zone Options 2 14	307 Report Code 1	308 Dialler Options 1
Location Zone #07 (Default = Instant)	309 Zone Type 0	310 Zone Pulse Count 0	311 Zone Pulse Count Time 0	312 Zone Options 1 1	313 Zone Options 2 14	314 Report Code 1	315 Dialler Options 1
Location Zone #08 (Default = 24 Hr Tamper)	316 Zone Type 9	317 Zone Pulse Count 0	318 Zone Pulse Count Time 0	319 Zone Options 1 1	320 Zone Options 2 12	321 Report Code 1	322 Dialler Options 1

Zone Types

Zone Type	Description	Zone Type	Description
0	Instant	8	24 Hr Hold-Up
1	Handover	9	24 Hr Tamper
2	Delay-1	10	Reserved
3	Delay-2	11	Keyswitch
4	Reserved	12	24 Hr Burglary
5	Reserved	13	24 Hr Fire
6	24 Hr Medical	14	Chime
7	24 Hr Panic	15	Not Used

Zone Pulse Count

The pulse count allows you to program how many pulses (0 – 15) need to be registered within the pulse count time to activate an alarm.

Zone Pulse Count Time

Option	20ms Loop Response Time	Option	150 ms Loop Response Time
0	0.5 Seconds	8	20 Seconds
1	1 Second	9	30 Seconds
2	2 Seconds	10	40 Seconds
3	3 Seconds	11	50 Seconds
4	4 Seconds	12	60 Seconds
5	5 Seconds	13	90 Seconds
6	10 Seconds	14	120 Seconds
7	15 Seconds	15	200 Seconds

Zone Options 1

Option	Description
1	Lockout Siren/Dialler
2	Delay Alarm Report
4	Silent Alarm
8	Sensor Watch

Zone Options 2

Option	Group
1	Isolated In STAY Mode 1
2	Zone Isolation Allowed
4	Forced Arming Allowed
8	Zone Restore Report Allowed

Zone Dialler Options

Option	Group
0	No Zone Reports Allowed
1	Report To Receiver 1
2	Report To Receiver 2
4	Report To Both Receiver 1 & Receiver 2
8	Report To Receiver 2 Only If Receiver 1 Fails

Keyswitch Zone Options

The keyswitch zone options replace Zone Options 1 only for the zones that have been programmed to operate as a keyswitch zone.

Option	Description
0	Latching Arm and Disarm In AWAY Mode
1	Latching Arm In AWAY Mode
2	Latching Disarm From AWAY Mode Or STAY Mode
4	Latching Arm and Disarm In STAY Mode
5	Latching Arm In STAY Mode
6	Latching Disarm From STAY Mode
8	Momentary Arm and Disarm In AWAY Mode
9	Momentary Arm In AWAY Mode
10	Momentary Disarm From AWAY Mode Or STAY Mode
12	Momentary Arm and Disarm In STAY Mode
13	Momentary Arm In STAY Mode
14	Momentary Disarm From STAY Mode

Location 323

Swinger Shutdown Count For Siren

0 = Unlimited / 1 - 15 = Number Of Times Siren Operate Till Lockout

3

Location 324

Swinger Shutdown Count For Dialler

0 = Unlimited / 1 - 15 = Number Of Times Dialler Operate Till Lockout

6

Location 325 - 326

Zone Status – Zone Tamper Report

Location 325 = Zone Tamper Report
Location 326 = Zone Tamper Restore Report

0 0

Location 327 - 328

Zone Status – Walk Test Report

Location 327 = Walk Test Start Report
Location 328 = Walk Test End Report

0 0

Location 329 - 330

Zone Status - Bypass Report

Location 329 = Zone Bypass Report
Location 330 = Zone Bypass Restore Report

9 8

Location 331 - 332

Zone Status - Trouble Report

Location 331 = Zone Trouble Report
Location 332 = Zone Trouble Restore Report

2 3

Location 333 - 334

Zone Status - Sensor Watch Report

Location 333 = Sensor Watch Report
Location 334 = Sensor Watch Restore Report

4 5

Location 335

Zone Status - Alarm Restore Code

14

Location 336

Zone Status Reporting Options

0 = No Zone Status Reports Allowed
1 = Report To Receiver 1
2 = Report To Receiver 2
4 = Report To Both Receiver 1 & Receiver 2
8 = Report To Receiver 2 Only If Receiver 1 Fails

1

Location 337

RF Supervision Time

Location 337 = Increments Of 6 Hours (0 - 90 Hours)

0

Location 338 - 339

RF Low Battery Report

Location 338 = RF Low Battery Report
Location 339 = RF Low Battery Restore Report

6 8

Location 340 - 341

RF Receiver Trouble Report

Location 340 = RF Receiver Trouble Report (Tens Digit)
Location 341 = RF Receiver Trouble Report (Units Digit)

7 9

Location 342 - 343

RF Receiver Trouble Restore Report

Location 342 = RF Receiver Trouble Restore Report (Tens Digit)
Location 343 = RF Receiver Trouble Restore Report (Units Digit)

7 11

Location 344

RF Dialler Options

0 = No Zone Status Reports Allowed
1 = Report To Receiver 1
2 = Report To Receiver 2
4 = Report To Both Receiver 1 & Receiver 2
8 = Report To Receiver 2 Only If Receiver 1 Fails

1

Location 345 - 346

Open/Close Reports

Location 345 = Open Report
Location 346 = Close Report

11 12

Location 347

Open/Close Reporting Options

0 = No Open/Close Reports Allowed
1 = Report To Receiver 1
2 = Report To Receiver 2
4 = Report To Both Receiver 1 & Receiver 2
8 = Report To Receiver 2 Only If Receiver 1 Fails

1

Location 348

Codepad Duress Report

6

Location 349 - 350

Codepad Panic ReportLocation 349 = Tens Digit
Location 350 = Units Digit

7 15

Location 351 - 352

Codepad Fire ReportLocation 351 = Tens Digit
Location 352 = Units Digit

7 14

Location 353 - 354

Codepad Medical ReportLocation 353 = Tens Digit
Location 354 = Units Digit

7 13

Location 355

Codepad Reporting Options0 = No Codepad Alarm Reports Allowed
1 = Report To Receiver 1
2 = Report To Receiver 2
4 = Report To Both Receiver 1 & Receiver 2
8 = Report To Receiver 2 Only If Receiver 1 Fails

1

Location 356 - 357

System Status - Fuse Fail ReportLocation 356 = Tens Digit
Location 357 = Units Digit

10 3

Location 358 - 359

System Status - Fuse Fail Restore ReportLocation 358 = Tens Digit
Location 359 = Units Digit

10 8

Location 360 - 361

System Status - AC Fail ReportLocation 360 = Tens Digit
Location 361 = Units Digit

10 2

Location 362 - 363

System Status - AC Fail Restore ReportLocation 362 = Tens Digit
Location 363 = Units Digit

10 7

Location 364 - 365

System Status - Low Battery ReportLocation 364 = Tens Digit
Location 365 = Units Digit

10 1

Location 366 - 367

**System Status - Low Battery
Restore Report**Location 366 = Tens Digit
Location 367 = Units Digit

10 6

Location 368 - 370

System Status - Access Denied (Code Retry)Location 368 = Code Retry Limit (0 = Unlimited)
Location 369 = Tens Digit
Location 370 = Units Digit368 369 370
6 7 12

Location 371

System Status Reporting Options0 = No Codepad Alarm Reports Allowed
1 = Report To Receiver 1
2 = Report To Receiver 2
4 = Report To Both Receiver 1 & Receiver 2
8 = Report To Receiver 2 Only If Receiver 1 Fails

1

Location 372 - 378

Test Report Time (Automatic)Location 372 = Hour Of Day (Tens Digit)
Location 373 = Hour Of Day (Units Digit)
Location 374 = Minute Of Day (Tens Digit)
Location 375 = Minute Of Day (Units Digit)
Location 376 = Test Report (Tens Digit)
Location 377 = Test Report (Units Digit)
Location 378 = Repeat Interval In Days372 373 374 375
0 0 0 0
H H M M376 377
7 1
Tens/Units
Report Code378
0
Interval

Location 379

Test Reporting Dialler Options0 = No Codepad Alarm Reports Allowed
1 = Report To Receiver 1
2 = Report To Receiver 2
4 = Report To Both Receiver 1 & Receiver 2
8 = Report To Receiver 2 Only If Receiver 1 Fails

1

Location 380 - 409

Outputs

Location Output 1

Default = Horn
Speaker

380 381
1 14
Event
Code

382
0
Polarity

383
0
Time
Base

384 385
0 0
Time Base
Multiplier

Location Output 2

Default = Fire Alarm
With Verification

386 387
2 7
Event
Code

388
10
Polarity

389
2
Time
Base

390 391
1 5
Time Base
Multiplier

Location Strobe Output

Default = Strobe
(Reset After 8 Hrs)

392 393
2 0
Event
Code

394
6
Polarity

395
4
Time
Base

396 397
0 8
Time Base
Multiplier

Location Relay Output

Default = Sirens
Running

398 399
1 15
Event
Code

400
1
Polarity

401
0
Time
Base

402 403
0 0
Time Base
Multiplier

Location Codepad Buzzer

Default = Entry/Exit
Warning + Day
Alarm

404 405
0 13
Event
Code

406
2
Polarity

407
1
Time
Base

408 409
0 1
Time Base
Multiplier

Event Codes

Event Code	Description	Event Code	Description
0 0	BOSCHSAT – Satellite Siren (Output 1 Only)	3 1	Dialler Disabled
0 1	System Armed	3 2	Dialler Active (On-Line)
0 2	System Disarmed	3 3	Ring Detect
0 3	Armed In STAY Mode	3 4	Codepad Panic (Multi-Break) V1.05+
0 4	Armed In AWAY	3 5	Mimic Zone 1
0 5	Pre-Arming Alert	3 6	Mimic Zone 2
0 6	Exit Warning (All Zones Sealed) + Entry Warning	3 7	Mimic Zone 3
0 7	Exit Warning	3 8	Mimic Zone 4
0 8	Exit Warning Finished	3 9	Mimic Zone 5
0 9	Kiss-Off After End Of Exit Time	3 10	Mimic Zone 6
0 10	Reserved	3 11	Mimic Zone 7
0 11	Entry Warning	3 12	Mimic Zone 8
0 12	Entry Warning + Day Alarm Resetting	3 13	Reserved
0 13	Exit Warning + Entry Warning + Day Alarm Resetting	3 14	Reserved
0 14	Day Alarm Resetting	3 15	Reserved
0 15	Day Alarm Latching	4 0	Reserved
1 0	Day Alarm Enabled	4 1	Reserved
1 1	Telephone Line Fail	4 2	Reserved
1 2	Kiss-Off Received	4 3	Reserved
1 3	Fuse Fail	4 4	Reserved
1 4	AC Fail	4 5	Chime
1 5	Low Battery	4 6	Zone Not Sealed
1 6	Horn Speaker Fail	4 7	Zone Not Sealed After Exit Time
1 7	Sensor Watch Alarm	4 8	Reserved
1 8	Codepad Medical Alarm	4 9	AC Mains Cycle (60 Hz Or 50 Hz)
1 9	Codepad Fire Alarm	4 10	Area 1 - Zone Unsealed (Solution 880 Only)
1 10	Codepad Panic Alarm	4 11	Area 2 – Zone Unsealed (Solution 880 Only)
1 11	Codepad Duress Alarm	4 12	Reserved
1 12	Access Denied (Code Retries)	4 13	Reserved
1 13	Reserved	4 14	Reserved
1 14	Horn Speaker (Output 1 Only)	4 15	Reserved
1 15	Sirens Running	5 0	Reserved
2 0	Strobe	5 1	Reserved
2 1	Silent Alarm	5 2	Area 1 In Alarm (Solution 880 Only)
2 2	Alarm In STAY Mode	5 3	Area 2 In Alarm (Solution 880 Only)
2 3	Alarm In AWAY Mode	5 4	Reserved
2 4	System Fault	5 5	Reserved
2 5	Fire Alarm (Resetting)	5 6	Area 1 Armed (Solution 880 Only)
2 6	Fire Alarm (Latching)	5 7	Area 2 Armed (Solution 880 Only)
2 7	Fire Alarm (Verification)	5 8	Reserved
2 8	Remote Control 1	5 9	Reserved
2 9	Remote Control 2	5 10	Area 1 Disarmed (Solution 880 Only)
2 10	Remote Control 3	5 11	Area 2 Disarmed (Solution 880 Only)
2 11	Radio Control Output 1	5 12	Reserved
2 12	Radio Control Output 2	5 13	Reserved
2 13	Radio Control Output 1 - Not In AWAY Mode	5 14	Any Areas Armed (Solution 880 Only)
2 14	Radio Control Output 2 - Not In AWAY Mode	5 15	Any Areas Disarmed (Solution 880 Only)
2 15	Communications Fail After 3 Attempts	6 0	Area 1 Codepad Data Terminal (Solution 880 Only)
3 0	Communications Fail	6 1	Area 2 Codepad Data Terminal (Solution 880 Only)

Polarity (Modes)

Option	Description	Option	Description
0	Disabled		
1	Normally Open, Going Low	8	Normally Low, Going Open
2	Normally Open, Pulsing Low	9	Normally Low, Pulsing Open
3	Normally Open, One Shot Low	10	Normally Low, One Shot Open
4	Normally Open, One Shot Low (Reset)	11	Normally Low, One Shot Open (Reset)
5	Normally Open, One Shot Low (Re-trigger)	12	Normally Low, One Shot Open (Re-trigger)
6	Normally Open, One Shot Low (Alarm)	13	Normally Low, One Shot Open (Alarm)
7	Normally Open, Latching Low	14	Normally Low, Latching Open

Time Base

Choose one of the options in the table below for the time base.

Option	Description
1	200 ms
2	1 Second
3	1 Minute
4	1 Hour

Time Base Multiplier

Enter a value between 01 – 99.

One Shot Mode

When you program the output polarity as a one shot, the time base is multiplied by the time base multiplier (eg. If the time base = 2 and the multiplier = 05, the output will operate for 5 seconds)

Pulsing Mode

When you program the output polarity as pulsing, the time base becomes the 'ON' time and the multiplier becomes the 'OFF' time. The 'OFF' time is the time base x the multiplier (eg. If you want the output to pulse one (1) second 'ON' and five (5) seconds 'OFF', you would program time base as one (1) and the multiplier as five (5)).

Location 410 - 411

Entry Time 1

Location 410 = Increments Of 1 Second (0 – 15 Seconds)
Location 411 = Increments Of 16 Seconds (0 – 240 Seconds)

4 1

Location 412 - 413

Entry Time 2

Location 412 = Increments Of 1 Second (0 – 15 Seconds)
Location 413 = Increments Of 16 Seconds (0 – 240 Seconds)

8 2

Location 414 - 415

Exit Time (AWAY/STAY Modes)

Location 414 = Increments Of 1 Second (0 – 15 Seconds)
Location 415 = Increments Of 16 Seconds (0 – 240 Seconds)

12 3

Location 416 - 417

Entry Guard Time For STAY Mode

Location 416 = Increments Of 1 Second (0 – 15 Seconds)
Location 417 = Increments Of 16 Seconds (0 – 240 Seconds)

0 0

Location 418 - 419

Delay Alarm Report Time

Location 418 = Increments Of 1 Second (0 – 15 Seconds)
Location 419 = Increments Of 16 Seconds (0 – 240 Seconds)

0 0

Location 420 - 421

Sensor Watch Time

Location 420 = Increments Of Days (Tens Digit)
Location 421 = Increments Of Days (Units Digit)

0 0

Location 422

Codepad Lockout Time

Location 422 = Increments Of 10 Seconds (0 – 150 Seconds)

0

Location 423

Siren Run Time

Location 423 = Increments Of 1 Minute (0 - 15 Minutes)

5

Location 424

Siren Sound Rate

Location 424 = (0 = Slowest Frequency / 15 = Fastest Frequency)

7

Location 425

Auto Arming Pre-Alert Time

Location 425 = Increments of 5 Minutes (0 – 75 Minutes)

1

Location 426 - 429

Auto Arming Time

Location 426 = Hour Of The Day (Tens Digit)
Location 427 = Hour Of The Day (Units Digit)
Location 428 = Minute Of The Day (Tens Digit)
Location 429 = Minute Of The Day (Units Digit)

426 427 : 428 429
0 0 : 0 0
H H M M

Location 430 - 433

Auto Disarming Time

Location 430 = Hour Of The Day (Tens Digit)
Location 431 = Hour Of The Day (Units Digit)
Location 432 = Minute Of The Day (Tens Digit)
Location 433 = Minute Of The Day (Units Digit)

430 431 : 432 433
0 0 : 0 0
H H M M

Location 434

Kiss-Off Wait Time

Location 434 = Increments Of 500 ms (500 ms - 8 Seconds)

3

Location 435

Speaker Beep Volume

Location 435 = (0 = No Beeps / 15 = Loudest Beeps)

13

Location 436

System Options 1

1 = BOSCH Smart Lockout Allowed
2 = Horn Speaker Monitor
4 = Strobe Indication For Radio Arm/Disarm
8 = Assign Button 4 On Transmitter To Operate STAY Mode 1

1

Location 437

System Options 2

1 = Codepad Panic To Be Silent
2 = Codepad Fire To Be Silent
4 = Codepad Medical To Be Silent
8 = Access Denied (Code Retries) To Be Silent

0

Location 438

System Options 3

- 1 = AC Fail After 1 Hour (Disabled = After 2 Minutes)
- 2 = Ignore AC Fail
- 4 = Pulse Count Handover Allowed
- 8 = Handover Delay To Be Sequential

8

Location 439

System Options 4

- 1 = Panel To Power Up Disarmed (If Power Reset)
- 2 = Arm/Disarm Tracking On Power Up
- 4 = Internal Crystal To Keep Time
- 8 = Radio Keyswitch Interface, Night Arm Station Or RE005 Installed

0

Location 440

Consumer Options 1

- 1 = Test Reports Only When Armed
- 2 = Test Report After Siren Reset
- 4 = Auto Arm In STAY Mode 1
- 8 = STAY Indicator To Display Day Alarm Status

0

Location 441

Consumer Options 2

- 1 = Codepad Display Extinguish After 60 Seconds
- 2 = Single Button Arming Allowed (AWAY/STAY Mode 1 & 2)
- 4 = Single Button Disarming Allowed (STAY Mode 1 & 2)
- 8 = Alarm Memory Reset On Disarm

2

Location 442

Consumer Options 3

- 1 = Codepad Fault Beeps Allowed
- 2 = Use Digit 3 For Codepad Duress Alarm (Instead Of Digit 9)
- 4 = Alarms Activate Sirens and Strobe Outputs In STAY Mode 1 & 2
- 8 = Zone Tamper Alarms To Be Silent

5

Location 443

Radio Input Options

- 1 = DS 304Mhz RF Receiver (RF3212)
- 2 = Latching Keyswitch Input
- 3 = Momentary Keyswitch Input
- 4 = Reserved

0

Location 444

Partitioning Options 1

- 1 = First To Open/Last To Close Reporting Allowed
- 2 = Area 1 Codepad Connected To Data Terminal
- 4 = Reset Sirens From Any Area Allowed
- 8 = Master Codepad To Display AUX Indicator When On-Line

0

Location 445

Partitioning Options 2

- 1 = Lock Area 1 To Receiver 1 & Lock Area 2 To Receiver 2
- 2 = User Codes Allowed To Arm/Disarm Both Areas At Same Time (Code + 0 + #)
- 4 = Reserved
- 8 = Reserved

0

Location 446 - 453

Zone Allocations For Area 1

- Location 446 = Zone 1 LED – Area 1 Codepad
- Location 447 = Zone 2 LED – Area 1 Codepad
- Location 448 = Zone 3 LED – Area 1 Codepad
- Location 449 = Zone 4 LED – Area 1 Codepad
- Location 450 = Zone 5 LED – Area 1 Codepad
- Location 451 = Zone 6 LED – Area 1 Codepad
- Location 452 = Zone 7 LED – Area 1 Codepad
- Location 453 = Zone 8 LED – Area 1 Codepad

446	447	448	449	450	451	452	453
0	0	0	0	0	0	0	0
Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8

Location 454 - 461

Zone Allocations For Area 2

- Location 454 = Zone 1 LED – Area 2 Codepad
- Location 455 = Zone 2 LED – Area 2 Codepad
- Location 456 = Zone 3 LED – Area 2 Codepad
- Location 457 = Zone 4 LED – Area 2 Codepad
- Location 458 = Zone 5 LED – Area 2 Codepad
- Location 459 = Zone 6 LED – Area 2 Codepad
- Location 460 = Zone 7 LED – Area 2 Codepad
- Location 461 = Zone 8 LED – Area 2 Codepad

454	455	456	457	458	459	460	461
0	0	0	0	0	0	0	0
Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8

Location 462 - 477

User Code Area Assignment

0 = User Code Not Assigned
1 = User Code Assigned To Area 1
2 = User Code Assigned To Area 2
3 = User Code Assigned To Both Area 1 and Area 2

Location User Code 1	462 0	User Code 2	463 0	User Code 3	464 0	User Code 4	465 0	User Code 5	466 0	User Code 6	467 0
Location User Code 7	468 0	User Code 8	469 0	User Code 9	470 0	User Code 10	471 0	User Code 11	472 0	User Code 12	473 0
Location User Code 13	474 0	User Code 14	475 0	User Code 15	476 0	User Code 16	477 0				

Location 478 - 525

Domestic Telephone Numbers

Location 526

Reserved

0

Location 527

RF Options

1 = Sound Siren On RF Receiver Fail
2 = Sound Siren On RF Receiver Tamper / Jamming
4 = Unseal Zone That Fails Supervision (If Supervision Enabled)
8 = RF Jamming Monitoring Allowed

0

Location 528 - 535

RF Device Mapping For Devices 1 – 8

Location 528 = Map RF Device 1 To Zone (1 To 8)
Location 529 = Map RF Device 2 To Zone (1 To 8)
Location 530 = Map RF Device 3 To Zone (1 To 8)
Location 531 = Map RF Device 4 To Zone (1 To 8)
Location 532 = Map RF Device 5 To Zone (1 To 8)
Location 533 = Map RF Device 6 To Zone (1 To 8)
Location 534 = Map RF Device 7 To Zone (1 To 8)
Location 535 = Map RF Device 8 To Zone (1 To 8)

528	529	530	531	532	533	534	535
1	2	3	4	5	6	7	8
D1	D2	D3	D4	D5	D6	D7	D8

Location 536 - 543

RF Device Mapping For Devices 9 – 16

Location 536 = Map RF Device 9 To Zone (1 To 8)
Location 537 = Map RF Device 10 To Zone (1 To 8)
Location 538 = Map RF Device 11 To Zone (1 To 8)
Location 539 = Map RF Device 12 To Zone (1 To 8)
Location 540 = Map RF Device 13 To Zone (1 To 8)
Location 541 = Map RF Device 14 To Zone (1 To 8)
Location 542 = Map RF Device 15 To Zone (1 To 8)
Location 543 = Map RF Device 16 To Zone (1 To 8)

536	537	538	539	540	541	542	543
0	0	0	0	0	0	0	0
D9	D10	D11	D12	D13	D14	D15	D16

Location 748 - 749

Ring Burst Time (V1.07+)

Location 748 = Increments Of 5 ms (0 – 75 ms)
Location 749 = Increments Of 80 ms (0 – 1200 ms)

4 6

Location 801 - 808

RF Signal Strength For Devices 1 – 8

Location 801 = Signal Strength For RF Device 1
Location 802 = Signal Strength For RF Device 2
Location 803 = Signal Strength For RF Device 3
Location 804 = Signal Strength For RF Device 4
Location 805 = Signal Strength For RF Device 5
Location 806 = Signal Strength For RF Device 6
Location 807 = Signal Strength For RF Device 7
Location 808 = Signal Strength For RF Device 8

801	802	803	804	805	806	807	808
0	0	0	0	0	0	0	0
D1	D2	D3	D4	D5	D6	D7	D8

Location 809 - 816

RF Signal Strength For Devices 9 - 16

Location 809 = Signal Strength For RF Device 9
Location 810 = Signal Strength For RF Device 10
Location 811 = Signal Strength For RF Device 11
Location 812 = Signal Strength For RF Device 12
Location 813 = Signal Strength For RF Device 13
Location 814 = Signal Strength For RF Device 14
Location 815 = Signal Strength For RF Device 15
Location 816 = Signal Strength For RF Device 16

809	810	811	812	813	814	815	816
0	0	0	0	0	0	0	0
D9	D10	D11	D12	D13	D14	D15	D16

Location 900

Default Options

0 = Defaulting System Allowed / 15 = Defaulting System Disabled

0

Location 901 - 904

System Time

Location 901 = Hour Of The Day (Tens Digit)
 Location 902 = Hour Of The Day (Units Digit)
 Location 903 = Minute Of The Day (Tens Digit)
 Location 904 = Minute Of The Day (Units Digit)

901	902	:	903	904
0	0	:	0	0
H	H	:	M	M

Location 905 - 910

System Date

Location 905 = Day Of The Month (Tens Digit)
 Location 906 = Day Of The Month (Units Digit)
 Location 907 = Month Of The Year (Tens Digit)
 Location 908 = Month Of The Year (Units Digit)
 Location 909 = Current Year (Tens Digit)
 Location 910 = Current Year (Units Digit)

905	906	907	908	909	910
0	1	0	1	0	1
D	D	M	M	Y	Y

Solution Ultima RF Receiver Interface Connections**Figure 1: RF Receiver (RF3212) Wiring Diagram****Wiring and Power Up**

- Remove power from the control panel.
- Connect the RF Receiver to the control panel as shown above using 0.8mm (22-gauge) or larger wire. Wire length should not exceed 300 meters (1000 feet).
- Apply power to the control panel. The red LED at the centre of the module will turn on.

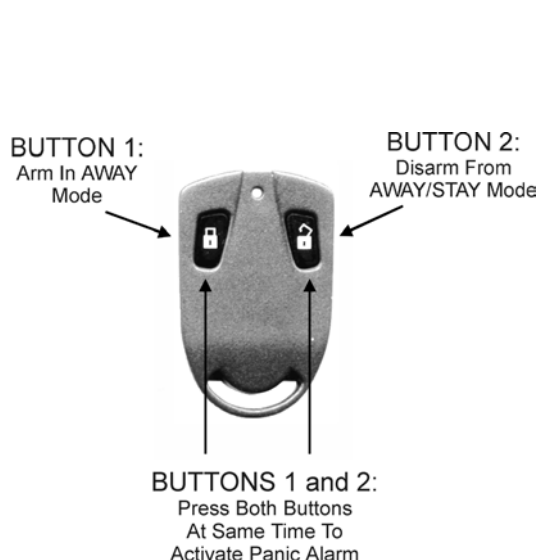
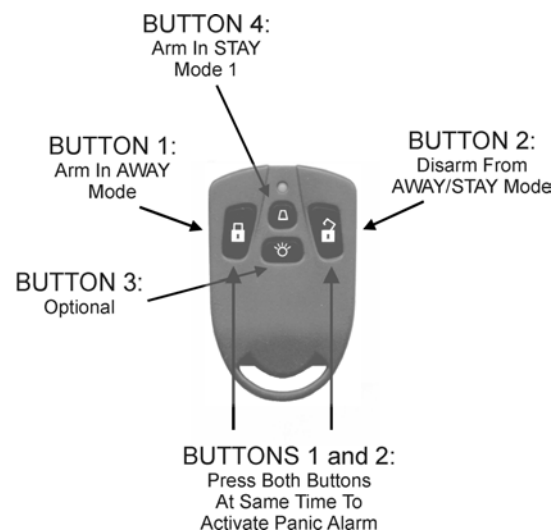
Operation

The following describes the status of the module based on the LED condition.

LED On – Module is functioning normally.

LED Off – Power failure has occurred or module is not wired correctly.

LED Turns Off Momentarily – Module acknowledged receiving an RF signal from a remote RF device.

RF Keyfob Operations For Solution Ultima Series Control Panels**Figure 2: RF3332 - 2 Button RF Keyfob****Figure 3: RF3332 - 2 Button RF Keyfob**

Connections For Split EOL Resistors For 8 Burglary Zones

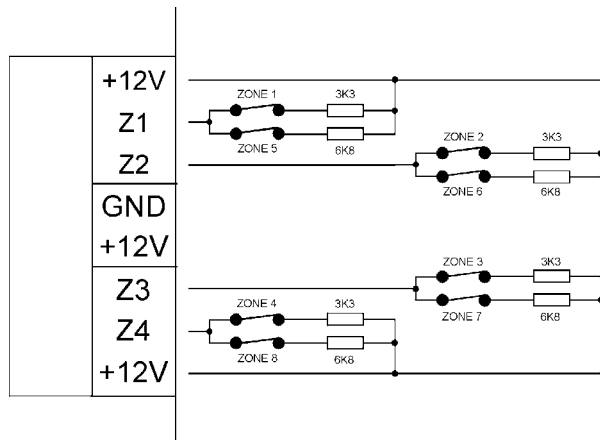


Figure 4: Split EOL Wiring Diagram (Location 266 = 15)

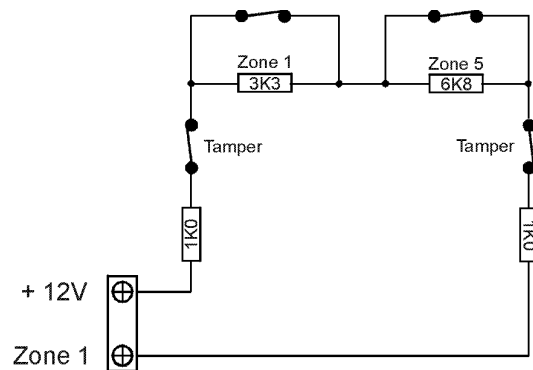


Figure 5: Split EOL Wiring Diagram With Tamper (Location 266 = 14)

Connections For Split EOL Resistors For 8 Zone Operation Using N/O Contacts

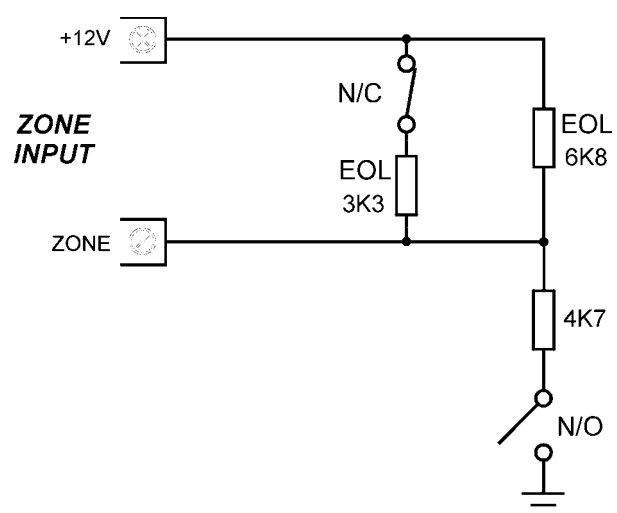
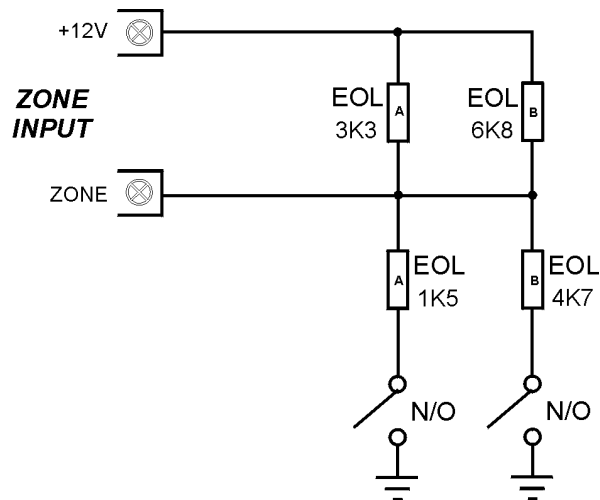


Figure 6: Split EOL Wiring Diagrams Using N/O Contacts

Wiring Diagram For Keyswitch Zone

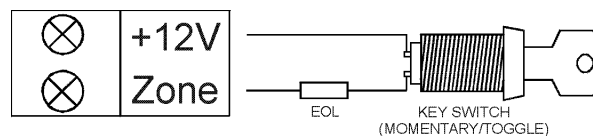


Figure 7: Wiring Diagram For Keyswitch Zone

Wiring Diagram

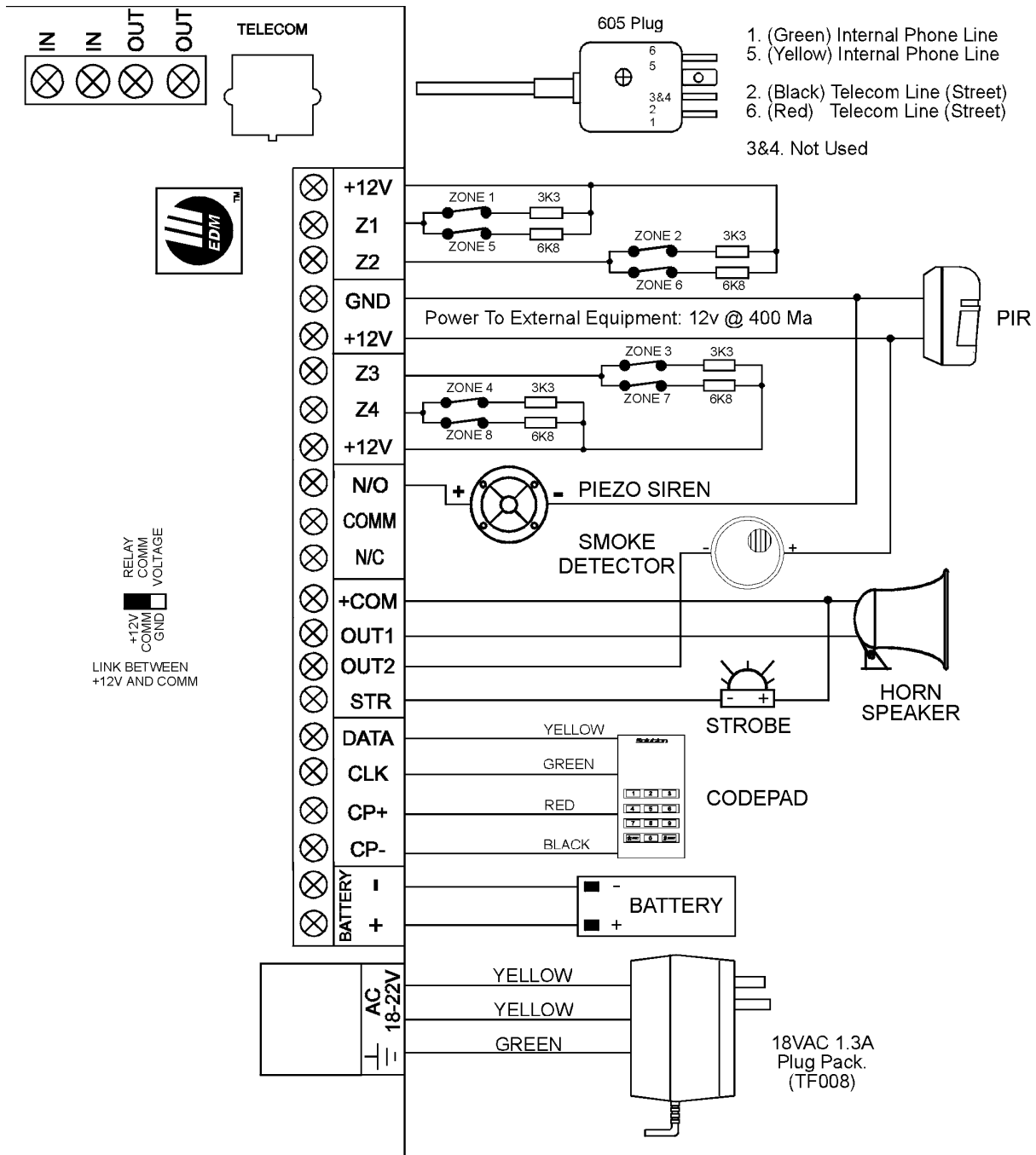


Figure 8: Solution Ultima Series Wiring Diagram

Component Overlay

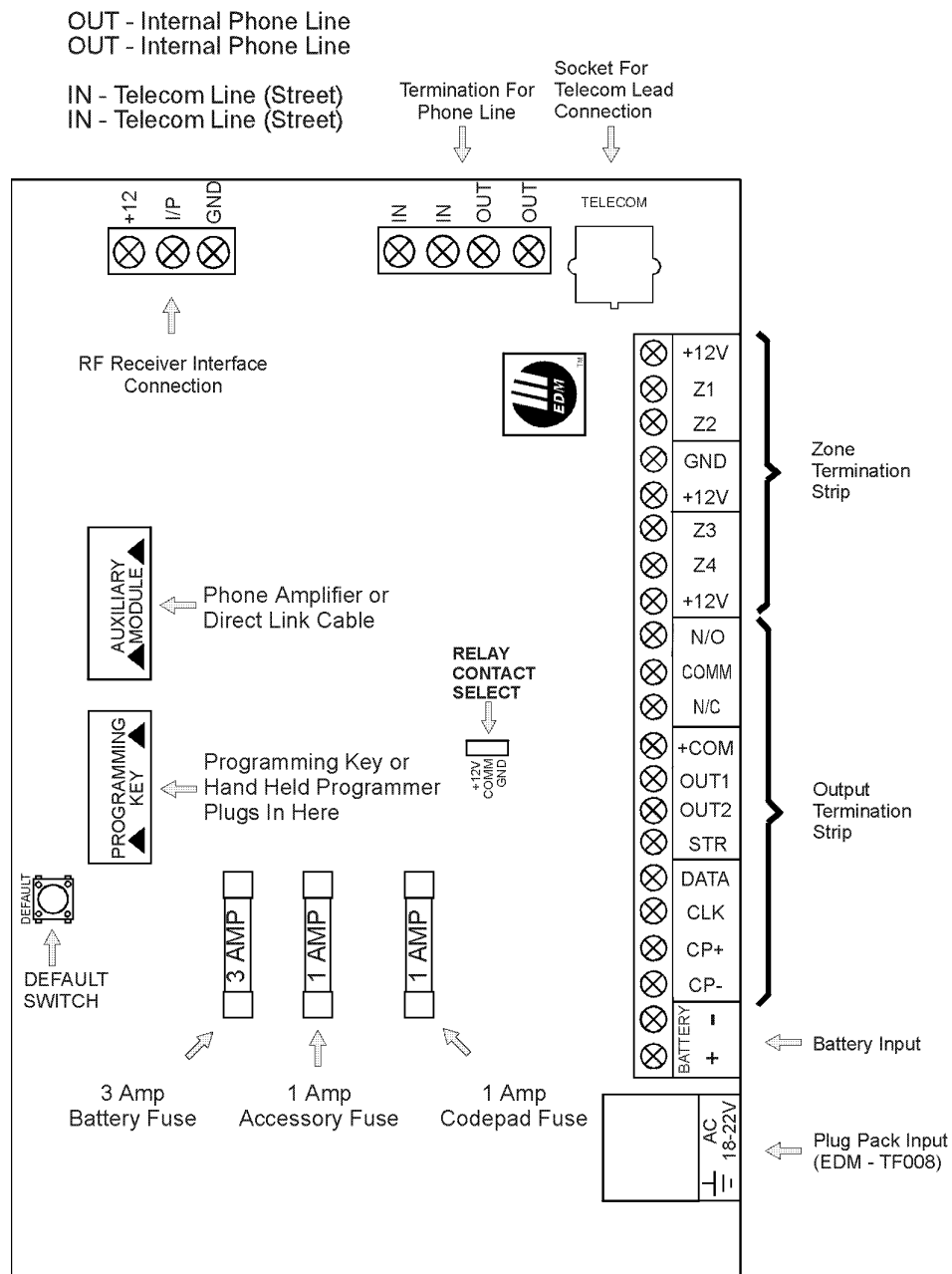
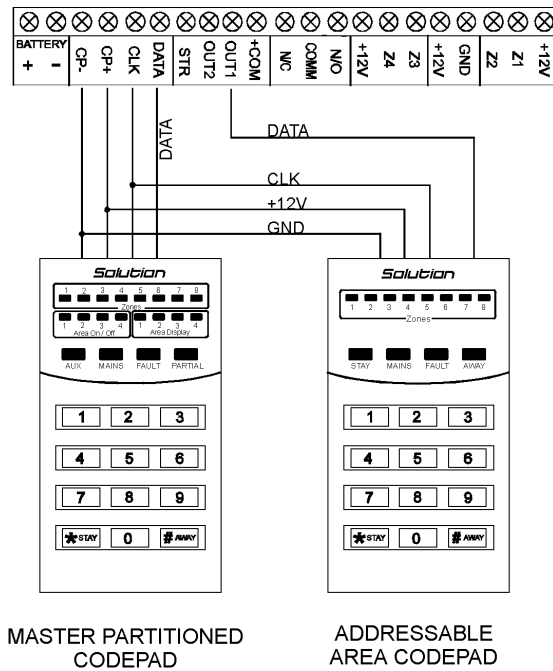


Figure 9: Solution Ultima Series Component Overlay

Codepad Connections For Partitioning - Examples



If the CP-5 Area Addressable (CP500A) codepad is assigned to **Area 1**, DIP Switch 1 on the back of the remote codepad will need to be in the ON position. The following locations for Output 1 will need to be programmed.

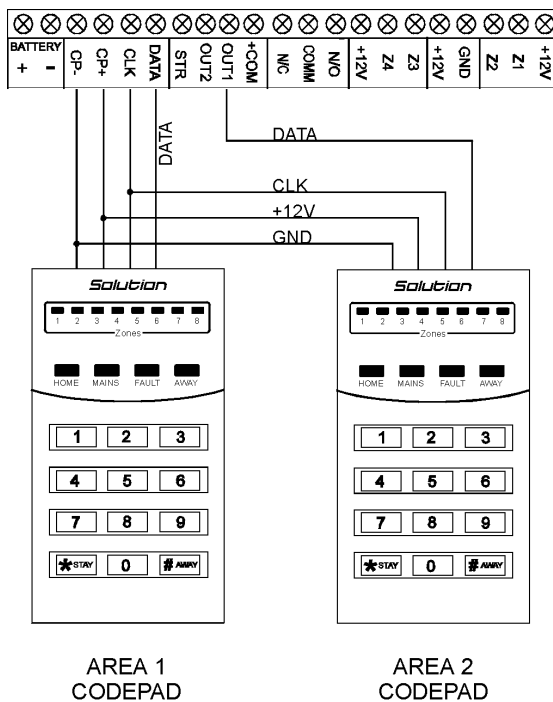
[LOCATION 380 = 6, 381 = 0]

If the CP-5 Area Addressable (CP500A) codepad is assigned to **Area 2**, DIP Switch 2 on the back of the remote codepad will need to be in the ON position. The following locations for Output 1 will need to be programmed.

[LOCATION 380 = 6, 381 = 1]

Note: The Master Partitioned Keypad requires all DIP switches set to the 'ON' position to operate correctly.

Figure 10: Connections For CP-5 Master Partitioned (CP500P) Codepad and CP-5 Area Addressable (CP500A) Codepad



The following DIP Switch settings and locations must be programmed for the two CP-5 Area Addressable (CP500A) codepads to function correctly.

AREA 1 CODEPAD

DIP Switch 1 on the back of the remote codepad will need to be in the ON position. The following location will also need to be programmed.

[LOCATION 444, Option bit 2 must be enabled]

AREA 2 CODEPAD - (Output 1)

DIP Switch 2 on the back of the remote codepad will need to be in the ON position. The following locations for Output 1 will need to be programmed.

[LOCATION 380 = 6, 381 = 1]

Figure 11: Connections For Two CP-5 Eight Zone Area Addressable (CP500A) Codepad