

Solution 6+6 Wireless On/Off Quick Reference Guide

ISSUE: 1.20



BOSCH

Solution 6+6 Wireless On/Off

Quick Reference Guide

Copyright © 1997 by Bosch Security Systems Pty Limited
SYDNEY, AUSTRALIA

Document Part Number MA670Q

Document ISSUE 1.20

Printed 23 May 2006

**This documentation is provided to suit the *Solution 6+6 Wireless On/Off* Control Panel
(CC670/LP670)**

Firmware Revision 1.00 - 1.01

Hardware Version A

Alarm Link Form – NFS2V10

Copyright Notice

All rights reserved. No part of this publication may be reproduced, transmitted or stored in a retrieval system in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Bosch Security Systems Pty Limited.

Trademarks

Throughout this document trademark names may have been used. Rather than put a trademark symbol in every occurrence of a trademark name, we state that we are using the names only in an editorial fashion and to the benefit of the trademark owner with no intention of infringement of the trademark.

Notice of Liability

While every precaution has been taken in the preparation of this document, neither Bosch Security Systems Pty Limited nor any of its official representatives shall have any liability to any person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by the information contained in this book.

Bosch Security Systems Pty Limited reserves the right to make changes to features and specifications at any time without prior notification in the interest of ongoing product development and improvement.

Introduction

Thankyou for choosing the *Solution 6+6 Wireless On/Off* control panel for your installation. We are sure that you will find this system extremely flexible, reliable and easy to use.

Before using the system for the first time, we suggest that you read the section in this Quick Reference Guide called "Programming Using a Codepad" to familiarise yourself with the basic programming methodology.

The Quick Reference Guide is supplied with the control panel to provide users with enough basic information to wire, configure and operate the system. Due to the systems many programmable features and options, we suggest that you obtain the complete Installation Manual which provides detailed information on all system options and functions as well as detailed information on the numerous programming methods.

Programming

The programming options of this system are stored in a non volatile EPROM. This memory will hold all the relevant configuration and user specific data even during a total power loss.

The data retention time is as long as ten years without power, therefore no reprogramming will be required after powering the system down.

The data can be altered as many times as required without the need for any additional specialised equipment. This memory is laid out in numerous locations each of which holds the data for a specific function. In general, the entire programming sequence will consist of nominating the location number and then entering or altering the required data. You will repeat this procedure until all the data has been altered to suit your requirements. The factory default settings have been selected for the control panel to report in Contact ID format.

Note: '15' is the maximum value that can be programmed into any location.

There are two programming modes. The Installer's Programming Mode and the Operators Programming Mode. Both modes have individual access codes and these two codes must always be programmed differently. The Master Code, as well as being able to arm and disarm the system gives access to the Operators Programming Mode. The Installer's Code only gives access to the Installer's Programming Mode and does NOT arm and disarm the system.

Programming of the *Solution 6+6 Wireless On/Off* control panel can be carried out via any of the following four methods.

- ☐ System Codepad
- ☐ Hand Held Programmer (CC814)
- ☐ Programming Key (CC810)
- ☐ Alarm Link (Upload/Download) Software (CC816)

Note: For further information on the different programming options available for the *Solution 6+6 Wireless On/Off* control panel, refer to the Installation Manual (MA670I).

Programming Using a Codepad

The system must be in a disarmed state with no flashing zone alarm memories, this can be achieved by entering the **MASTER CODE** followed by the **AWAY** button. The factory default Master Code is **2580**.

To access the Installer's Programming Mode, enter the four digit **INSTALLER CODE** followed by the **AWAY** button. The factory default Installer Code is **1234**. Three beeps will be heard and both the **AWAY** and the **STAY** indicators will flash simultaneously. If a long beep is heard, check the system for alarm memory. The combination of the **MAINS** and **ZONE** indicators will indicate the data stored in the first location (LOCATION 000).

Data Value	Zone 1 IED	Zone 2 IED	Zone 3 IED	Zone 4 IED	Zone 5 IED	Zone 6 IED	Zone 7 IED	Zone 8 IED	Mains IED
1	✓								
2		✓							
3			✓						
4				✓					
5					✓				
6						✓			
7							✓		
8								✓	
9	✓							✓	
10									✓
11	✓								✓
12		✓							✓
13			✓						✓
14				✓					✓
15					✓				✓

Zone Indicators When Programming

Example

To move to a particular programming location, enter the location number required followed by the **AWAY** button. The data of the new location will now be displayed.

To move to the next location, press the **AWAY** button. This will step you to the next location and the data in that location will be displayed via the zone LED indicators.

If you press the **STAY** button without previously entering a location number, the system will step back one location.

To change data in the current location, enter the new value followed by the **STAY** button. This will store the new data into the location and still leave you still positioned at the same location.

To proceed to the next location, press the **AWAY** button. The next locations data will now be displayed.

To exit the Installer's Programming Mode, enter the command **960** followed by the **AWAY** button. Two beeps will be heard and the system will return to normal.

For a more detailed explanation, refer to the *Solution 6+6 Wireless On/Off* Installation Manual (MA670I)

Note: The valid address range for a *Solution 6+6 Wireless On/Off* control panel is 000 to 213.

Quick Start

The following steps will enable you to use the **Solution 6+6 Wireless On/Off** control panel with the default values as set in the factory. The default settings allow the panel to communicate in Contact ID format.

1. Connect AC power to the unit.

The MAINS indicator will remain on as will the AWAY indicator. The unit is now in the armed state.

2. The back-up battery should now be connected.
3. Enter the default Master Code **2580** followed by the **AWAY** button. The AWAY indicator will extinguish. The panel is now in the disarmed state. Installer's Programming Mode can now be accessed.
4. Enter the factory default Installer Code **1234** followed by the **AWAY** button. The STAY and AWAY LED's will now flash simultaneously.
5. Enter the primary and secondary telephone numbers and the Subscriber ID Number.
6. Set the time for the test reports if this option is required. Any other programming changes required can also be made, otherwise the factory programming default settings will be used.
7. Enter command **960** followed by the **AWAY** button to exit Installer's Programming Mode. The panel will return to the unarmed state and is now ready for use.
8. Using a Master Code set the date and time.
 - Enter **MASTER CODE** + **6** + **AWAY**.
 - Enter the day of the month, then the month, then the year, then the hour, then the minute using the format (DD, MM, YY, HH, MM).
 - Press the **AWAY** button when finished.

Zone Default Settings

The default zone settings are as listed in the table below.

Zone No.	Zone Type
1	Delay
2 & 3	Handover
4 & 5	Instant
6	24 Hour

Note: The example given in this Quick Reference Guide is a simplified description of how to configure the panel. The system offers many other programmable features which are described in detail in the **Solution 6+6 Wireless On/Off** Installation Manual (MA670I).

Installer's Programming Commands

There are several commands that can be invoked to perform the functions as listed below. These commands only operate while you are in the Installers Programming Mode. To invoke the command, press in the corresponding numerical code then press the **AWAY** button.

Command	Function
958	Enable and Disable Zone Status Mode
959	Test Programming Key
960	Exit Installer's Programming Mode
961	Set Defaults For Contact ID Format (Factory Default Settings)
962	Copy The Panel Memory To The Programming Key
963	Copy The Programming Key Data To The Panel Memory
964	Wipe Programming Key
965	Set Defaults For Domestic Reporting
966	Enable and Disable Automatic Stepping of Locations During Programming
999	This Command Displays The <i>Solution</i> Panel's "Software Version" Number When Using An BOSCH Hand Held Programmer

Installers Programming Commands

Installer Code Functions

Installer Code Functions are designed to allow the installer to perform various system tests without the need to know a Master Code.

The **INSTALLER CODE** is entered followed by a **FUNCTION** digit then the **AWAY** button to enter you into a particular mode. If a button is not pressed within any sixty second period, the mode will automatically terminate.

INSTALLER CODE + **FUNCTION** + **AWAY**

These functions can only be carried out while the system is in a disarmed state.

Function	Description
0	Fault Analysis Mode
1	<i>Reserved</i>
2	Set Number Of Days Until The First Test Report
3	Event Memory Recall
4	Walk Test Mode
5	Satellite Siren (BOSCHSAT) Service Mode
6	Initiate Modem Call
7	Turning Telephone Monitor Mode On and Off
8	<i>Reserved</i>
9	Send A Test Report

Installer Code Functions

Master Code Functions

Master Code Functions are designed to allow those users that have the appropriate access level to perform certain functions of a supervisory level. These functions can only be carried out while the system is in a disarmed state.

MASTER CODE + **FUNCTION** + **AWAY**

Function	Description
0	Arming and Disarming Both Areas At The Same Time
1	Changing and Deleting User Codes/Radio Remote User Codes
2	Changing Phone Numbers (Domestic Only)
3	Event Memory Recall
4	Walk Test Mode
5	Fault Analysis
6	Setting The Date and Time
7	Toggle Day Alarm On and Off
8	Reset Latched Outputs
9	Initiate Modem Call

Master Code Functions

Fault Analysis

There are various system faults that can be detected by the **Solution 6+6 Wireless On/Off** control panel. When any of these are present the **FAULT** indicator will begin to flash and the codepad will beep once every minute.

Hold the **5** button down for two seconds until two beeps are heard. The **STAY** and **AWAY** indicators will begin to flash in unison with the **FAULT** indicator. One or more zone indicators (1-8) will illuminate to indicate the current fault. Refer to the following table for a list of fault types.

Zone Indicator	Description
1	Low Battery
2	Date and Time
3	Sensor Watch
4	Horn Speaker Disconnected
5	Reserved
6	E ² Fault
7	Reserved
8	Communications Failure

Fault Types

User Code Functions

USER CODE + **FUNCTION** + **AWAY**

Function	Description
0	Arming and Disarming Both Areas At The Same Time

Hold Down Functions

Hold Down Functions have been incorporated to allow easy activation of specific operations. When a button is held down for two seconds, two beeps will be heard and a particular function will operate. These functions are listed below.

Function	Description
AWAY	Arm The System in AWAY Mode
STAY	Arm The System in STAY Mode
0	<i>Reserved</i>
1	Horn Speaker Test
2	Bell Test
3	Strobe Test
4	Toggle Day Alarm On and Off
5	Fault Analysis
6	Initiate a Modem Call
7	Reset Latching Outputs
8	Codepad ID Beeper Tone Change
9	Initiate a Test Report

Hold Down Functions

Testing The Dialler

Telephone monitor mode allows the remote codepad to be used for a visual representation of data transmissions between the control panel and the base station receiver. The dialling sequence is also shown in this mode.

The codepad will beep once every two seconds while telephone monitor mode is turned on regardless of whether the system is in Installer's Programming Mode or normal operating mode. The first five indicators are used to display the progressive steps for a transmission to the base station receiver.

Zone Indicator	Dialling Event
1	Telephone Line Seized
2	Dialling Phone Number
3	Handshake Received
4	Data Is Being Transmitted
5	Kiss-Off Received
None	Telephone Line Released

Telephone Monitor Mode Indications

How To Turn Telephone Monitor Mode On and Test The Dialler

1. Enter your **INSTALLER CODE** followed by **7** and the **AWAY** button.
Three beeps will be heard.
2. Hold Down button **9** for two seconds until two beeps are heard to initiate a test report.

How To Turn Telephone Monitor Mode Off

1. Enter your **INSTALLER CODE** followed by **7** and the **AWAY** button.
Two beeps will be heard.

Each zone contains five locations. The first four locations determine how the zone operates, while the last location contains the dialler reporting information.



Type



Option



Pulse



Time



Dialler

Zone Types

There are fifteen different zone types to choose from. Each has the ability to be programmed as any of the types listed in the table below.

Type	Description	Type	Description
0	Instant	8	Delay 1 + Isolated In STAY Mode
1	Handover	9	Delay 2 + Isolated In STAY Mode
2	Delay 1	10	Reserved
3	Delay 2	11	Keyswitch
4	Reserved	12	24 Hour
5	Reserved	13	24 Hour Fire
6	Instant + Isolated In STAY Mode	14	Chime Only (follow me)
7	Handover + Isolated In STAY Mode	15	Zone Not Used

Zone Options

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

Keyswitch Zone Options

Option	Description
1	Arm Only
2	Disarm Only
4	Enabled = Arm In STAY mode Disabled = Arm In AWAY mode
8	Enabled = Momentary operation Disabled = Toggle operation

Pulse Count Settings

The pulse count settings for each zone can be programmed between 0 - 15.

Pulse Count Time

Zone time is the time frame or period over which the number of pulses must register.

20ms Loop Response Time		150ms 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 Descriptions

Zone	Description	Tamper Zones Description
1		
2		
3		
4		
5		
6		

Location 00 - 15

Primary Telephone Number

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Location 16 - 31

Secondary Telephone Number

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Location 32 - 47

Callback Telephone Number

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Location 48

Dialling Format

1 = Australian DTMF

2 = Australian Decadic

3 = Alternate DTMF & Decadic (Aus.)

4 = International DTMF

5 = Reversed Decadic

6 = Alternate DTMF & Reverse Decadic

1

Location 49

Handshake Tone

1 = Hi-Lo Handshake (Contact ID)

2 = 1400 Hz (Ademco TX @ 1900 Hz)

3 = 2300 Hz (Sescoa TX @ 1800 Hz)

4 = No Handshake Required

5 = Pager

1

Location 50

Transmission Format

1 = Contact ID

2 = Reserved

3 = Reserved

4 = Reserved

5 = Reserved

6 = Reserved

7 = Reserved

8 = Reserved

9 = Reserved

10 = Reserved

11 = Domestic

12 = Basic Pager

13 = Reserved

14 = Reserved

15 = Reserved

1

Location 51

Reserved

0

Location 52 - 55

Subscriber ID Number

0	0	0	0
---	---	---	---

Location 56 - 59

Installer Code

1	2	3	4
---	---	---	---

Location 60

Ring Count

15 = Answering Machine Bypass 1

14 = Answering Machine Bypass 2

8

Location 61 - 100

User Codes

UserCode # 1

Location 61 - 65

2	5	8	0	8
---	---	---	---	---

UserCode # 2

Location 66 - 70

15	15	15	15	0
----	----	----	----	---

UserCode # 3

Location 71 - 75

15	15	15	15	0
----	----	----	----	---

UserCode # 4

Location 76 - 80

15	15	15	15	0
----	----	----	----	---

UserCode # 5

Location 81 - 85

15	15	15	15	0
----	----	----	----	---

UserCode # 6

Location 86 - 90

15	15	15	15	0
----	----	----	----	---

UserCode # 7

Location 91 - 95

15	15	15	15	0
----	----	----	----	---

UserCode # 8

Location 96 - 100

0	15	15	15	1
---	----	----	----	---

Location 101

Day Alarm Mask

1 = Zone 1

2 = Zone 2

4 = Zone 3

8 = Zone 4

1

Location 102

Code Retries

6

Location 103

EOL Resistor Value

1 = 1K Ω 2 = 1K5 Ω 3 = 2K2 Ω 4 = 3K3 Ω 5 = 3K9 Ω 6 = 4K7 Ω 7 = 5K6 Ω 8 = 6K8 Ω 9 = 10K Ω 10 = 12K Ω 11 = 22K Ω

12 = Reserved

13 = Reserved

14 = Reserved

15 = Split EOL For 6 Tamperers

4

Zones

Zone # 1

Location 104 - 108

2 0 0 0 3

Zone # 3

Location 114 - 118

1 0 0 0 3

Zone # 5

Location 124 - 128

0 0 0 0 3

Zone # 2

Location 109 - 113

1 0 0 0 3

Zone # 4

Location 119 - 123

0 0 0 0 3

Zone # 6

Location 129 - 133

12 0 0 0 3



Type



Option



Pulse



Time

Report
Option

Report Option

1 = Enable Alarm Report

2 = Enable Restore Report

4 = Reserved

8 = Reserved

Location 134

Report Options 1

1 = Enable Bypass Reports

2 = Enable Bypass Restore Reports

4 = Enable Trouble Reports

8 = Enable Trouble Restore Reports

15

Location 135

Report Options 2

1 = Enable Duress Reports

2 = Enable Panic, Medical and Fire Reports

4 = Enable Access Denied Reports

8 = Enable Test Reports

15

Location 136

Report Options 3

1 = Enable AC Fail Report

2 = Enable Low Battery Reports

4 = Enable Sensor Watch Reports

8 = Enable Opening/Closing Reports

15

Location 137 - 139

Test Reporting Time (Repeat Days, Hours Tens, Hours Units)

0 0 0

Location 140 - 163

Output Configurations

Output # 1

Location 140 - 145

1 14 0 0 0 0

Strobe

Location 146 - 151

2 0 1 0 0 0

Relay

Location 152 - 157

1 15 1 0 0 0

Console

Location 158 - 163

0 12 2 1 0 1

Event Type
(when)Polarity
(how)Time
(base)Time
(multiplier)

Location 164 - 165

Entry Timer 1 (Seconds, 16 Seconds)

10 0

Location 166 - 167

Entry Timer 2 (Seconds, 16 Seconds)

4 1

Location 168 - 169

Exit Timer (Seconds, 16 Seconds)

12 3

Location 170 - 171		
Entry Guard Timer (Seconds, 16 Seconds)		12 3
Location 172 - 173		
Sensor Watch Time (Days)		0 0
Location 174		
Codepad Lockout Time (10 Second)		0
Location 175		
Siren Run Time (Minutes)		10
Location 176		
Siren Sound Rate (Slow < -Sound-> Fast)		7
Location 177		
Swinger Shutdown Count		0
Location 178		
Dialler Options 1	1 = Enable Dialler Reporting Functions 2 = Enable Remote Arming Via The Telephone 4 = Enable Upload/Download Via BOSCH Alarm Link Software (CC816) 8 = Terminate "Alarm Link" Session On Alarm	5
Location 179		
Dialler Options 2	1 = Send Open/Close Reports Only If A Previous Alarm Has Occurred 2 = Enable First To Open, Last To Close Reporting (Partitioning Only) 4 = Send Open/Close Reports When In STAY Mode 8 = Delay Siren Until Transmission Is Complete	0
Location 180		
System Options 1	1 = Enable Forced Arming 2 = Enable BOSCH Smart Lockout 4 = Enable Monitoring Of Horn Speaker 8 = Allow Horn Speaker Beeps For Radio Remote Control Operation	1
Location 181		
System Options 2	1 = Enable BOSCH Radio Key/Keyswitch Interface or BOSCH Night Arm Station 2 = Enable Handover Delay To Be Sequential 4 = Enable Codepad Panic To Be Silent 8 = Enable Access Denied To Be Silent	2
Location 182		
System Options 3	1 = Enable Main Codepad To Display Data For Area #1 2 = Enable Resetting Of Sirens From Both Areas 4 = Ignore AC Fail 8 = Enable Handover Of Zone Pulse Count	0
Location 183		
System Options 4	1 = Enable AC Fail In 1 hour 2 = Extend Time To Wait For Handshake From 30 Seconds To 1 Minute 4 = Enable Control Panel To Power Up In The Disarmed State 8 = Reserved	0
Location 184		
Consumer Options 1	1 = Send Test Reports Only When The System Is Armed 2 = Enable Operation Of Siren & Strobe In STAY Mode 4 = Enable Answering Machine Bypass To Work Only When The System Is Armed 8 = Enable Codepad Extinguish Mode	2
Location 185		
Consumer Options 2	1 = Enable "User Code + 0 + AWAY" Function To Arm/Disarm BOTH Areas At Same Time 2 = Enable Single Button Arming in Away and Stay mode 4 = Enable Single Button Disarming from Stay mode 8 = Enable Alarm Memory Reset on disarm	0
Location 186 - 191		
Area 1 Zone Allocations		0 0 0 0 0 0

Location 192 - 197

Area 2 Zone A Locations

0	0	0	0	0	0
---	---	---	---	---	---

Location 198 - 205

Area/User Allocations

Location 198 Areas for User# 1	Location 199 Areas for User# 2	Location 200 Areas for User# 3	Location 201 Areas for User# 4
Location 202 Areas for User# 5	Location 203 Areas for User# 6	Location 204 Areas for User# 7	Location 205 Areas for User# 8

Location 206 - 213

Radio User Allocations

Location 206 Radio User# 9	Location 207 Radio User# 10	Location 208 Radio User# 11	Location 209 Radio User# 12
Location 210 Radio User# 13	Location 211 Radio User# 14	Location 212 Radio User# 15	Location 213 Radio User# 16

Location 900

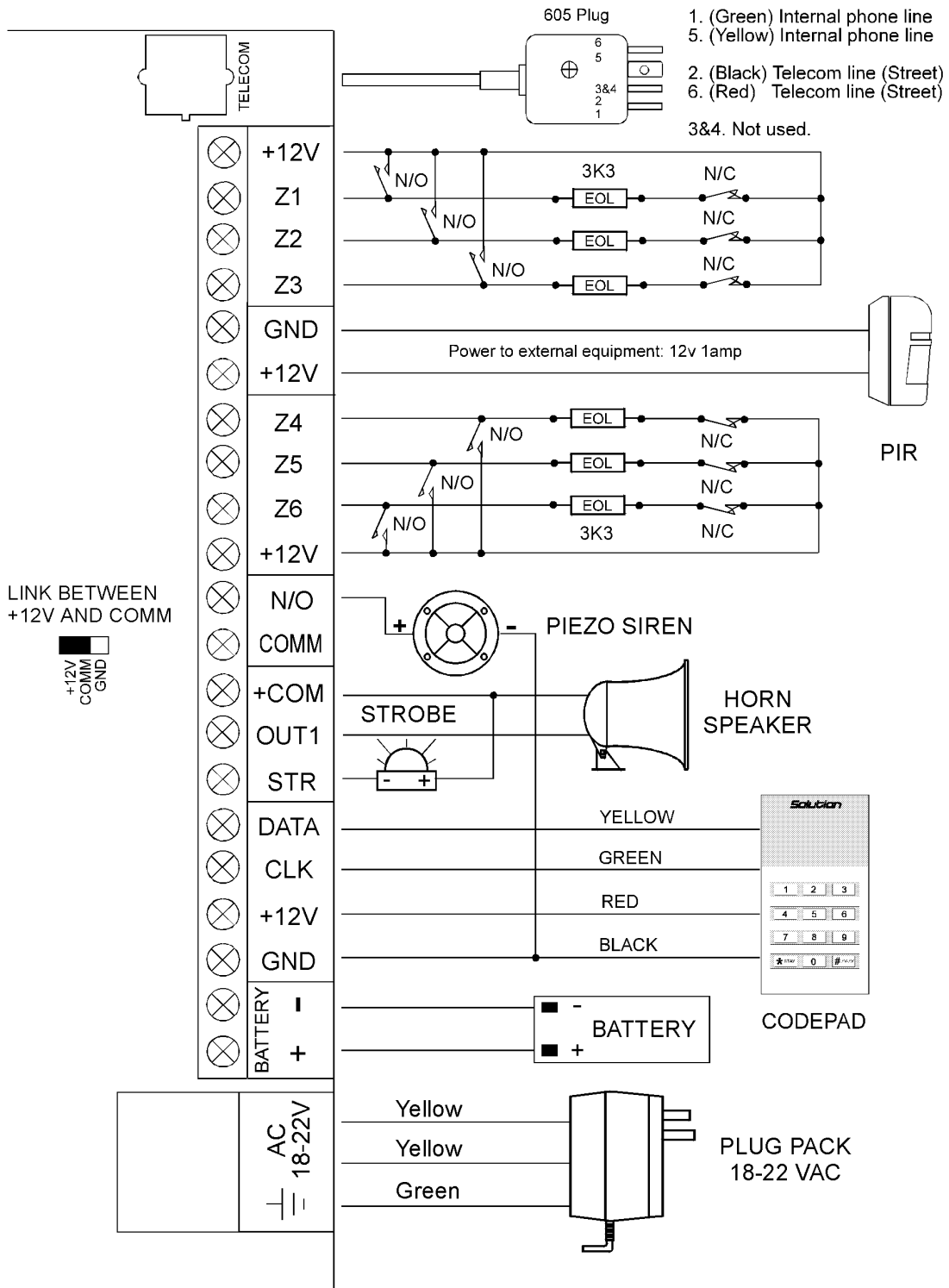
Disable Factory Default

0 = Defaulting Enabled
15 = Defaulting Disabled

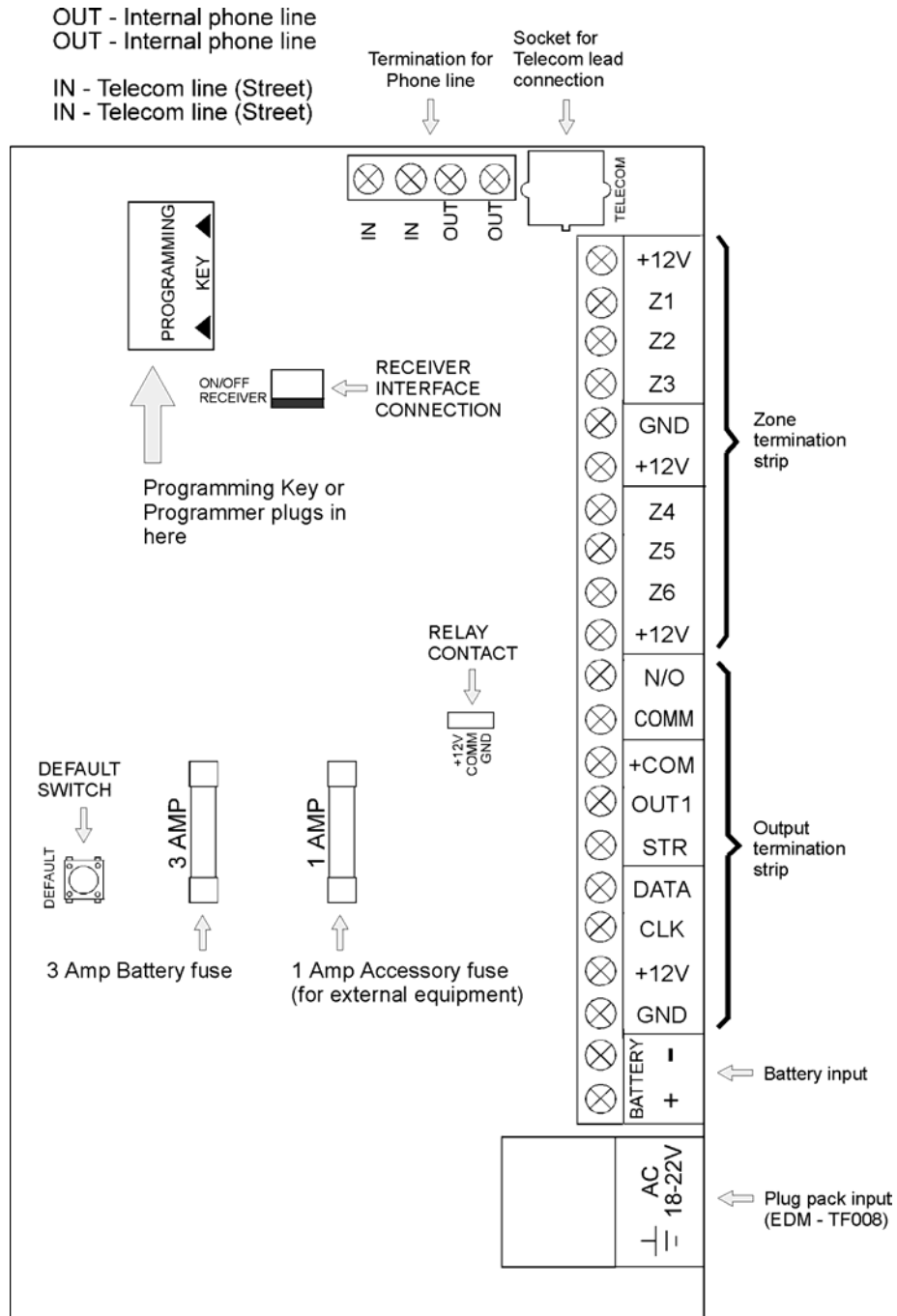
0

Wiring Diagram

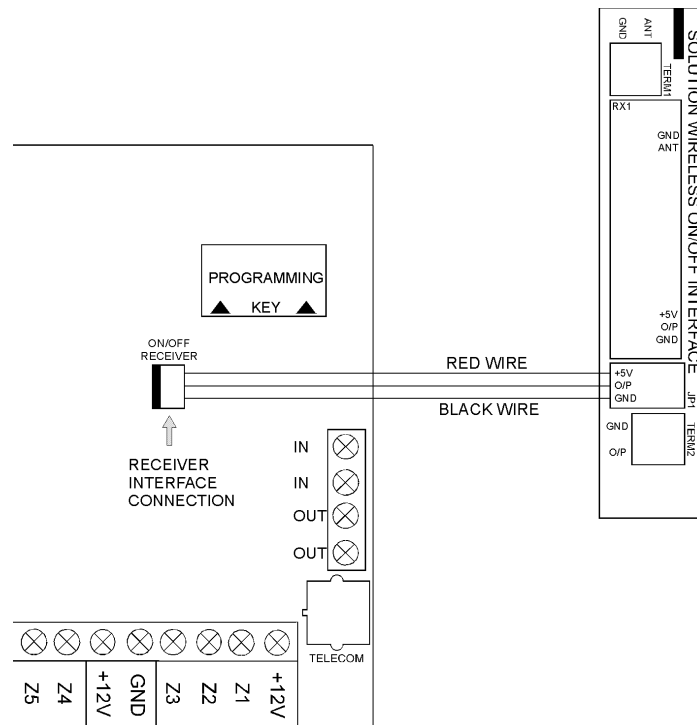
Solution 6+6



Component Overlay



Wireless ON/OFF Interface



Wiring Diagrams for Keyswitch Zones

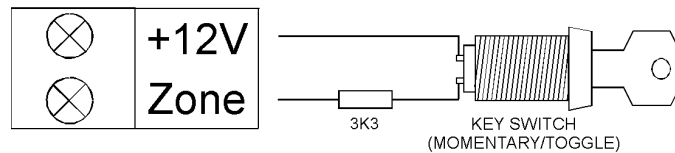


Figure 1: Wiring Diagram for Keyswitch Zone

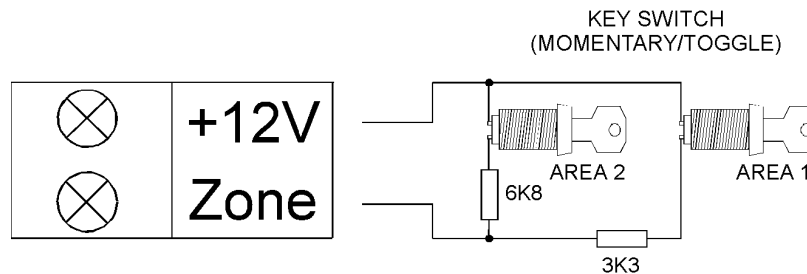


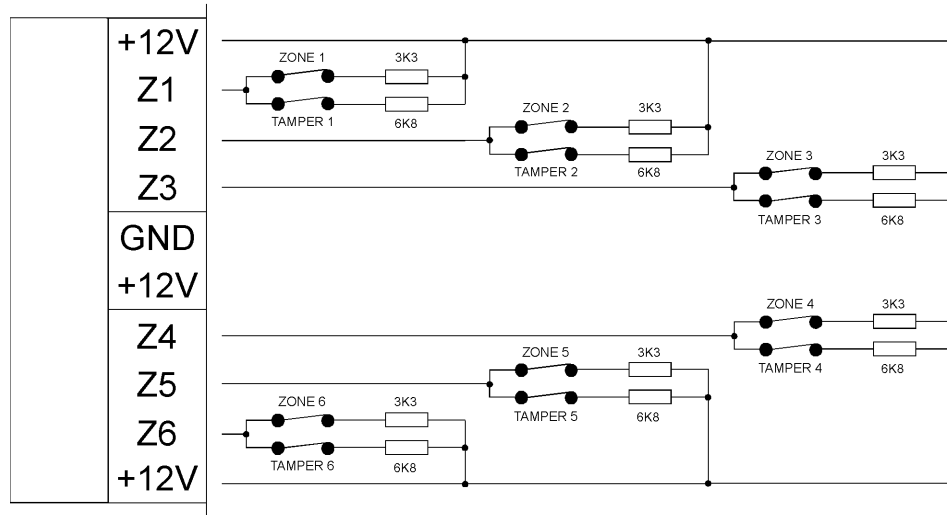
Figure 2: Wiring Diagram for Keyswitch Zone in Partitioning

Note 1: When choosing an EOL resistor value other than the default 3K3 for a non-partitioned system, the keyswitch zone must still use a 3K3 EOL resistor as shown in "Figure 1". The keyswitch zone will not operate with any other resistor value.

Note 2: When using a keyswitch zone in partitioning, to enable arming/disarming of area 2, there is no need to enable split EOL resistors when not using tamper zones. Simply wire the zone as shown in "Figure 2".

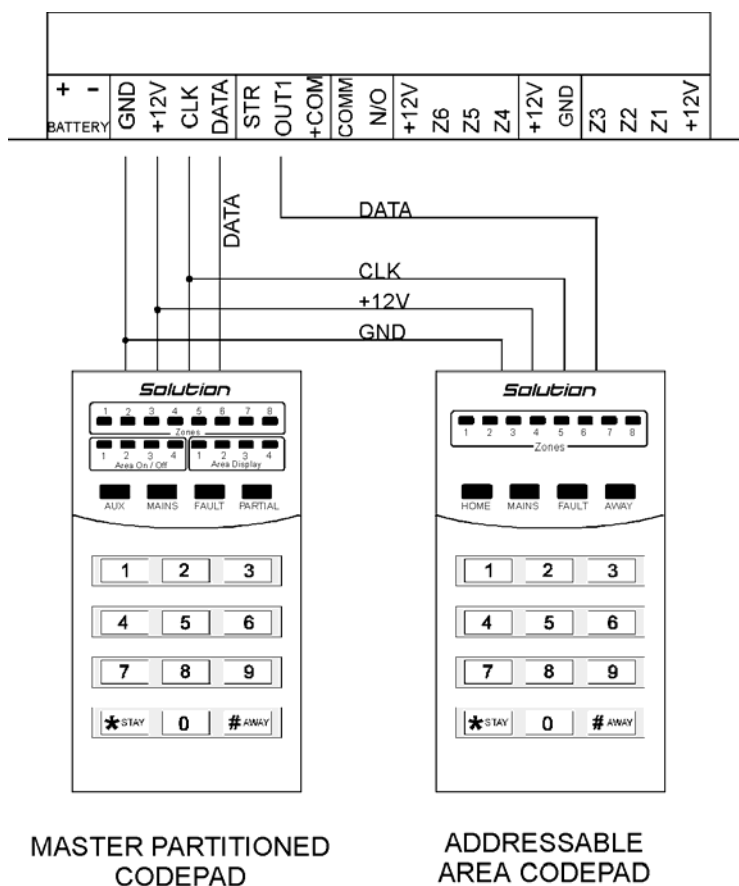
Connections Of Split EOL Resistors For Tamper Operation

Normal/Tamper zone
(3K3/6K8) configuration
using N/C switches.



If N/O switches are used both
zones will trip if either of the
N/O switches are closed

Codepad Connections For Partitioned Systems

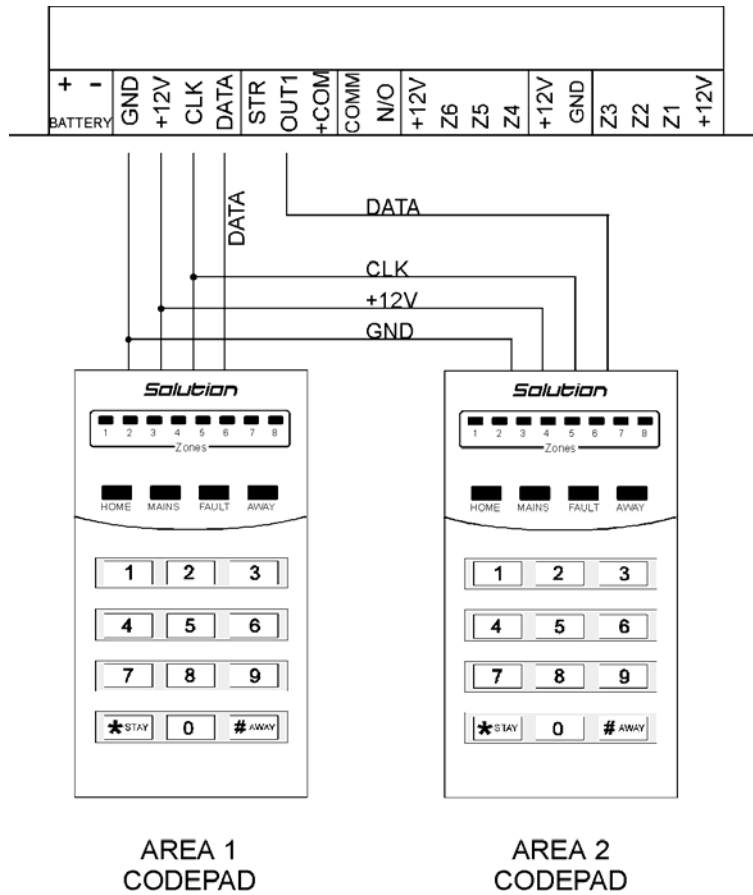


If the “Area Addressable” codepad is assigned to **Area 1**, DIP Switch 1 on the back of the remote codepad will need to be in the “ON” position. The following locations for Output 1 will need to be programmed.

[LOCATION 140 = 6, 141 = 0]

If the “Area Addressable” 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 140 = 6, 141 = 1]



The following DIP Switch settings and locations must be programmed for the two “Area Addressable” 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 182, Option Bit 1 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 location will also need to be programmed.

[LOCATION 140 = 6, 141 = 1]