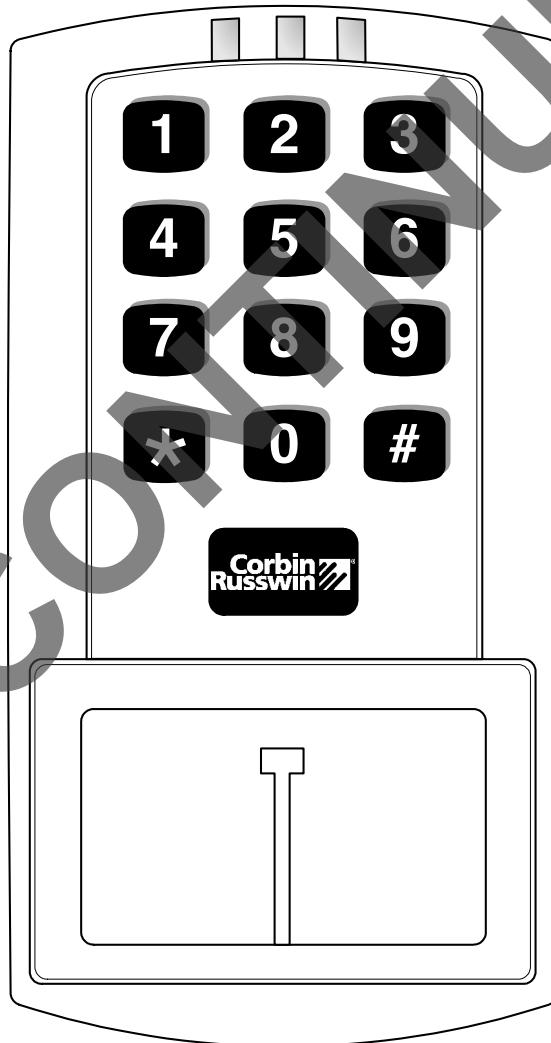


**Installation Instructions
for WM800 Reader / Controller**

FM233 11/18

Attention Installer



WARNING

This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

08/2018

For installation assistance, contact Corbin Russwin, Inc., at 1-800-810-WIRE (9473)

Installation and Wiring Instructions for Corbin Russwin WM800

Table of Contents –WM800 Reader / Controller

Section 1: Introduction

1.1 General Description/Requirements	3
1.2 System Requirements	3
1.3 Description/Features	4
1.4 Supplied Parts/Optional Items	5
1.5 WM800 Specifications	6

Section 2: Installation

2.1 WM800 Component Overview	8
2.2 Performing a Wall Mount Installation	9
2.3 Preventing Possible Water Problems	10
2.4 Performing a Glass Mount Installation	11
2.5 Performing a Secure Installation (Keypad/controller away from prox antenna)	12

Section 3: Wiring

3.1 Connecting the Communication Board to the Main Control Board	15
3.2 Main Control Board Wiring Connection Overview	16
3.3 Communication Board Wiring Connection Overview	17
3.4 Wiring the Main Relay to Fail Secure Lock	18
3.5 Wiring the Main Relay to Fail Safe Lock	19
3.6 Wiring the Auxiliary Relay for Alarm Shunt	20
3.7 Wiring the Auxiliary Relay for Door Ajar or Forced Door Alarm	21
3.8 Wiring the REX (Request to Exit) Switch	22

Section 4: Programming

4.1 Default Settings	23
4.2 User Type Definitions	24
4.3 Program Commands	25
4.4 LED Indicators/Sounder Operations	29
4.5 Testing the Controller/Keypad	30

Installation and Wiring Instructions for Corbin Russwin WM800

Section 1: Introduction

1.1 General Description/Requirements

This equipment is designed to be installed and serviced by security and lock industry professionals.

Access system programming: This access system possesses infrared communications capability and can be managed as part of an overall access control system with Accessware™ software. See section 1.2 for system requirements.

Optional Keypad Programming: The WM800 unit can be programmed manually using the keypad on each unit and without the use of a personal computer (PC) and software. This manual contains the optional keypad programming instructions (section 4). Keypad programming can be helpful to get a door or doors up and running prior to having the availability of the host computer. In all cases, the personal computer programming options supersede the keypad programming options.

Information to User

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1.2 System Requirements

Access system programming -System Requirements

- Accessware™ PC with Access HH PDA software

PC Hardware Requirements

- IBM-compatible Pentium-class computer
- 30MB available hard disk space
- VGA monitor or better, 800x 600 resolution recommended
- CD-ROM or DVD-ROM drive
- Mouse

Operating System List

Windows 98; Windows 2000; Windows XP

Installation and Wiring Instructions for Corbin Russwin WM800

1.3 Description/Features

The WM800 unit is a single opening (single or pair of doors) access system that is managed from a personal computer using Accessware™ software. The unit is equipped with infrared communications which allow the unit to be programmed with Access HH PDA software. In addition, the unit can be programmed manually with its keypad.

The WM800 unit is unique since no separate controller is needed and there is no need to run cables from a reader to a controller. The unit is self-contained and includes built in HID proximity technology, a keypad, and the controller.

Important features include:

- Managed with Accessware™ software loaded on a PC (personal computer)
- Programmed with Access HH PDA software
- No separate controller to install
- Eliminate costly reader wiring
- 2000 users per door
- 2000 event audit trail
- Integrated-HID proximity reader
- Card, code, card and code
(Card = proximity card, fob or tag)
- Can locate proximity antenna 10 ft from controller
- Indoor and outdoor (gasket included) applications
- Glass mount kit
- Door monitor relay
- Main relay for lock
- Programmable auxiliary relay
(For Alarm Shunt, Door Ajar, or Forced Door)
- Local sounder for alerts
- Internal and external REX (Request to Exit) capability

Installation and Wiring Instructions for Corbin Russwin WM800**1.4 Supplied Parts/Optional Items**

Quantity	Description
1	Keypad/control unit assembly with Prox Sensor, Backplate, hex socket screw
1	Filler Piece/REX Button
1	Press to Exit Label
4	Wall Anchors
4	Mounting Screws
1	Antenna Backplate for remote mounting
1	Silicone Rubber dogbone
4	Self-Adhering Pads (for glass mounting)
1	Installer Guide
4	Cable Assemblies
1	Tamper Screw (spanner)
1	Gasket
	Optional Items
	Replacement Battery: Panasonic BR1225 or equivalent
	Accessware™ PC software with Access HH PDA software
	ISO Prox II
	ProxCard II
	DuoProx II
	MicroProx tag
	ProxKey II

Installation and Wiring Instructions for Corbin Russwin WM800**1.5 WM800 Specifications**

ELECTRICAL	12 or 24 VDC, linear filtered and regulated power supply 500 mA (not including locking device or peripherals)
WIRING (by others)	
Remote Antenna Cable	ALPHA 1174C (22AWG) 4-wire, stranded (this is required ONLY if you choose to remote the antenna 10 feet Max away from the keypad/controller)
Power Supply Cable	18AWG -22AWG 2-wire stranded (depends on distance)
Door Lock Cable	18AWG -22AWG 2-wire stranded (depends on distance)
Door Monitor Cable	18AWG -22AWG 2-wire stranded (depends on distance)
REX Cable	(If using remote switch) 2-wire stranded
MECHANICAL	
Height	5.25 in (13.3 cm)
Width	2.75 in (7 cm)
Depth	1.375 in (3.5 cm)
RELAY OUTPUT	
	Main Relay (switches up to 2A)
	Aux Relay (switches up to 2A)
MONITOR INPUTS	
	Door Position (Normally Closed, dry contact)
	Request to Exit (REX, Normally Open, dry contact)
LEDs	Bi-Color (red/green)
	Yellow
COMPATIBLE PROXIMITY CARDS	Any HID card can be programmed by keypad presentation. HID 26, 33, 34-bit, and corporate 1000 (35-bit) cards can be programmed through software

Installation and Wiring Instructions for Corbin Russwin WM800

UNIT CAPACITY	
Users	2,000 users maximum; each user can have a card/tag, a PIN code, or a card/tag plus a PIN code
Audit Trail Transactions	2,000 transactions maximum; each transaction includes, date, time, user, site, door, event, serial #
Lock Time	1- 255 seconds
Lock Mode	Access Time or Passage
ALARM OUTPUT	One of these three events can be programmed: Alarm Shunt Relay, Forced Door Relay or Door Ajar Relay
USER ACCESS CONFIGURATIONS	
	Code ONLY
	Card ONLY
	Code OR Card
	Code AND Card
PROGRAMMABLE USER TYPES	Each user is assigned one of the following user types:
	0-Passage
	1-Standard access
	3-Lockout
	4-Extended time
	5-Single use
	6-Relock
	7-Emergency
	8-Communication unlock
SYSTEM USES/ INSTALLATION CONFIGURATIONS	Suitable for remote locations, indoors or outdoors, wall mounted, glass mounted, or secure installation
ENVIRONMENTAL	Indoor or outdoor
Operating Temperature	-22° to 150° F (-30° to 65° C) for 12 VDC Operation -22° to 122° F (-30° to 50° C) for 24 VDC Operation
Operating Humidity	5% to 95% relative humidity, non-condensing

Installation and Wiring Instructions for Corbin Russwin WM800

Section 2: Installation

2.1 WM800 Component Overview

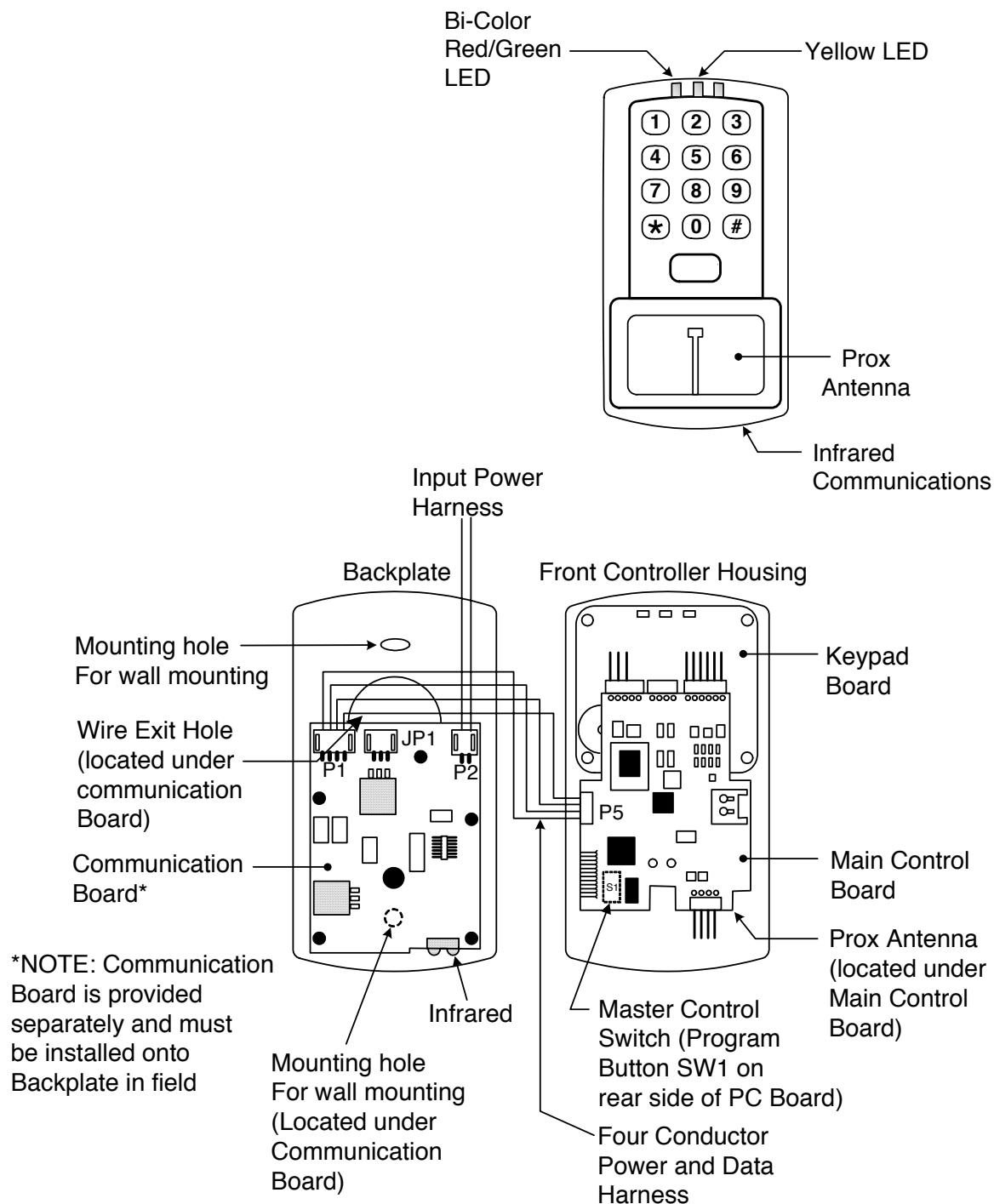


Figure 1 WM800 Component Overview

Installation and Wiring Instructions for Corbin Russwin WM800

2.2 Performing a Wall Mount Installation

Typically, the WM800 unit is mounted on a flat, surface (drywall, masonry, wood, etc.).

A single-gang electrical box (or back box) can be used. Typically, the WM800 unit is wall mounted outside the access area on the unsecure side of the door.

Figure 2 illustrates the backplate on the WM800 unit used for wall mounting. Two single-gang box holes align with two corresponding holes in the single-gang box. A wire exit knockout is supplied through which the WM800 wiring is pulled.

1. Secure a single-gang box to the desired location.
2. Punch out the two holes for single-gang box connectors (Figure 2) on the controller backplate of the WM800 unit. Punch out wiring exit hole(s) as required.
3. Disconnect the controller backplate of the WM800 unit from the front keypad/controller. Align the two single-gang box connectors on the controller backplate over the two corresponding holes on the single-gang box, previously secured at step 1.
4. Secure the backplate to the single-gang box by inserting/tightening two screws into the two single-gang box holes. For exterior applications, install the supplied gasket between the WM800 backplate and wall (Figure 3).
5. Pull the WM800 wiring through the wiring exit holes as appropriate.
6. Install the communication board onto the controller backplate using the supplied five screws.
7. Refer to Wiring Instructions (section 3), to connect the communication board to the main controller board and appropriate wiring for the application.
8. Connect the front keypad/controller to the back housing.
9. Install either the hex screw using the supplied hex wrench or the spanner screw supplied in the hardware pack. Use a #6 spanner bit (not included) for the spanner screw.

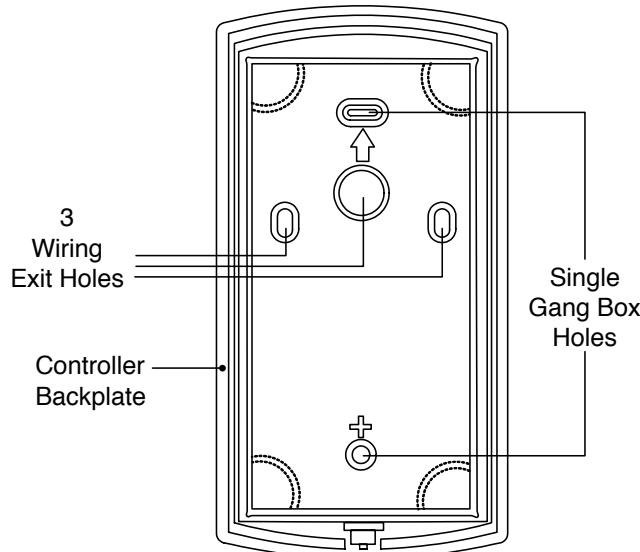


Figure 2 Backplate

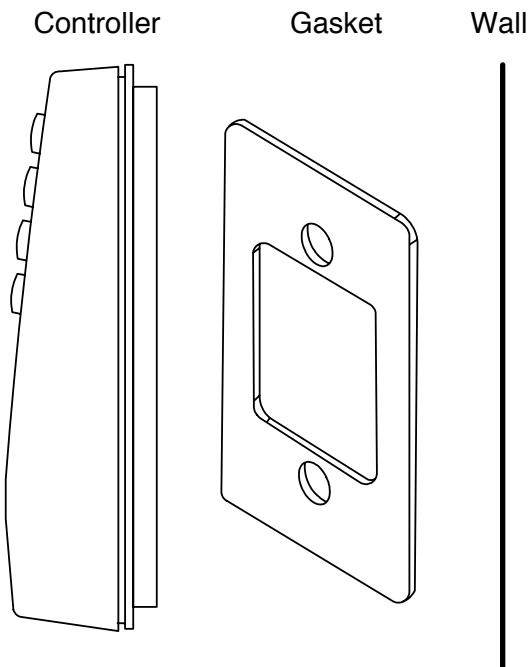
Installation and Wiring Instructions for Corbin Russwin WM800

Figure 3 Gasket Installation/Exterior Applications

2.3 Preventing Possible Water Problems

To avoid damage to electronics caused by water when used on exterior applications, follow these instructions carefully.

1. Do NOT seal the cover and base together.

Keypads are designed to direct any water that enters the two constituent pieces, base and cover, towards the bottom and out a drain or weep hole.

2. Use the supplied gasket for exterior applications.

3. Use silicone to seal wire runs and mounting holes.

4. Bend the wires before they enter the case to form a drip loop.

Water can follow the wires to the connection point of the circuit board and short out the terminals to which the wires are connected.

Installation and Wiring Instructions for Corbin Russwin WM800

2.4 Performing a Glass Mount Installation

Figure 4 shows the four pressure-sensitive adhesive pads and the two side cut-outs used for this installation. In this configuration, the WM800 unit is affixed with the four self-adhesive pads to the glass or the glass window adjacent to the controlled door being accessed, on the interior side of the glass. One of the two side cut-outs is used to bring the wires out of the side of the WM800 case.

1. Disconnect the back housing from the front keypad/controller. Remove the tape from the four self-adhesive pads on the back housing and apply the pads to the four corners of the backplate.
2. Affix the back housing to the glass door or the glass window adjacent to the controlled door being accessed on the interior side of the glass.
3. Determine which of the two side cut-outs on the back housing to use for the wiring and open that cut-out using the appropriate cutting tool.
4. Pull the wiring through the selected side cut-out as required.
5. Install the communication board onto the controller backplate using the five screws provided.
6. Refer to Wiring Instructions (section 3), connect the communication board to the main controller board and appropriate wiring for the application.
7. Connect the front keypad/controller to the back housing.
8. Install either the hex screw using the supplied hex wrench or the spanner screw supplied in the hardware pack. Use a #6 spanner bit (not included) for the spanner screw.

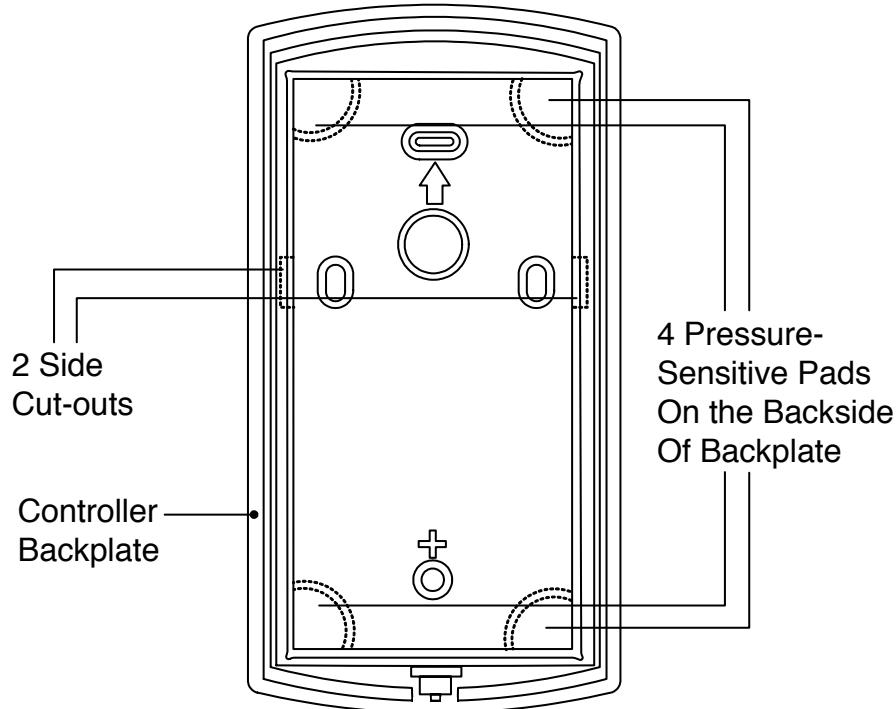


Figure 4 Performing a Glass Mount Installation

Installation and Wiring Instructions for Corbin Russwin WM800

2.5 Performing a Secure Installation (keypad/controller away from prox antenna)

In this configuration, the WM800 prox sensor housing is removed from the keypad/controller and located a maximum of 10 feet away. The controller/keypad is located inside a secure area.

1. Disconnect the backplate of the WM800 unit from the front keypad/controller.

- When handling the main printed circuit board, to guard against possible static discharges, touch a grounded object BEFORE touching the WM800 unit. Remove the main printed circuit board by pressing the two spring tabs in the direction of the arrows as shown in Figure 5. Be careful with the wires.
- Pull on the main circuit board and remove Pin connector P4 (a 4-pin connector) from the bottom of the main board. A ribbon cable now holds the main board to the keypad board. **DO NOT** pull this ribbon cable out of its connector! Once the main board is removed, you can access the interior of the antenna.

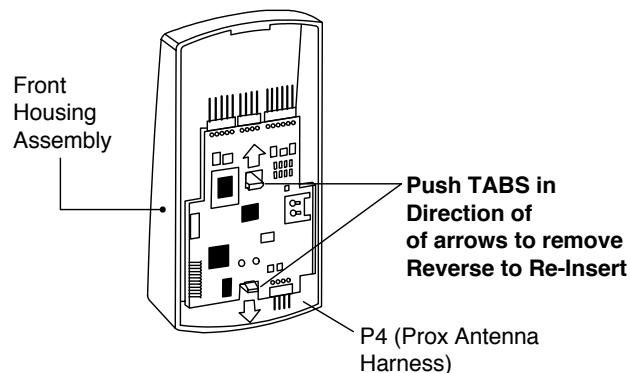


Figure 5 Removing/Inserting Printed Circuit Board

2. Remove the antenna housing from the keypad/controller by pressing the four secure tabs inward (see Figure 6) until the sensor housing pops out.

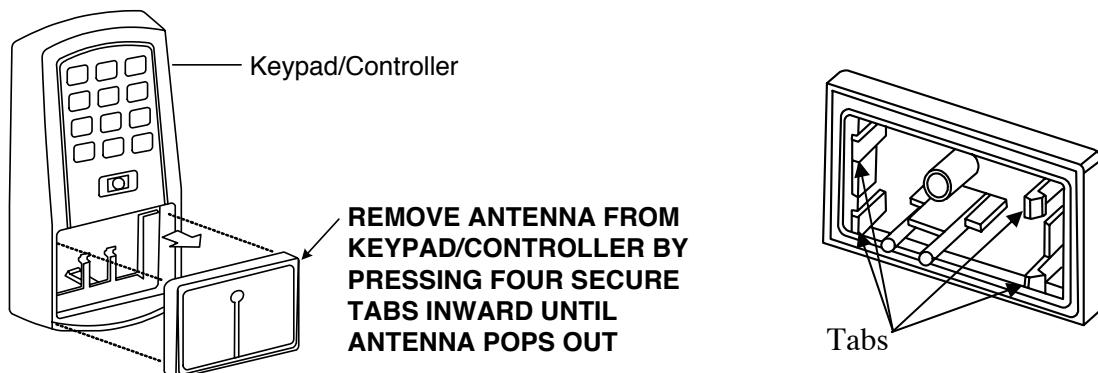


Figure 6 Removing Prox Antenna

Installation and Wiring Instructions for Corbin Russwin WM800

3. Prepare the wiring and extension wiring as follows:

- Cut off the plastic connector of the WM800 sensor housing harness (Figure 7).
- Splice the recommended remote antenna cable Alpha 1174C (22AWG), field supplied **10-foot maximum length**, to the properly cut antenna cable using standard electrical techniques.

REMOTE INSTALLATION SITE

MAX 10 feet from Keypad /Controller

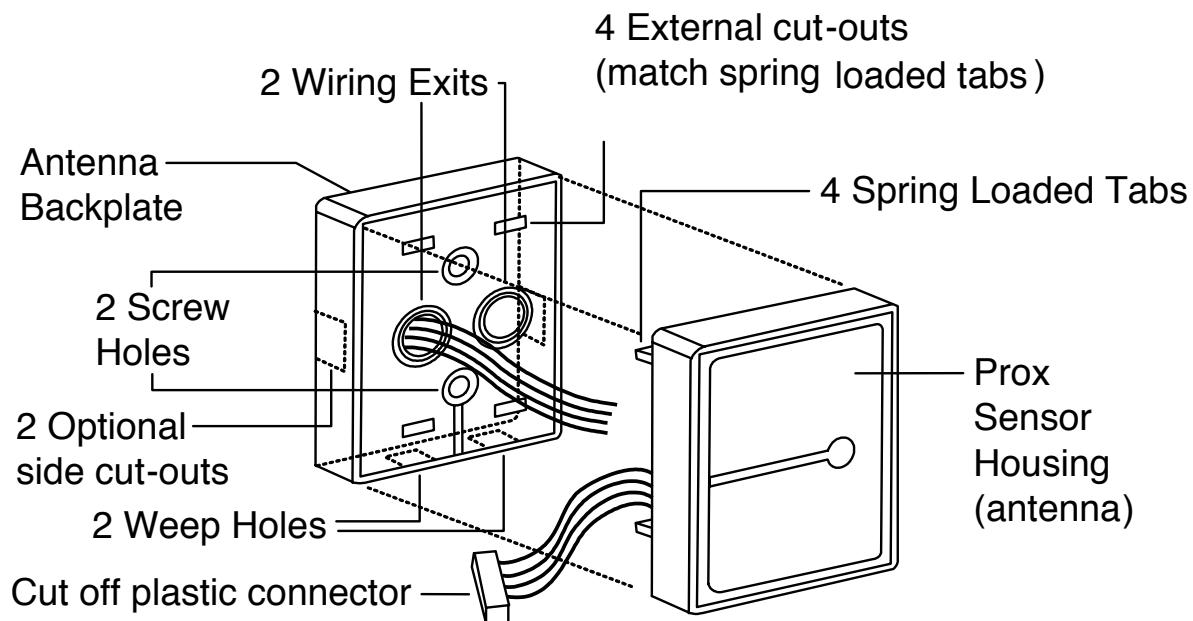


Figure 7 Remote Installation of Prox Antenna

4. Mount the antenna backplate in a vertical orientation (Figure 7) and secure it to the wall through the two screw holes using the two screws provided. Ensure that the two weep holes, provided to remove possible moisture, are positioned on the bottom. The wiring exits in the antenna backplate. (Four external cut-outs on the antenna backplate match the four spring-loaded tabs on the antenna.)

NOTE: Two side cut-outs are furnished on the antenna backplate for the wiring, if the installation does not permit the wiring to run through the wall. These must be cut out to be used.

- Once the antenna backplate is mounted properly, align the antenna to the backplate and connect the antenna to the antenna backplate. The large tab in the center of the antenna assembly must be broken off before being attached to the antenna backplate.

5. Refer to the Wall Mount Installation instructions and Figure 2 for backplate and communication board installation.

Installation and Wiring Instructions for Corbin Russwin WM800

6. Run the antenna wiring back to the secure keypad/controller and connect it to the main circuit board, using the 10-inch 4-wire harness (red, black, white, and white) that you plug into connector P4 on the controller board. Connect the red wire of the antenna to the red wire of the P4 harness, etc. Seal the wire holes with silicone.
7. Select Filler or Request to Exit (REX) operation as follows (Figure 8):
 - If you elect to use the filler piece as a REX switch, return to the keypad/controller and break off two tabs on the filler piece as illustrated in Figure 8. The filler piece replaces the antenna on the front of the keypad/controller for secure installations.
 - **If the filler piece is not to be used as a REX switch, DO NOT remove the two tabs.**
 - Select Filler or REX operation and affix the appropriate provided label to the filler piece.

For Filler operation, no tabs are broken off the filler piece, which merely sits in place of the remotely located antenna, once the main circuit board and cabling are replaced.

For REX operation, break off the labeled tabs, which allows a spring-loaded tab to engage the REX switch on the main circuit board and open the door.

 - Replace the main circuit board into the keypad/controller and Pin connector P4 to the main circuit board.
 - Connect the front keypad/controller of the unit to the back housing.
 - Secure with a hex socket screw using the supplied hex wrench, or secure with a tamper screw (optional tool required).

NOTE: REX is off by default. It can be turned on manually see page26 step 5, action7.

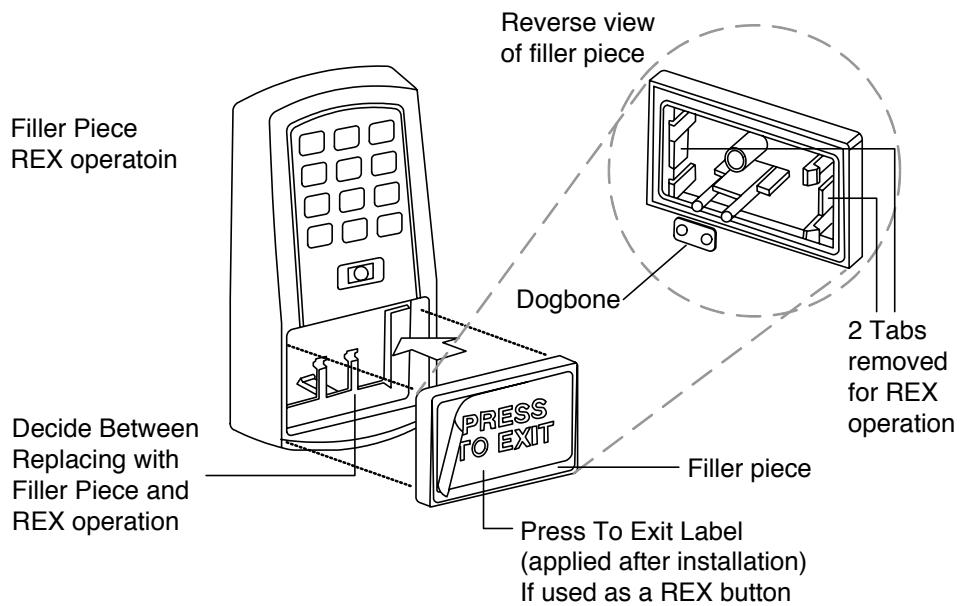


Figure 8 Filler Piece or Internal REX Installation

Installation and Wiring Instructions for Corbin Russwin WM800

Section 3: Wiring

3.1 Connecting the Communication Board to the Main Control Board

The WM800 is composed of two circuit boards, the control board and the communication board, which is mounted in the rear keypad housing. The communication board contains the infrared communications circuitry used for communicating to a PDA device, as well as the power supply. **The power supply circuit should be powered with 12 or 24 VDC. This is selectable by jumper JP1; 24 VDC is the factory setting. For details, see Figure 9.**

The WM800 unit is powered through P2 on the communication board. Connector P1 on the communication board then provides power to the keypad control board using the supplied wire harness; this connects to P5 on the control board. The two data wires for infrared communications are also on this same wire harness. See Figure 9.

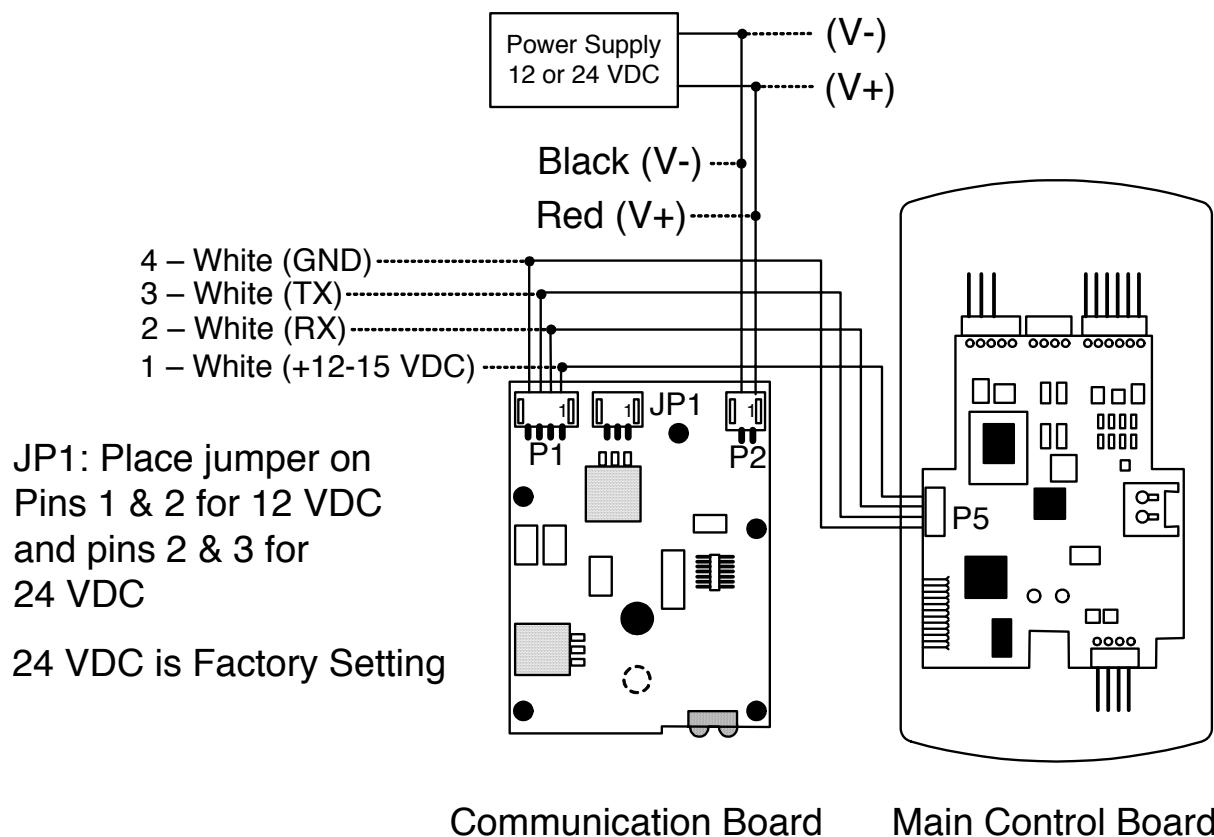


Figure 9 Connecting Communication Board to Main Control Board

Installation and Wiring Instructions for Corbin Russwin WM800

3.2 Main Control Board Wiring Connection Overview

Figure 10 below illustrates the Pin connectors on the WM800 main circuit board. Specifications are listed on page 6.

* See Note below

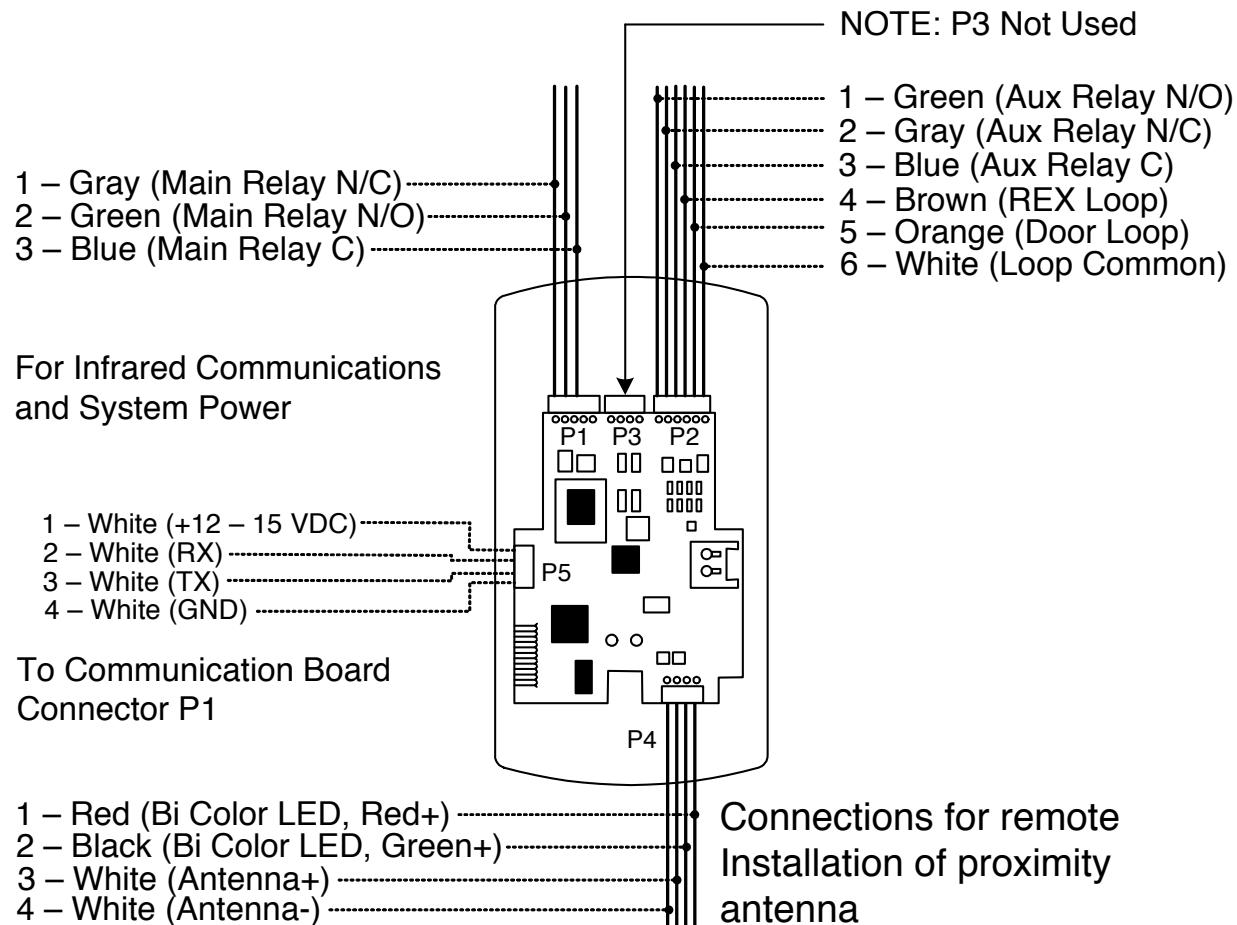


Figure 10 Identifying Pin Connectors (Main Control Board)

NOTE: P2—Pins 1 and 2 can be wired at the installer's option for one of the following alarm outputs: Alarm Shunt, Forced Door, or Door Ajar.

[Mandatory: If you do not wish to install door contacts, twist the white and orange wires together. **If this is not done, REX input will not work.]**

Installation and Wiring Instructions for Corbin Russwin WM800

3.3 Communication Board Wiring Connections Overview

Figure 11 below illustrates the pin connections on the WM800 communication board.

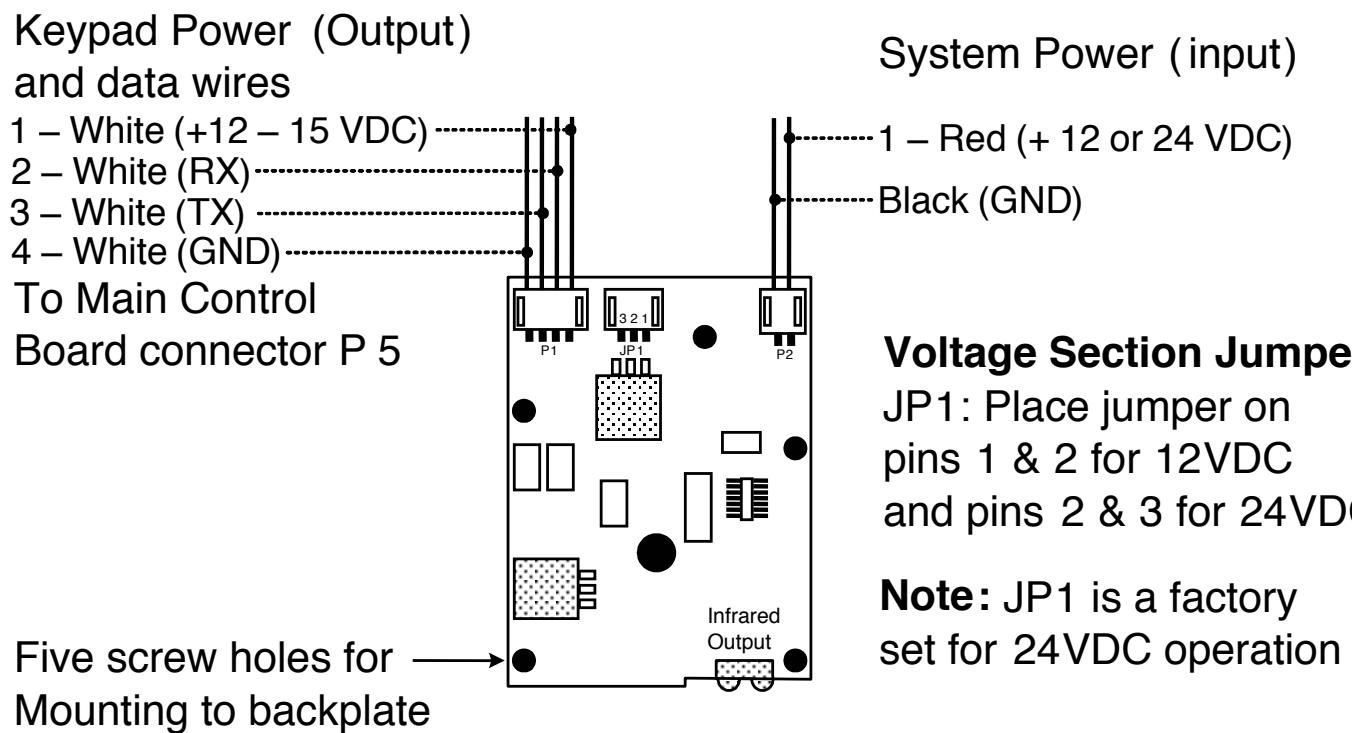


Figure 11 Identifying Pin Connectors
(communication board)

Installation and Wiring Instructions for Corbin Russwin WM800

3.4 Wiring the Main Relay to Fail Secure Lock

The door lock is wired to connector P1 on the WM800 main circuit board.

Power for the WM800 unit should be powered with a 12 or 24 VDC linear, filtered, and regulated power supply. It is typical for the chosen power supply to power BOTH the WM800 unit and the selected locking device. When using one power supply for both the WM800 unit and locking device, be sure to include both devices in your current requirements calculation.

NOTE: We recommend that you ground the power supply to earth ground.

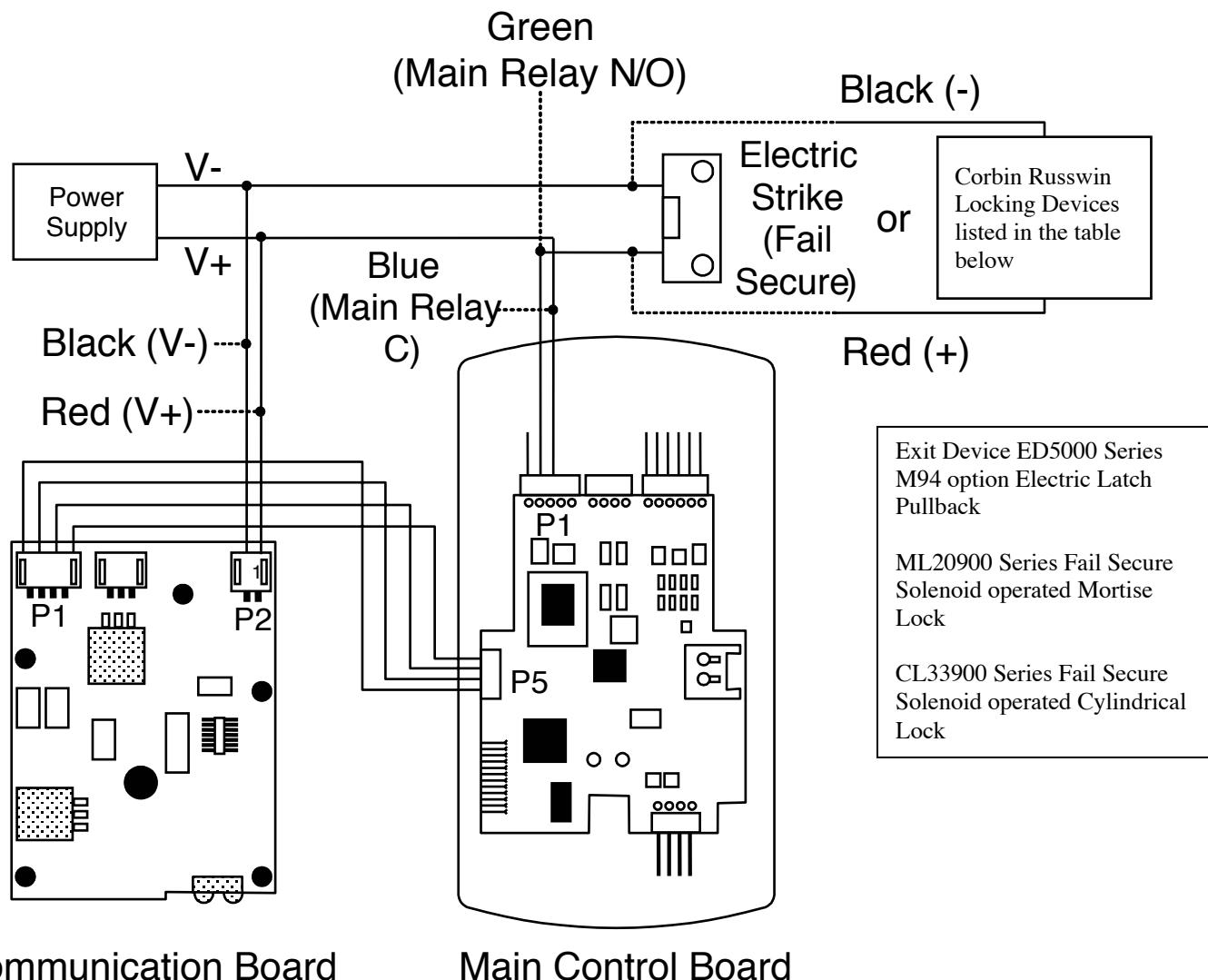


Figure 12 Fail Secure Wiring Diagram

Installation and Wiring Instructions for Corbin Russwin WM800

3.5 Wiring the Main Relay to Fail Safe Lock

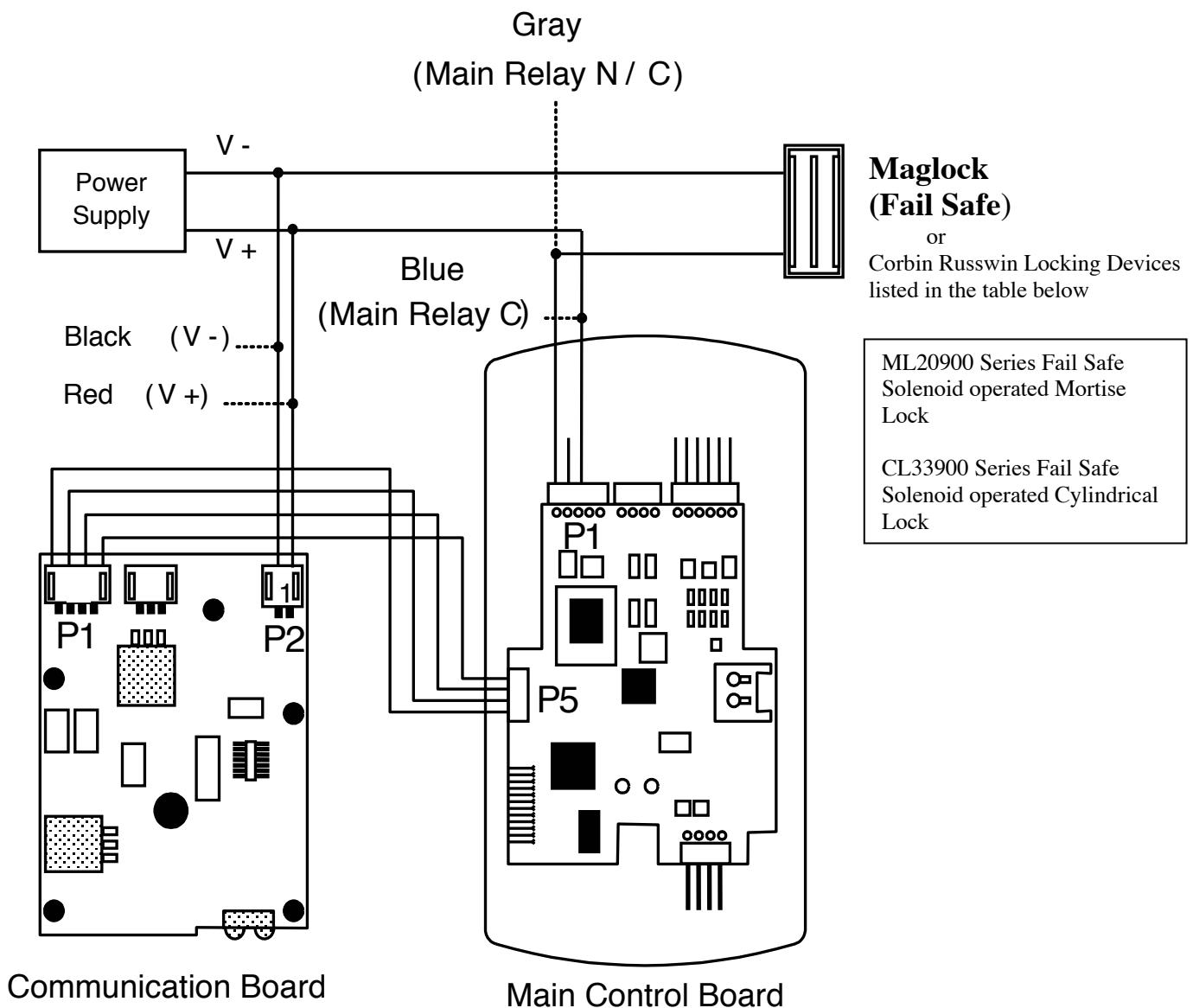


Figure 13 Fail Safe Wiring Diagram

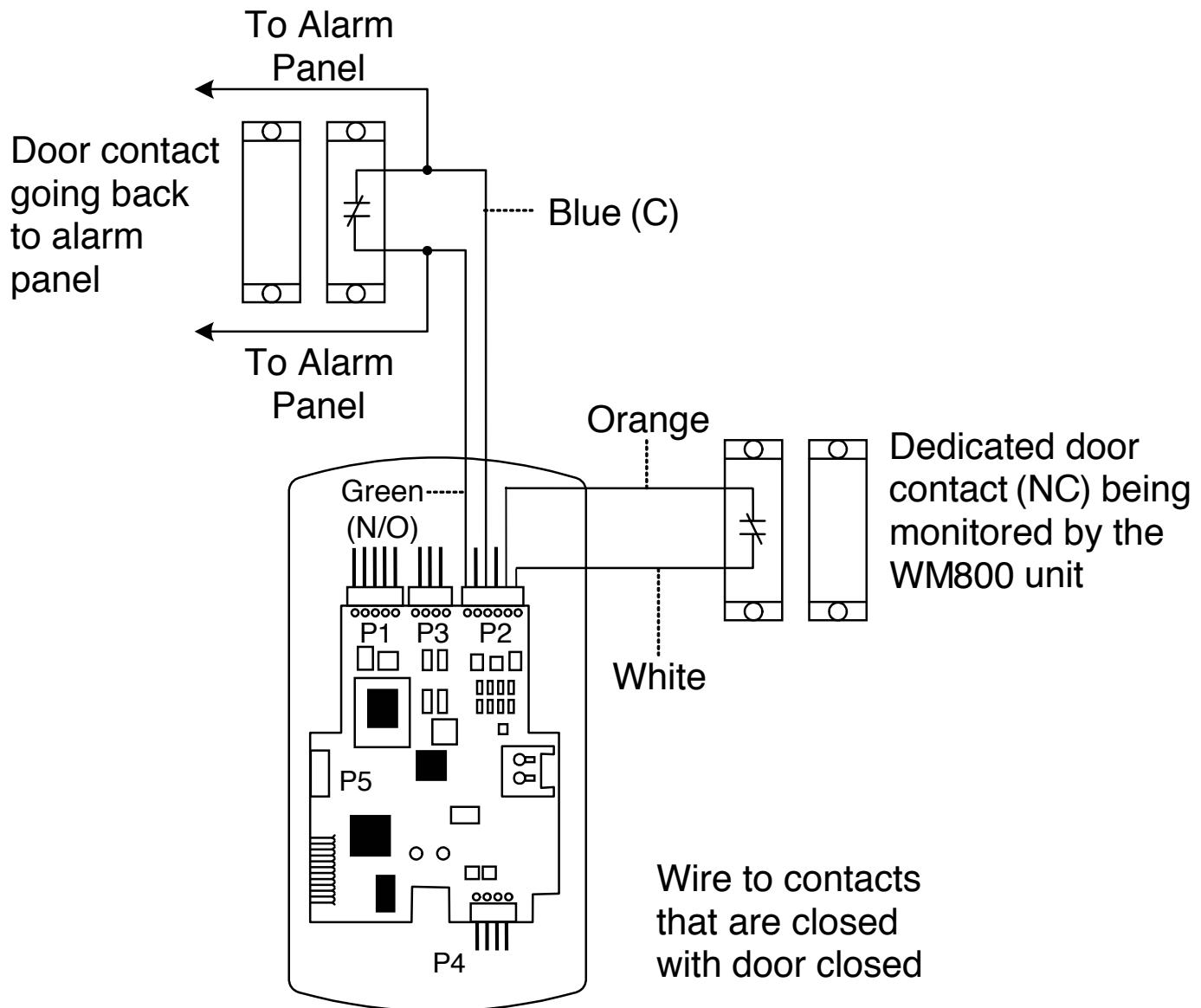
Installation and Wiring Instructions for Corbin Russwin WM800**3.6 Wiring the Auxiliary Relay for Alarm Shunt**

Figure 14 Wiring Auxiliary Relay for Alarm Shunt

Installation and Wiring Instructions for Corbin Russwin WM800

3.7 Wiring the Auxiliary Relay for Door Ajar or Forced Door Alarm

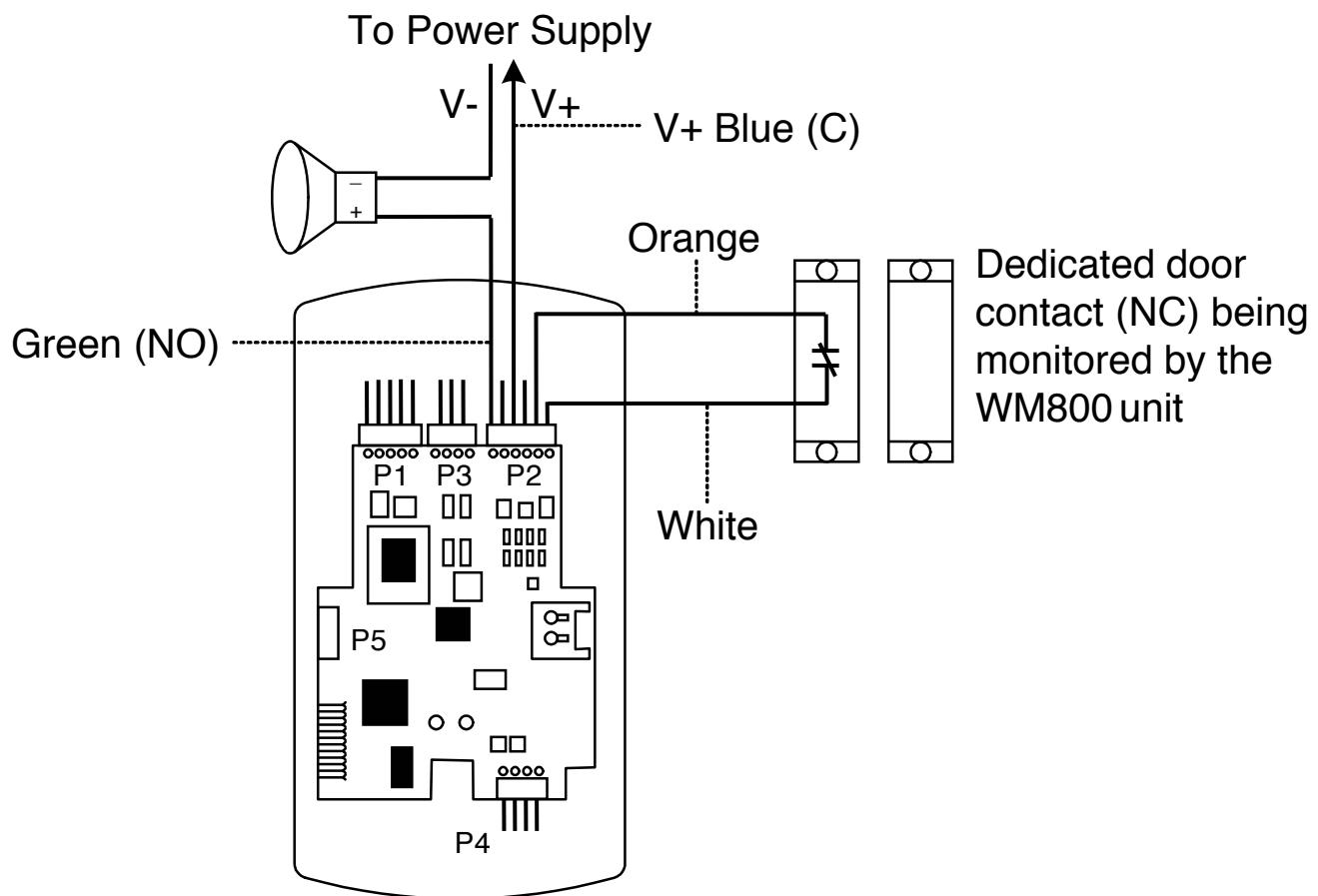


Figure 15 Wiring Auxiliary Relay for
Door Ajar/Forced Door Alarm

Installation and Wiring Instructions for Corbin Russwin WM800

3.8 Wiring the REX (Request to Exit) Switch

The WM800 unit can be wired to monitor a remote switching device, which is intended to be installed on the secure side of a door. The Request to Exit (REX) loop is a momentary input that engages the lock output for the same length of time for which it is programmed. This feature can be stored in the Transaction Log for viewing.

If you elect to perform a secure installation where the controller is mounted on the secure side of the door, you can use the filler piece as a REX switch. (See page 14, Figure. 8)

Other REX devices can be used to include a remote button placed at a receptionist desk, a press-to-exit switch on the inside of a door, or a passive infrared detector, allowing free and convenient egress. The external REX feature requires no programming; simply wire the unit as illustrated in Figure 16. To incorporate this feature, follow the steps below:

1. Turn OFF power to the WM800 unit, and then unlatch the keypad from the plastic housing.
2. Locate connector P2 on the main circuit board.
3. Plug the 6-conductor harness into connector P2. (NOTE: The 2-pin jumper on pins 5 and 6 of connector P2 must be removed first. See Figure 16.)
4. **If you do not wish to install the door contacts per Figure 16, twist the white wire and the orange wires and wire nut together. This is mandatory. If this is not done, the REX input will not function.**

NOTE: The door contact **MUST** be closed for the REX feature to work properly.

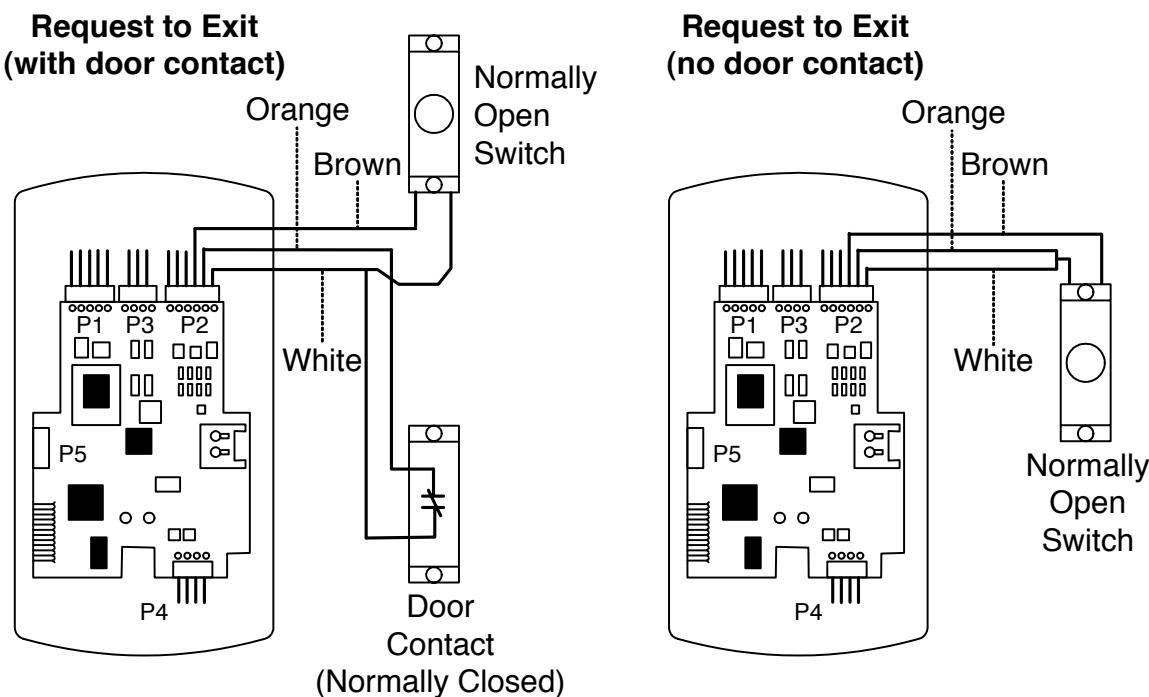


Figure 16 Wiring the REX Switch

Installation and Wiring Instructions for Corbin Russwin WM800

Section 4: Programming

4.1 Default Settings

Parameter	Default Setting
Main Relay	Lock Output
Auxiliary Relay	Alarm shunt function
Audio Alert #1	Forced Door
Audio Alert #2	Door Ajar
Master Code (user one)	1234
Main Relay energizes for	Five (5) seconds
Audible Keypress Feedback	ON
Door Ajar Output activates after	Thirty (30) seconds
Forced Door Output activates for	Ten (10) seconds

4.1.1 Master Code

The Master code is a special code stored in user location one. This code can be used to enter program mode, and has access to all programming commands.

“1234” **NOTE:** “1234” is the default master code, which Corbin Russwin recommends that you change right away. See Section 4.3 Action 1.

4.1.2 Supervisor Code

The Supervisor code is a special code stored in user location two. This code has limited access to Program mode, including commands:

- Adding/Deleting Users (commands #50, #51, #52, #53, #57, and #58)
- Enabling/Disabling Users (command #56)
- Changing Lock Output Time (command #11)
- Changing Keypad Platform Parameters 5 and 6 (command #32)

By default, user location two is empty, which means that if you need a Supervisor code, you must program one.

4.1.3 Master Code and Supervisor Code Notes

The following is a list of items that pertain only to the Master and Supervisor codes:

- The Master and Supervisor codes can only be programmed as standard user types
- The Master and Supervisor codes can be programmed as card AND code or card OR code users.
- The Master and Supervisor codes cannot be programmed as card only.

Installation and Wiring Instructions for Corbin Russwin WM800

4.2 Wall Prox User Types

User Type	Numeric ID	Description
Passage	0	Passage user causes the following: If the door is locked, it is unlocked and will remain in an unlocked state. If the door is unlocked, it is relocked. Passage mode is indicated by 6 quick beeps and a solid green LED.
Standard Access	1	Standard Access users unlock door for the lock duration programmed in command 12.
Lockout	3	Presentation of a valid credential by this user type locks out all other users in the controller. This is useful if there has been a danger identified in a particular room and you do not want anyone to enter until the danger is cleared. The state of the lock does not change when a Lockout Code is entered. To clear the Lockout condition, you must enter a Lockout Code again. During the Lockout condition, the following users are still allowed to gain access: Master, Supervisor, and Emergency user types.
Extended Time	4	Extended Time Users are like Standard users except they use the unlock duration programmed in command 32, parameter 3. The default unlock time is 10 seconds.
Single Use Code	5	Presentation of a valid credential by the user type will unlock the door as a standard user will, but the code is accepted by that particular controller only once.
Relock	6	Relock codes are used to relock the door when a passage or auto-unlock is active. Entering 00 # prior to a relock code allows auto-unlock to be re-triggered, when First In is enabled. Relock users cannot unlock the door.
Emergency	7	Emergency users are special users that cannot be locked out and cannot be disabled. The user also uses the unlock duration programmed in command 32 parameter 3. The default unlock time is 10seconds.
Communication Unlock	8	Communication Unlock user is used to unlock communications, which allow the transferring of data to/from the PDA to the WM800 unit. This code does not unlock the door.

Installation and Wiring Instructions for Corbin Russwin WM800

4.3 Program Commands

In addition to personal computer (PC) programming, the WM800 unit can be programmed manually using the keypad on each unit and without the use of a personal computer and software. Keypad programming can be helpful to get a door or doors up and running prior to having the availability of the host computer. In all cases, the personal computer programming options supersede the keypad programming options.

Defaults are in bold.

Action Desired	Press	Details
To enter program mode	99 # (Master Code) *	Default Master code = 1234. Yellow LED blinks slowly
1. Change master code Code-only operation (example, 4321 master code)	99 # (Master Code) * 1 # (new code) * (repeat code) * * *	Example: 1 # 4321 * 4321 *
2. Assign outputs (see note below)	99 # (Master Code) * 10 # virtual output # physical output # * * *	<p>NOTE: A Virtual Output is simply an output that can be assigned to a physical output.</p> <p>Default Output Assignments</p> <p>Lock is assigned to Main Relay</p> <p>Alarm Shunt is assigned to Auxiliary Relay (Aux Relay can be programmed for Alarm Shunt, Door Ajar or Forced Door)</p> <p>Forced Door is assigned to Audio Alert #1</p> <p>Propped Door is assigned to Audio Alert #2</p>
	Virtual Output 1-Lock 2 -Alarm Shunt 3-Door Ajar 4-Forced Door	Entering a zero (0) for a virtual output disables the physical output
	Physical Output 1 -Relay1(Main) 2 -Relay 2 (Aux) 5 -Audio Alert #1 6-Audio Alert #2	Note: Door Ajar & Forced Door can only be performed manually
3. Set lock output duration (main relay)	99 # (Master Code) * 11 # tt # 0 # ***	tt = number of seconds to operate lock on access (1 through 255) defaults to 5 seconds
4. Delete users	99 # (Master Code) * user-location # ***	

Installation and Wiring Instructions for Corbin Russwin WM800

Action Desired	Press	Details
5. Set/clear keypad programming options	99 # (Master Code) * 30 # option # set/clear # *** Option Set/Clear 0-audio keypress feedback 0=off, 1=ON 1-visual keypress feedback 0=off, 1=ON 2-auto entry enable 0=OFF , 1=on 3-Card and PIN required for Program mode 0=OFF ,1=on 5-user lockout enable 0=off, 1=ON 7-internal REX select 0=OFF ,1=on 8-user lockout select 0=BY LOCATION , 1=by group 9-timezones select 0=OFF ,1=on 10-holiday time zone midnight crossing 0=off, 1=ON 11-auto-unlock select 0=OFF ,1=on 12-first-in auto-unlock 0=OFF ,1=on 13-daylight savings time select 0=off, 1=ON 15-daylight savings time format 0=USA , 1=European 16-anti-passback 0=off, 1=ON	
6. Change keypad parameters	99 # (Master Code) * 32 # parameter # value # ***	See options below
	Parameter Value 0-error lockout threshold 1-50 (def=3) 1-error lockout duration 1-255 (def=10 sec) 3-extended unlock time 1-255 (def=10 sec) 4-site code (for cmd 51, 57) 0-255 (def=11) 5-user timezone mask 0-255 (def=255) (for programming users through the faceplate) 6-user lockout group 0-15 (def=4) 7-lockout by group operand 0-3 (def=0) (see below) 0=lockout users in all other groups 1=lockout users in this group (except lockout users) 2=lockout users in higher numbered groups 3=lockout users in lower numbered groups 8-anti-passback delay 2-240 (1/4 second increments, default = 4 or 1 second)	
7. Set/clear auto-unlock mask	99 # (Master Code) * 38 # autz # set/clear # ***	autz -auto-unlock timezone (1-8) Entering a 1 sets the timezone as auto-unlock and a 0 clears it
8. Restore system defaults (master user and system options/parameters only)	99 # (Master Code) * 40 # 00000 # 00000 # * * *	Does not erase users.
9. Set system time	99 # (Master Code) * 41 # hhmm # 0 # ***	hhmm=hour/minute, 24-hr format

Installation and Wiring Instructions for Corbin Russwin WM800

Action	Press	Details
10. Set system date	99 # (Master Code) * 42 # mmddyy # dow # * * *	mmddyy=month, date, year; dow=day of week, 1=Sunday, etc.
11. Set door number	99 # (Master Code) * 43 # nnnnn # 0 # * * *	nnnnn=door number Default=0001 (max number=65535)
12. Set Door Ajar output time	99 # (Master Code) * 44 # ttt # 0 # ***	ttt=Door Ajar time, to nearest 10's seconds, entered as 00-990; default=30 secs entering 00 disables Door Ajar
13. Set forced door output time	99 # (Master Code) * 45 # ttt # 0 # ***	ttt=forced door time, to nearest 10's seconds, entered as 00-990 (00 latches it); default=10 secs
14. Clear all memory and restore default settings	99 # (Master Code) * 46 # 00000 # 00000 # ***	
	User Types 0-passage 1-standard access 3-lockout 4-extended time 5-single use 6-relock code 7-emergency 8-comm. unlock	Lockout users are defaulted to by location. To ensure all users are locked out, program to location 4.
15a. Code only user	99 # (Master Code) * 50 # type # location # key pin *keypin **	
15b. Card only user by presentation	99 # (Master Code) * 50 # type # location # *** <present card> *	
15c. Card AND code user	99 # (Master Code) * 50 #type#location #key pin*keypin <present card> **	
15d. Delete user	99 # (Master Code) * 50 #0#location#***	

NOTE: Card site codes must be programmed before programming command 51 (see command 32).

16. Program 26-bit card only user without presenting card	99 # (Master Code) * 51 #type # location # card pin *card pin **	Location must be greater than 2; master/supervisor cannot be set as card only
17. Program card OR code user	99 # (Master Code) * 52 # type # location # key pin * keypin * <present card> *	

Installation and Wiring Instructions for Corbin Russwin WM800

Action	Press	Details
18. Program consecutive card only users by presentation	99 # (Master Code) * 53 # type # start user # ** <present card> <present card>... *	Start user must be greater than 2; master/supervisor cannot be set as card only
19. Enable/disable users	99 # (Master Code) * 56 # enable/disable # user # * * *	0= Enables that user 1= Disables that user; master user cannot be disabled; an unprogrammed user cannot be enabled or disabled (generates a program error)
NOTE: Card site codes must be programmed before programming command 57 see page 26 command 32.		
20. Program block of 26-bit card only users without presenting cards	99 # (Master Code) * 57 #number of users #start user #card pin * card pin * *	Start user must be greater than 2; master/supervisor cannot be set as card only; uses site ID set in command 32, parameter 4
21. Delete block of consecutive users	99 # (Master Code) * 58 # start user # start user # number of users * number of users * *	
22. Set/clear event log mask	99 # (Master Code) * 73 #event #set/clear #***	See options below; all events are logged by default unless stated otherwise below
	Event 1-access denied invalid PIN 2-program denied 4-REX 5- Door Ajar 6-Door Closed 7-Forced Door 17-access granted to user #N 19-access denied to user #N, bad time zone 20-toggle mode activated by user #N (passage) 21 -toggle mode de-activated by user #N (passage de-activated) 22 -1st in auto-unlock triggered by user #N 23 -door relocked by user #N 24 -user lockout enabled by user #N 25 -user lockout disabled by user #N 26 -access denied to user #N -user is disabled 27 -card/code mismatch 29 -program mode started by user #N 30 log erased by user #N 32 -unprogrammed card data 33 -unprogrammed code data 50 log retrieved 51 -access denied to user #N, user group lockout	Events 30 and 50 cannot be disabled Events 32 and 33 are disabled by default

Installation and Wiring Instructions for Corbin Russwin WM800

Action	Press	Details
23. Reset (erase) transaction log	99 # (Master Code) * 76 # 00000 # 00000 # * * *	
24. To exit Program mode	*(after final command)	Yellow stops flashing

NOTE:

If the WM800 unit is not entering program mode when 99# Master Code * is pressed on the WM800 keypad or installer/ programmer forgets the “Master Code” it may be reset by following the instructions below.

1. With power to WM800 unit turned ON, remove the main circuit board from the unit as described in section 2.5.
2. Locate the “Program” button (SW1) underneath the main circuit board and press it for about 2 seconds. Take care if you must pull the circuit board out of the plastic housing. Handle the board edges, otherwise, your fingers can short the solder points. Figure 1 illustrates the location of this button. **(When handling main circuit board, to guard against possible static discharges, touch a ground object BEFORE touching the WM800 unit.)** (The yellow LED blinks slowly, indicating that program mode is active.)
3. To program a new master code, press:
1# new-code * repeat-code *
The code can be 1-6 digits, with repeated numbers acceptable.
4. To exit program mode, press *.
5. Continue programming as described in Section 4.

Installation and Wiring Instructions for Corbin Russwin WM800

4.4 Led Indicators/Sounder Operations

LED or Sounder	Visual/Audible Condition	Description
Yellow LED	Slow blink	Unit is in Program mode
	Rapid blink	Verify mode is active (checking that the last two values in sequence match)
	Steady	Program error; to clear, press * or error lockout
	Very rapid blink	Memory (eeprom) erase is in progress (commands 40/46, loop-back)
Bi-color LED	Steady red	Lock output deenergized
	Steady green	Lock output is energized (timed or latched)
	Red/green alternating	Awaiting second PIN during Card AND Code access attempt
	Green blink	Auto-unlock active
Sounder	Short beep (100 ms), every 2 seconds	Audio alert #2 is active
	Sounder 1/2 sec on, 1/2 sec off	Audio alert #1 is active
	Double beep	Lockout is canceled
	Pair of double beeps	Lockout is activated
Sounder After PIN/Card	3 slow beeps (250 ms), then double beep	Keypad self-test is complete
	1 single beep	Valid card access
	1 long beep followed by 1 short beep	User disabled
	1 long beep followed by 2 short beeps	Bad time zone
	1 long beep followed by 3 short beeps	User lockout
	3 rapid beeps after code entered or card presented	Code or Card is not found
	4 quick beeps	First-In Auto-unlock
	6 quick beeps	Passage mode is active

Installation and Wiring Instructions for Corbin Russwin WM800

4.5 Testing the Controller/Keypad

1. Connect the power to the WM800 unit.
2. Turn ON the power supply.
3. Ensure that the bi-color LED (red and green) on the WM800 unit lights red.
4. On the WM800 controller/keypad, press: **7890 # 123456 ***

If all 12 key presses are verified, the WM800 unit enters the self-test mode. The bi-color LED turns green. The red LED blinks alternately with the yellow LED and then both turn OFF. Next, the sounder beeps three times, pauses, and then beeps twice more. If this does not occur, attempt to enter the self-test mode again by repeating step 5.

NOTE: If you are using Corbin Russwin software, you can capture the self-test data on a PDA. This data contains information about the device.

5. Enter the factory default master code on the keypad by pressing:

1234* (or programmed master code *)

The red LED turns OFF and the green LED turns ON for five seconds while the main relay energizes.

End of Installation Instructions

In U.S.A.:
Corbin Russwin, Inc.
225 Episcopal Road
Berlin, CT 06037-4004
www.corbinrusswin.com

Technical Product Support
Phone: 800-810-WIRE (9473)

In Canada:
ASSA ABLOY Door Security Solutions Canada
160 Four Valley Drive
Vaughan, Ontario, Canada L4K 4T9
www.assaabloy.ca