OMNILOCK[®]

Planning the installation

Contents

These installation instructions describe how to install your Omnilock Wall Mount Unit for models OM500 OM2000 and Wireless. Topics covered include:

Planning the installation1
Installing outside escutcheon4
Troubleshooting8

Environment information

Model	Side of door	Temperature Range	Exposure
Standard	Outside	+32°F to +129°F 0°C to +54°C	Drip proof. Inadvertent splashing of water spray acceptable.
Weatherized	Outside	-4°F to +129°F -20℃ to +54℃	Direct exposure to rain and snow
Extreme Weatherized ^a	Outside	-40°F to +129°F -40°C to + 54℃	Direct exposure to rain and snow
	Inside	+32°F to +129°F 0°C to +54°C	N/A

a. See installation instruction Addendum (T83323) Extreme Weatherized Installation for the extreme weatherized model installation.

Installation Instructions for Omnilock Wall Mount Units

Components checklist

Use the following checklist to make sure that you have the items necessary to install your Omnilock Wall Mount Lock.

Components provided in the box:

- Outside escutcheon assembly
- \Box Installation template and instructions
- □ Screw package
- □ Wall anchors
- Batteries
- Cylinder and key

Other components:

 Programming Default ID Card (provided with software)

Remote Switch

Note: Not available for wireless models.

The Omnilock does not come equipped with a remote switch. However, if the external system has a remote switch, such as one at a receptionist's desk, it may be routed through the terminal on the Omnilock Wall Mount System circuit board. See "Install batteries" on page 3.

Momentarily pressing the switch causes the system to go through a normal lock and unlock sequence. If the switch is held closed, the open time will be extended.



Figure 1 Applying the template

Planning the installation

Position template and mark drill points

Note: When determining the location of the unit, take wheel chair access into consideration.

1 Open the template provided *Installation Template for Omnilock Wall Mount Units (T83322).*

Note: If installing an Extreme Weatherized model, see Installation Template for OM Wall Mount System Extreme Weatherized Units (T83323). This is the template for locating the extreme weatherized module mounting holes.

- 2 Position the template on the wall, making sure that the top edge is horizontal and the centerline is vertical.
- 3 Tape the template to the wall. See Figure 1.

2 Center punch and drill holes

- 1 Center punch the necessary drill points. See the instructions on the template.
- 2 Determine the hole sizes and anchors based on the wall material.
- 3 Drill the holes.

Planning the installation

3 Install batteries

Four alkaline AA batteries (or two weatherized packs if installing a weatherized unit) are furnished with your Omnilock system and must be installed before proceeding with operation verification and system installation.

Note: For the Extreme Weatherized model, see Section 5 on page 5 for instructions and Installation Template for OM Wall Mount System Extreme Weatherized Units (T83323) for the mounting template.

- 1 Remove the gasket and battery cover from the rear of the housing assembly as shown in Figure 2.
- 2 Install batteries with proper polarity as shown in Figure 3. (For weatherized battery packs, simply connect the wires from the battery pack to the circuit board as shown in Figure 4.)

Note: Be sure red and black motor wires are connected before attempting step 4. Align the wires together so that the wire colors match.

- 3 Press and hold the reset button on the circuit board (as shown in Figure 3) until the green light on the keypad flashes (about three seconds) then release the button.
- 4 If using a remote switch, the wires may be routed through the circuit board. Route the twisted pair wires through the access hole and to the terminal at the top of the unit. (*Not available for wireless units.*) See Figure 3.

Note: When properly wired, momentarily pressing the remote switch will cause the system to cycle and the event will be recorded in the audit log.

- 5 Replace the battery cover. See Figure 2. Make sure that the tabs on the lower edge of the battery cover are hooked over the edge of the back plate and secure the cover with the screw.
- 6 Replace the gasket. See Figure 2. Make sure that it is inside the edge of the housing.



Figure 2 Installing batteries







Figure 4 Installing weatherized batteries



Figure 5 Installing escutcheon

Install outside escutcheon

4 Install outside escutcheon

Caution: Since the Wall Mount System controls external circuits, care must be taken to ensure that static electrical discharges will not cause damage to equipment. All devices connected with the system must be electrically connected to a common ground. The case grounding wire of the Wall Mount System (green/vellow wire) must be connected to the chassis of the device it operates. Additionally, a device power supply lead should be grounded to the common ground. The equipment-grounding conductor, (a green or bare wire normally located in an electrical outlet box or a metal box itself) is recommended for grounding. See Figure 8.

Note: Ensure that the external system power supply is turned off.

- 1 Route the power supply, device and grounding wire through the wire access hole drilled in the wall. Allow approximately 4 inches of wire to protrude from the wall.
- 2 Thread the wires through the wire access hole in the escutcheon.
- 3 Secure the escutcheon to the wall with the screws and anchors provided. Ensure no wires are pinched when attaching the escutcheon to the wall.
- 4 Use the wire nuts provided to connect the escutcheon wires to the system wires. Place wire nuts on any unused wires. **See Figure 8.**
- 5 Tuck the wires and wire nuts into the escutcheon housing.
- 6 Continue with Section 6.

Install outside escutcheon

5 Optional: Install Extreme Weatherized Unit, if necessary

Note: Ensure that the external system power supply is turned off.

Note 2: See *Caution* in Section 4 on page 4.

- 1 Thread the connecting cables through the wire access hole from the outside wall to the inside wall.
- 2 Secure the escutcheon to the wall with the screws and anchors provided. Ensure no wires are pinched when attaching the escutcheon to the wall.
- 3 Route the connecting cables, power supply, device and grounding wire through the wire access hole drilled in the inside wall. Allow approximately 4 inches of wire to protrude from the wall. See Figure 6.

Note: If using a remote switch, also route the twisted pair wires through the access hole and attach to the terminal block. (Not available for wireless units.)

- 4 Attach the inside wall mount unit to the wall with the proper screws and anchors for the wall material.
- 5 Plug the connecting cables into the circuit board as shown in Figure 7.
- 6 Use the wire nuts provided to connect the wall mount wires to the system wires. Place wire nuts on any unused wires. **See Figure 8.**
- 7 Install batteries with proper polarity as shown in Figure 7.
- 8 Press and hold the reset button on the circuit board (as shown in Figure 7) until the green light on the escutcheon keypad flashes (about three seconds) then release the button.
- 9 Tuck the wires and wire nuts into the housing and screw on cover.



Figure 6 Installing the Extreme Weatherized unit



Figure 7 Extreme Weatherized circuit board



System diagram



Wire connection diagram

Figure 8 Simplified wiring diagrams

Install outside escutcheon

6 Install the cylinder assembly

- 1 With the control key in the core, insert the core into the cylinder assembly.
- 2 Insert the rear threaded rod of the cylinder assembly into the threaded hole between the mounting screws. Thread in the cylinder assembly.
- 3 Return the control key to the 12 o'clock position and withdraw the key.

Caution: The control key can be used to remove cores and to access doors. Provide adequate security for the control key.

Check operation

Check the operation of the unit. For example, check that:

- door opens and locks properly
- □ key access works
- remote switch, if present, operates properly

For assistance, contact your local dormakaba Representative.



Omnilock a Product Group of dormakaba USA Inc.

Troubleshooting

8 Test unit

To test the unit for proper operation before the unit is programmed, follow these instructions:

For keypad units

1 Press 1234 for the 2000 series, or 5011234 for the 500 series.

The green light flashes and the door unlocks.

2 Open the door.

During the unlock time, the green light flashes; then the red light flashes and the door relocks.

For magnetic stripe or proximity card units only

Note: If the unit has a proximity card reader, it may have already been activated by the presence of an object near the card reader.

- 1 Align the magnetic stripe card with the V mark by the card slot.
- 2 Insert and then remove the card.

The green light flashes and the door unlocks.

3 Open the door.

During the unlock time, if using the Programming Default ID Card, the green light flashes; then the red light flashes and the latch relocks.

If a remote switch has been installed, momentarily press the switch. The green light will flash once (1) and the device will change state. After approximately five (5) seconds, the red light will flash and the device will return to its original state.

9 Troubleshooting

If the mechanism doesn't unlock, remove the battery cover and check for proper orientation and seating of the batteries and motor connector. Ensure that wires are not pinched. Reset the electronics by pressing and holding the reset button on the circuit board until the light flashes green (approximately three seconds), then releasing the button. See Figure 3.

Note: The system will go through a self-test and the green light will flash. You will hear the unit unlock, then relock three times. A red flash indicates a circuit board or drive system problem. If a red flash or no flash is observed, check for proper orientation and seating of the batteries and motor connector, ensure that wires are not pinched, then repeat the reset process.