External Power ACCESS SYSTEMS Installation Instructions

Optional: install outlet

Caution: This step must be completed by a licensed electrician in accordance with all appropriate electrical codes.

If not already existing, locate and install a 120 VAC, 60 Hz. grounded electrical outlet concealed from view, but near the door for the Best power supply, or equivalent. (See power supply specifications on reverse side.)

2 Pull wire to the lock opening

- 1 Pull the wire (see wire specifications on reverse side) from the power supply location to the point where the wire will enter the door frame. Leave enough excess wire to extend down the frame and through the door. For information on pulling wire to the door, see document number T61926, *Door Wiring Instructions for Electrically-operated Locksets*.
- 2 Remove any existing lock hardware.
- 3 Make door modifications and pull transformer wires to the lockset opening.

Install the lock

- 1 If the lock is not already installed, install the lock using forms T61918 or T61919 *8KV/9KV*, or *30HV Installation Instructions*.
- 2 Make sure that the transformer wires are routed to the battery compartment opening. See Figure 3.

Install external power circuit board

1 If the battery is already connected, remove the battery compartment cover as shown in Figure 1.

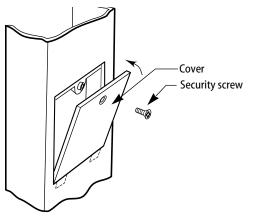


Figure 1—Removing the battery compartment cover

2 Remove the battery, if already installed, by disconnecting the battery wire. See Figure 2.

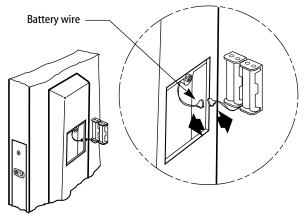


Figure 2—Disconnecting the battery

- 3 If the adapter cable is not already connected, connect it as shown in Figure 3.
- 4 Connect the external power circuit board to the same connector that the battery was connected to. See Figure 3.

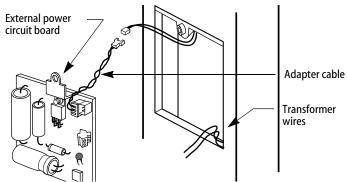


Figure 3—Connecting the external power circuit board

5 Mount the external power circuit board into the battery compartment.

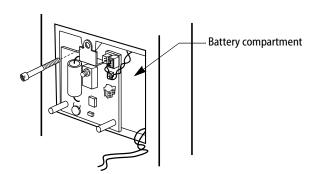


Figure 4—Mounting the external power circuit board

Warning: Be sure all power is off from the power supply before connecting transformer wires.

6 Connect the wires from the transformer to the terminal block on the external power circuit board as shown in Figure 5.

Note: Polarity is not important, that is, it does not matter which wires connect to which terminal on the terminal block.

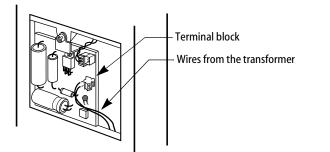


Figure 5—Connecting the transformer wires to the board

7 Place the backup battery (with wires projecting from the bottom) into the battery compartment. Connect the backup battery to the external power circuit board as shown in Figure 6.

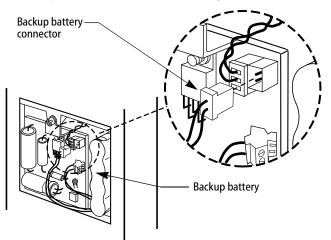


Figure 6—Connecting the backup battery

8 Make sure all components are enclosed in the battery compartment. Replace the battery compartment cover.

Caution: Make sure that no wires are pinched when tightening the security screw.

5 Connect wires to transformer terminals

1 Strip 1/8" of insulation from the power supply wires and crimp on the fork terminals as shown in Figure 7.

Note: Crimp fork terminals are recommended, but not required.

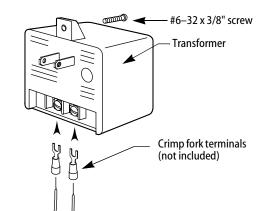


Figure 7—Connecting wires to the transformer

- 2 Place the fork terminals under the terminal block screws and secure. **Note:** *Polarity is not important, that is, it does not matter which wires connect to which terminal.*
- 3 Plug the power supply into the grounded outlet and secure with the screw provided.

Caution: Failure to supply voltage within the specified range will cause a lock failure or cause the lock to be without external power.

6 Finish lock installation

Finish installing the lock using the *8KV*/9KV or 30HV Installation Instructions:

- 1 Through-bolt the trim.
- 2 Install knobs or levers.
- 3 Install the strike.

Specifications

Component	Parameter	Specification
External power circuit board	Input voltage	9–32 VDC or 12–24 VAC
	Current	500 mA
	Load regulation	± 5%
Wire	Gauge	16 to 20 AWG
	Strand	Stranded
	Conductors	2
	Jacket	PVC or Plenum CL2
Maximum wire run	500 feet	16 AWG
	300 feet	18 AWG
	200 feet	20 AWG
Backup battery	Voltage	4.8 volts
	Capacity	110 mAH

BEST ACCESS SYSTEMS Indianapolis, Indiana