QUICKSTART "BASIC" INSTALLATION GUIDELINES FOR AN 1812 PLUS CABINET AND BY-PASS BOARD
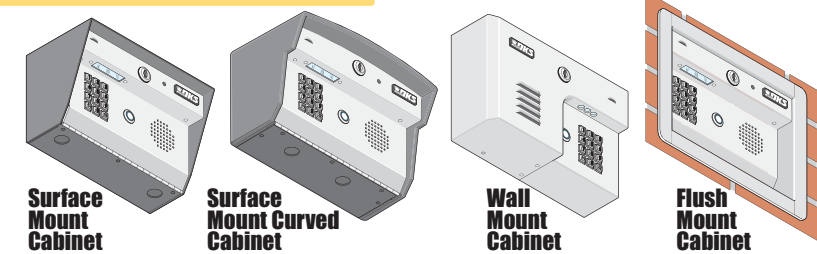
It is highly recommended that you consult the Installation/Owner's manual for complete instructions on all the different types of installations. The 1812 Plus Telephone Entry System involves the installation of the 1812 Plus cabinet, the by-pass board for the incoming telephone line, and wiring of these components (On reverse side). Be sure that all dirt, metal or wood debris is removed from inside cabinet after mounting it. This could damage the control board and cause a malfunction during operation.
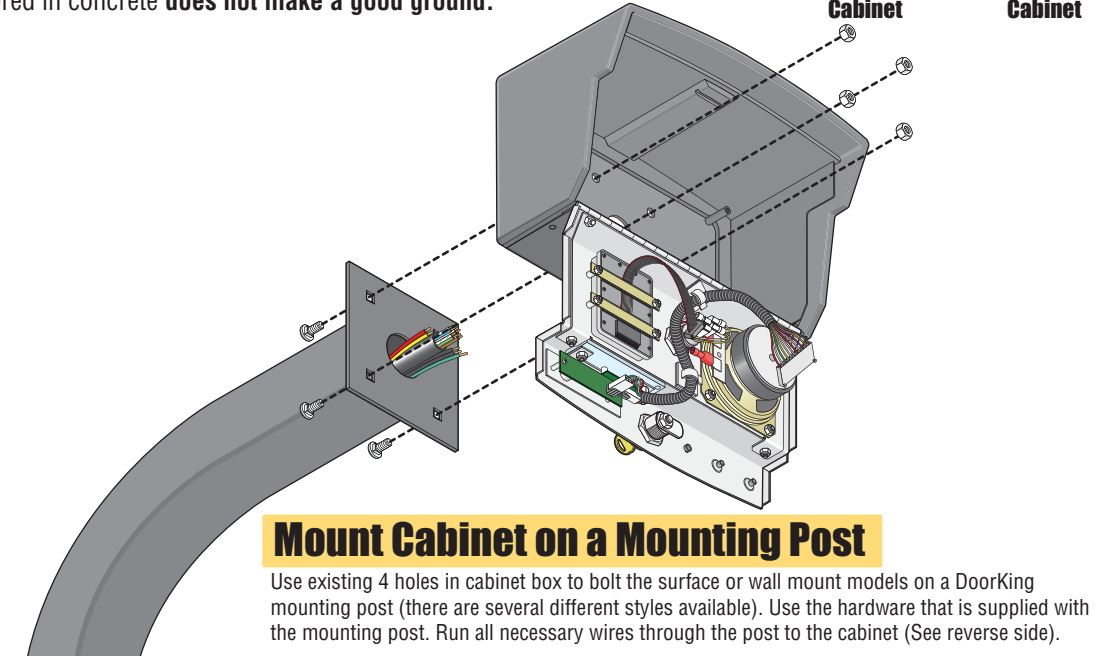

DKS DOORKING®, INC.

Surface Mount Cabinet
Surface Mount Curved Cabinet
Wall Mount Cabinet
Flush Mount Cabinet

120 Glasgow Avenue
Inglewood, California 90301
U.S.A.

Remove Control Board from Cabinet

The control board removal is the same for all models.

1. Unlock and open the 1812 Plus door.
2. Disconnect the keypad plug and door accessories plug from the control board.
3. Remove the 4 screws. Carefully remove control board.

CAUTION Keep the control board in a protected area during the installation.

18-Pin Main Terminal Connector

Remove the 18-pin main terminal connector from the control board by gently pulling it straight up. This will make wiring to the control board easier. Note the orientation and numbering sequence of the connector to correctly wire it.

IMPORTANT The 1812 Plus and by-pass board **MUST** be properly grounded! A gooseneck mounting post anchored in concrete **does not make a good ground.**
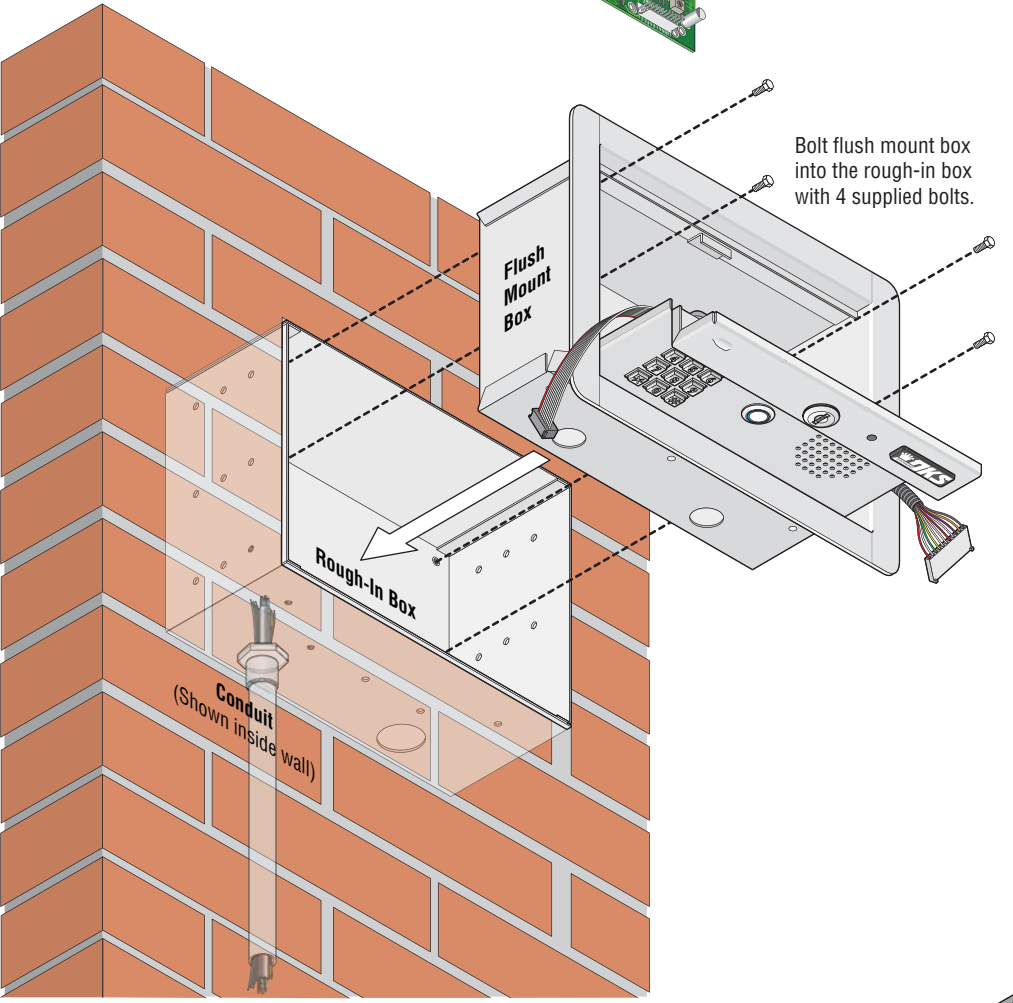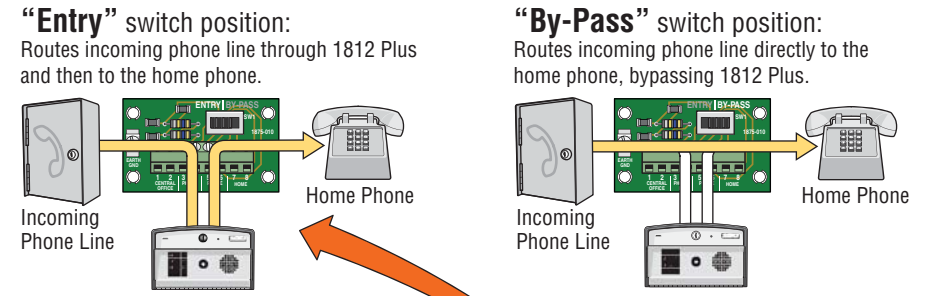
Mount Cabinet on a Mounting Post

Use existing 4 holes in cabinet box to bolt the surface or wall mount models on a DoorKing mounting post (there are several different styles available). Use the hardware that is supplied with the mounting post. Run all necessary wires through the post to the cabinet (See reverse side).

Bolt flush mount box into the rough-in box with 4 supplied bolts.

Flush Mount Box

Rough-In Box

Conduit (Shown inside wall)

Plastic screw anchors for masonry if required. (Not supplied)

Conduit (Shown inside wall)

Mount Cabinet Directly to a Wall or Pilaster

Use the 4 existing holes in the cabinet box to screw the surface or wall mount models to the wall. Run conduit inside or outside of wall or pilaster if desired. Use appropriate hardware to mount the cabinet (Not supplied). Be sure that the mounting hardware does not protrude into the cabinet where it could cause a short. Run all necessary wires through the conduit to the cabinet (See reverse side).

Flush Mount Cabinet in a Pilaster, Wall or Kiosk

Mount rough-in box into the pilaster, wall or kiosk. Run conduit inside wall into bottom of rough-in box if desired. Use appropriate hardware (Not supplied) to secure the rough-in box in place. Run all necessary wires through the conduit in to the rough-in box (See reverse side).
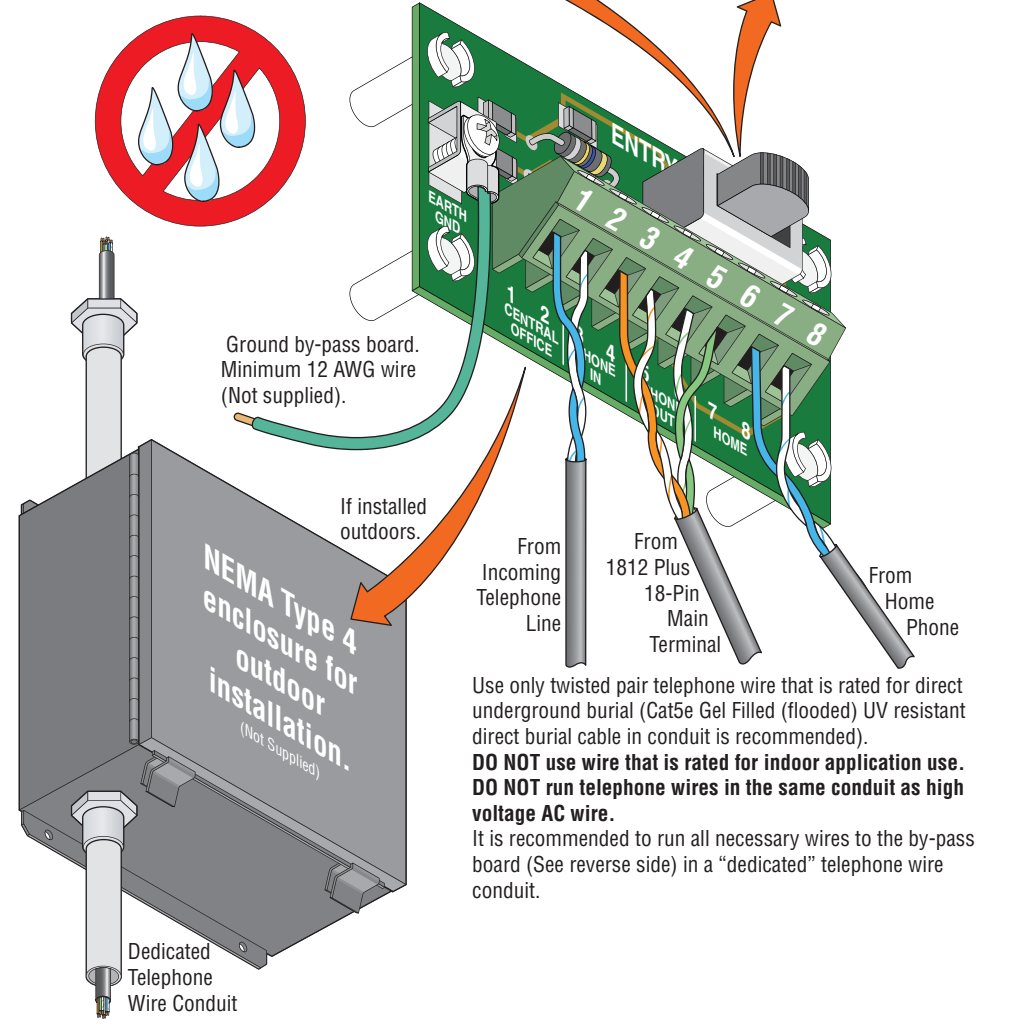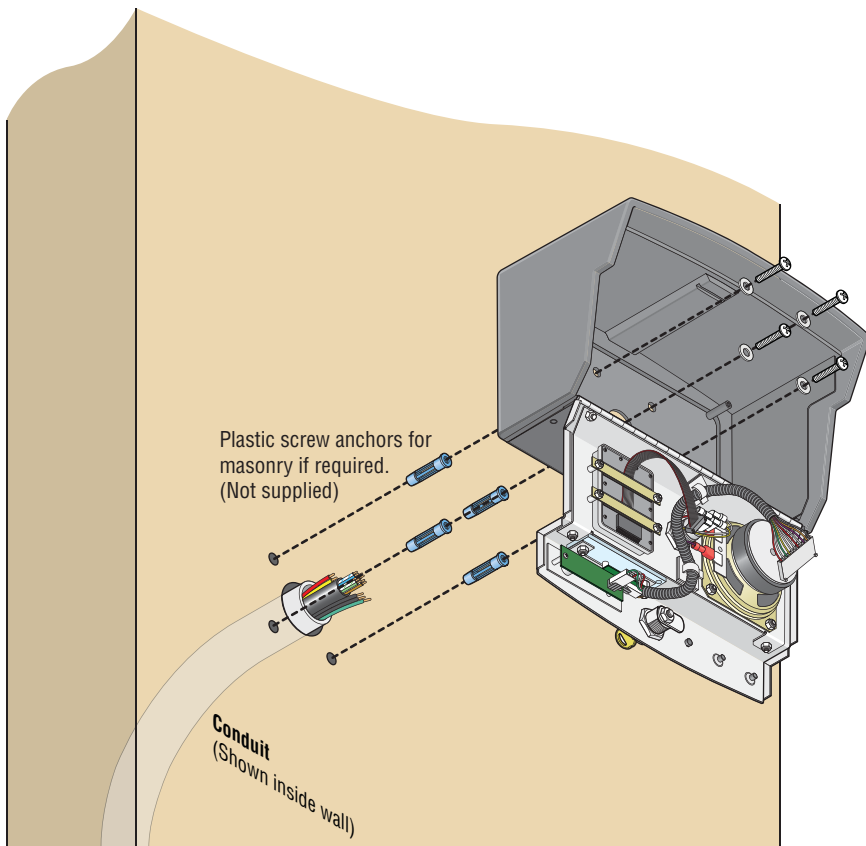
Install the By-Pass Board

The 1812 Plus by-pass board provides a method to by-pass the 1812 Plus and route the incoming telephone line directly to the homeowner's phone. **It must be installed as part of the 1812 Plus system.** All telephone wires for the 1812 Plus must pass through the by-pass board.

Mount the by-pass board in a location that is easily accessible by the homeowner. In case of 1812 trouble or maintenance, the homeowner will use the by-pass switch on the board to route the incoming telephone line directly to their home phone. If the by-pass board is installed outdoors, it must be installed in a NEMA Type 4 enclosure (not supplied) with conduit to protect the board and wires from direct exposure to landscape sprinklers, rain, snow, and other elements.

"Entry" switch position:
Routes incoming phone line through 1812 Plus and then to the home phone.

Incoming Phone Line — Home Phone

"By-Pass" switch position:
Routes incoming phone line directly to the home phone, bypassing 1812 Plus.

Incoming Phone Line — Home Phone

Ground by-pass board. Minimum 12 AWG wire (Not supplied).

If installed outdoors.

NEMA Type 4 enclosure for outdoor installation. (Not Supplied)

Dedicated Telephone Wire Conduit

From Incoming Telephone Line

From 1812 Plus 18-Pin Main Terminal

From Home Phone

Use only twisted pair telephone wire that is rated for direct underground burial (Cat5e Gel Filled (flooded) UV resistant direct burial cable in conduit is recommended).
DO NOT use wire that is rated for indoor application use. DO NOT run telephone wires in the same conduit as high voltage AC wire.
It is recommended to run all necessary wires to the by-pass board (See reverse side) in a "dedicated" telephone wire conduit.

QUICKSTART "BASIC" WIRING GUIDELINES FOR AN 1812 PLUS SYSTEM WITH TWO ACCESS CONTROL DEVICES

It is highly recommended that you consult the Installation/Owner's manual for complete wiring instructions on all the different types of installations and programming.

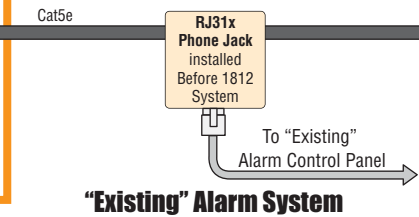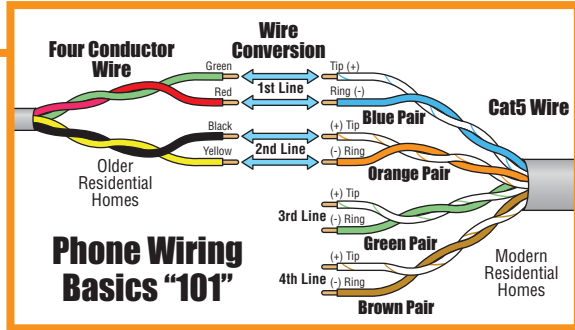**DKS DOORKING, INC.™**

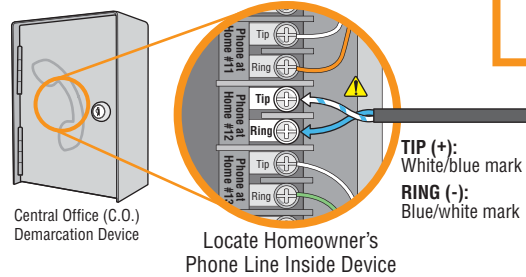120 Glasgow Avenue
Inglewood, California 90301
U.S.A.

Basic Programming for the 1812 Plus

The 1812 Plus has been programmed at the factory with many of the programming parameters (default setting) set for a typical residential application with a single 1812 Plus.

However, **you must program a "Master Code" before putting the 1812 Plus into service.** If you are using more than a single 1812 Plus in the system, or if you are using any of the advanced features of the 1812 Plus, such as Time Zones, Do-Not-Disturb Schedules, Call Forwarding, Holiday Schedules, Hold Open Schedules, Directory Code Dial-Out Phone Numbers, Temporary Access Codes, etc., you will need to download the complete Installation/Owner's and Programming Manual from our tech support web site.
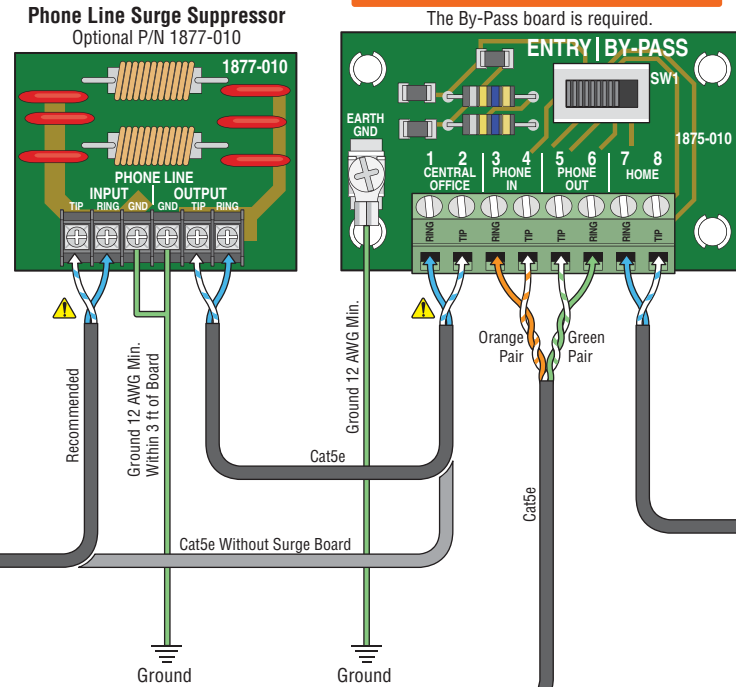
Telephone Company Demarcation Point

Use common electrical safety practices when connecting telephone wires. You can receive a substantial jolt if the phone rings while handling these wires. "RING" terminal voltage varies and can be between -48 to -130 Volts AC, depending on the distance to the central office. "TIP" terminal is always positive with respect to RING terminal.

Central Office (C.O.) Demarcation Device

Locate Homeowner's Phone Line Inside Device

TIP (+): White/blue mark
RING (-): Blue/white mark

Phone Wiring Basics "101"

Four Conductor Wire

Older Residential Homes

Wire Conversion
- 1st Line — Tip (+) Green / Ring (-) Red
- 2nd Line — (+) Tip Black / (-) Ring Yellow — Blue Pair
- 3rd Line — (+) Tip / (-) Ring — Orange Pair
- 4th Line — (+) Tip / (-) Ring — Green Pair
  — Brown Pair

Cat5 Wire

Modern Residential Homes

RJ31x Phone Jack installed Before 1812 System

To "Existing" Alarm Control Panel

"Existing" Alarm System

Cat5e (to) Cat5e

Phone Line Surge Suppressor
Optional P/N 1877-010

1877-010

EARTH GND

PHONE LINE
INPUT — TIP RING GND
OUTPUT — GND TIP RING

Recommended

Ground 12 AWG Min. Within 3 ft of Board

Ground

By-Pass Board

The By-Pass board is required.

ENTRY | BY-PASS

SW1

1875-010

EARTH GND

1 2 CENTRAL OFFICE | 3 4 PHONE IN | 5 6 PHONE OUT | 7 8 HOME

RING TIP | RING TIP | TIP RING | TIP RING

Ground 12 AWG Min.

Cat5e

Cat5e Without Surge Board

Ground

Orange Pair | Green Pair

Telephone and RS 485 Wire Run (Cat5e) Table

Wire Size	Max Distance
24 AWG	800 ft
22 AWG	1600 ft
20 AWG	2200 ft
18 AWG	3600 ft

⚠ **Check Polarity of Telephone Line**
Check for polarity on the incoming telephone line to each board and maintain polarity throughout the telephone line (TIP (+), RING (-)).

Cat5e **Gel Filled (flooded) UV resistant direct burial cable** run in conduit recommended.

DO NOT run telephone wires in the same conduit as high voltage AC wire.

Homeowner's Phone(s)

Older Lines Red Wire (-) → RING
Older Lines Green Wire (+) → TIP

Phone Jack — Phone Jack

Cat5e
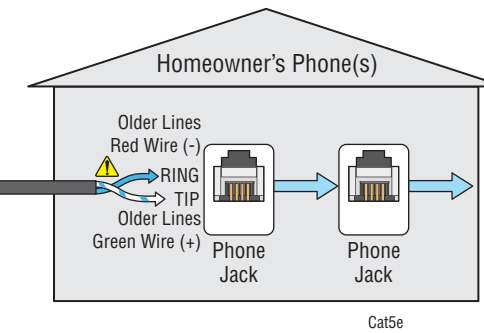
Complete Instructions

This "Quickstart" guideline is designed for installing a single 1812 Plus in a typical single family home application using the factory default settings programmed in the 1812 Plus. Complete installation instructions and programming manual is available on the enclosed CD **AND** from our tech support web site.
CLICK HERE TO VISIT DOORKING'S TECHNICAL WEB SITE:
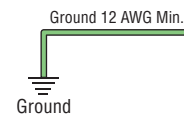www.dkaccess.com/english/Telephone_Entry/telephone_entry.html.

Access Control Devices

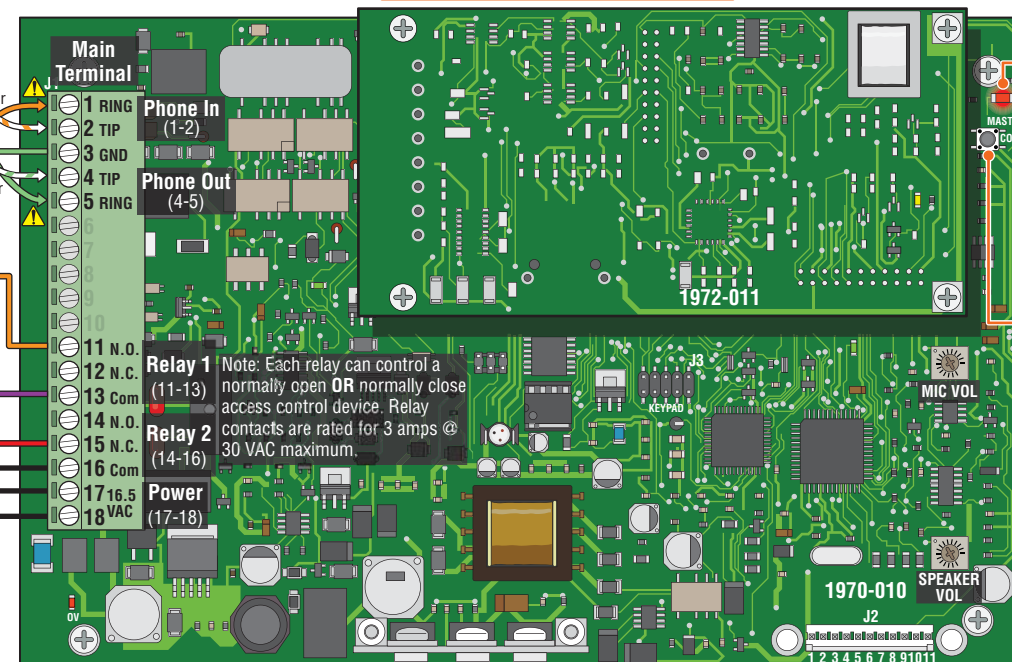"Normally Open" Vehicular Gate Operator (Terminal 11 and 13)

Separate UL Listed Power Transformer

Electric Strike

Maglock

"Normally Close" Pedestrian Gate/Door with Maglock (Terminal 15 and 16)

"Normally Open" Pedestrian Gate/Door with Electric Strike (Terminal 14 and 16)

Magnetic locks or electric strikes must be powered from a separate UL Listed power transformer. **DO NOT** power electric strikes or magnetic locks from the 1812 Plus power transformer. keep power wire runs as short as possible.

Programming Relay 1 and 2 Strike Time - (Factory default is 1 second)

1. Press ✱ 0 3 and enter the MASTER CODE. [✱ 0 3 _ _ _ _ (beep)]
2. Enter "1" for relay 1 or "2" for relay 2, then press ✱. [_ ✱(beep)]
3. Enter a two-digit strike time (00-99), then press ✱. [_ _ ✱(beep)]
   Note: Strike time entered in seconds. 00 = ¼ sec., 10 = 10 seconds, etc.
4. Repeat steps 2 and 3 to set the other relay strike time if necessary.
5. Press "0 #" TOGETHER to end. [0 # (beeeeeep)]

⚠CAUTION

DO NOT power the 1812 Plus from a 24-Volt source (Such as a gate operator). **Damage will occur to the 1812 Plus** that is **NOT** covered under DoorKing's warranty.

Supplied Power Transformer
Polarity does not matter.

Output 16.5 VAC 20 VA

Without Surge Board

Power Transformer and Access Control Device(s) Wire Run Table

Wire Size	Max Distance
18 AWG	100 ft
16 AWG	200 ft

⚠ **Over Voltage Power Note:** LED located on bottom left corner of board will light up if too much power is applied to circuit board.

0V

Ground 12 AWG Min. Within 3 ft of Board

Ground

Low Voltage Surge Suppressor
Optional P/N 1878-010

OUT OUT GND GND IN IN
OUTPUT | INPUT
LOW VOLTAGE LINE

1878-010

IMPORTANT All boards **MUST** be properly grounded or the system will **NOT** function correctly!

Ground 12 AWG Min.

Ground

Orange Pair
Green Pair

Control Board

Main Terminal
1 RING — Phone In (1-2)
2 TIP
3 GND
4 TIP — Phone Out (4-5)
5 RING
6
7
8
9
10
11 N.O.
12 N.C. — Relay 1 (11-13)
13 Com
14 N.O.
15 N.C. — Relay 2 (14-16)
16 Com
17 16.5 VAC — Power (17-18)
18 VAC

1972-011

Note: Each relay can control a normally open **OR** normally close access control device. Relay contacts are rated for 3 amps @ 30 VAC maximum.

MIC VOL
SPEAKER VOL
1970-010
KEYPAD
J2
J3
1 2 3 4 5 6 7 8 9 10 11

Program MASTER CODE

Master Code LED Description

Blinking LED - Power is applied to the 1812 Plus and the processor is working (Normal Mode).

LED ON Continuously - After master code push button has been pressed, system will be in Master Code programming mode. (Will revert back to blinking LED if master code is not entered within 10-seconds).

MASTER CODE

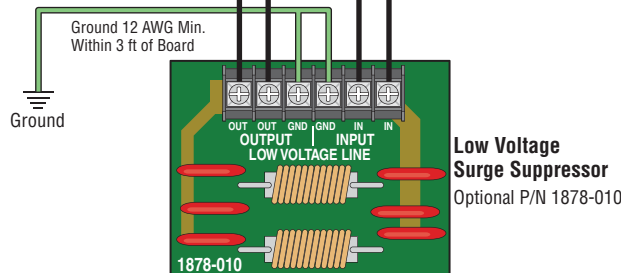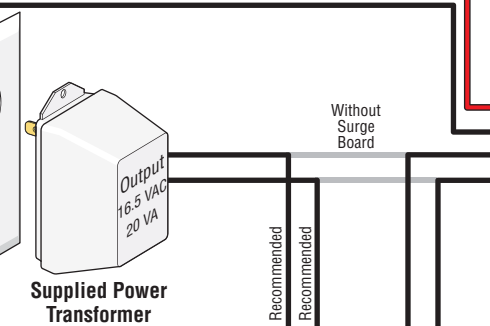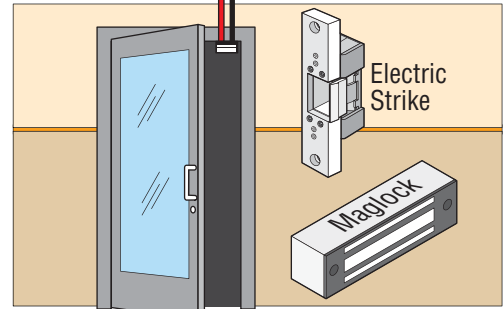### Push Button to Program "Master Code"

1. Press the Master Code push button. (the LED will stay on continuously).
2. Enter a four digit **Master Code** number then press "✱", **"beep"** will be heard. [_ _ _ _ (beep)] (Write down master code).

Programming Simple Access Codes

Programming Simple Access Code(s) to Operate Relay 1 and/or 2 on a 24/7 Basis - (Maximum of 50 codes)

1. Press ✱ 0 2 and enter the MASTER CODE. [✱ 0 2 _ _ _ _ (beep)]
2. Press 1 for relay 1 **OR** Press 2 for relay 2, then press ✱. [_ ✱(beep)]
3. **Choose and** enter a five-digit **simple** access code, then press ✱. [_ _ _ _ _ ✱(beep)]
4. Repeat steps 2 and 3 to enter additional **simple access codes**.
5. Press "0 #" TOGETHER to end. [0 # (beeeeeep)]

1812-167-C-12-11