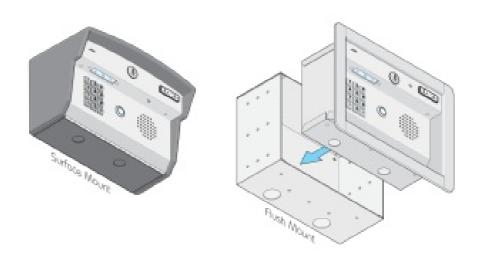


# **DKS 2112 Internet/Cellular Programmable Video Telephone/Access Control System Owner's Manual**

Home » DKS » DKS 2112 Internet/Cellular Programmable Video Telephone/Access Control System Owner's Manual

DKS 2112 Internet/Cellular Programmable Video Telephone/Access Control System



#### **Contents**

- 1 FEATURES
  - 1.1 Mounting Options
  - 1.2 SPECIFICATIONS
  - 1.3 Surface Mount Dimensions
  - 1.4 Flush Mount Dimensions
  - 1.5 Important Notices
  - 1.6 General Information
- **2 INSTALLATION** 
  - 2.1 Standard Internet Installation ONLY
  - 2.2 Optional Cellular Installation ONLY
  - 2.3 Mount the 2112
- 3 WIRING
  - 3.1 Terminals TB1, TB2, TB3, TB4
  - 3.2 Cellular OR Internet Connection
  - 3.3 Grounding and Surge Suppression
- 4 REGISTERING/PROGRAMMING/VOLUME

#### **ADJUST**

- 4.1 Register 2112
- 4.2 Smart Phone App
- 4.3 Volume Adjustment
- 4.4 2112 Wiring Schematic
- 5 Documents / Resources
- **6 Related Posts**

## **FEATURES**

# 2112 Video Entry System

- · User provided Internet connection standard
- Optional cellular connection available
- · Programming via Internet Browser
- DKS 2112 App
- All programming is shared in the cloud and system memory · Updates show as they occur
- · Cloud Based system
- · Built-in IP Camera for Video Calling
- Broadcast Calling (up to four numbers simultaneously)
- Up to 24 residents with a maximum of four (4) phone numbers per resident
- Entry codes can be set to four (4) or five (5) digits
- · Do Not Call schedule
- · Hold Open schedule
- Entry Code schedule
- Microphone / Speaker volume control
- Relay status: Open Close Held Open
- Relay (Entry Point) names, Three (3) type C relays, 1A max
- · Independent relay strike times
- · Events log
- Relay (door/gate) control: Open Close Hold Open

## **Mounting Options**

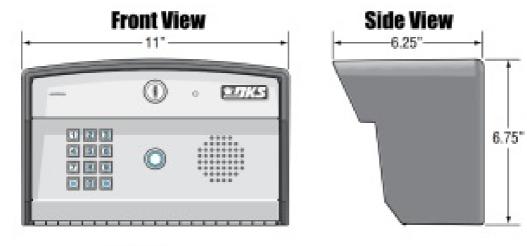
- Surface mount cellular model requires additional internal cellular module kit.
- Flush mount cellular model requires additional external cellular module kit.



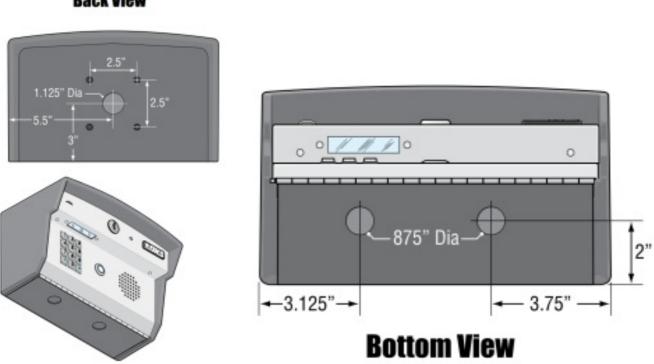
DoorKing, Inc. reserves the right to make changes in the products described in this manual without notice and without obligation of DoorKing, Inc. to notify any persons of any such revisions or changes. Additionally, DoorKing, Inc. makes no representations or warranties with respect to this manual. This manual is copyrighted, all rights reserved. No portion of this manual may be copied, reproduced, translated, or reduced to any electronic medium without prior written consent from DoorKing, Inc.

# **SPECIFICATIONS**

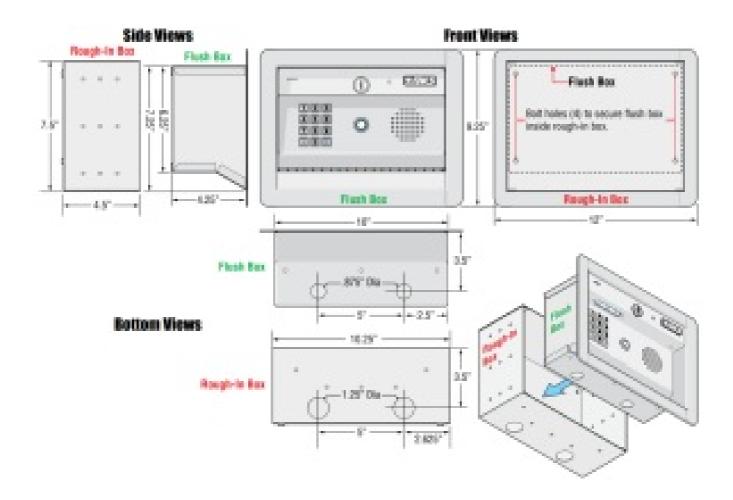
**Surface Mount Dimensions** 



**Back View** 



**Flush Mount Dimensions** 



#### **Important Notices**

#### FCC - United States

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC

Rules and Regulations. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Registration Number: DUF6VT-12874-OT-T

## DOC - Canada

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Department does not guarantee the equipment will operate to the users satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable means of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure, for their own protection, that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**CAUTION:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

DOC Registration Number: 1736 4507 A

#### Notice:

DoorKing does not provide a power transformer on units sold into Canada. Use only transformers that are CSA listed to power the telephone entry system. The model 2112 requires a 16.5-volt, 20 VA transformer.

#### **UL 294 Performance Levels**

Destructive Attack:
Line Security:
Endurance:
Standby Power:
Single Point Locking Device:
Level I
Level I
Level I
Level I

#### **General Information**

- Prior to beginning the installation of the telephone entry system, we suggest that you become familiar with the
  instructions, illustrations, and wiring guidelines in this manual. This will help insure that you installation is
  performed in an efficient and professional manner.
- The proper installation of the telephone entry panel is an extremely important and integral part of the overall access control system. Check all local building ordinances and building codes prior to installing this system. Be sure your installation is in compliance with local codes.
- When used to control a door or pedestrian gate, try to locate the telephone entry system as near as possible to
  the entry point. The unit should be mounted on a rigid wall to prevent excessive shock and vibration from
  closing doors or gates. Continuous vibration and shock from slamming doors or spring-loaded pedestrian
  gates will damage the circuit board. Under no circumstances should the unit be mounted directly to a moving
  door or gate.
- ADA mounting requirements for door control (Ref: ICC/ANSI A117.1-2009). The requirements below apply
  ONLY when the telephone entry system is being used to control entry through A PUBLIC DOOR ONLY. If this
  system is used to control entry through a vehicular gate or private entrance, the dimensions noted below do
  not apply.
- 1. **Unobstructed Forward Reach.** Where a clear floor or ground space allows only a forward approach to an object and is unobstructed, mounting height shall be a minimum of 15 inches (381 mm), and a maximum of 48 inches (1.22 m), above the floor or ground to the operable controls.
- 2. **OBSTRUCTED HIGH Forward Reach.** If the high forward reach is over an obstruction, reach and clearances shall be as shown. NOTE: If the height of a control is 48" maximum, then the length of the obstruction must be 20" or less. If the height of a control is 44" maximum, then the length of the obstruction may be increased to 25" or less.
- 3. **Unobstructed Side Reach.** Where a clear floor or ground space allows a parallel approach to an object and the side reach is unobstructed, and the edge of the clear floor space is 10 inches (255 mm) maximum from the object, mounting height shall be a minimum of 15 inches (380 mm), and a maximum of 48 inches (1.22 m), above the floor or ground to the operable controls.
- 4. **OBSTRUCTED HIGH Side Reach.** If the side reach is over an obstruction 10 inches or less, mounting height shall be a maximum of 48 inches (1.21 m) above the floor or ground to the operable controls. If the side reach is over an obstruction greater than 10 inches, but less than 24 inches, mounting height shall be a maximum of 46 inches (1.17 m) above the floor or ground to the operable controls.

- When used to control a vehicular gate with an automatic gate operator, the telephone entry system must be mounted a minimum of six (6) feet away from the gate and gate operator, or in such a way that a person cannot operate the entry system and/or touch the gate or gate operator at the same time.
- Be sure that the system is installed so that it is not directly in the traffic lane.
   Goose neck mounting post and kiosks work well for these type systems.
   When planning where to locate the system, take into consideration traffic lane layouts, turn around lanes for rejected access, conduit runs, power availability, etc.
- Environmental factors must also be taken into account. Surface mount units are designed for direct outdoor installations, however it is preferable to protect them from direct exposure to driven rain or snow whenever possible. Flush mount units must be protected from direct exposure to the elements.
- This telephone entry system contains a number of static sensitive components that can be damaged or
  destroyed by static discharges during installation or use. Discharge any static prior to removing the circuit
  board from the lobby panel by touching a proper ground device.
- Instruct the end user to read and follow these instructions. Instruct the end user to never let children
  play with or operate any access control device. This Owner's Manual is the property of the end user
  and must be left with them when installation is complete.

# **INSTALLATION**

Prior to beginning the installation, we suggest that you become familiar with the instructions, illustrations, and wiring guide-lines in this manual. This will help insure that your installation is performed in an efficient and professional manner.

Installation of the 2112 involves the installation of the hardware and the wiring of these components. Be sure that all dirt, metal or wood debris is removed from inside after mounting it. Any debris inside could damage the control board and cause the 2112 system to malfunction during operation.



When the 2112 is used to control a vehicular gate with an automatic gate operator, it must be mo unted a minimum of six (6) feet away from the gate and gate operator, or in such a way that a per son cannot operate the 2112 system and/or touch the gate or gate operator at the same time.

Included with the system is an extra random keyed cabinet lock. If desired, for added security against unauthorized entry into the system, the standard lock may be replaced with the random lock. Note: DoorKing cannot replace this specific lock or keys if lost.

#### **Standard Internet Installation ONLY**

A Cat5 wire will need to be run to the 2112 installation location that is **ALREADY** connected to the internet, then installation can begin.



## **Optional Cellular Installation ONLY**

An existing cellular phone will be needed to test the signal strength of DoorKing's cellular network in the

## desired installation location (a smart phone is preferred).

**BEFORE** the 2112 cellular module can be installed, the installation location **MUST BE TESTED** for good cellular signal strength for reliable communication.

TEST this location using an existing active T-Mobile cellular phone ONLY.

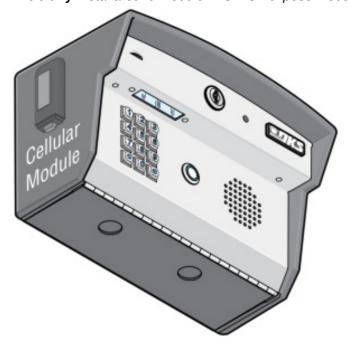
DO NOT install the cellular module in a WEAK or NO signal area.



Activate the phone near the position where you want the cellular module to be installed. 3-4 bars of signal strength should be indicated on the phone for a reliable signal. If 3-4 bars are not achievable in that specific location, then try moving the phone around and see if at least 3-4 bars can be achieved and maintained in a nearby location. If a smart phone is being used, try using the browser to connect to a website to verify good data transfer. Generally, the higher the cellular module is mounted, the better the reception. This also helps protect against vandalism. The cellular module should be located as close as possible to minimize the wire run. This allows less chance for lightning surges or other electrical interference to disrupt the cellular signal. Keep the cellular module away from any metal. This can also disrupt the signal. After the 3-4 bar signal strength has been confirmed (and the smart phone has good browser data transfer if used for signal testing), the installation can begin.

**Surface Mount:** Cellular module works inside plastic enclosure. The cellular module can be mounted outside the enclosure if desired because signal strength is a problem.

Avoid any metal around module. DO NOT expose module to weather.



**Flush Mount:** Cellular module needs to be mounted outside metal enclosure in a **protected secure** area as high as possible for best reception. Avoid any metal around module.

DO NOT expose module to weather. See pages 7 & 8.



#### Mount the 2112

Use the specification dimensions page in front of manual and the next 2 pages to help with the installation of your chosen 2112 model.

# **Remove Control Board and Faceplate**

The control board removal is the same for flush mount model.

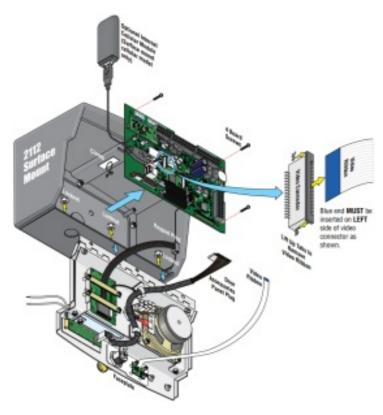
**CAUTION** The control board contains static sensitive components. Discharge any static electricity from your hands by touching a proper ground device **before** removing the control board.

- 1. Unlock and open the 2112 faceplate.
- 2. Disconnect the keypad plug, door accessories panel plug and video ribbon from the control board.
- 3. Remove the 4 screws at the corners of the board and unclamp optional cellular module from top of box (on surface mount cellular model only).

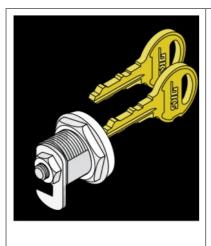
## Carefully remove control board.

4. Remove the 3 locknuts at hinge to remove faceplate.

Keep the removed components in a protected area during the mounting installation.



Note: Refer to 2112 wiring schematics in back of manual to help re-install components.



Included with the system is an extra random keyed cabinet lock. If desired, for added security against unauthorized entry into the system, the standard lock may be replaced with the random lock.

Note: DoorKing cannot replace this specific lock or keys if lost.

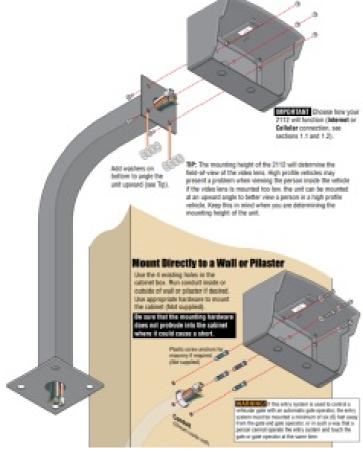
# 2112 Surface Mount Configurations

Surface mount model can be mounted directly to a wall, pilaster or post mounted using a DoorKing mounting post (there are several different styles available). Be sure it is securely mounted and is not subject to continuous vibration from closing doors or gates.

## **Mount on a Mounting Post**

Use existing 4 holes in cabinet box to bolt the surface mount model on a DoorKing mounting post. Use the hardware that is supplied with the mounting post.

**Note:** A gooseneck mounting post anchored in concrete does **NOT** make a good ground.

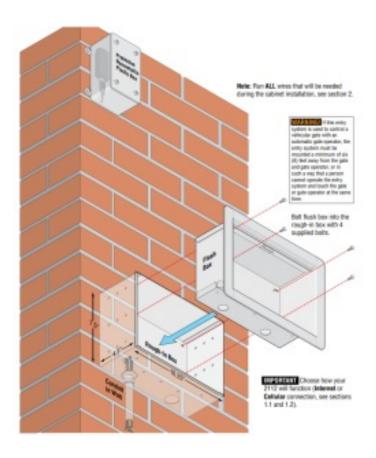


Note: Run ALL wires that will be needed during the cabinet installation, see section 2.

#### 2112 Flush Mount

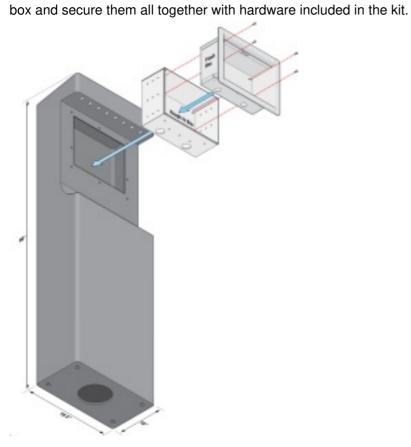
Flush mount unit is installed into a pilaster, wall or kiosk and can be mounted outside, exposed to the weather. It is preferred that they have limited direct exposure to the weather. We suggest that when they are mounted outdoors, it is in a covered protected area. Be sure the unit is mounted securely and is not subject to vibration from closing doors or gates. 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.

Mount "Optional external cellular module kit" in a **secure protected** area if desired. Generally, the higher the cellular module is mounted, the better the reception. Keep clear of metal. **DO NOT** expose to weather.



# 2112 Flush Mount in a DoorKing Self-Standing Lighted Kiosk

ONLY the flush mount can be installed into the self-standing kiosk (P/N 1200-175). Secure the rough-in box in the kiosk. Run all necessary wires to rough-in box. Slide the flush box into the rough-in



Mount "Optional" cellular module in a secure protected area as near as possible to the kiosk clear of ALL metal. Generally, the higher the

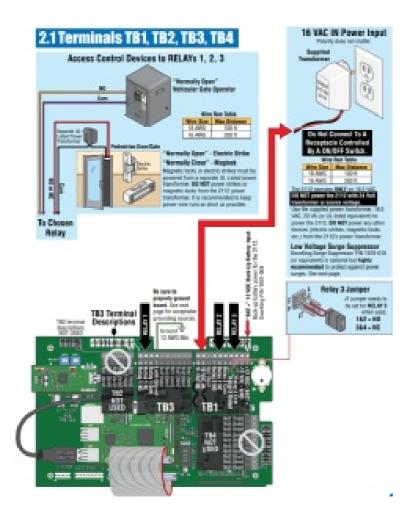
cellular module is mounted, the better the reception. DO NOT expose to weather.

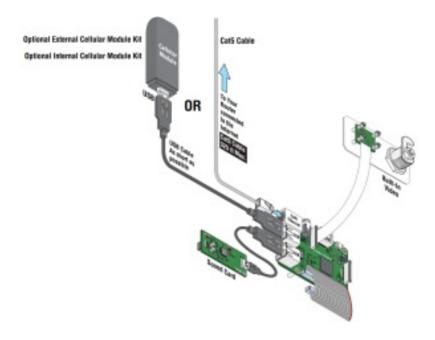


**WARNING!** If this entry system is used to control a vehicular gate with an automatic gate operator, the entry system must be mounted a minimum of six (6) feet away from the gate and gate operator, or in such a way that a person cannot operate the entry system and touch the gate or gate operator at the same time

# **WIRING**

Terminals TB1, TB2, TB3, TB4





#### **Grounding and Surge Suppression**

Proper Grounding and the use of surge suppressors can significantly reduce the chance of component failure because of static charges or surges. To be effective, ground connections should be made with a minimum 12 AWG wire to a ground point within 10 feet of the device being protected. The ground point can be at an electrical panel, a metallic cold water pipe that runs in the earth or a grounding rod driven at least 10 feet into the soil. A gooseneck mounting post anchored in concrete does NOT make a good ground.

# **Some Acceptable Ground Sources**



# Low Voltage Surge Suppressor

It is highly recommended that a low voltage surge suppressor (DoorKing P/N 1878-010) be installed to help protect the telephone entry system from power surges. Surge suppressor must be positioned 3 ft or less from the ground source, 12 AWG min.

### REGISTERING/PROGRAMMING/VOLUME ADJUST

After installation is complete, register your 2112 first, then program it and adjust volume if necessary.

# Register 2112

After the 2112 is connected to the internet (Cat5 connection or cellular module), go to DoorKing's website: <a href="https://dksti.com">https://dksti.com</a> to register the 2112. The **System ID Number** will be needed for registering, found inside the 2112.

Click on the **REGISTER button** and fill out the necessary fields on the page. A confirmation e-mail will be sent to

you after completing the registration page successfully. Use this information to log on and access the 2112. Follow the on-screen instructions for desired programming. All future programming etc. can be accomplished by logging on at this page.

## **Smart Phone App**

The 2112 is programmed directly from your internet browser via a laptop, tablet or smartphone. **The DKS 2112 App is required for video calling.** 

Download the App for a Android phone at Google Play Store.



Download the App for a iphone at APP Store.



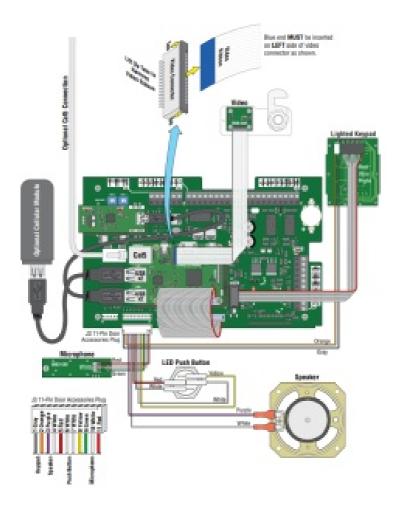
# **Volume Adjustment**

# Final adjustment after the 2112 has been Registered

Volume is adjusted online using the internet browser. Adjust as desired.

If the phone line is not active, something went wrong during the registration which must be corrected. If still having problems, call DoorKing tech support.

# 2112 Wiring Schematic





Register and Program your Entry System at: <a href="https://dksti.com">https://dksti.com</a>

# DoorKing, Inc.

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

Phone: 310-645-0023 Fax: 310-641-1586

# **Documents / Resources**



<u>DKS 2112 Internet/Cellular Programmable Video Telephone/Access Control System</u> [pdf] Owner's Manual

2112, Internet Cellular Programmable Video Telephone Access Control System, 2112 Internet Cellular Programmable Video Telephone Access Control System

Manuals+,