## **1830 Series VolP 2334-080 / RS-232 Control Box**

**DoorKing Part Number** 2334-080

### DO NOT use this VoIP device to make 911 calls.

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

The VoIP/RS-232 Control Box is fee based and operates on DoorKing's network website. The control box provides voice communication and data communication plan selected at DoorKing's Server website.

The VolP/RS-232 Control Box is designed to be used with: 1833, 1834, 1835, 1837, and 1838 entry systems.

## **Installation Options:**

The VolP/RS-232 control box MUST be wired to the telephone entry system's phone line (voice) and RS 232 connection (data). See page 2.

The VoIP/RS-232 control box will work with TWO 1830 entry systems connected to it. These are designated as System A and System B. See next page to wire 1 or 2 1830 entry systems to the box.



IV

https://dksdb.dksoftware.com/UserLogin.aspx

Before starting the registration process, be sure to have the VoIP ID number written down. This number is printed on a label on the VoIP adapter. Also the Master Code of the phone entry system will be needed for the registration process.

Click the IM/VoIP DKS button on the first screen. Enter your personal information, then click the entry systems tab. Add an entry system by selecting the DKS VolP/Data service.

NOTE: VolP/Data uses the VolP adapter AND the DoorKing client mode DKS TCP/IP adapter. (DO NOT select the DKS VolP only. This is for voice ONLY and data will not function with this selection.)

Enter the VoIP ID number on the decal on VoIP adapter, the optional name of the system A entry system if desired, and your postal area code which will be used for control box phone number selection. Finally, enter the Master Code of the System A entry system, then Click ADD. The entry system will be added to the table above. Click the billing tab and enter billing information. When completed, the VoIP and DKS TCP/IP adapters will be turned **ON** and a phone number will be **automatically assigned** to the control box.

Record the phone number assigned to the control box for your records and also needed when programming the 1830 on page 3.

### Installation Steps:

- **1.** Install and wire control box to 1830(s) and your router (page 2).
- 2. Power up control box (page 2).
- 3. Register control box and System A 1830 online (see above).
- 4. Setup Phone Number/Data over IP on 1830(s) system(s) (page 3).
- 5. Test control box (page 4).
- 6. Troubleshoot control box if necessary (page 4).

Note: Installation steps assume that the 1830 system has already been setup for the master code (section 3.2.1 in manual) and multiple system programming (section 3.2.9 (\*04) in manual) if 2 1830s are being used.





Inglewood, California 90301 U.S.A.

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sealed to prevent water intrusion.

phone line with the System A phone entry system. The phone cannot be

used while a transaction is taking place on System A.

## **1830(s) Setup Phone # / Data over IP**

EACH 1830 MUST be setup after the VoIP/RS-232 control box has been Registered. The 1830 phone entry system(s) will NOT function until this is accomplished.

The 1830(s) circuit board(s) MUST be Revision "Z" or higher to work with Data over IP.

Program next information using the keypad on the 1830 system.

### 3.2.10 Program in DKS Data over IP Phone Number

The following programming sequence is necessary **when using DoorKing DKS Data over IP**. After installing the Remote Account Manager Software, Version 6.5.a or higher, there is an option to use the DoorKing **DKS Data over IP** service type on the System Information screen.

When registering an entry system online with the DKS Data over IP requires the 10-digit phone number of the entry system which DKS Data over IP WILL ASSIGN when registering your VoIP control box.

This phone number MUST be programmed into the entry system to use the DKS Data over IP.

Factory setting = No number in system

1. Press 😤 📳 🕎 and enter your four-digit MASTER CODE 🔋 🔋 🍞 (beep).

2. Enter the 10-digit phone number - assigned during registration, then press 🙀 (beep).

3. Press 🛅 🐺 TOGETHER to end this programming sequence (beeeeeep).

### 6.1.9 Turn DKS Data over IP ON

Use the following sequence to turn DKS Data over IP ON.

The **DKS Data over IP** must be **ON** to use the entry system with **DKS Data over IP**. **Note:** When section 3.2.10 (DKS Data over IP Phone Number is programmed, the **DKS Data over IP** is **automatically** turned **ON**.

If there is **NOT** a valid 10 digit system phone number in memory, the system will emit three (3) short beeps. **Beep ... Beep ... Beep Factory setting = Data over IP is OFF** 

- 1. Press 😤 🐻 and enter your four-digit MASTER CODE ???? (beep).
- 2. Press 💏 🛞 (beep) to turn OFF, OR 🚏 🛞 (beep) to turn ON.
- 3. Press 🛯 🕼 together to end this programming sequence (beeeeeep).

### 6.1.8 Test Connection to DKS Data over IP

This will allow you to test the connection to the DKS Data over IP or display problems that may have occurred.

1. Press 🛞 🕎 and enter your four-digit MASTER CODE 🔋 🔋 🍞 👔 (beep).

The LCD display will show one of the following and the entry system will BEEP accordingly:

### System is Registered - (beep) one beep

- System is registered and communication to DKS Data over IP is good.

### Check Registration - (beep-beep) two beeps

- Make sure your registration is current and this system is set to **DKS Data over IP** on the registration screen. Also, be sure that the system phone number or ID number and the master code are set the same on **DKS Data over IP** and the entry system.

#### Program 10 Digit ID - (beep-beep-beep) three beeps

- There is not a valid 10-digit ID in the entry system memory.

### Turn DKS Data over IP On - (beep-beep-beep-beep) four beeps

- There is a valid 10-digit ID, but DKS Data over IP is turned OFF.

No DKS Data over IP Contact - (beep-beep-beep-beep-beep) five beeps - Communication to DKS Data over IP could not be made.





# 2334-080 Testing

**Final Testing after the VoIP/RS-232 board has been Registered** - All systems should be tested and final adjustments done. Connect a telephone butt set to the VoIP/RS-232 circuit board **Phone Line** and make sure the line is active and that phone calls may be made and received. 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. Attach a label to the inside of the control box listing the local phone number that was assigned during registration.

**Voice Testing -** On the 1830 circuit board lower left corner is a jumper for phone line matching. Remove the jumper from the **UPPER position** and place it on the **LOWER position** labeled **1816**. This allows the 1830 speakerphone **OPTIMUM performance and MUST be done**.

Program a phone number into the memory of the 1830 using the 1830 keypad. Then call that programmed number on the 1830. Have the call recipient press "9" on their phone to open the door. Verify the 9 tone is detected (door will open). Adjust the feedback on 1830 as necessary. This adjustment is **VERY** important for DTMF detection. See specific 1830 Installation/Owner's instruction manual for programming and adjustment information.

IMPORTANT Note: Factory set Tone Open numbers: "9" TONE activates Relay 1. "0" TONE activates Relay 0. "5" TONE activates Relay 2.

**Remote Program Testing -** Use the DKS Cloud **OR** Remote Account Manager Software version 6.5.a or later on an internet connected PC for 1830 programming and management. Create an account and open the system Info screen. Enter **System A's** master code, **phone number that has been assigned**, and pick **DKS VoIP/Data** for the service type. If a second 1830 is connected, create a second account with the same settings as above except System B's master code **MUST** be different. Refer to the Remote account manager software manual for additional settings which **MUST** be made. Enter some test data into the resident screen and then attempt to send the data to the 1830.

## 2334-080 Troubleshooting

**IMPORTANT:** The Master Code can only be programmed using numbers and not the "\*" or "# " keys.

### Voice Not working:

• Are the lights on the VoIP adapter ON? If not, look for circuit board power LED. If ON. Power transformer MUST NOT be connected to a receptacle controlled by a ON/OFF switch.

• Registration is not complete OR DATA ONLY has been selected. Service suspended because of past due bill. Contact DoorKing for support.

### Data Transfer Not Working:

• Are the lights on the VoIP adapter ON? Is the board power LED ON? If yes, press Reset Links button or cycle power to board.

• Registration is not complete OR VOICE ONLY has been selected. Service suspended because of past due bill. Contact DoorKing for support.

• Wiring error to the entry system. Check RS 232 wiring.

• Master code mismatch. Master code for the 1830, PC software, and DKS VoIP website MUST match each other.

• Check for remote account manager error messages for failure reasons such as memory size, anti passback mismatch, etc, and correct errors.

• 1830 wiegand/RS 232 power is missing. Check for 16.5VAC at 1830 auxiliary terminals 1,2.

• Try connecting a laptop directly to the 1830 and see if possible to transfer data.

• Check the LED lights on the circuit board. During a data transfer the yellow Ethernet data LED should be flashing. The data LED near the TCP/IP should be flashing. The RS 232 LEDs should be flashing for the proper system either A or B indicating attempted data transfer. If the wrong RS 232 LEDs are flashing, A and B systems are mixed up.

• Check the 1830 baud rate setting. It should be 19200bps. See specific 1830 Installation/Owner's manual. Older 1830s only run at 9600bps (Rev L and earlier) (K and earlier 1838 boards). Call DoorKing tech support for help.

• Network cable (RJ45 cable) loose or unplugged on the VoIP adapter or circuit board.

• Cycle power to the TCP/RS 232 adapter.







## **ACCESSPLUS Series VolP 2334-081/Cat5 Control Box**

DoorKing Part Number 2334-081

# DO NOT use this VoIP device to make 911 calls.

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

The VolP/AccessPlus Cat5 Control Box is fee based and operates on DoorKing's network website. The control box provides voice communication and data communication plan selected at DoorKing's Server website.

The VolP/AccessPlus Cat5 Control Box is designed to be used with: 1802, 1808, 1810, 1812 and 1838 AccessPlus systems.

# **Installation Options:**

The VolP/AccessPlus Cat5 control box MUST be wired to the AccessPlus system's phone line (voice) and Cat5 connection (data). See next page.

The VolP/AccessPlus Cat5 will work with TWO AccessPlus systems connected to it. These are designated as System A and System B. See next page to wire 1 or 2 AccessPlus systems to the box.



https://dksdb.dksoftware.com/UserLogin.aspx

Before starting the registration process, be sure to have the **VoIP ID number** written down. This number is printed on a label on the VoIP adapter. Also the **Master Code** of the phone entry system will be needed for the registration process.

Click the **IM/VoIP DKS button** on the first screen. Enter your personal information, then click the **entry systems tab**. Add an entry system by selecting the **DKS VoIP/Data** service.

NOTE: VolP/Data uses the VolP adapter AND the DoorKing client mode DKS TCP/IP adapter. (DO NOT select the DKS VolP only. This is for voice ONLY and data will not function with this selection.)

Enter the **VoIP ID number** on the decal on VoIP adapter, the optional name of the system A entry system if desired, and your **postal area code** which will be used for control box phone number selection. Finally, enter the **Master Code** of the System A entry system, then Click **ADD**. The entry system will be added to the table above. Click the **billing tab** and enter billing information. When completed, the VoIP and **DKS TCP/IP** adapters will be turned **ON** and a phone number will be **automatically assigned** to the control box.

Record the phone number assigned to the control box for your records and also needed when programming the AccessPlus on pages 7-8.

### **Installation Steps:**

- 1. Install and wire control box to AccessPlus(s) and your router (page 6).
- 2. Power up control box (page 6).
- 3. Register control box and System A AccessPlus online (see above).
- Setup Phone Number/Data over IP on AccessPlus(s) system(s) (pages 7-8).
- 5. Test control box (page 9).
- 6. Troubleshoot control box if necessary (page 9).

**Note:** Installation steps assume that the AccessPlus system has already been setup for the **master code** (in your AccessPlus manual) and **multiple system programming** (in your AccessPlus manual)

if 2 AccessPlus systems are being used.

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## rogramming the AccessPlus for Vol

Before proceeding with any of the programming steps on this page and the next page, install the AccessPlus Management software on the computer (PC ONLY) that will be used for this purpose. Once the software is installed and the unit is connected. refer to the software programming steps and help screen instructions to proceed with the programming steps on this page and the next page. Be sure to register the software - follow the on-line registration instructions when you download 1.07A.



**Reboot Note:** If a programming step calls for a reboot, follow the programming steps in 2.3.5. If you are performing several programming steps that call for a reboot, complete **ALL** of those steps first, then perform the reboot sequence in 2.3.5.

Important Note: The unit will prompt you with short tones (beep) when each programming step has been correctly keyed in and with a long tone (beeeeep) when all of the programming steps have been successfully completed in the sequence.

## **2.3.1 Set the AccessPlus System IP Address** (reboot required)

### Factory setting is: no factory default (required programming step)

A valid value for any of the three digit fields in this sequence is 000 to 255. All 3 digits **MUST** be entered in each field between dots, for example: 192.168.0.30 must be entered as 192.168.000.030

For System A, program IP address to: 192.168.000.030 For System B if installed, program IP address to: 192.168.000.031



1. Press \* 5 1 and enter the MASTER CODE. [\* 5 1 \_ \_ \_ (beep)] 2. Enter the IP address. Use the \*key to enter the "dot".

```
System Keypad
```

[ \_ \_ \*(beep) \_ \_ \*(beep) \_ \_ \*(beep) \_ \_ \*(beep)]

3. Press 0 # TOGETHER to end. [0 # (beeeeeep)]

## 2.3.2 Sub-Net Mask (reboot required)

### Factory setting is: no factory default (required programming step)

All sub-net mask should be set to 255.255.255.000. This rarely needs to be changed, consult with your network expert first. Valid values for any of the three digit numbers is 000 to 255.



- 1. Press \* 5 2 and enter the MASTER CODE. [\* 5 2 (beep)]
- 2. Enter the sub-net mask number. Use the \* key to enter the "dot".

3. Press 0 # TOGETHER to end. [0 # (beeeeeep)]

### 2.3.3 Set the Cellular Gateway IP Address (reboot required)

### Factory setting is: no factory default (required programming step)

Valid value for any of the three digit numbers is 000 to 255. All 3 digits **MUST** be entered in each field between dots, for example: 192.168.0.1 must be entered as 192.168.000.001 Program **Gateway IP address** to: **192.168.000.001** 



- 1. Press \* 5 3 and enter the MASTER CODE. [\* 5 3 \_ \_ \_ (beep)]
- 2. Enter the gateway (router) IP address. Use the \* key to enter the "dot".

[ 1 9 2 \*(beep) 1 6 8 \*(beep) 0 0 0 \*(beep) 0 0 1 \*(beep)]

3. Press 0 # TOGETHER to end. [0 # (beeeeeep)]

## **2.3.4 Set the Port Number** (reboot required)

### Factory setting is: no factory default (required programming step)

This must be the same port number that was programmed in the software. Valid values are 01024 to 65535. All 5 digits must be entered in the field, for example: 1030 must be entered as 01030



- 1. Press \* 5 6 and enter the MASTER CODE. [\* 5 6 \_\_\_\_ (beep)]
- 2. Enter the 5-digit port number, then press \*. [ \_\_\_\_ \* (beep)]

**3.** Press 0 # TOGETHER to end. [0 # (beeeeeep)]

## 2.3.5 Enable / Disable TCP / IP Support - System Reboot

### Factory setting is: no factory default (required programming step)

This programming sequence enables or disables the support for TCP / IP. It will also cause an automatic reboot of the AccessPlus two seconds after the programming sequence is completed. For this reason, perform this step after all other network setup programming sequences have been completed (sections 2.3.1 through 2.3.4) or whenever an individual network programming step is performed.



- 1. Press \* 5 0 and enter the MASTER CODE. [\* 5 0 \_ \_ \_ (beep)]
- 2. Press 0 \* to disable TCP / IP **OR** press 1 \* to enable TCP / IP. [ \_ \* (beep)]

### 3. The system will reboot automatically.

System Keypad S. The System will report automatically. Once the unit is connected, the green LED on the RJ-45 jack on the interface board should light indicating that a good wire connection has been made (See illustration on previous page). The LAN DOWN LED should go off after a few seconds if all previous programming steps have been completed and programmed successfully.

**STOP!** If you are **OR** are going to use a computer with the AccessPlus system, **NO other programming at the System Keypad is required.** All programming parameters beyond this point can be set in the Management software.

This software will show all the specific programming parameters that will exist in the memory of the AccessPlus system after it has been programmed. It can be easily recalled for future modification or re-programming.

Download AccessPlus Account Manager software at: http://www.doorking.com/accessories/access-plus-software





**Note:** The system keypad **DOES NOT** have the capability to show any of the programming that will exist in the memory of the unit after being programmed. The only way to keep track of the specific parameters that have been programmed into the unit for future reference when **NOT** using the management software, is to physically write down all the information in a log (In back of your chosen AccessPlus manual).

## 2334-081 Testing

**Final Testing after the VoIP System has been Registered -** The system should be tested and final adjustments done. Connect a telephone butt set to the VoIP system circuit board **Phone Line** and make sure the line is active and that phone calls may be made and received.

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. Attach a label to the inside of the cellular enclosure listing the local phone number that was assigned during registration. For DATA ONLY cellular systems skip the voice testing and proceed to remote program testing.



**Voice Testing -** Program a phone number into the memory of the AccessPlus using the AccessPlus keypad. Then call that programmed number on the AccessPlus. Have the call recipient press "9" on their phone to open the door. Verify the 9 tone is detected (door will open). The feedback on the AccessPlus **MUST** be adjusted as necessary for the cellular network. This adjustment is **VERY** important for DTMF detection. See specific AccessPlus Installation/Owner's instruction manual for programming and adjustment information. Note: The 1812 AccessPlus **automatically** adjusts feedback and needs no adjustment.

IMPORTANT Note: When using the VoIP network, change TONE OPEN numbers to: Relay 1; 9-8-0-1 and Relay 2; 7-6-5-4.

**Remote Program Testing** - Install DoorKing Remote Management Software version 1.07A or later on an internet connected PC that will be used for AccessPlus programming and management. Create an account and open the system Info screen. Enter **1st AccessPlus's** master code, phone number that has been assigned, and pick DKS VoIP for the service type. If a **second AccessPlus** is connected, create a second account with the same settings as above except 2nd AccessPlus's master code **MUST** be different. **Refer to the Remote account manager software manual for additional settings which MUST be made**.

Enter some test data into the resident screen and then attempt to send the data to the AccessPlus.

## 2334-081 Troubleshooting

**IMPORTANT:** The Master Code can only be programmed using numbers and not the "<sub>\*</sub>" or "# " keys.

#### Voice Not working:

• Are the lights on the VoIP adapter ON? If not, look for circuit board power LED. If ON. Power transformer MUST NOT be connected to a receptacle controlled by a ON/OFF switch.

• Registration is not complete OR DATA ONLY has been selected. Service suspended because of past due bill. Contact DoorKing for support.

#### Data Transfer Not Working:

• Are the lights on the VoIP adapter ON? Is the board power LED ON? If yes, press **Reset Links** button or cycle power to board.

• Registration is not complete OR VOICE ONLY has been selected. Service suspended because of past due bill. Contact DoorKing for support.

• Wiring error to the AccessPlus system. Check wiring.

• Master code mismatch. Master code for the AccessPlus, PC software, and DKS VoIP website **MUST** match each other.

• Check for remote account manager error messages for failure reasons such as memory size, anti passback mismatch, etc, and correct errors.

• Try connecting a laptop directly to the AccessPlus and see if possible to transfer data.

• Check the LED lights on the circuit board. During a data transfer the yellow Ethernet data LED should be flashing. The data LED near the TCP/IP should be flashing. The Cat5 connector LEDs should be flashing for the proper system either A or B indicating attempted data transfer. If the wrong Cat5 connector LEDs are flashing, A and B systems are mixed up.

• Check the AccessPlus baud rate setting. It should be 19200bps. See specific AccessPlus Installation/Owner's manual. Older AccessPlus systems only run at 9600bps (Rev L and earlier) (K and earlier 1838 boards). Call DoorKing tech support for help.

• Network cable (RJ45 cable) loose or unplugged on the VoIP adapter or circuit board.

• Cycle power to the AccessPlus system.