

1830 Series VoIP / RS-232 Control Box

DoorKing Part Number
2334-080

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

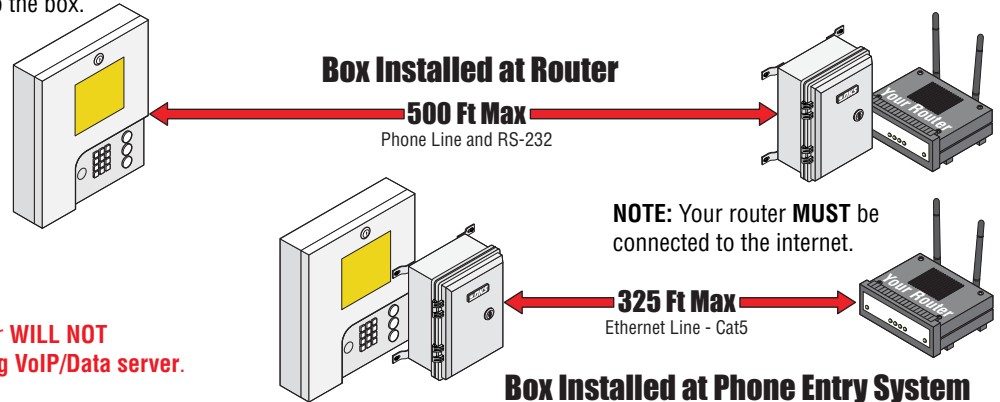
The **VoIP/RS-232** Control Box is **fee based** and operates on DoorKing's network website. The control box provides voice communication and data communication plan selected at DoorKing's Server website.

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

Installation Options:

The **VoIP/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 2 1830 entry systems to the box.



Registration

The VoIP adapter and DKS TCP/IP adapter **WILL NOT** function until registered with the **DoorKing VoIP/Data server**.

The registration page may be reached at:

<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: **VOIP/Data** uses the **VoIP** adapter **AND** the DoorKing client mode **DKS TCP/IP** adapter. (**DO NOT** select the **DKS VOIP 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. **Make sure to record the phone number assigned to the control box for your records.**

Installation Steps:

1. Install and wire control box to 1830(s) and your router (page 2).
2. Power up control box (page 3).
3. Register control box and System A 1830 online (see above).
4. Test control box (page 3).
5. Troubleshoot control box if necessary (page 3).

Note: Installation steps assume that the 1830 system has already been setup and functioning including the **master code** and **multiple system programming** if 2 1830s are being used.



DKS
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Wiring

AFTER DKS Online Registration Completed, VoIP/RS-232 Board will function.
See previous page.

The **EARTH GROUND** must be connected to a proper ground close by (ground rod, cold water pipe in the ground, existing electrical ground, etc).

Battery Back-Up

Call DoorKing

Reset Timer Selector
OFF-OFF = No reset
OFF-ON = 1 day
ON-OFF = 2 days
ON-ON = 3 days

Reset Links

Cat5 cable to Your Router connected to the internet
See previous page.

TCP/IP Camera

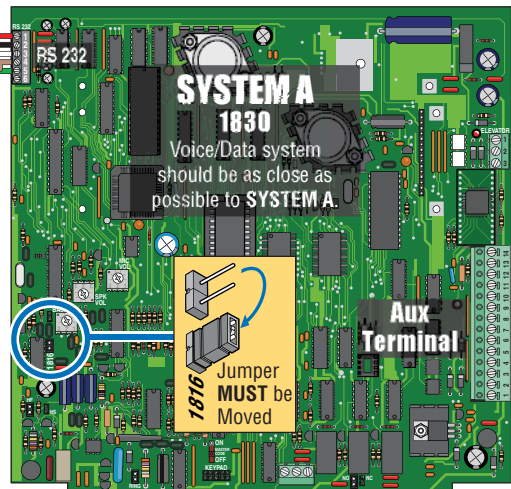
RS 232 Connection

System A Terminal	1830 Terminal
DATA OUT-Red	1
DATA IN-Black	2
BUSY OUT-White	3
BUSY IN-Brown	4
GROUND-Green	5

Supplied Power Transformer
16.5VAC
40 VA

Data

500 ft RS-232 MAX



Voice

Twisted Pair **MUST** be used.

Do Not Connect Power To A Receptacle Controlled By A ON/OFF Switch.

Existing Power

Supplied Power Transformer
16.5VAC
40 VA

1 ONLY

Choose How to Power VoIP/RS-232 Board:

- 1 Wire supplied power transformer (16.5 VAC, 40 VA) to Aux terminal 5 & 6. This powers VoIP/RS-232 board **AND** DoorKing phone entry system's Aux terminal. If Aux terminal 1 & 2 is already being powered by a 16.5 VAC, 20 VA transformer, **REPLACE IT** with the 16.5 VAC, 40 VA transformer that is supplied to power **BOTH** devices. **NOT available on the 1834. - OR -**
- 2 Wire supplied power transformer (16.5 VAC, 40 VA) **DIRECTLY** to VoIP/RS-232 power terminal. **DO NOT** wire to Aux terminal 5 & 6.

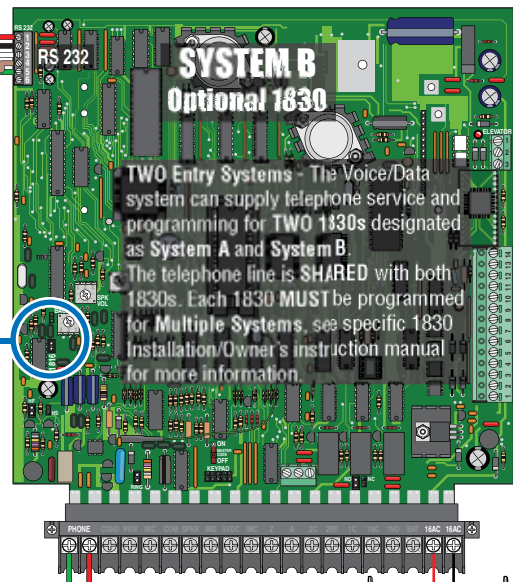
RS 232 Connection

System B Terminal	1830 Terminal
DATA OUT-Red	1
DATA IN-Black	2
BUSY OUT-White	3
BUSY IN-Brown	4
GROUND-Green	5

500 ft RS-232 MAX

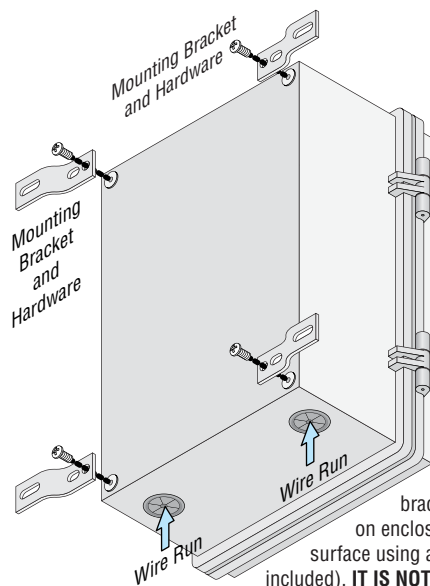
Data

Twisted Pair Phone Line **MUST** be used.



Voice

Box Installation



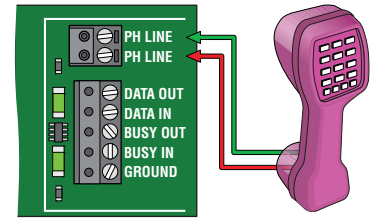
The plastic enclosure comes with mounting brackets and hardware to mount on enclosure. Mount enclosure on surface using appropriate hardware (not included). **IT IS NOT RECOMMENDED DRILLING HOLES IN THE PLASTIC ENCLOSURE!**

If holes must be drilled, remove the circuit board before drilling and be sure that mounting bolts/screws do not touch the back of the circuit board. Holes must be sealed to prevent water intrusion.

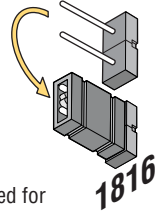
System B Phone Line Alternate Use - If system B is not being used for a second phone entry system, a phone can be installed and used. **It shares the phone line with the System A phone entry system.** The phone cannot be used while a transaction is taking place on System A.

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 - Install DoorKing Remote Management Software version 6.3.g or later on an internet connected PC that will be used 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.

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.

