



## RC5-KPA and RC5-KPS Remote Control & Monitor Operating Manual

The Juice Goose RC5-KP is a remote control and operations monitor for the Juice Goose CQ Series line of power sequencing products. For information not contained in this manual, please see product literature or operations manuals for any CQ Series Product.

The RC5-KP will control and monitor any CQ Series product. It features:

- o Sequence Up and Sequence Down Function
- o Indicator Lights for Sequence Completion

**DISCLAIMER:** Juice Goose shall under no circumstances be held responsible for any loss, damage or injury resulting directly or indirectly from the use of the RC5 in a manner inconsistent with safe and proper operating procedures and/or with this documentation. The user should determine prior to use whether the Juice Goose RC5 is adequate, suitable or safe for the application intended. Since individual applications can be subject to extreme variation, Juice Goose makes no representation or guarantee as to the suitability of the RC5 for any specific application.

### INSTALLATION

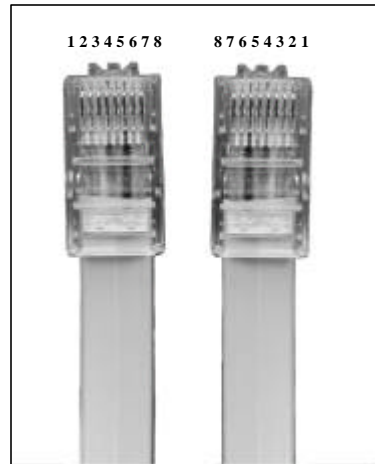
The RC5-KP requires no external power supply. It fits inside a single gang switch box, intended to be mounted in a wall or similar location. The front panel fits a “Decora” style faceplate.

### SEQUENCE SIGNAL LINE CONNECTION

Sequence signal line output from the RC5-KP is accomplished by way of eight wire, RJ-45 type cable (similar to CAT5).

**NOTE: The RJ connector on one end of this cable should be upside down from the connector on the other end of the cable. When the connectors are placed end to end, the colors of the wire strands in the cable should match. When placed side to side they should mirror each other. Pin #1 on the CQ Input is Pin #8 on the Output.**

**According to the following diagram, when the connectors on both ends of the cable are placed end to end, the colors should match when viewed from left to right. This assembly process conforms to standard teleco, rather than Ethernet, configuration.**



Once the cable has been assembled, it may connect the RC-5 and the CQ Series unit which will be controlled by the RC-5. There is no known functional distance limit between an RC-5 and a CQ Series device. The CQ Series system operates by creating a low voltage, DC current loop between CQ Series units. It is not sensitive to minor voltage fluctuations along this line. It is neither sensitive to nor does it create high frequency transmissions. Therefore, this wire may be run along any desired path, subject to any local wiring codes. Once the cable has been attached to the modular connectors, the cable may join the RC5-KP and the CQ Series unit which will be controlled by the RC5-KP.

#### ENABLING THE MONITOR

In order to enable the Sequence Up and Sequence Down complete LEDs of the RC5-KP, a “Terminator” (**provided with the RC5-KP**) must be installed in the Signal Output connector of the last CQ Series product in the system. Simply snap the Terminator into the Output connector of the last CQ Series product in the system.

#### OPERATION

##### **Power sequencer overview:**

Juice Goose CQ Series products (compatible with the RC5-KP) are designed to provide “plug-and-play” convenience for AC power control, used primarily for audio systems.

##### **General features:**

The RC5-KP power sequence controller is a microprocessor-based accessory product that provides key-less remote control when connected to one CQ Series power sequencing module. Functions of the RC5-KP are proprietary and not of use with other applications. This product uses a three button key pad for either analog (RC5-KPA) or coded, secure (RC5-KPS) operation.

Indicator LEDs show function and status of the power sequence Up or Down process. The appropriate LED will blink while a sequence Up or Down operation is in process and stay lighted when that process is completed.

**RC5-KPA (Analog)**

This model is intended for use when access to power control does not need to be restricted. Three buttons on the RC5-KPA are labeled “One” (top), “Two” (middle) and “Three” (bottom). Pushing the top button twice will cause a connected CQ Series product to sequence up (i.e. turn on). Any additional CQ products connected to the first one will be controlled by that first unit. Pushing the bottom button twice will cause all connected CQ Series products to sequence down (i.e. turn off). Pushing the middle button twice will pause a sequencing process active at that time.

**RC5-KPS (Secure)**

This model is intended for use when access to power control should be limited to authorized individuals.

Operation of this model requires entry of a four digit operating code using the three buttons (“One”, “Two” and “Three”) on the RC5-KPS. The operating code comes from the factory set to '2233' but can be changed by the user. Any four digit sequence can be used as a valid operating code other than “3132”, which is the administrative code entered by the user to enable changing the operating code. (Note: this administrative code is factory set and can not be changed).

The operating code “toggles” between a sequence up and sequence down command. The same code is entered to cause the CQ power sequencing modules to sequence up or down. If they are powered down, or in the process of powering down, entering the code will cause them to change to the power-up sequence. Entering the code again will cause them to sequence down.

When each key is pressed, a short flash on the button LED’s indicate the key press was recognized. When a valid operating code is entered the Up or Down LED begins flashing and then stays on when that sequence process is completed.

**Setting the Operating Code**

The Sequence Up / Down, Operating Code is factory set to '2233'. To change the operating code, enter the administrative code: “3132” followed by four numbers. After all LEDs flash enter the same four digit code a second time. All LEDs will flash again confirming the code has been changed. Test that the new code has been properly entered.

After the RC5-KP is installed and all CQ Series equipment is connected (see “Installation” section) the power sequencing system is ready to be powered up. When the RC5-KP is first connected to power (i.e. connected by cable to a CQ unit which is plugged into power) it is automatically issuing a sequence down command.

**Operating with the RC5-KPS**

To sequence the system up enter the four digit Operating Code. The UP LED

will begin to flash and the CQ module connected directly to the RC5 will turn on first, followed by any additional CQ modules. When the last piece of equipment is activated the Up LED will stay lighted. To turn the system off, once again enter the same Operating Code. The Down LED will begin to flash and the farthest CQ equipment will turn off first, followed by successively closer equipment. When all equipment is off the Down LED will stay lighted. Should AC main power be lost and then restored the system will remain off until a sequence up command is once again entered.

#### IN CASE OF MALFUNCTION

The RC5-KP is not intended to function with any other power sequencing product or any other product that uses a 8 wire RJ type connection, including data communications or telephony equipment. Should there be a problem with the performance of the RC5-KP the following check list is provided as a diagnostic aid. If a problem is observed, first double check that the CQ cable has been correctly assembled and connected. Call Juice Goose Technical Support for assistance if desired.

#### TROUBLESHOOTING

1. RC5 lights are not on.
  - a. Check cable connection to the RC5. Is it plugged in?
  - b. Is it connected to a CQ Series product that is receiving power.
2. Sequence Up light will not activate after completion of the sequence up process.
  - a. Is the Terminator plugged into the Signal Output connector on the last CQ unit in a series?
4. Some lights on the RC5 are lit, but the proper system status is not indicated and the CQ System is not functioning correctly. The probable problem is that one cable connector is attached to the cable upside down.
  - a. Disconnect the RC5-KP from the first CQ device and attempt to turn on the CQ device using the sequence switch on the CQ.
  - b. Check that the connectors are properly installed as per the directions in this manual.

If the problem can not be remedied, contact Juice Goose for Technical Support. You may call or contact Juice Goose online for fast and complete technical information. If a unit is to be returned for service, an authorization number will be required for tracking purposes.

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