PROFESSIONAL SOUND CORPORATION

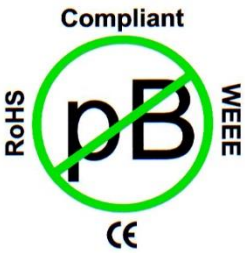
Bell and Light System™

RF Remote Control

Thank you for purchasing the Professional Sound Corporation Bell and Light System RF Remote Control. PSC is confident that the RF Remote Control has set new standards in design and ease of use for on set Bell and Light Systems. Please feel free to contact us at the address below if you have any comments, suggestions, or questions about your new RF Remote Control. Additionally, we are always open to suggestions for new products that you would like to see developed.

PSC extends a limited one-year parts and labor warranty to all RF Remote Control users.

PLEASE BE SURE THAT YOU HAVE READ AND UNDERSTOOD THIS ENTIRE OPERATIONAL MANUAL BEFORE INSTALLING AND/OR USING THE PSC RF REMOTE CONTROL! FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE RF REMOTE CONTROL AND/OR THE PSC BELL AND LIGHT SYSTEM POWER SUPPLY MODULE. IF YOU DO NOT FULLY UNDERSTAND ANY PART OF THE ENCLOSED INSTALLATION INSTRUCTION, PLEASE STOP AND CONTACT PSC FOR CLARIFICATION BEFORE INSTALLING THE RF REMOTE CONTROL INTO YOUR PSC BELL AND LIGHT POWER SUPPLY MODULE. PSC ASSUMES NO RESPONSIBILITY FOR INCORRECLTY INSTALLED RF REMOTE CONTROL MODULES AND/OR DAMAGES CAUSED BY INCORRECTLY INSTALLING THE MODULE.



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PSC Bell and Light Power Supply with RF Remote Control Module Installed and Hand-held Transmitter

DESCRIPTION:

This optional RF Remote Control System consists of a small, compact hand-held transmitter and a receiver module. The Hand-held transmitter operates on 433Mhz and is fully approved for use in the United States, Canada and all of the European Union. The receiver module is designed to be installed in and will remotely control our fourth generation Bell and Light Power Supply module. Using the RF remote control eliminates the need for the traditional cabled remote control and also semi-automates the bell generation function to simplify your job on set.

USE:

The use of this RF Remote Control is very simple. When the Director yells “Roll Camera” you simply push the red “ROLL” button. The PSC bell and Light System will then generate a long

(two second) blast of the bells and turn on the red flashing lights. This will alert everyone in and around the set to be quiet as filming has begun. At the end of the take, the director will yell “Cut” and you press the green “CUT” button. The system will then generate two, one second long blasts of the bell indicating that filming has stopped. At the same time, it will turn off the red flashing lights and turn on the steady-state, soothing green lights to let everyone in and around the set know they are free to move about and make noise.

PARTS INDENTIFICATION:

Hand-held Remote Control **Receiver Module** **Receive Antenna**

SECURITY CODE SETTING:

The PSC Bell and Light System RF Remote Control uses a user set-able 10-bit security code. This code is used to allow the transmitter and receiver to be paired up and operate together without interference from other transmitters. This code selection is similar to the code selection on a garage door opener. There are ten (10) small code selection switches in the hand-held transmitter and ten (10) small corresponding switches on the receiver module printed circuit board***. The switches must be set the same on both the transmitter and receiver in order for them to operate together.*** These switches have been set to a matching pair at the PSC factory. We pre-set each set of transmitter and receiver modules for you so that you can

use them without going to the trouble of setting them yourself. We set each and every system we build to a random setting so that no two PSC Bell and Light System RF Remote Controls have the same settings. This will allow the systems to be used near each other such as in the case of working on a major film studio lot with multiple sound stages. Should you find that your system is somehow being interfered with, you can change your individual codes at any time by following the instructions here:

1. Turn off the power to your Bell and Light Power Supply.

2. Remove the top cover of the power supply by removing the 8 case screws (4 on each of the left and right sides)

3. Remove the tiny code access switch cover from the hand-held transmitter.

4. Set both sets of switches so that they are identical. Please note that the switches on both units are numbered 1-10 for your convenience. For example, set switches 1 through 4 to "ON" and 5-10 to "OFF". Make sure both the hand-held transmitter and the receiver module switches are set exactly the same.

5. Re-install covers on both the Power Supply module and the code switch access cover on the transmitter. Power up the system and test to see if the system now works with the new codes installed.

*****SPECIAL NOTE*** You may not set all 10 switches to either ALL OFF or to ALL ON!!! The code software within these units requires that at least one of the 10 switches be set to "ON" and at least one of the 10 switches be set to "OFF"**

Hand-held Transmitter showing code setting switch access door removed

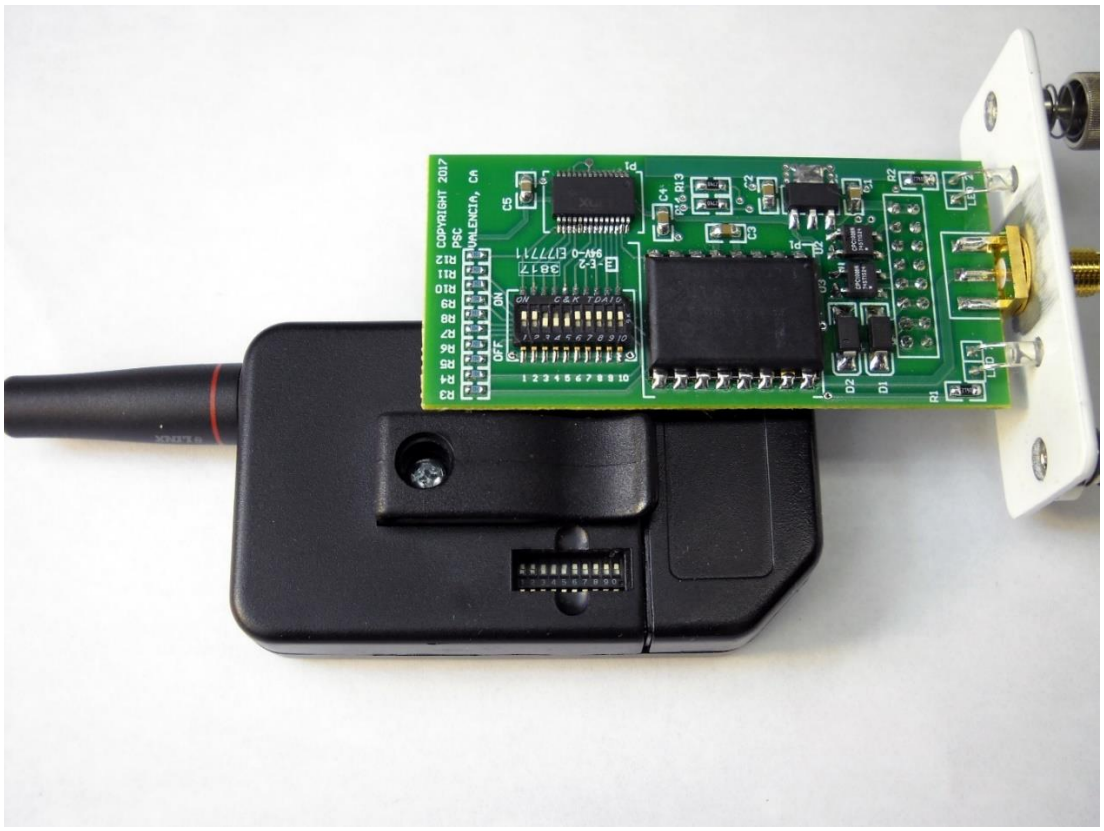

Photo showing both Receiver and transmitter code setting switches

*****NOTE*** the switches on both units are numbered 1-10 for your convenience.**

Switches in photo are set as follows: 1,2 "ON", 3,4 and 5 "OFF", 6,7,8,9 and 10 are "ON"

INSTALLTION OF RECEIVER MODULE:

The receiver module is very simple to install, but it must be done with great care. There is a 16-pin male right angle header (male connector) on the bottom of the receiver module printed circuit board. This male connector must properly line up and mate with a female 16 pin socket on the power supply unit. Failure to properly align these two connectors can result in damage to either the receiver module and/or the power supply. Please take you time and follow the instructions listed below. Alternatively, you can send you power supply and receiver module to PSC where we will be happy to install it for you free of charge. Shipping to and from PSC is your responsibility. RF Receiver Modules and/or Power Supplies are not covered under warranty for improper installation damage.

1. **Unplug the Bell and Light Power Supply from its AC power.**
2. **Remove the access cover by unthreading the two thumb screws.**

Photo showing blank cover plate in place before installing RF receiver Module.

You must remove this access cover plate by unthreading the two thumb screws.

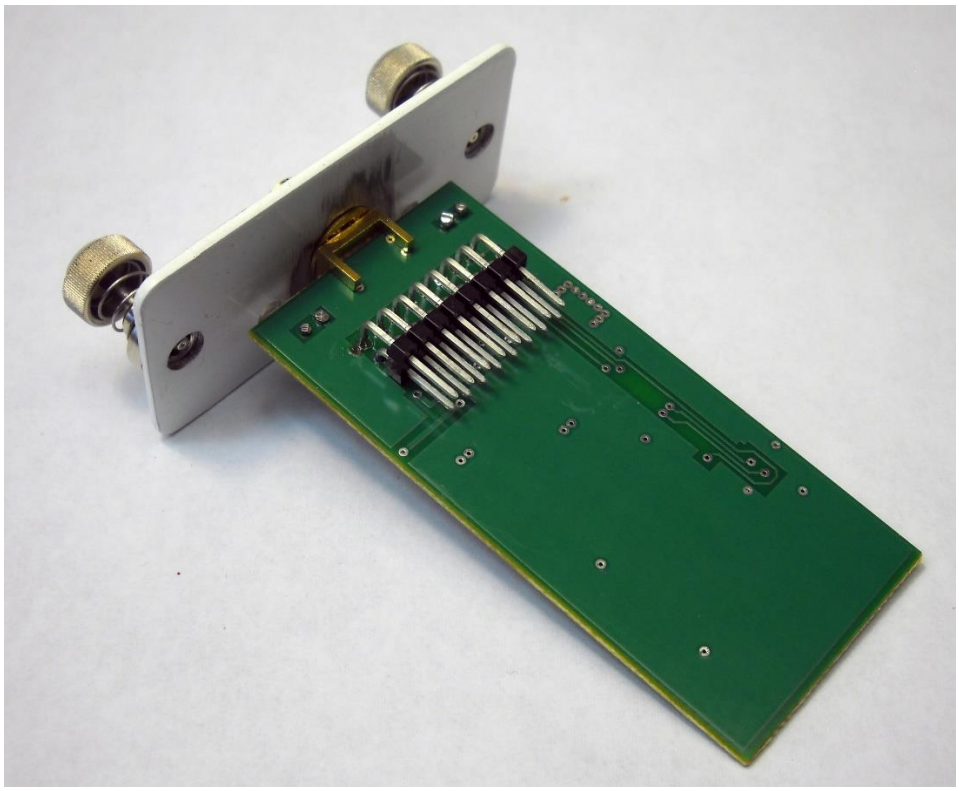

Photo showing 16 pin MALE connector on bottom of Receiver Module

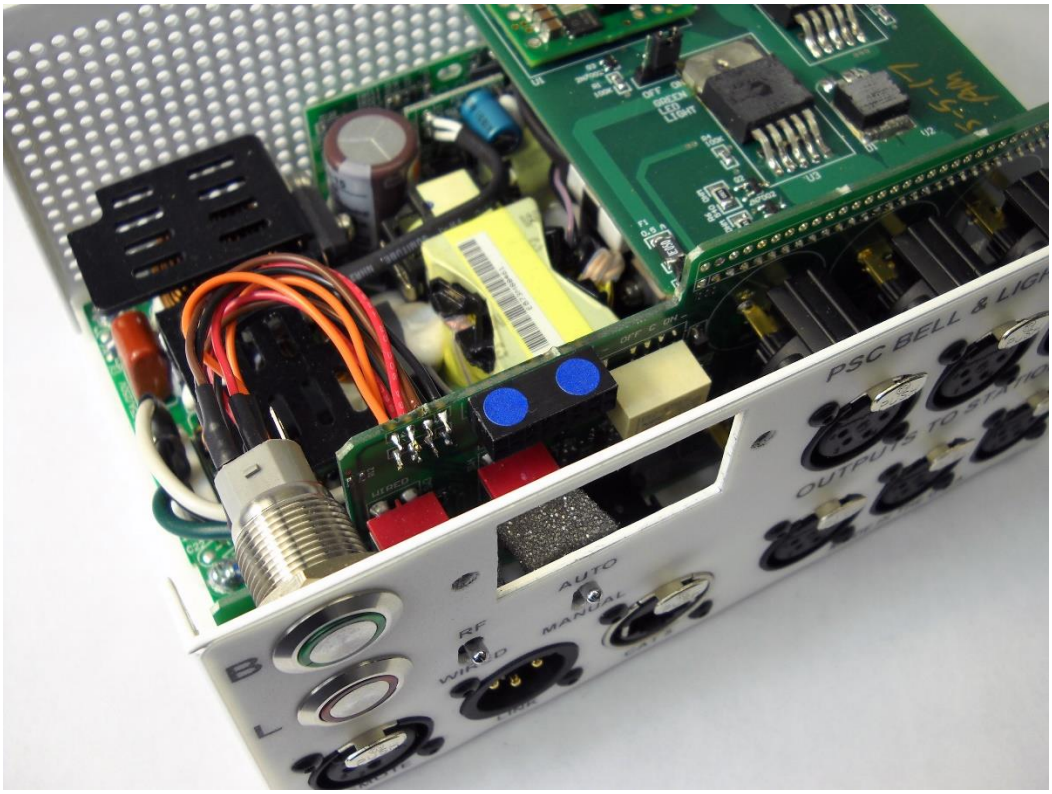

Photo showing 16 pin Female connector inside of power supply unit.

*****NOTE*** connector has 2 BLUE dots on it in the photo.**

You must align the 16 pin MALE connector on the Receiver Module with this 16 pin FEMALE connector inside of the power supply unit. Be careful and go slow and it will be easy!

3. CAREFULLY ALIGN the RF Receiver Module within the opening of the power supply. You must make sure that you have the two thumb screws aligned EXACTY with their corresponding threaded holes in the power supply housing. This will insure that the 16-pin male connector is properly aligned with the 16-pin female connector inside the power supply. Once you make sure that you have these two screws exactly aligned, gently press the board into place. You should be able to feel the 16-pin male connector engaging with the 16-pin female connector. If you have any issues with pressing the module into place, STOP and re-check your alignment of the two thumb screws with the threaded openings in the power supply case. Once you are confident that you have pressed the module into place, you must then engage and hand tighten the two thumb screws. The white aluminum front plate on the RF receiver module should now be fully seated against the front of the housing of the power supply unit.

IF YOU HAVE ANY ISSUES WHILE INSTALLING THE RECEIVER MODULE, PLEASE DO NOT FORCE ANYTHING, STOP AND CONTACT PSC AND WE WILL HELP YOU WITH THE INSTALLATION.

Photo showing how thumb screws must be aligned with threaded holes on Power Supply

4. Stop and set the operation mode switches on the front of the power supply to the correct positions for use with the RF Remote Control. The Left switch should be set to the upward position so that it is switched to the "RF" control position. The Right switch should be should also be set to the upward position so that it is switched to the "AUTO" mode. This will allow the power supply to fully generate the Bell and Light actions required on set.

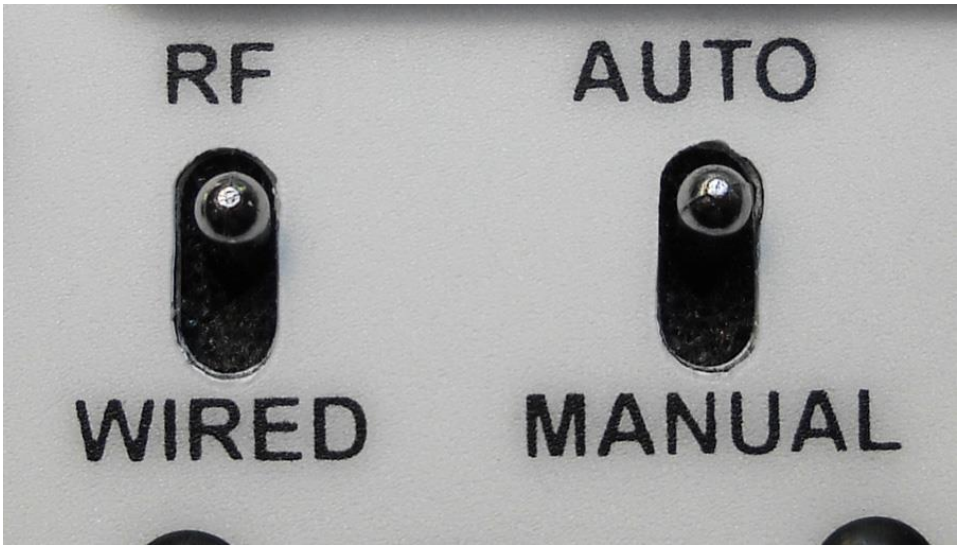

Photo showing proper setting of mode switches for use with RF remote control

INITITIAL POWER UP AND TESTING:

Once you have finished installing and securing the two thumb screws on the receiver module, you may now plug the power supply back into AC power. Take a look at the front of the RF receiver Module. If you properly installed the module (aligned the 16 pin connectors correctly) the BLUE "POWER" indicting LED will now be lit.

IF THE BLUE "POWER" LED IS NOT LIT, STOP, UNLPUG THE UNIT AND RE-CHECK YOUR MODULE INSTALATION AND ALIGNMENT!!

DATA TRANSMISSION LED

There is a LED indicator on the front panel of the receiver module that is labeled "DATA" This LED will light up Yellow when data has been successfully transmitted form the hand-held transmitter to the receiver module. Any time you press either the "CUT" or "ROLL" buttons on the transmitter, the yellow "DATA" led will light up. This is an easy way to check to see if your transmitter is properly talking to the receiver module.

WARNING:

This device is AC powered and thus can be dangerous if not used properly and safely. Do not use this product in wet, damp or rainy environments. Keep product dry at all times. Do not open power supply unit. It contains high voltages that could cause serious bodily harm or fatality. No user serviceable parts inside. Please refer to a qualified service technician for any repair. Do not modify unit in any way. Do not use the power supply for any other application or use.

TRANSMITTER BATTERY REPLACEMENT:

The hand-held transmitter uses one standard # CR2032 coin button cell. This cell should last for several years with intermittent use on film sets. To replace the battery, remove the battery access cover by pressing down firmly on the label area and sliding the cover off. Once the cover is off of the unit, remove the battery by sliding it from beneath the battery retaining holder (metal clips). Replace the battery with the same type of battery while observing the polarity of the battery to be sure it is installed the correct way. ***NOTE*** the battery positive (+) symbol should be visible (facing up and out of the unit) when the battery is installed.

THERE MAY BE RISK OF EXPLOSION IF THE BATTERY IS REPLACED WITH THE WRONG TYPE!

FCC PART 15 RULES:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

LIMITED WARRANTY:

Professional Sound Corporation warrants the PSC Bell and Light System RF Remote Control to be free of defective material and workmanship for a period of one year from the original date of purchase and agrees to repair or replace such defective part(s) or the whole product at its option, provided that the equipment is returned to Professional Sound Corporation. Shipping and insurance costs to and from Professional Sound Corporation must be prepaid by the owner. This warranty does not cover damage due to accident, careless handling, abuse or misuse, improper connection and/or installation, improper electrical contact or grounding. This warranty will be null and void in the event of removal, alteration or tampering with the serial number, or by service or repair work not performed by Professional Sound Corporation. Proof of purchase date (copy of invoice) must be furnished before warranty service will be performed. This warranty is in lieu of any other warranty, expressed or implied, including warranties without limitation, products being merchantable at the time of purchase or suitable for a particular purpose. This warranty does not extend to, or include consequential damage.

SPECIFICATIONS:

TRANSMITTER:

Size:	**2.8” x 1.6” x 0.65” less antenna (7cm x 4cm x 1.6cm)**
Weight:	**1.3 oz (37 grams)**
Material:	**Plastic**
Frequency:	**433.920Mhz**
Security Code:	**10 Bit, user selectable**
Range:	**1000’ (312meters) typical, line of sight**
Battery Type:	**CR2032**
TRANSMITTER ID:	**FCC ID: OJM-CMD-HHLR-XXXB**
	IC ID: 5840A-HHLR433A CE APPROVED

RECEIVER MODULE:

Size:	**2.2” x 3.3” x 1.1” less antenna (5.6cm x 8.3cm x 2.8cm)**
Weight:	**1.5 ox (42.5 grams)**
Material:	**Aluminum plate**
Frequency:	**433.920Mhz**
Security Code:	**10 Bit, user selectable**
Connector:	**16 pin Molex**

RoHS Certificate of Compliance

Professional Sound Corporation certifies that all products designated by Professional Sound Corporation as “PB-Free”, “RoHS Compliant” or “Green” are compliant with the requirements of the European Union’s Restriction on Use of Hazardous Substances (“RoHS”) Directive, 2002/95/EC.

Professional Sound Corporation bases its material content knowledge on information provided by third parties, including parts manufacturers, distributors and vendors. Only RoHS certified parts and sub-assemblies are used in the assembly of Professional Sound Corporation products. Additionally, Professional Sound Corporation has taken and continues to take commercially reasonable steps to ensure that its parts suppliers, subcontractors and assembly houses are RoHS compliant. Level A Banned Substances Threshold, Homogeneous Level

Asbestos Not intentionally added

Azo colorants Not intentionally added

Cadmium 100 ppm, Not intentionally added

Hexavalent Chromium 1000 ppm, Not intentionally added

Lead 1000 ppm, Not intentionally added

Polybrominated Biphenyls (PBB’s) 1000 ppm, Not intentionally added

Polybrominated Diphenyl Ethers (PBDE’s) 1000 ppm, Not intentionally added

Polychlorinated Biphenyl (PCB’s) Not intentionally added

Professional Sound Corporation certifies that all products made on or after June 30th, 2006 to be RoHS Compliant. All such products will be clearly marked with Professional Sound Corporation “compliant” label. This label assures the reseller and end user that the product is RoHS Compliant. An example of this label is shown below:

Ronald Meyer, President, Date: January 2016

CE

DECLARATION OF CONFORMITY

EMC: This product is in compliance with the Electromagnetic Compatibility Directive, 89/336/EEC as defined in EN 50081-1, EN55022 and EN 50082-1. IEC801-2, IEC801-3 and IEC801-4.

LVD: This product is in compliance with the requirements of the Low Voltage Directive, 73/23/EEC. 93/68/EEC as defined in EN60065, 1993 and/or EN60950/A1/A2/A3: 1995

TRADE NAME: PSC

MODEL: Bell & Light System RF Remote Control

RESPONSIBLE PARTY: Professional Sound Corp. 28085 Smyth Drive Valencia, CA 91355 USA

CONTACT PERSON: Ronald Meyer (661) 295-9395

TYPE OF PRODUCT: Low Power RF Remote Control

MANUFACTURER: Professional Sound Corp. 28083 Smyth drive Valencia, CA 91355 USA
We hereby declare that the equipment bearing the trade name and model number listed above has been tested in accordance with the requirements contained in the above listed directives. All necessary steps have been taken and are in force to assure that production units manufactured will conform to Directive guidelines.

November 2017 Professional Sound Corporation.