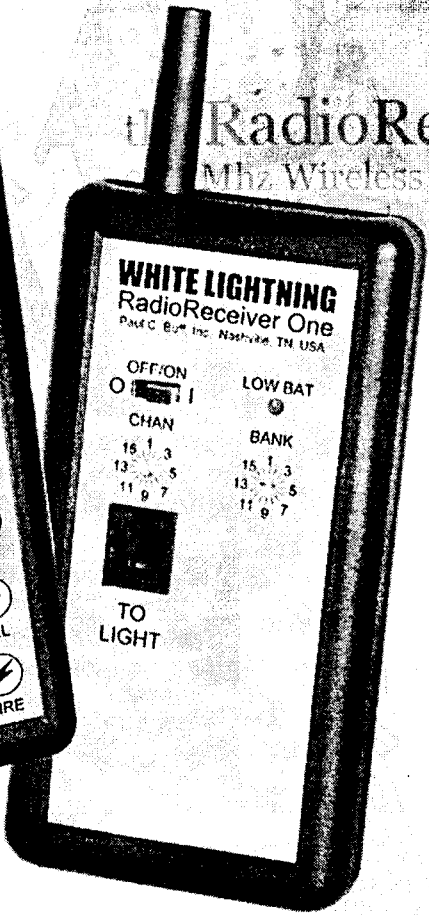
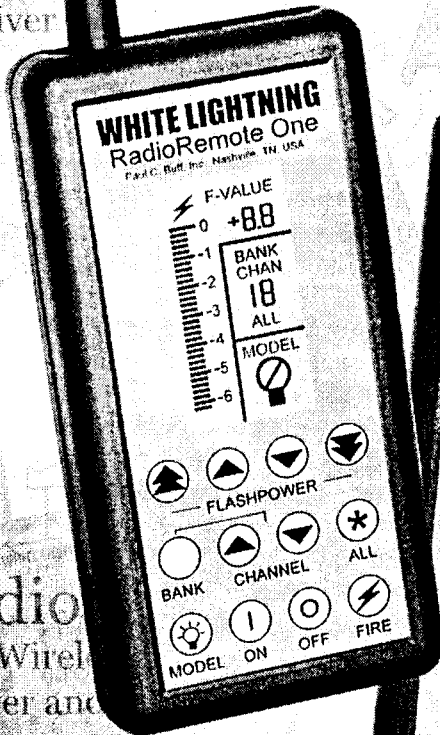


the RadioRemote One
 900 Mhz Wireless
 Transmitter and
 Receiver

RadioRemote
 900 Mhz Wireless



PAUL C. BUFF, INC.

ALIENBEES WHITE LIGHTNING LIGHTGEAR USA

THE RADIOREMOTE ONE
 OPERATIONS MANUAL

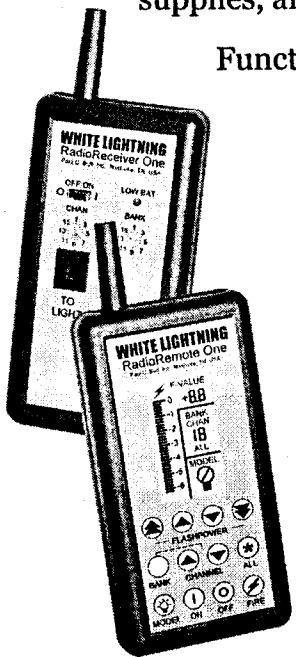
The RadioRemote One Wireless System

A complete set-up includes one **RadioRemote One Transmitter** and a separate **RadioReceiver One** for each light in that set-up.

Units are shipped with appropriate cords, batteries or power supplies, and velcro mounting attachments.

Functions of the RadioRemote One:

- remote function and a fully functional radio slave
- adjustable flashpower and modeling of up to 16 lights on 16 different banks (256 lights total!)
- maximum range based on line of sight up to 500 feet
- controls flashpower from -0 to -6.2 f-stops in 1/10 or full f-stops, with modeling settings of Full, Off, or Tracking
- a full setup includes one RadioRemote One transmitter, and a separate receiver for each light in the setup (a 900Mhz system)
- convenient glow-in-the-dark keys and back-lit display, the bar graph is easily read, to adjust individual lights. The 900Mhz system will reliably fire at long distances, around
- non-volatile memory to record previous settings
- low battery indicators
- blinking modeling lamp serving to indicate the initial data up-link success



The RadioRemote One system provides full wireless remote control for all Paul C. Buff, Inc. Flash Units. The remote system combines the convenience of both remote function as well as that of a fully functional radio slave. The RadioRemote One system allows the photographer to adjust the flashpower setting as well as the modeling mode of each light in a setup. Exposure meter reading is made easy with the ability to test fire all or individual lights. Exposure bracketing can be adjusted from the remote transmitter instead of from the camera to maintain depth-of-field. By not allowing over-range or under-range bracketing of a light, proper ratios between the lights are maintained by the system.

The RadioRemote One is not to be confused with cheap infrared remotes which require a strict line-of-site, from the transmitter to the light, and don't allow camera sync. The 900Mhz system in the RadioRemote One is consistently reliable for a longer distances and able to transmit around obstructions.

TRANSMITTER

back-lit **Liquid Crystal Display (LCD)** indicates the exact settings of flashpower, bank/channel information, and specific modeling lamp status the **Bargraph**, located on the LCD displays channel flashpower settings at a glance the **F-VALUE** display (-0 to -6.2 range) a two-digit display showing channel flashpower in 1/10 f-stop units

the **BANK/CHAN** display on the LCD shows the current channel when nothing is pressed, and shows the current bank when the **Bank** button is pressed when using the **All** mode, the display shows if a channel is over or under range by indicating the lowest channel which is out of range

the **ALL** indicator on the LCD becomes active when the **All** button is pressed, indicates all channels within that bank are being adjusted

the **MODEL** icon on the LCD indicates one of three modeling lamp modes

1. blank = the modeling lamp is OFF
2. dark = the modeling lamp is ON at Full Power
3. half-bulb = the modeling lamp is set to TRACKING

the **MODEL** button

scrolls through the three modeling lamp modes

Flashpower Adjustment

buttons serving to raise and lower flashpower

double arrow: 1 whole f-stop increments

single arrow: 1/10 f-stop increments

the **ALL** button

pressed once, this button sends the current settings to all lights, pressing and holding this button together with any flashpower button raises or lowers the flashpower on all channels

the **Channel Up/Down** arrows

select one of sixteen possible channels

the **Bank** button

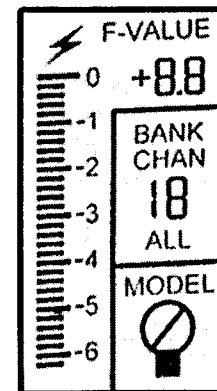
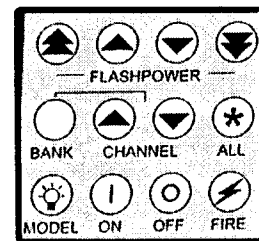
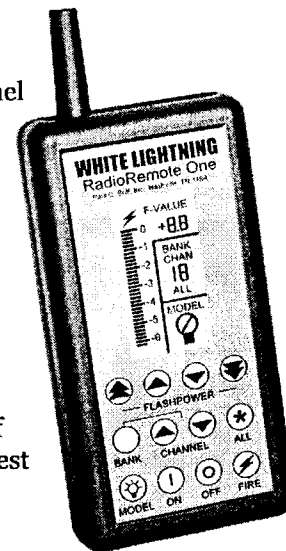
when pressed and held, using the Up/Down **Channel** arrows will select one of sixteen possible banks

the **ON** and **OFF** buttons

set each individual channel to be active or inactive

the **FIRE** button

test flashes the channel, or test flashes the entire bank when the **All** button is pressed and held



The RadioRemote One Wireless System

Setting up the RadioRemote One: the **Transmitter**

1. First, insert the two AA batteries into the back of your transmitter, these are the power source for your transmitter to operate. Push the **channel** button to "wake" your remote transmitter.
2. The transmitter is factory set in bank one. To choose the bank, hold down the **bank** button, and use the **channel** up and down keys to select your desired bank.
3. Using the arrows on your touch pad that say **channel**, arrow the channels up and down and choose which channel you wish to work in. Each individual light will have its own channel. If you wish to operate and adjust multiple lights in one channel, giving them the exact same settings, you may use multiple lights on one channel. Note that any adjustments you make in this single channel will adjust the lights whose receivers are on that channel in the exact same increments.
4. Push the **on** button to turn that channel on once it is selected. A channel must be made active in order for it to transmit the various commands. You can tell if a channel is active by looking at the bargraph and the f-value display areas as you scroll through the channels.
5. Adjust the power on that channel by arrowing up and down with the power arrows on the touch pad. You will notice that there are four available buttons for flashpower adjustment, labeled **Flash power**. The button to the far left, with two stacked arrows facing upwards will adjust the power up in 1 full f-stop increments. The second button, with one arrow facing upwards will adjust the power up in 1/10 f-stop increments. The third button, with one arrow facing down will adjust the power down in 1/10 f-stop increments. The fourth button, on the far right, with two stacked arrows facing down, will adjust the power down in 1 full f-stop increments.
6. Push the **Fire** button to test fire the channel that you are on.
7. With your transmitter and your external flash meter, adjust the flashpower setting to the proper f-stop reading that you wish to achieve by adjusting the arrows, and test firing the light.

The RadioRemote One Wireless System

Setting up the RadioRemote One: the **Transmitter**

8. Follow this same method of adjusting and test firing for each channel that you are working in, based upon the number of lights in your set-up.
9. To fire all of the lights, on all of your different channels for a final reading, push the **All** button (with the star graphic), and all of the lights on all of your channels will fire.
10. Notice the display panel, and look for the box in the lower right corner that says **Model**, and has a little bulb underneath. When the bulb on the display is **clear**, the modeling lamp of the light in that channel is on **full**. When only **half** of the bulb is on, the modeling lamp of the light in that channel is on **tracking**. When set to tracking mode, the modeling lamp will self-adjust its brightness or dimness in proportion to the changes made in flashpower. When the bulb in the display goes **off**, your modeling lamp in that channel is turned **off**. To select the modeling lamp mode, push the **Model** button with the lightbulb graphic, located in the lower left corner of the keypad. Pushing this button will cause the display to change, cycling through your modeling options.
11. Be sure to mount the transmitter as vertical as possible, using the provided velcro, as this will insure the best signal for transmission of your settings.
12. After flash metering your lights and set-up, plug the sync cord into the transmitter and the camera. Use the provided sync cord that comes with your RadioRemote One. Now you are ready to take pictures.
13. To save battery life, the transmitter "sleeps" after two minutes of no use. After the transmitter is in **Sleep Mode**, it will still fire when the shutter is used, as long as it is still connected. If you wish to make further adjustments in flashpower or modeling lamp mode after the sleep mode has begun, you will need to touch the **channel** button to "wake" the transmitter up.
14. Use the **Off** button to turn any channel off, noting that any channels not in use should be off.

Setting up the RadioRemote One: the Receiver

RECEIVER

the **OFF/ON** switch

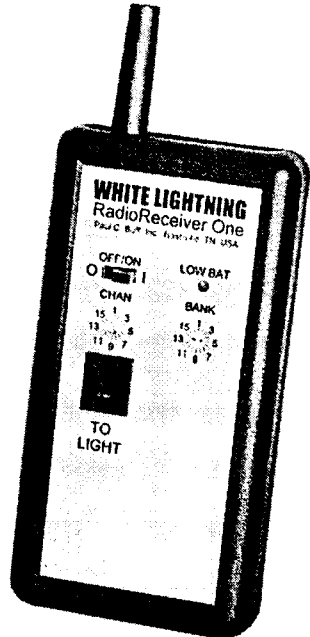
turns the unit off or on

the **Channel Dial** and the **Bank Dial**
selects the channel and bank, turned with a mini
flat head screwdriver

the **To Light** telephone connection jack
remote jack connects with RJ-11 type modular
telephone cable

the **LOW BAT** LED indicator
turns red and blinks four times when the unit is
powered up and the battery supply is low

alternate **DC Power Supply** connector
(located on top of the unit, next to the antenna)
for connecting only the Paul C. Buff, Inc. included
DC power supply



1. First, insert the two AA batteries into the back of your receiver, these are the power source for your receiver to operate. Turn your **Power** switch on, by sliding it to the left.
2. The receivers are factory set to bank one. Think of each bank as one photographer. All of the lights in a single set-up should all be in the same bank.
3. The receiver comes factory set as well to channel one. You may set your channels as you wish, giving each light its own channel to adjust individually, or using multiple lights on one channel to have them adjusted with the same settings. Each light requires its own receiver, regardless of what channel you wish to set it to.
4. Connect the provided telephone cable from the back panel of your light to the front jack on the receiver, labeled **To Light**. The telephone cord will have one end with a noise cancel, which is a small round extrusion. This end of the telephone cord is the end that you will place in the receiver. Insure that both ends are fully pressed into the receiver and the light.
5. Use the provided velcro to attach the receiver to the side of your flash unit, in as close to a vertical position as you can attach it. This will allow the antenna to be vertical, decreasing the interference that may be present from other people, other lights, and other electronic devices.

6. When you turn your receiver on, the **LED** will blink twice to indicate its power. The modeling lamp in your flash unit will blink as well, to indicate a successful data up-link. You are now ready to make adjustments, test fire and meter, and take pictures.
7. After you are finished shooting, be sure to turn the **Power** switch off, by sliding it left.

the Batteries:

The batteries powering both your transmitter and receiver are standard AA, 1.5 volt alkaline batteries. The batteries in your transmitter work for approximately 400 hours of typical use, with a three month standby. The batteries in your receiver(s) work for approximately 100 hours of typical use. The **Low Battery** light indicators will turn red when they are near the end of their lifespan, to let you know that they must be replaced. Any standard brand of AA 1.5 volt alkaline batteries may be used for replacement.

the Operating Range:

Typical operating range should be from about 100 to 400 feet or more. This range may be affected by a number of factors, including buildings, vegetation, bodies of water, and interference from other radio transmitters. Antennas should be kept vertical for the best transmission, and the receivers should be mounted away from large, metal, concrete, or water-filled objects, with line of sight orientation yielding maximum range. At long distances, you may have to move the receivers all to one side of your shoot to overcome "dead spots."

the Factory Settings:

As supplied from the factory, the transmitter default settings are set to the following:

All Channels are set to -2 f-stops

Channel One is set to "On"

(with Channels Two through Sixteen set to "Off")

These default settings may be recalled from the internal memory at any time by pressing and holding the **Bank** button, then pressing the **On** button. When performing this function, the bargraph on the LCD display screen will instantly kick upwards.

the Last Scene Memory:

The RadioRemote One transmitter contains EEprom memory which automatically stores the current settings each time the transmitter goes into "sleep mode" (after two minutes of non-use). Thus, if the batteries fail or need to be changed during a shoot, you will not lose your settings. Further, if your shoot lasts multiple days, or you take breaks between shots and wish to return to the same settings, they will remain. If you desire to force the storage of a current setting (for instance, when changing your batteries in a hurry), this can be accomplished by pressing and holding the **Bank** button while pressing the **Single Arrow Flashpower Up** button. Recalling these settings can be achieved by holding the **Bank** button while pressing the **Single Arrow Flashpower Down** button.

Before using the RadioRemote One, you will need to look at your camera's operations manual to discover the sync speed that your camera allows. Use this chart to discern what shutter speed is appropriate based on your camera rated sync speed.

Radio Remote One Shutter Speeds

camera rated sync speed	maximum camera shutter speed
1/500"	1/220" or slower
1/300"	1/170" or slower
1/250"	1/154" or slower
1/200"	1/133" or slower
1/125"	1/95" or slower
1/100"	1/80" or slower
1/60"	1/52" or slower

Visual Verification

When an active channel is selected or sent data, the modeling lamp on the associated light unit will blink once to verify that it is properly receiving data. This can also serve as a reminder of which flash unit is on which channel. This only works, of course, when the modeling lamp is set to be on, in full or tracking mode. The LED light on the receiver for that unit will also blink twice.

Refreshing All Settings

Every time the **All** button is pressed, all settings for all of your active channels in the selected bank are re-sent. When this **All** button is pressed, all LED lights and modeling lamps (if turned on) should blink. After pressing the **All** button, press the **Fire** button to test fire all of your lights. If any of these tests fail to provide you with the expected response, you will need to troubleshoot the system by first checking your connections and batteries, then check to see that you have selected the proper bank and proper channels.

Common Modeling Lamp Mode

Rather than selecting individual modeling lamp modes for each channel, if you wish to have all modeling lamps in your bank set in one mode, press the **All** button as you scroll through the options. Regardless of what channel you are setting the flashpower in, pressing this **All** button will immediately make the modeling lamp mode you select the same in all active channels, even those you are not currently dialed to.

Bracketing, or Modifying ALL Flashpower Settings Simultaneously

1. Press and hold the **All** button. The f-value display will read 0.0, indicating no modification has been made to the individual channels' flashpower. The **All** segment of the LCD will become active, and the bargraph will turn off.
2. While continuing to hold the **All** button, press the **Flashpower Arrows** to make adjustments. This will allow you to alter the f-stop power readings in your lights, keeping the same ratios.
3. If you were to then press the **All** button a second time, the display would again indicate 0.0, allowing you to start again making further modifications to all channels.

Troubleshooting with the RadioRemote One

Over-Range and Under-Range

It is of great importance when bracketing that one does not alter the ratios between flash units, as this would alter what the scene actually "looks" like. Accordingly, it is important that in using the **All** button, the individual flash units do not go brighter than their Full power or dimmer than their Minimum power. To keep this from occurring, the receivers will not register changes which ask the flashpower to be raised or lowered outside of the -0 to -6.2 f-stop range. If you are adjusting the lights for bracketing with the **All** button pressed, and you dial in a setting that is higher or lower than this range, the unit will simply cap itself at the highest or lowest setting within its range.

General Care Recommendations

1. Avoid exposure to moisture, as this may damage the unit.
2. Avoid exposing your remotes to temperatures in excess of 110° F, or below 32° F.
3. For long term storage, remove the batteries so as not to let them corrode inside their case.
4. Always use alkaline AA 1.5 volt batteries from a manufacturer who is reputable when you need replacement.
5. Turn all remotes off when not in use.

This equipment has been tested and found to comply with the limitations for a Class B digital device, pursuant to Part 15 of the FCC rules and regulations. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in proper accordance with the provided instructions, may cause harmful interference to other radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and the receiver.
3. Consult the dealer or an experienced technician for help.

First, note that there are **NO USER SERVICEABLE PARTS** in either the RadioRemote One transmitter or the receiver. Any malfunction which can not be attributed to incorrect battery polarity or to an exhausted battery should be addressed by the manufacturer.

Common problems and questions for the **RadioRemote One**:

problem: the bracketing function (all up or all down) will not work
Most likely, one or more of the channels is at Full Power or at Minimum Power. To correct this problem, insure that all channels not in use are turned off.

problem: another photographer in the area is setting off your lights
Are your slaves disabled? Be sure that your slave trippers are disabled by plugging the dummy jack in fully. Is another photographer also using a Radio Remote One, and in the same bank that you are? If so, simply change what bank you are working in.

problem: one receiver is not responding, though the other do
Is the non-responsive receiver turned on? Are the batteries inside still good? First check that all connections are tight, and that your batteries are good. Make sure that the individual receiver is turned on, and set to the proper channel and bank. Then check that the corresponding channel on the transmitter is on, and all channels not in use are turned off.

problem: none of the receivers are working
First check to see that the transmitter's batteries are good, and that the bank is correctly set. Then check that the proper channels are selected, and that they are turned on.

problem: the transmitter fires the lights, but the camera will not
If the camera sync cord has reversible connections, try reversing them. If you are using a hot shoe adaptor, make sure that the cord comes out of the back end of the camera, not the front, and check that the hot shoe is well-locked in place. Try unplugging the sync momentarily, and short the sync cord contacts together with a metal object, which should fire the system. If there are still problems, the malfunction could either be in your camera, your hot shoe (if using an adaptor), in the sync cord, or in the transmitter. Contact our Service department to assess if repairs or replacement is necessary.

For further problems, please call our technical services department to assess your needs, diagnose the problem, and decide whether you need any repairs or replacement. We are available Monday through Friday, 9:00am-5:00pm CST at 1-800-443-5542.

Notes:

RadioRemote One System Warranty

The RadioRemote One System carries a 2 Year Factory Warranty, covering parts and labor for manufacturing defects. The obligation of Paul C. Buff, Inc. is limited to the repair or replacement only. Battery replacement is not included under warranty, and no other warranty is expressed or implied.

Caution: Changes or modifications made to the equipment, not expressly approved by the manufacturer, could void the user's authority to operate the equipment.

Thank you for choosing the RadioRemote One! We are sure that it will compliment your craft, making your shoot simpler. If you have any questions or concerns, please contact us:

Paul C. Buff, Inc. 2725 Bransford Avenue Nashville, TN 37204
toll free 1-800-443-5542 local (615) 383-3982 fax (615) 383-0676