

Instructions

RC-1 Remote Control

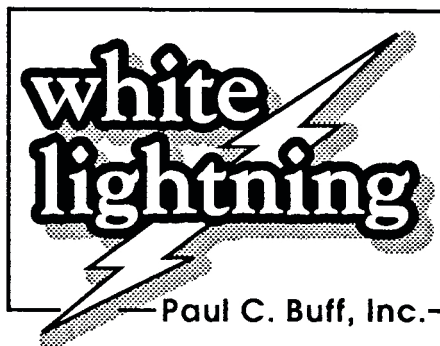
for

White Lightning

Ultra 600

Ultra 1200

Ultra 1800



FUNCTION

The **RC-1 Remote Control** unit is designed to interface with all **Ultra Series** studio photoflash units from **Paul C. Buff, Inc.**, via common Modular Telephone wire and connectors (4 - 25' cables included).

Four channels are provided such that one **RC-1** may be connected to up to four **Ultra** units to provide the following remote-control functions:

1. Individual control of **Flashpower**, from **Full Power** to **1/32 Power** (-5f).
2. Individual selection of **Modeling Lamp Mode**...Full, Off or Tracking.
3. Individual channel **Flash On/Off** selection.
4. Common hardwire sync connection on **RC-1** unit.

Thus, an entire **Ultra** lighting system is easily controlled from a single lap-sized control console.

Should there be more than four **Ultra** flash units in a setup, another **RC-1** unit may be added for each additional four lights...an unlimited number of flash units may be controlled from a central location, i.e. the camera position, with zero power loss, even at working distances of 100' or more.

INSTRUCTIONS

ON/OFF SWITCH — BATTERY The **RC-1** unit is powered from a standard 9 volt transistor-radio-type battery (alkaline type...**DURACELL #1604** or equivalent). The battery will last for about 200 hours of use before requiring replacement. Notice the snap-open battery compartment located on the back of the unit.

Make sure you turn the power switch to the OFF position when the unit is not being used or the battery will be exhausted after a few days. Do not connect a cable from one jack of the RC-1 to another jack of the RC-1 as this will present a short-circuit condition resulting in battery failure and possible damage to the unit itself.

BASIC CONNECTIONS Connect up to four **White Lightning Ultra** units to the **RC-1** unit using the 25' cables provided. The **Ultra** units should be plugged into **grounded three-wire power outlets**. It should be noted that the **RC-1** unit will not function properly if the **Ultra** units are connected to two-wire ungrounded outlets unless the power-plugs of all units are oriented to the same powerline polarity. We recommend against defeating the third-wire ground on **White Lightning** units or any other such equipment, for the sake of user safety.

CONTROLS Whenever an **Ultra** unit is connected to the **RC-1**, and the **RC-1** is turned **ON**, control of **Flashpower** and **Modeling Mode** (*Off, Full or Tracking*) is a function of the **RC-1**, *regardless of the control settings of the Ultra unit itself*. When the **RC-1** is switched **OFF**, or disconnected from an **Ultra** unit, control of these parameters *reverts to the control settings on the Ultra unit(s)*.

The following remaining **Ultra** controls are not remotely operable, and must be set as desired on the **Ultra** unit(s): **Power** switch, **Relative Model** switch, **Model/Ready** switch.

Once the system is set up, the **RC-1** can be located conveniently (usually at camera-position) and the **Flashpowers** and **Modeling Modes** for the whole system may be adjusted and visually monitored. You may find it particularly useful to alternately operate each of the four **RC-1** switches labeled **Flash On/Off** to quickly view the effect of each light on the scene without disturbing the other control settings.

SYNC A hardwire sync connection is established in the connection between the **RC-1** unit and each **Ultra** unit which is connected to it. Accordingly, the camera may be connected to the sync-jack located on the **RC-1** to fire all connected **Ultra** units. Notice also the **Slave** window contained on the **RC-1**...it functions the same as do the slaves on the **Ultra** units except that it will fire *all* **Ultra** units connected to the **RC-1**.

Ultra slave circuits automatically disable *whenever a plug is inserted into the associated 1/4" sync jack*. This applies equally to the slave contained in the **RC-1**. To conveniently configure a system which does not fire in response to the flashing of other flash-units, connect the camera sync, via sync cord, to the **RC-1** sync input (this will disable the **RC-1**'s slave), and insert blank 1/4" phone plugs (available at **Radio Shack** type stores) into the sync jack of each **Ultra** unit (this will disable their slaves).

TEST BUTTON/BATTERY INDICATOR The **TEST** button serves as a convenient way of fire all **Ultra** units connected to the **RC-1**, as well as providing a simple test for battery condition and general functioning of the **RC-1** unit. Each time the **TEST** button is pressed, the red **BATT** indicator should briefly light. This indicates that the battery is OK, and also indicates that a diagnostic test of the unit's major internal components has been successfully performed. The same diagnostic routine is carried out whenever the unit has been fired via the built-in slave or sync jack.

To test the **RC-1** then, simply turn it **ON** and press the **TEST** button. (The **RC-1** need not be connected to **Ultra** units to test it.) If the **BATT** indicator does not flash, replace the battery. If the **BATT** indicator still won't flash after replacing the battery, an unlikely internal defect is indicated.

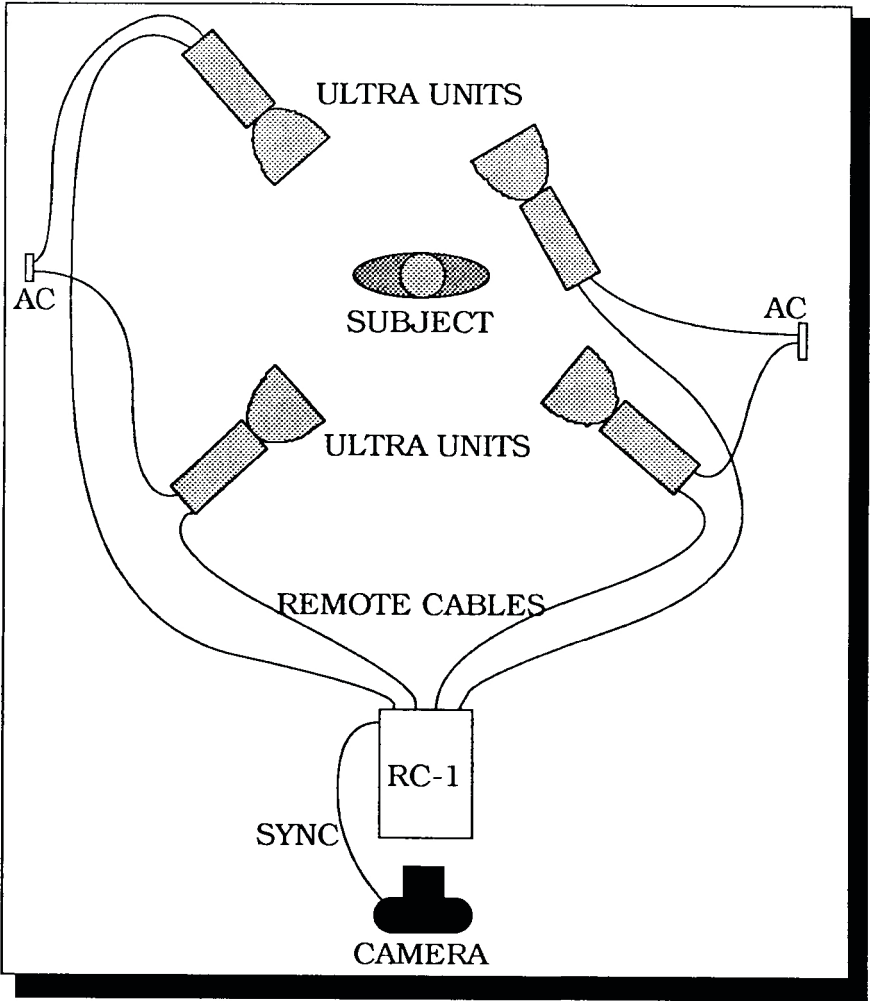
CUSTOM CONNECTIONS A variety of custom control functions may be implemented using off the shelf modular telephone connecting hardware. Simple extension cables may be used to increase the distance between the remote control unit and the **Ultra** units. These are available in 25' lengths from stores carrying telephone supplies. (Make sure cables have four internal wires...we have run across cheap ones with only two wires...they won't work). The **RC-1** system has been tested with wire runs up to 100' with no problems.

A popular custom connection might be to mount several **Ultra** units in a large overhead lightbank (such as for illuminating automobiles) and configuring them to function as a single unit from one channel of the **RC-1**. This can be easily done using an accessory which is designed to allow multiple items to be connected to a single phone jack. One **RC-1** channel can thus be split to feed any number of **Ultra** units, and they will all assume the control settings set on that **RC-1** channel.

If you desire to fabricate your own custom cables, using readily available materials and tools, you should keep in mind that the Modular Telephone Cable Standard requires a reversal of the wire order on alternate ends of each male-to-male connecting cable. Failure to follow this orientation standard will not harm the **RC-1** or the **Ultra** units, but will prevent proper operation of the system.

WARRANTY This equipment is covered under a limited three year factory warranty. This warranty is limited to the repair or replacement of the unit or any component part thereof which shall fail during the period stated. The warranty shall exclude the replacement of batteries.

Should warranty service be required, send the unit, postage paid and well packed, to the address on this manual. Be sure to include a brief description of the problem and include your complete mailing address and phone.



Typical Remote Control Setup



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