

QUANTUM RADIO SLAVE 4

OPERATING INSTRUCTIONS

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.

FCC ID CEX8EH-505S

FCC ID CEX8EH-505R

CONTENTS

Diagrams

Sender - Controls

Remote - Controls

General Information

Frequency

Channels

Owners of Radio Slave Models 400 and 405

Accessories included with the Sender and Remote

Sender

Installing the Battery

Battery Check

Remote

Installing the Batteries

Status Light

AC Operation and 415 Charger /Adapter

AC Operation without Batteries

AC Operation with Alkaline or Lithium Batteries

Charging Nicads/AC Operation with Nicads

Mounting Hardware

Shoe Mount - Sender and Remote

Velcro - Sender and Remote

Belt Clip - Sender

Pole Mount Adapter - Remote

Do's and Don't's

Flash Sync System

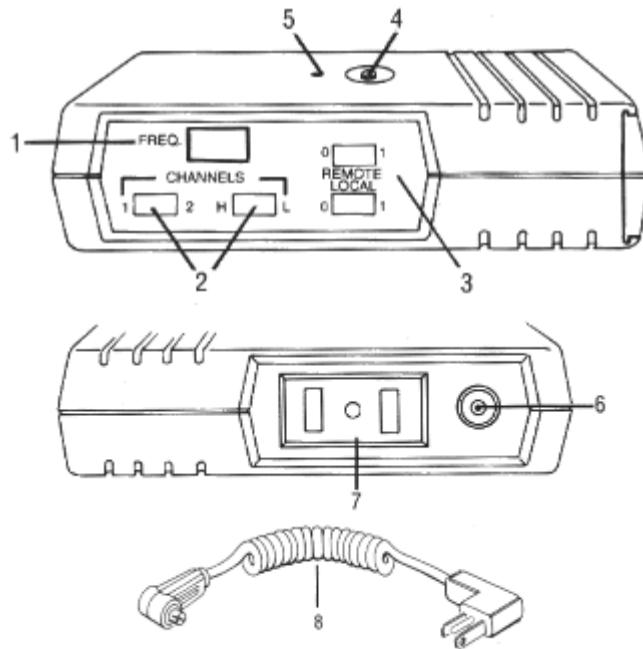
Motor Drive Tripping System

Remote Flash and Motor Drive

Troubleshooting Guide

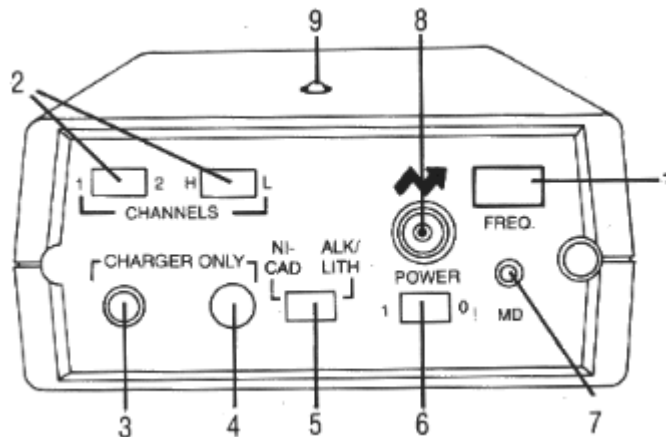
SENDER

1. Frequency Model
2. Channel Selector Switches
3. Remote and Local Selector Switches
4. Manual Control Button and Battery Check Button
5. Battery Test Light
6. PC Connection (to local flash, if required)
7. Double Blade Sync Connection (to camera)
8. Sync Cord, Double Blade / PC



REMOTE

1. Frequency Model
2. Channel Selector Switches
3. Charge Light (for Nicads)
4. AC option and Nicad Charge Jack
5. Battery Select Switch
6. Power ON (1) OFF (0) Switch
7. Motor Drive Output
8. PC Sync Output
9. Status Light



GENERAL INFORMATION

Frequency: A or B or C or D

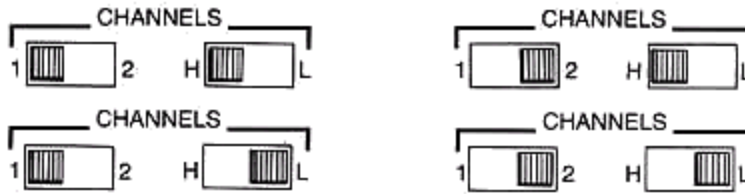
The Radio Slave 4 is available in 4 different frequencies. The Sender and Remote must be the same frequency for the unit to operate.

The frequency is indicated on the control panel of both the Sender and Remote.

One Sender will trigger as many Remotes as required provided they are all the same frequency. When ordering extras be sure to indicate the frequency required for your system.

Channels

Four channel options are available with the Radio Slave 4 System. The Sender and Remote must be set to the same channel for the system to operate. Channels 1, 2, High and Low. Channel options shown below.

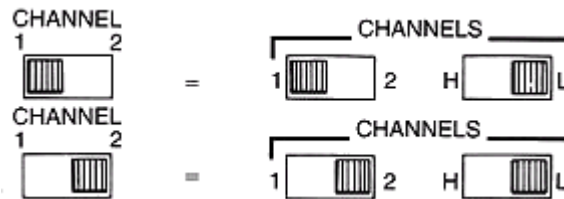


All channels will allow the use of shutter speeds up to 250th second for focal plane and a 500th second for leaf shutters. However, the shutter speed used cannot exceed your camera's maximum flash sync speed. Consult the camera's manual.

For Owners of Radio Slave Models 400 and 405

Radio Slave 4 Model 505 is compatible with older Radio Slave Models 400/405. When using either Model 400 or 405 with the new Radio Slave 4 Model 505, set the channels as shown below.

MODEL 400 and 405 MODEL 505



Accessories included with the Sender and Remote

Included with 505 Sender:

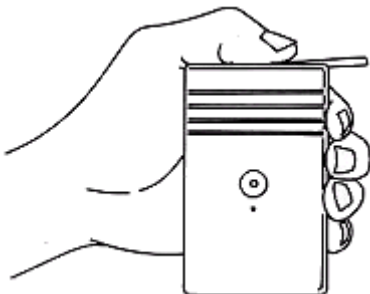
- Sync Cord, double blade / pc (model #536)
- Belt Clip / Mounting Screw 1.00 inch (25mm) Long (model #511)
- Shoe Mount / 2 Mounting Screws
- Velcro™

Included with 505 Remote:

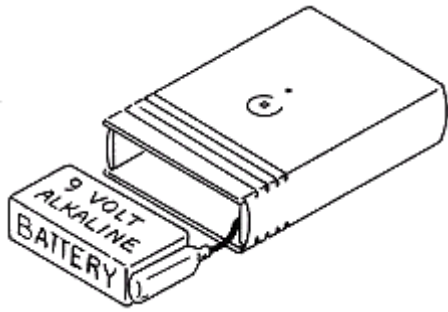
- Shoe Mount / 2 Mounting Screws
- Pole Mount, 2 piece extended range 3/8" to 1-3/4" / 2 mounting screws
- Velcro™

SENDER:

Installing the Battery



- Hold the Sender firmly in your hand.
- Press down on the center of the battery door.
- Slide the battery door off.

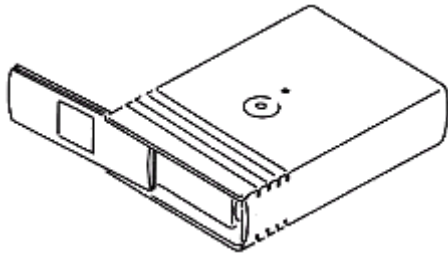


Snap the battery contact onto a 9 volt alkaline battery.

Use caution when handling the battery contact so as not to stress the battery wires.

Use only alkaline batteries.
(Standard carbon/zinc or "heavy-duty" batteries will give poor performance and short battery life).

Do not use rechargeable batteries in the Sender.






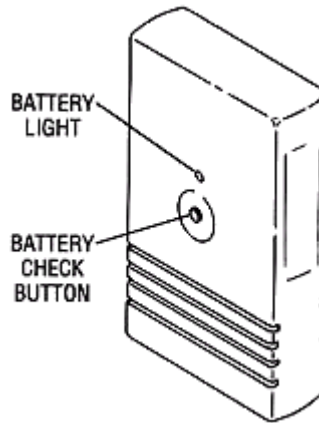
Place the battery inside the battery compartment carefully tucking the wires out of the way.

Slide the battery door into place.

Battery Check

To check the battery capacity, press the Battery Check Button.
The battery light will display the following:

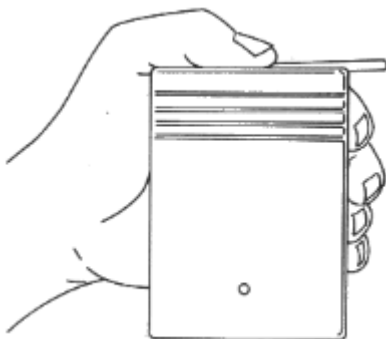
-  BRIGHT LIGHT - GOOD BATTERY
-  DIM LIGHT - REPLACE BATTERY
-  NO LIGHT - REPLACE BATTERY



Battery life will be approximately one year with normal use.

REMOTE:

Installing the Batteries



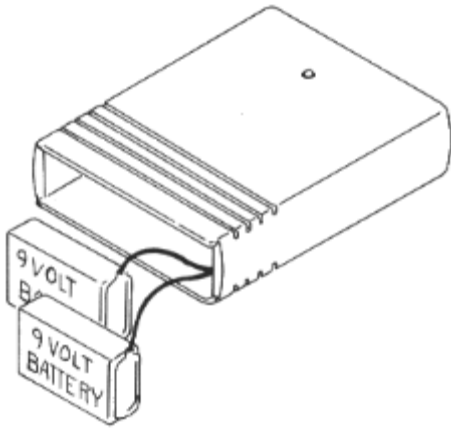
Set the Power Switch to 0 (OFF).

Hold the Remote firmly in your hand.

Press down on the center of the battery door.

Slide the battery door off.

Snap battery contacts onto two 9 volt batteries.



Battery life will vary depending upon the type of use, age and manufacturer of the battery.

Approximate times are shown below.

Use either:

2 Alkaline / non-rechargeable batteries / 50-70 hours

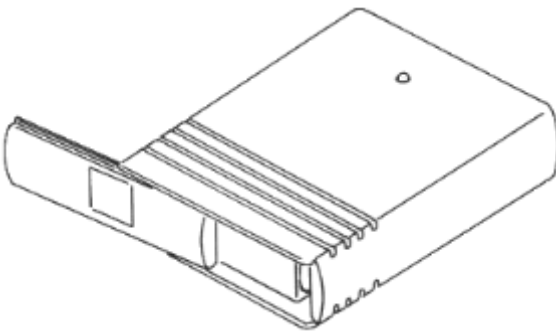
2 Lithium / non-rechargeable batteries / 100-140 hours

or

2 Nicad / rechargeable batteries / 10-20 hours per charge

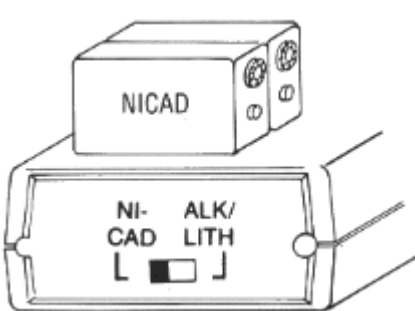
Do not use standard carbon/zinc or "heavy-duty" batteries. They will give poor performance and short battery life.

Use caution when handling the battery contacts, so as not to stress the battery wires.

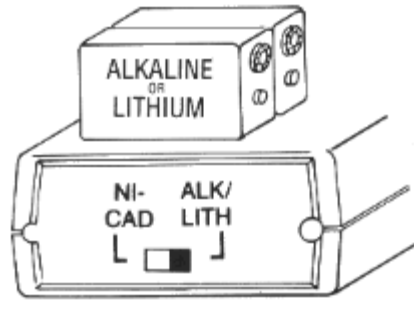


Place the batteries inside the battery compartment, carefully tucking the wires out of the way.

Slide the battery door in place.



SET SWITCH TO NICAD



SET SWITCH TO ALKALINE /
LITHIUM

Set the Battery Selector Switch to whichever type battery you have selected.

**NEVER SET SWITCH TO NICAD WHEN USING ALKALINE OR LITHIUM BATTERIES.
THIS COULD DAMAGE THE REMOTE AND VOID THE WARRANTY.**

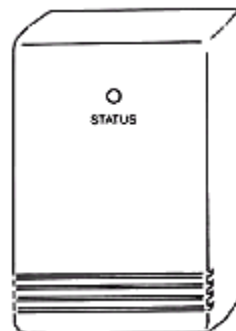
Status Light

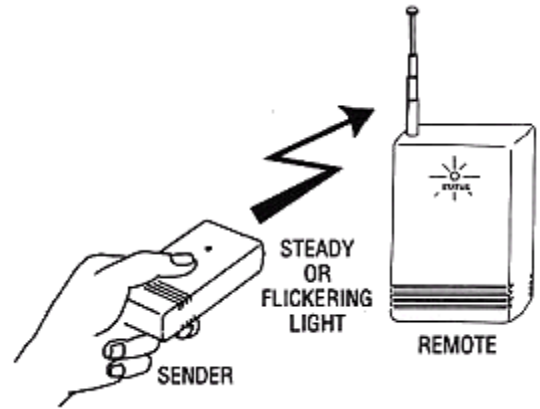
The Status Light works only when the Power Switch is turned ON (1).

Power ON - Status Light blinks approximately once 3 - 4 seconds.

Low Battery - Status Light blinks rapidly, (approximately 2 times per second).
Replace or recharge batteries.

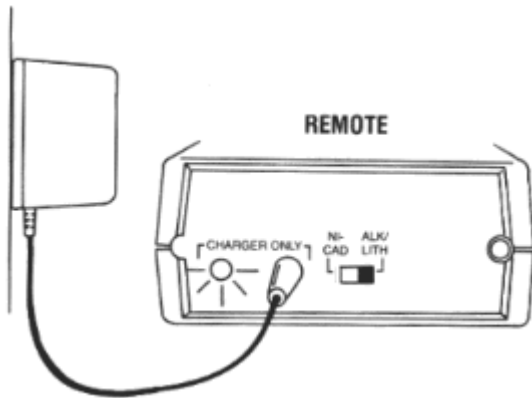
The Status Light will light when receiving a radio signal from the Sender.





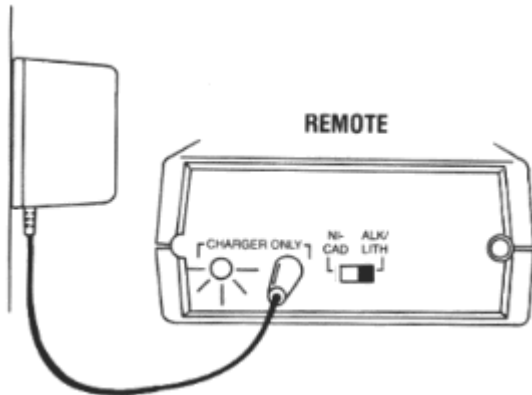
AC OPERATION AND 415 CHARGER / ADAPTER

Only use the 415 CHARGER / ADAPTER (purchased separately). Plug the 415 Adapter into the AC / Charge Jack on the Remote and into a standard (115v) household outlet.



AC Operation without Batteries

Batteries are not necessary if the Remote is used on continual AC power. Set the battery switch to the Alkaline/Lithium position.

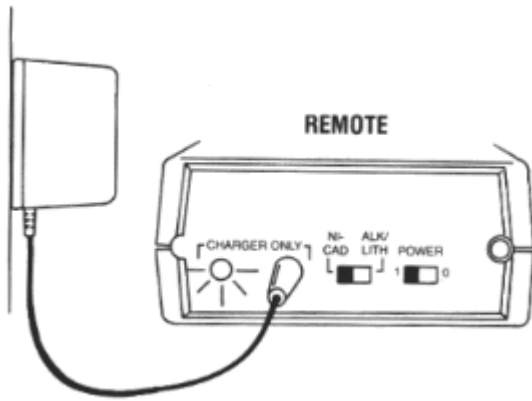


AC Operation with Alkaline or Lithium Batteries

Alkaline or Lithium batteries may be left inside the Remote when using AC power. They are automatically disconnected when the Adapter is plugged into the Remote.

CAUTION: THE BATTERY SELECTOR SWITCH MUST BE SET TO THE ALKALINE/LITHIUM POSITION.

Charging Nicads/AC Operation with Nicads



The Battery Selector Switch must be set to Nicad.

Plug the 415 Charger into the Remote and into a standard (115v) household outlet. The Charge Light will be on if the unit is charging properly.

Charge for 14-16 hours for a full charge. Charging for more than 24 hours is not recommended.

Charging can be done with the Power Switch in either the ON (1) or OFF (0) position.

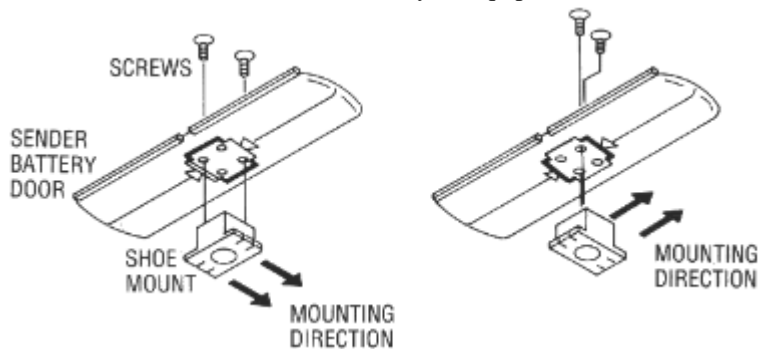
With the Power Switch set to the ON (1) position the Remote can be used on AC power and charged at the same time. Recharge time will not change.

MOUNTING HARDWARE

Shoe Mount - Sender and Remote

Important: The Shoe Mount was designed for permanent placement. Once you have decided to mount it to the battery door it should be left in place.

Sender - The diagram below shows two possible ways of mounting the Shoe Mount to the battery door. The position you select will determine how the Sender mounts onto your equipment.



Place the Shoe Mount on the battery door in the position you want to mount it.

Two of the four holes in the battery door will line up with 2 of the holes in the Shoe Mount. The holes should be diagonally across from each other.)

Fasten the Shoe Mount to the battery door with 2 of the screws provided in the accessory package. Fasten securely but do not overtighten.

Place the battery door back onto the unit.

Remote - The Shoe Mount can be positioned on the battery door only one way.

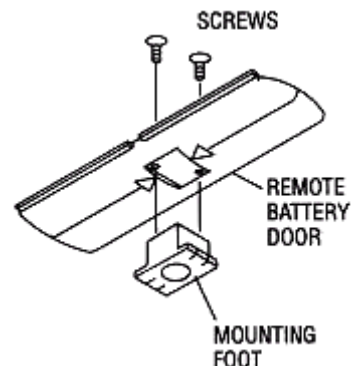
Place the Shoe Mount on the battery door.

Line up 2 of the 4 holes in the Shoe Mount with the 2 holes in the battery door.

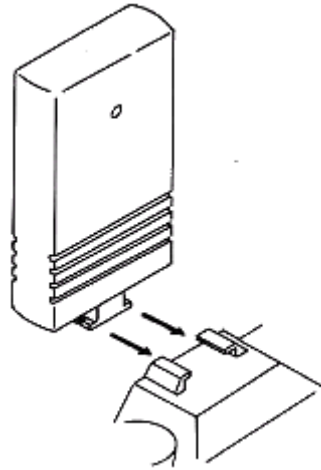
Fasten the Shoe Mount to the battery door with 2 of the screws provided in the accessory package.

Fasten, but **do not overtighten**.

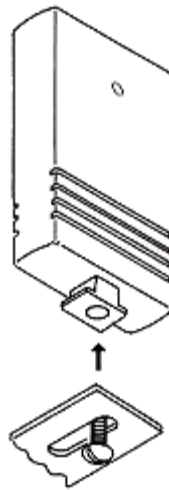
Place the battery door onto the unit.



The Sender or Remote can now be mounted directly onto the camera.

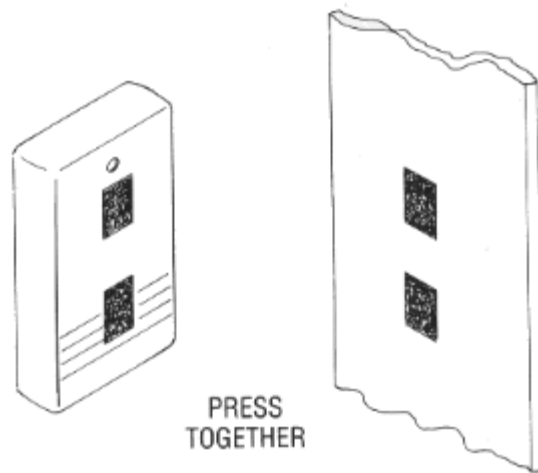


The Sender or Remote can also be bracket mounted.
Fasten the bracket screw securely to the Shoe Mount.



Velcro™ - Sender and Remote

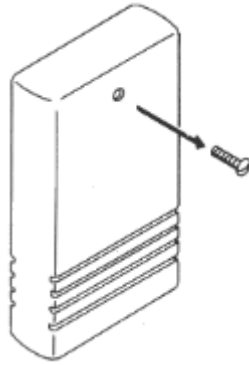
The Sender and Remote can also be mounted with Velcro.
When using Velcro be sure both surfaces are clean and dry.
Peel the backing off the Velcro and place where needed. Press firmly
Maximum adhesion will occur 24 hours after application.



Belt Clip - Sender

IMPORTANT: The Belt Clip was not designed to be removable. Once you have made the decision to mount the Belt Clip to the Sender it must be permanently left in place.

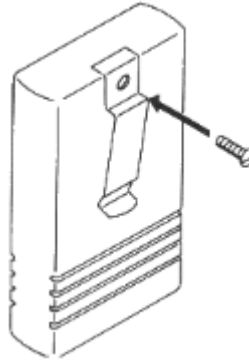
Remove the black screw from the back of the Sender and discard.



Position the Belt Clip on the Sender as shown.

Fasten the Belt Clip securely to the back of the Sender using the long Silver Screw provided in the accessory package.

Do not screw the long Silver Screw into the Sender without the Belt Clip.

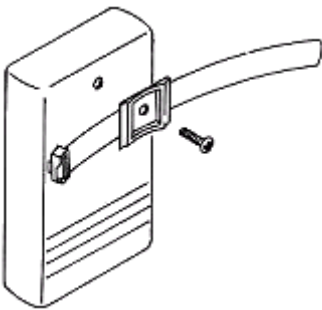


The Sender can be clipped to your belt.

If you wish to connect the Sender to the camera sync, a 5 ft. (1.5m) extended sync cord, Model 535, is available.

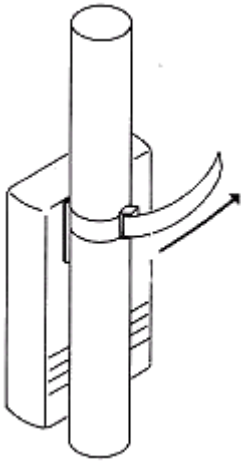


Remote: Pole Mount Adapter



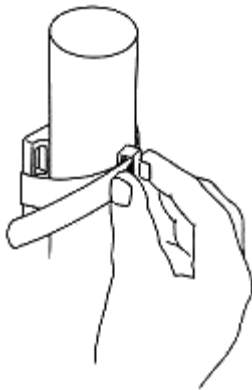
Included in the accessory package are 2 Pole Mounts and a screw for mounting. Each Pole Mount fits a different size pole, one mount fits poles 3/8" to 1-1/8" the other 1" to 1-3/4". Select the correct mount required for the size pole being used.

Fasten the Pole Mount to the back of the Remote using the screw provided.



Fasten the strap securely around the pole by pulling the strap back.

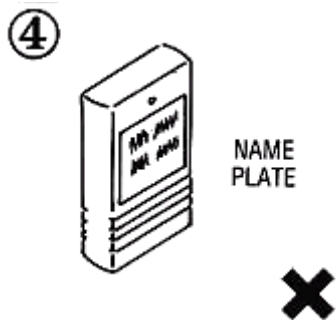
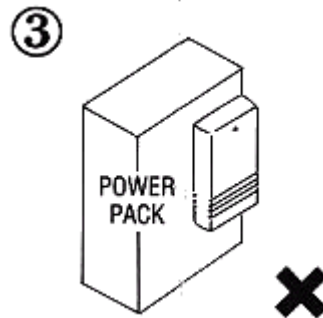
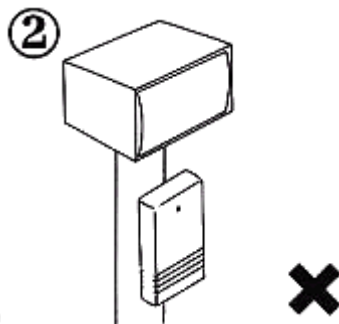
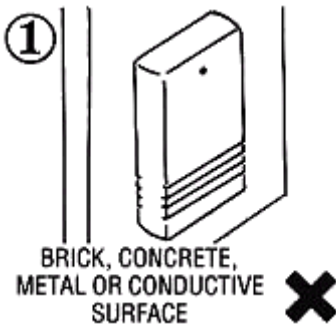
Note: To prevent sliding, wrap a piece of tape around the pole just below the pole mount.



Release the strap by pinching the two tabs on the Pole Mount and sliding the strap out.

A Pole Mount Kit with a three piece extended range is available for sizes 3/8" to 2-1/4".

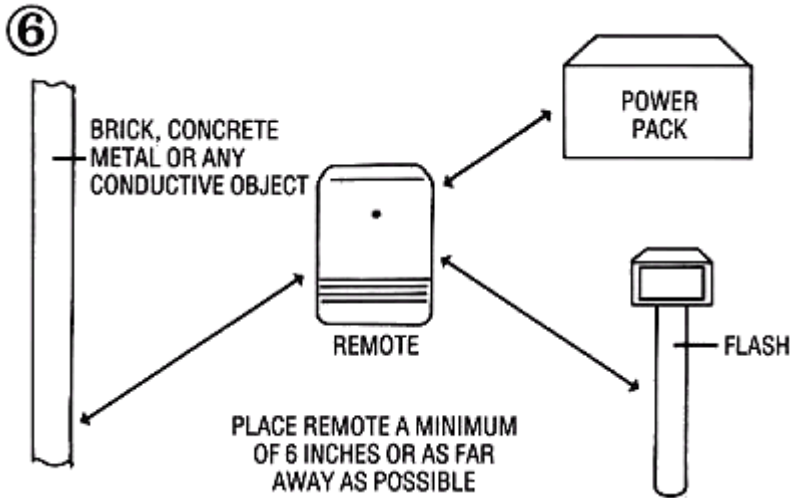
DO'S AND DON'T'S



1. DO NOT mount the Remote on brick, concrete, metal, or any conductive surface. This will affect the range of the Remote.

2. & 3. DO NOT mount the Remote to a flash or Power Pack. This could cause the Remote to malfunction.

4. DO NOT place anything such as a nameplate on the front surface of either the Remote or Sender. This will



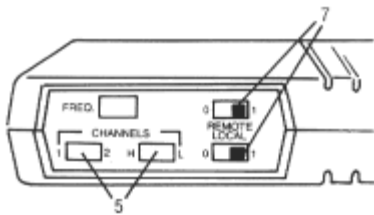
cause the unit to malfunction.

5. DO NOT use any type of "Gaffers" tape that may contain aluminum on either the Remote or Sender. This will cause the unit to malfunction.

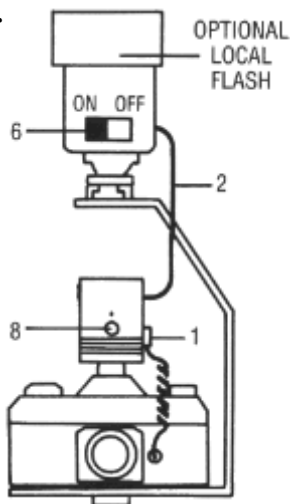
6. DO place the Remote a minimum of 6 inches (15cm) or as far away as possible from any conductive objects, power packs, or flashes.

FLASH SYNC SYSTEM

Sender

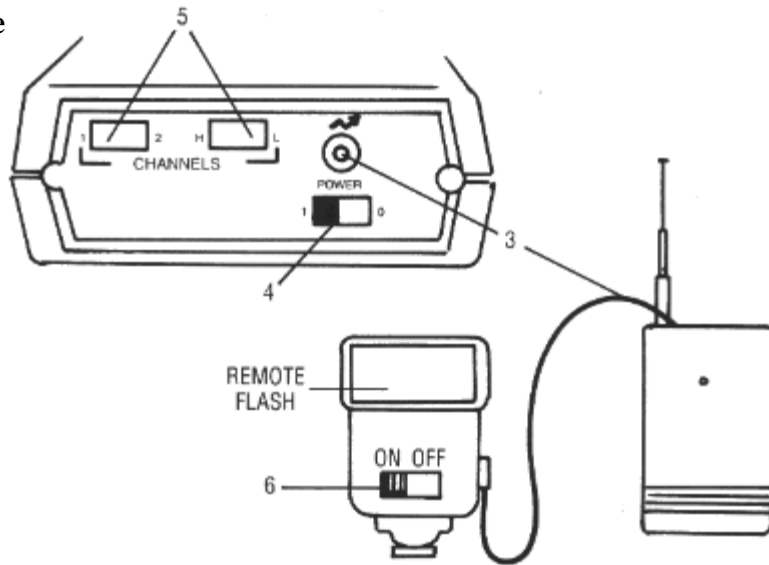


Sender



1. Connect the camera to the Sender with the Sync Cord (double blade) provided in the accessory package.
2. Connect the local flash (optional) to the PC Output on the Sender using the sync cord from the flash.
3. Connect the remote flash to the PC Output on the Remote using the Sync cord from the flash.
4. Turn the Remote Power Switch to ON (1).
5. Set the Sender and Remote to the same Channels.

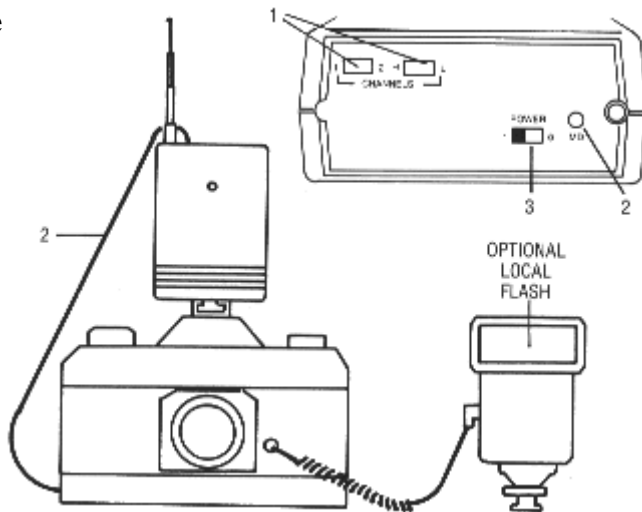
Remote



6. Turn local and remote flashes on.
7. On the Sender, set the Local and Remote Switches to the ON (1) position depending upon the flash or flashes required.
8. Check the range and operation by pressing the Manual Control Button on the Sender.

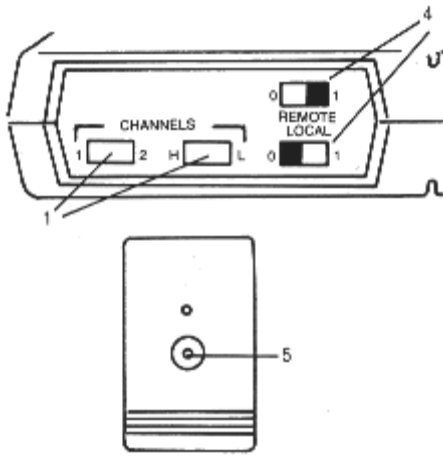
MOTOR DRIVE TRIPPING SYSTEM

Remote



1. Set Sender and Remote to the same Channels.
2. Using the Motor Drive Cord (purchased separately) selected for your camera, connect the camera's motor drive to the MD (Motor Drive) Socket on the Remote.
3. Turn the Power Switch on the Remote to ON (1).
4. Turn the Remote Switch located on the Sender to ON (1) and turn the Local Switch to OFF (0).
5. Check the range and operation by pressing the Manual Control Button on the Sender. This will trigger the camera to shoot.

Sender



MOTOR DRIVES WITH CONTINUOUS POSITION:

If this mode is selected the camera will continue to fire for as long as the Manual Control Button is pressed.

USING WITH A FLASH:

For proper synchronization the flash or flashes must be connected directly to the camera.

RANGE:

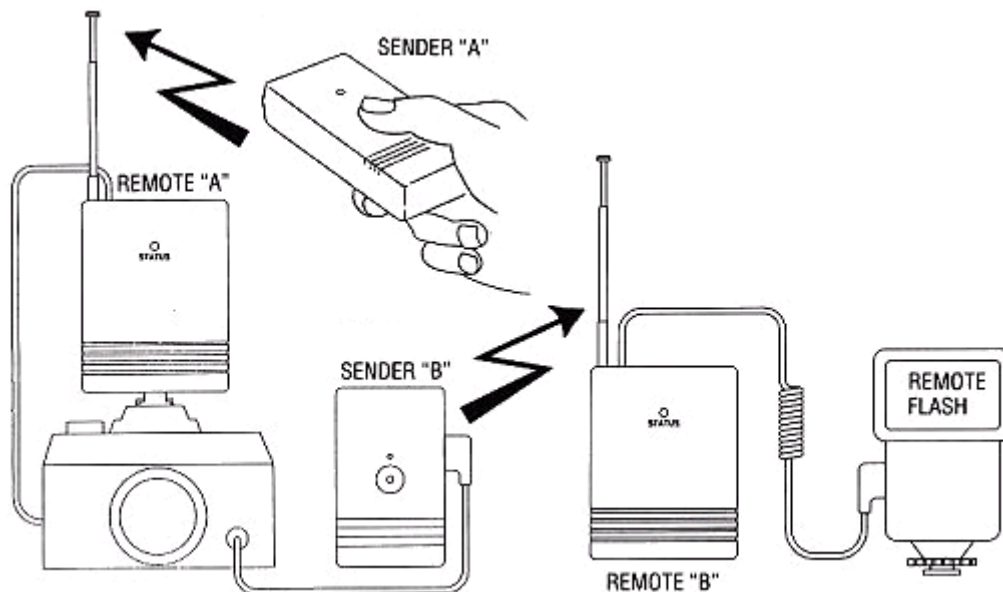
Nominal range, depending upon surroundings, is 200 - 250 feet. Maximum line of sight range is 250 feet.

REMOTE FLASH AND MOTOR DRIVE

Two Radio Slave systems are required.

The systems may be the same or of different frequencies.

The two systems are shown here as Remote "A" / Sender "A" and Remote "B" / Sender "B".



Set up Remote "A" and Sender "A" as described in the Motor Drive Tripping System (see above).

Connect Sender "B" to the camera using the (double blade) Sync Cord.

Optional local flash may be connected to Sender "B" using the sync cord from the flash.

Connect Remote "B" to the flash using the Sync Cord from the flash.

Set Sender / Remote "A" to a different channel than Sender / Remote "B".

TROUBLESHOOTING GUIDE

| Symptom | Refer to Note(s) (below): |
|--|---------------------------|
| Remote will not fire remote flash, status light does not light. | A,C,E,F,G,K,L,M,U,W,X,Y |
| Sender will not fire local flash. | A,C,H,J,L,M,V,X |
| Will not fire remote or local flash. | A,C,E,F,G,H,J,L,M,V,X |
| Remote flash only, fires intermittently. | A,B,D,E,L,M,N,O,U,W,X,Y |
| Local flash only, fires intermittently. | C,E,J,L,M,X |
| Both flashes fire intermittently. | B,C,E,J,L,M |
| Local flash fires by itself. | C,E,J,L,M,X |
| Remote flash fires by itself. | A,B,C,D,E,L,M,O,Q,R,W |
| All works but range is poor. | A,O,W |
| Remote status light is blinking fast. | A |
| Remote does not fire flash, status light does light steadily. | A,B,D,M |
| Sender always transmitting. | C |
| Does not work on AC. | N |
| Does not charge battery. | E,N,P |
| Motor drive doesn't work, status light lights steadily. | A,E,T |

NOTES

| | |
|---|---|
| A | Bad Battery or Batteries. (Test under load). |
| B | Connecting cord between flash and Remote defective. |
| C | Connecting cord between Sender and camera defective. |
| D | Flash defective. |
| E | Battery clip(s) making poor connection or loose. |
| F | Sender and Remote not set to same channel or not the same frequency. |
| G | Remote switch not on. |
| H | Local switch not on. |
| J | Connecting cord between Sender and flash defective. |
| K | Remote power switch not on. |
| L | PC connector on camera defective. |
| M | PC connector on connecting cord needs tightening. Be sure to bend center pin slightly off center. |
| N | AC adaptor (415) defective or wrong device. |
| O | Metallic substance against top surface of remote (says Radio Slave 4). |
| Q | Mounted on or too close to the flash - change its position. |
| R | Someone else is transmitting within range - try changing channel. |
| T | Defective motor drive cord. |
| U | Range between Remote and Sender too great. |
| V | Reverse household connector if so equipped. |

| | |
|---|--|
| W | Strong broadcast station or RF noise generating source nearby. |
| X | Flash is defective. |
| Y | Radio signal absorbing material (eg. brick, concrete, steel) separating Sender and Remote. |

ADDITIONAL INSTRUCTIONS

p/n 458 - Minolta 7000 & 9000

p/n 459 - Canon T90, 620EOS

The enclosed cord will allow remote electronic shutter control of the camera. However, due to the camera manufacturer's design, the enclosed cord will work as theirs does -- the automatic focus and exposure systems WILL NOT FUNCTION. The focus and exposure settings must be MANUALLY set during remote/camera installation.

ATTENTION OWNERS OF HASSELBLAD CAMERAS WITH "C" SERIES LENS & QUICK FOCUSING HANDLE

Due to the unique design of some older model C-lenses, a standard sync cord may obstruct the quick focusing handle as it approaches the sync jack. Sometimes this problem can be corrected by adjusting the quick focusing handle in relation to the focusing ring. If no adjustment can be made, a special sync cord is required. You may either exchange your standard cord or purchase the special type. In order to receive a free exchange, you must return your standard Quantum sync cord with this completed form. To purchase the special cord send \$15.00. Don't forget to check off which cord you require!

Name _____

Address _____

Model 470 for use with Radio Slave 2 / Hasselblad with "C" series lens.

Model 570 for use with Radio Slave 4 / Hasselblad with "C" series lens.

Method of payment (check one)

Free exchange. (My standard Radio Slave sync cord enclosed)

Check for \$15.00 enclosed. (New York residents add \$1.28 local sales tax)

Charge to:

Visa

Mastercard

Exp. Date ____/____

Account # _____

QUANTUM INSTRUMENTS INC.

1075 Stewart Avenue, Garden City, NY 11530

Tel: (516) 222-6000

Fax: (516) 222-0569