

QUANTUM RADIO SLAVE 2

OPERATING INSTRUCTIONS

RADIO SLAVE MODEL 405 INSTRUCTION

THE MODEL 405TR REPLACES THE MODEL 400TR RADIO SLAVE. BOTH MODELS ARE COMPATIBLE WITH EACH OTHER.

UNPACKING

Remove all pieces from the box. It should include:

A) For the 405TR:

- 1) One Transmitter.
- 2) One Receiver.
- 3) Accessory packet containing one camera sync cord, one belt clip and mounting hardware.
- 4) Instruction booklet and literature.

B) For the 405R:

- 1) One Receiver.
- 2) One accessory packet containing mounting hardware.
- 3) Instruction booklet and literature.

C) For the 405T:

- 1) One Transmitter.
- 2) Accessory packet containing one camera sync cord, one belt clip, Velcro for mounting.

Examine carefully for breakage, etc. If so, report it to your dealer.

UNDERSTANDING THE CONTROLS AND FUNCTIONS

TRANSMITTER

Sync Switches (1,2) Selects devices to be fired
- Local and Remote.

Channel Selector (3) Selects either channel 1 or 2.

Open Flash Button (4) Sets off the flash(es) that have been selected by the sync switches.

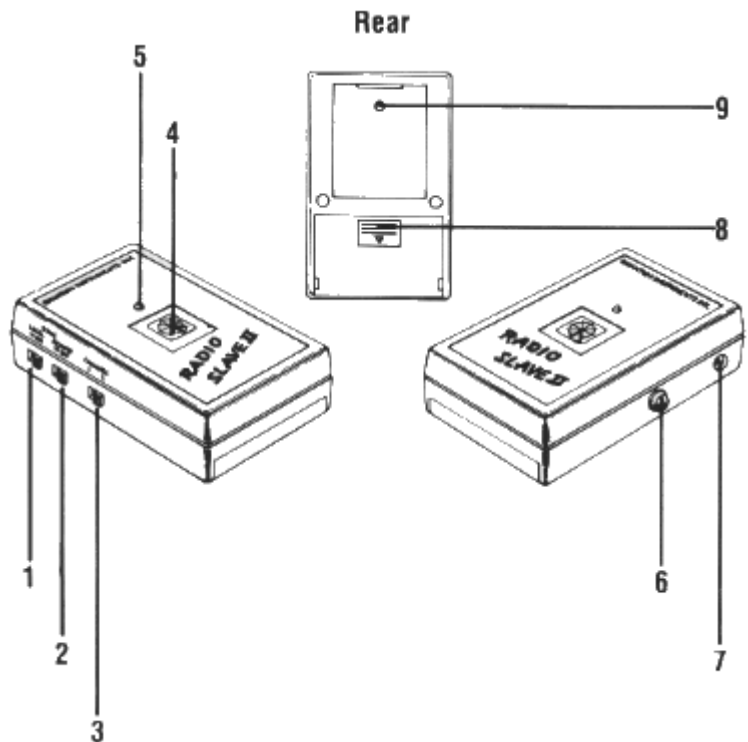
Battery Test Light (5) Press the open flash button - Bright light- good battery. Dim light or no light-replace battery.

PC Connector (6) A flash connected to the transmitter plugs into this jack. (Will accept Nikon™ Locking plug).

3.5mm connector (7) The sync cord connected between camera and transmitter plugs into this jack.

Battery Compartment (8)

Mounting hole for belt clip (9)



RECEIVER

Channel Selector (10) Selects Channel 1 or 2. MUST be set to the SAME channel as the transmitter for the system to work.

ON/OFF Switch (11) Turns the receiver power on and off.

AC (12) Optional battery charger/AC adapter Model 415 plugs into this jack. Use this if a great deal of use is near AC power.

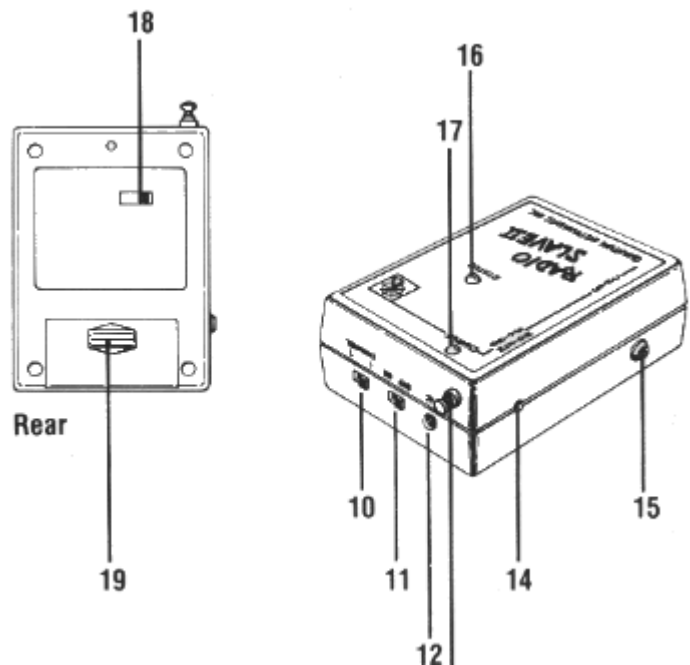
Antenna (13) Extend for maximum range.

Motor Drive (14) An optional cord, p/n 450 / 460 series, plugs into this jack.

Sync (15) A remote flash plugs into this jack. Will accept Nikon™ Locking plug.

Status Light (16) Works ONLY when the receiver is turned on. When the receiver is on, it blinks approximately once every 2 seconds as a 'power on' indicator. If the batteries are low and need to be replaced or recharged, it blinks rapidly. When receiving a radio signal from the transmitter, it lights. When the camera's shutter closes, it will 'blink' for an instant OR it will stay on as long as the open flash button is depressed. **This steady light means the receiver is receiving a valid radio signal from the transmitter.**

Charge (17) Re-charge indicator for rechargeable batteries. Lights only when ni-cads are being charged. Remember - If the receiver is set up to charge the batteries and this light is not lit, THE BATTERIES ARE NOT BEING CHARGED.



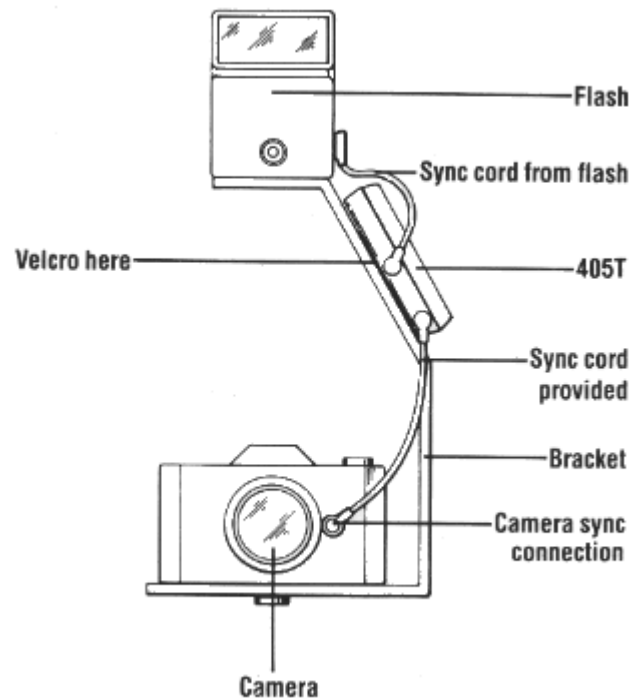
Battery Selector (18) This switch is located on the rear of the receiver. If alkaline batteries are being used, place it in the ALKALINE position. If ni-cads are being used, place it in the NI-CAD position.
UNDER NO CIRCUMSTANCES IS IT TO BE IN THE NI-CAD POSITION WHEN USING ALKALINES. DOING SO COULD DAMAGE THE RECEIVER AND WILL VOID THE WARRANTY.

Battery Cover (19)

INSTALLATION FOR USE AS A FLASH SYNC SYSTEM

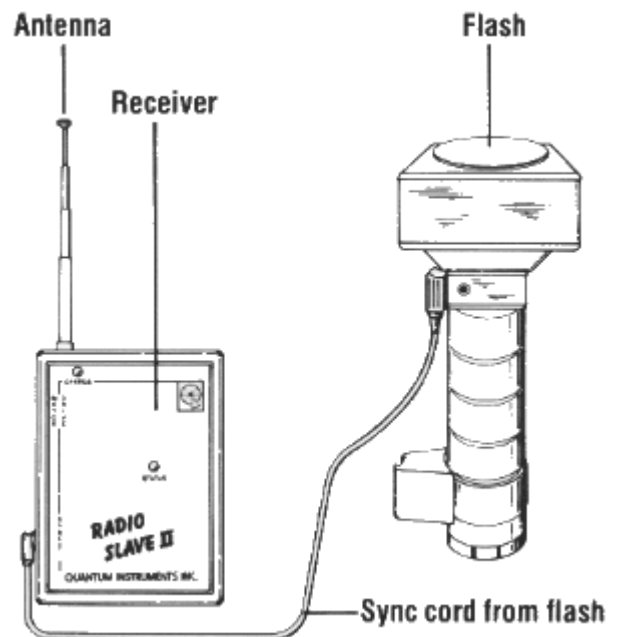
TRANSMITTER

- 1) Insert a NEW 9v alkaline battery. To do this, slide off the battery access cover (8). Snap clip onto battery, observing polarity. Insert the battery, wrapping the wire around the battery terminals. Replace cover.
 NOTE: if the wire is under the battery, the cover will not close properly.
RECHARGEABLE BATTERIES SHOULD NOT BE USED IN THE TRANSMITTER.
- 2) Connect the transmitter to the camera via the sync cord included in the accessory packet.
- 3) Connect the flash mounted on the camera to the PC female outlet on the transmitter. This is the "local" flash. If a flash is not used here, no connection is necessary.
- 4) Locate a position on the camera assembly for mounting the transmitter. The Velcro, belt clip (supplied) or any other suitable method may be used. The belt clip attaches to the hole in the rear of the transmitter (9), using the screw provided. Do not place the transmitter on a large piece of metal, as this will affect the maximum overall range. A narrow camera bracket is fine.



RECEIVER

- 5) Turn the power switch to the off position. Insert two (2) NEW 9v alkaline batteries. To do this, slide off the battery access cover. Snap the clips onto the batteries observing polarity. Insert each battery into the compartment, with the wire on the top. Install the battery cover.
- 6) Connect the remote flash, via a sync cord, to the PC sync outlet.
- 7) Mount the receiver. Conductive materials (eg. metal, brick, concrete) around the receiver and antenna tend to reduce its range. For best range, it **must** be as far away as possible from large conductive objects.
UNDER NO CIRCUMSTANCES IS ANYTHING, INCLUDING NAME PLATES, TO BE MOUNTED TO THE TOP FACE (SAYS RADIO SLAVE II) OF THE RECEIVER. THIS INCLUDES THE USE OF SOME TYPES OF "GAFFERS" TAPE WHICH MAY CONTAIN ALUMINUM. THE RECEIVER IS NOT TO



BE MOUNTED AGAINST A STROBE OR POWER RACK.

THIS WILL CAUSE ERRATIC OR NON OPERATION OF THIS RADIO SET.

Using Rechargeable Ni-Cad batteries in the receiver.

The receiver may be powered by two rechargeable 9v batteries. To do this, simply install these batteries in place of the alkalines and switch the battery selector switch on the rear to NI-CAD. **It this is not done, the batteries will not charge.** Charge the batteries using ONLY the Model 415 adapter. To charge, plug the Model 415 adapter into the AC jack and the other end into a functioning 115v 60Hz outlet. The batteries require 14-16hrs. for a full charge. They can not be over-charged, but charging for more than 24hrs. IS NOT RECOMMENDED. Charging can be done with the power switch in EITHER the on or the off position. This allows the receiver to be charged AND to be used on AC power at the same time. Recharge time will not change. AT ALL TIMES, THE 'STATUS' LIGHT WILL INDICATE WHEN THE BATTERIES ARE IN NEED OF A CHARGE, EXCEPT WHEN THE 'AC' ADAPTER IS BEING USED.

AC Operation

Plug the Model 415 adapter into the AC jack and the other end into a functioning 115v 60Hz outlet. The receiver may be left ON continuously without damage, but may be turned on or off with the on/off switch. IF ALKALINE BATTERIES ARE USED, IT IS NOT NECESSARY TO REMOVE THEM. THEY ARE AUTOMATICALLY DISCONNECTED WHEN THE ADAPTER IS PLUGGED INTO THE RECEIVER. **CAUTION: THE BATTERY SELECTOR MUST BE IN THE CORRECT POSITION.** AC operation may be used when the receiver is in the studio or any other place where there is continuous use and AC power is available. This will conserve the batteries. If it is always used on AC power, no batteries are necessary.

USING THE RADIO SYSTEM FOR FLASH SYNC

- 1) Set the transmitter to channel 1 or 2.
- 2) Turn on the receiver and set it to the same channel selected on the transmitter.
- 3) Turn on the remote and the local flash (if used). Set the sync selector switches to fire the flash(es) desired. Press the open flash button on the transmitter to check for proper operation.
- 4) Check the range. If it is not satisfactory, move the receiver to a different position, set it higher, move it farther away from metal objects, or extend the antenna.

INSTALLATION FOR USE AS A MOTOR DRIVE TRIPPING SYSTEM

TRANSMITTER

- 1) Follow step 1 as outlined in the INSTALLATION FOR SYNC section.
- 2) The remote sync selector switch MUST be in the 'on' position.
- 3) The transmitter can be used "hand held" or the belt clip can be used. Place the transmitter near as little metal as possible, as this will affect the maximum range. Your body is a conductor and if the transmitter is worn on your belt, this will also affect range. Nominal range, depending on surroundings, is 150-200 ft. Maximum line of sight range is 250 ft. Depressing the open flash button commands the motor drive circuit in the receiver to trigger.

RECEIVER

- 4) Follow steps 5, 7 and the cautions as outlined in the INSTALLATION FOR SYNC section.

- 5) Connect the camera's motor drive connector to receiver socket marked "Motor Drive" via the correct optional cord for the motor drive system being used. **ONLY THE 450 / 460 SERIES CORDS WORK WITH THIS RECEIVER.** Check with your dealer for the correct cord for your model camera.

USING THE RADIO SYSTEM FOR MOTOR DRIVE OPERATION

- 1) Follow steps 1, 2, and 4 of USING THE RADIO SYSTEM FOR SYNC section.
- 2) Momentarily depressing the open flash button will cause the camera to fire. On motor drives with a 'continuous' position, the camera will continue firing for as long as the open flash button is depressed, when this mode is chosen.

CAUTION: When the radio is being used to trip a motor driven camera, any flash(es) being used **MUST** be connected to the camera's sync socket. Do not connect a flash to the PC connector on the transmitter or receiver or **IMPROPER** synchronization will result. One radio slave can **ONLY** be used as **EITHER** a motor drive control **OR** a flash sync system.

OPERATIONAL HINTS FOR ALL USES

- 1) Both channels will allow the use of all shutter speeds up to a 250th second for focal plane and a 500th second for leaf shutters. The maximum shutter speed is determined by your camera. Consult its manual or this speed.
- 2) Turn OFF the receiver when not in use to conserve the batteries. The transmitter is only ON when the shutter is closed or the open flash button is depressed.
- 3) As the batteries wear, especially the transmitter's, the range will **DECREASE**. **CHECK RANGE BEFORE EACH JOB TO THE MAXIMUM IT WILL BE USED TO ENSURE RELIABLE OPERATION.** Under normal use, the transmitter's alkaline battery should last 1 year. Alkalines in the receiver should last 50-100 hrs. of continuous use. **CAUTION: POOR BATTERIES WILL CAUSE THIS RADIO SYSTEM NOT TO SYNC PROPERLY. PLEASE MAKE SURE THE BATTERIES ARE GOOD AT ALL TIMES.**
- 4) Some flashes generate large amounts of radio interference which **MAY** cause intermittent operation or continuous self-firing. If you use a flash with an **external battery**, keep the receiver as far away from the flash, the external battery **AND** the wires to prevent self-flashing. If you cannot stop this false triggering, **PLEASE CONSULT US.**
- 5) The system will follow a flash sync trigger rate of 3 flashes per second.
- 6) Use **ONLY** alkaline batteries. Standard carbon/zinc batteries will give poor performance and short life. Rechargeable ni-cad batteries may be used **ONLY** in the receiver. **DO NOT USE NI-CADS IN THE TRANSMITTER.**
- 7) If the receiver **AND** transmitter are **NOT** set to the same channel, the radio system **WILL NOT WORK.**
- 8) Some cameras will not allow the open flash button to operate **UNTIL** the film is advanced.
- 9) **BOTH** receiver and transmitter **MUST** be of the same frequency. Radio slaves are available in four (4) different frequencies, A, B, C, D. Each frequency has two channels-1 & 2. This feature further reduces the chance of interference between radio slave systems. When ordering extra receivers or transmitters, be sure to include the frequency desired. Frequency is indicated by the letter on the serial number label on the outside rear of the transmitter or receiver.
- 10) One transmitter will trigger as many receivers as are need **PROVIDING:**
 - A-All receivers are of the same frequency, (A, B, C, D), as the transmitter.
 - B-ALL receivers are set to the same channel (1 or 2) as the transmitter.

Symptom	Refer to Note:
1)Receiver will not fire remote flash, status light does not light steadily.	A,C,E,F,G,K,L,M,U,W,X,Y
2)Transmitter will not fire local flash.	A,C,H,J,L,M,V,X
3)Will not fire remote or local flash.	A,C,E,F,G,H,J,L,M,V,X
4)Remote flash only, fires intermittently.	A,B,D,E,L,M,N,O,U,W,X,Y
5)Local flash only, fires intermittently.	C,E,J,L,M,X
6)Both flashes fire intermittently.	B,C,E,J,L,M
7)Local flash fires by itself.	C,E,J,L,M,X
8)Remote flash fires by itself.	A,B,C,D,E,L,M,O,Q,R,W
9)All works but range is poor.	A,O,W
10)Receiver status light blinking fast.	A
11)Receiver does not fire flash, status light does light steadily.	A,B,D,M
12)Always transmitting.	C
13)Does not work on AC.	N
14)Does not charge battery.	E,N,P
15)Motor drive doesn't work, status light lights steadily.	A,E,T

NOTES

- A)Bad battery(ies) (Test under load).
- B)Connecting cord between flash and receiver defective.
- C)Connecting cord between transmitter and camera defective.
- D)Flash defective.
- E)Battery clip(s) making poor connection or loose.
- F)Transmitter or receiver not set to same channel or not same frequency.
- G)Remote switch not on.
- H)Local switch not on.
- J)Connecting cord between transmitter and flash defective.
- K)Receiver 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 (41 5) defective or wrong device.
- O)Metallic substance against top surface of receiver (says Radio Slave II).
- P)Alkaline/Ni-Cad switch not set to Ni-Cad position.
- Q)Mounted on or too close to the flash-change its position.
- R)Someone else transmitting within range-try changing channel.
- T)Defective motor drive cord.
- U)Range between transmitter and receiver 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 transmitter and receiver.

ADDENDUM'S

IMPORTANT READ THIS NOTICE

The sync cords (p/n 434 and 435) provided for use with Quantum Radio Transmitters model 405T (black

color), serial number 46500 and above, are compatible with all Radio Slaves.

However, the sync cords provided with GVI Radio Transmitters (grey or light tan color), serial number 46499 and lower CAN NOT be used with this 405T. To do so will cause erratic or non-operation of this transmitter.

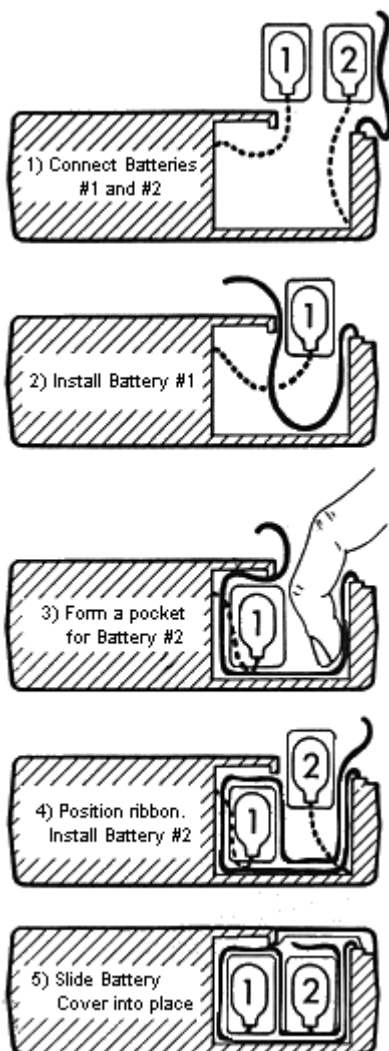
Please use the correct cord.

CAUTION

Do not pull on wires when changing batteries.

ULTRALIFE™ and VARTA™ BRAND batteries are not recommended for use with this unit - they are longer and are difficult to remove.

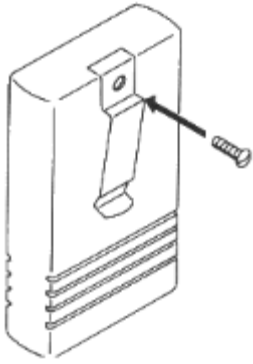
To install batteries follow steps 1-5



MOUNTING THE BELT CLIP TO THE SENDER

The Belt Clip was not designed to be removable. Once you have made the decision to mount the Belt Clip 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.

Using the Long Silver Screw provided, fasten the Belt Clip securely to the back of the Sender.

ADDED MOUNTING INSTRUCTIONS

RECEIVER

The receiver may be mounted either with the Velcro or the "clip and dee" included in this packet. To use the Velcro, first make sure both surfaces are clean and dry. Peel off the protective white backing and position where needed. **PRESS ON FIRMLY**. Maximum adhesion will occur 24 hours after application. To use the "clip and dee" provided, position the clip's hole over the mounting hole just above the rear label. Screw in firmly using the #10 x 1/4 self tapping screw provided. Hang as required.

TRANSMITTER

The transmitter may be mounted either with the Velcro or the belt clip included in this packet. To use the Velcro, first make sure both surfaces are clean and dry. Peel off the protective white backing and position where needed. **PRESS ON FIRMLY**. Maximum adhesion will occur 24 hours after application. To use the belt clip provided, position the clip's hole over the mounting hole by the rear label. The belt clip's lip should be seated into the slot in the case. Screw in firmly using the #8 x 1/4 self tapping screw provided. Hang as required.

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 # _____

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