

## Smart Motorized Stage

### *Why the motorized stage is so important for precise operating*



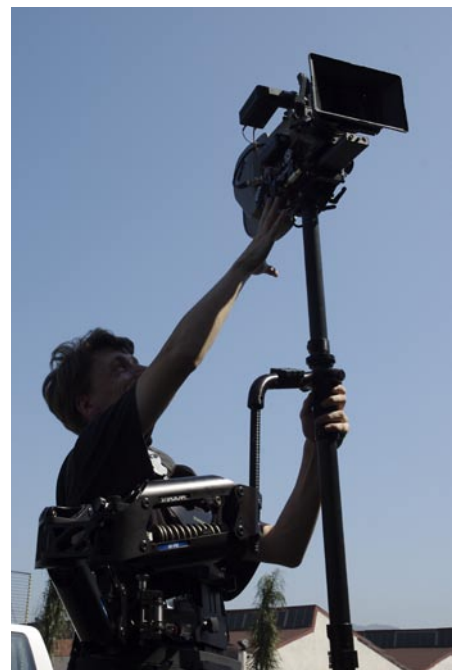
Before operators had the Ultra's reliable and precise motorized stage, trimming the Steadicam had to be done before the shot, and the Steadicam's balance was fixed. As Garret Brown has often said, it was a situation akin to that of an airplane pilot landing his plane to adjust the flaps. For precise work, so much depends on the Steadicam's balance. With the motorized stage, that balance can be instantly altered to suit the shot's changing requirements.

In addition, it is far easier to push a button to tweak the Steadicam's balance than it is to reach up, twist a knob, and wait for the Steadicam to settle to a new attitude. The easier it is to tweak the sled's balance, the more likely it is that the operator actually will take the time to precisely balance the sled.

This is a crew member's view of the Steadicam operator adjusting the precise balance of the sled using the wireless transmitter — a 3 second exposure! Really!!

### *Some situations where the Ultra<sup>2</sup>'s motorized stage really helps:*

- Anytime you want to trim precisely and quickly, with no change in posture or grip. Includes trimming on the fly, in the middle of a shot, or holding an opening frame perfectly still.
- In long mode (and sometimes in standard low mode), it is often difficult or impossible for the operator to reach the stage to manually adjust the sled's balance.
- While shooting from a vehicle, it can be dangerous to let the sled go with one hand to adjust the sled's balance.



## Removing the remote

Whenever you want to hand the remote off to your assistant (or charge the remote's battery), unscrew the knurled ring.



The remote is held in place by two sets of pins. The forward set of pins slips into two small holes, and the rear set of pins are captured in a groove in the knurled ring.



When returning the remote to the handle, insert the pins carefully and do not force anything.

If you want, you can remove the pins and just Velcro the remote to the handle. A "half moon" filler plate is supplied with gimbal so that if the remote is removed, the filler can take its place.



## Charging the remote

If the transmitter's battery is low, the LED will blink continuously after any button is depressed. To charge the remote, remove it from the gimbal handle. Plug the supplied cable into the remote and the other end into any one of the three 4-pin HRS connectors on the sled.



Leave the sled on as you charge the battery. It takes about 5 hours to charge a completely discharged remote battery. When the battery is charging, the green LED will be on. When the lithium-ion battery is fully charged, the green light goes off.

If plugging in a fully charged transmitter, the LED will remain lit for approximately ten minutes until the charge circuit determines the battery is actually full.

Battery life can vary depending on how often the transmitter is used and the storage and operating conditions.

## Changing the frequency

To avoid interference with other systems, 1 of 8 channels can be selected via the rotary switch on starboard side of nose box.



The remote and the receiver must be on the same channel. Simultaneously holding down the top 2 go-to buttons for 6 seconds will enter the remote into a channel change mode. The number of LED blinks will correspond to channel selected.

Change channels by pressing the fore or aft remote buttons (channel up or down). After the proper channel is selected, the programming mode will time out after 9 seconds and re-flash the selected channel number. Channel 0 corresponds to 8 flashes.

(For operation outside of the USA) To select between US and UK frequency operation, there are two jumpers that must be changed. One jumper is inside the nosebox, the other is inside the remote. They must match for the system to work. The jumpers are set at the factory at the time of shipping. (902 – 928MHz US and 868 to 870MHz UK)

The green "PWR" LED on nose box comes on when the CPU is operational.

## Ergonomics



regular

The remote control is ergonomically designed, and it rotates to any angle for your comfort, whether you operate normally or goofy-footed.



goofy



Low mode: Typically, the remote is upside down in low mode. With the Ultra2 you can orient the remote for better low mode operation.

To angle the remote, loosen the small set screw in the curved handle of the gimbal.



Orient the remote by screwing the curved handle in or out. If the handle is too far in, you can't easily remove the remote via the black knurled ring, and you might have to back the handle off one full turn. Loosening the setscrew a lot further and unscrewing the handle is also how you access the "tilt" bearings and shaft for cleaning.



For goofy foot operators, the remote can be inserted upside down keeping the go-to buttons on the "thumb side." You might, however, prefer accessing the go-to buttons with your index finger: i.e., orient the remote as you wish.



## *“Go-to” Buttons and the Smart Motorized Stage*

On the remote control, there are three “go-to” buttons on one side in addition to the four original “trim” buttons (as well as two other “spare” buttons).



The go-to buttons move the stage to specific marks, defined by the operator. One position is usually the nominal balance, and the other two are programmed for some other part of the shot. During the shot, the operator (or an assistant holding the removable remote) pushes a go-to button to move the stage precisely to a new trim setting. Pushing the “home” button at any time returns the stage to the nominal trim. No more counting revolutions or so many seconds; the stage moves exactly where you want it to — and back.

In addition to big tilts and Dutch angles, you might set a button to “post perfectly vertical and in dynamic balance,” and use another button for the nominal trim for the shot at hand. Or set the three buttons to roughly account for the movement of film in some magazines.

Programming the go-to buttons is a snap. Move the stage to the desired position, either manually or using the traditional trim buttons. Then hold one of the go-

to buttons down for three seconds. The green LED will flash twice, and it’s set. You can even program any button on the fly, during the shot, if you have the mental reserves...

Note that both fore-aft and side to side positions are programmed via the go-to buttons. Trimming fore and aft may slightly alter your precise side to side balance, or you may want to program in a severe Dutch angle. You can even program two or three buttons for the same trim if you like, so you don’t have to think about which button to push!

The positions are stored in non-volatile memory, so changing batteries or turning off the sled power does not erase your presets.



The center go-to button on remote shares the same preset as the “L” position on the switch on the nose box. The “L” position is programmed exactly like the center go-to button on the remote, and the red mode LED on the nosebox will flash to confirm programming.

Holding one of the go-to buttons down for more than six seconds will clear all programming for that button and make it non-operational. The green LED will flash 3 times. The “C” button can be programmed the same way as the “L” button. It might be useful to reprogram the “center” position if you were working with a camera and the nominal balance was shifted significantly side to side.