Heavier cameras can suffer from clutch 'bounce' at sudden stops because the tilt gears cannot be 'back-driven'. Loosening the clutch will allow the clutch to absorb this and give smooth stops.

Sometimes the camera needs to be balnced slightly forward. Not too much!

#### Pan, Tilt, Zoom & Focus

Operating the unit is intuitive from any of our controllers. This section should be read in conjunction with the appropriate controller instructions.

Pan & Tilt is the main function of the head and is controlled with the joystick in a fully progressive manner. There are 10 electronic 'gears' for each axis which are adjusted by the controller. There is also a 'Turbo' function which puts the head into the highest speed whilst this command is active. The head then returns to the previous speed.

All control directions can be reversed using the 'REVERSE' functions on the controllers. This cycles the control direction of each axis through the 4 possible configurations. These settings are stored in the head even when the unit is powered off. This means that inverted and upright heads can be used together on the same controller with the directions all working in the same way.

Zoom drift can be nulled via the Joystick Controller. See controller instructions.

#### **Preset Positions**

Up to 8 preset positions can be stored and recalled. Each position includes, Pan, Tilt, Zoom and Focus positions. These positions are absolute and saved during power off. They are not lost even if the head is moved using the slipping clutches.

If the head does not reach the preset positio within 6-8 seconds it will time out and abort the move. This can occur if an obstruction is met or the position is out of range.

A preset move can be aborted by operating the joystick or zoom rocker on the controller. Sending another move will also abort the move and send it to the new postion.

#### Specifications

Weight:	3.4kg,
Capacity:	15kg
Dimensions:	W 298mm, H 250mm, D 98mm
Power:	12 - 24v @ 0.25A (idle) + Camera requirement
Data:	RS 485, twisted pair, 1000+ metres

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# Instructions

## U4\_J Operating Instructions



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The **U4\_J** is a remote head designd for medium sized cameras utilizing LANC protocols. It is optimized for the JVC range of cameras and has additional LANC commands specific to JVC cameras.

#### Power & Data Input

Inputs to the head are *power* and *data*. These are both input via the XLR4 input socket on the base.

**Power;** 12 -18 volts, (24v max. For short periods) <1A for the Head only, up to 3.5A for the head & camera.

**IMPORTANT** - Voltages greater than 5v on pins 2 or 3 will damage the data receivers. e.g.. phantom power. Take care when working with audio and intercom systems etc. not to plug the wrong cable into the head.

#### Camera Power & Data Connectors

**<u>4pin XLR</u>** Supplies regulated 12v (3A) power to the camera. This is a 12v regulated supply for the camera.

#### Video Circuits

The BNC connectors are simply connected together and provide a convenient way of acbling the camera to the rotating base.

#### LANC jack socket

This is connected to the camera with the suppled cable.

#### Tilt Clutch Adjustment

The tilt clutch is in 2 parts; The larger diameter knob is the clutch and the smaller diameter knob is the clutch lock. To loosen the clutch, first loosen the lock then loosen the clutch. The main reason for loosening the clutch is to enable adjustment of the camera balance.

Do not overtighten the clutch. Its purpose is to prevent damage to the mechanics should the camera be moved by an external force or be prevented from moving by an obstruction.

#### Fitting and balancing the Camera

It is important the camera is balanced in 2 planes. Fore/Aft and Up/Down.

Fit the camera slide plate using the 3/8" bolt through the centre of the saddle. Attach the camera and **all** the cables required. Now slacken the tilt clutch and slide the camera so that it balances perfectly front and back.

Now the 4 bolts securing the saddle to the drop arms are loosened and the saddle is adjusted for perfect up and down balance. The camera should now stay in position wherever it is tilted and **not** return to level.