GOLD PAN-TILT HEAD WITH 12V JOYSTICK CONTROL

INSTRUCTION MANUAL
IT IS IMPORTANT THAT YOU READ AND UNDERSTAND THIS GUIDE BEFORE ATTEMPTING TO ASSEMBLE OR USE YOUR NEW PROAIM GOLD PAN-TILT HEAD. SHOULD YOU NEED ADDITIONAL INFORMATION, TECHNICAL ASSISTANCE IS AVAILABLE 'ON LINE' BY CONTACTING YOUR SALES REPRESENTATIVE.

WARNING: NEVER MOVE ANY PART OF THE HEAD BY HAND! THE REDUCTION DRIVES IN THE MOTORS HOLD EACH AXIS IN PLACE. TO MOVE BY HAND MAY PERMANENTLY DAMAGE THE MOTOR GEARBOX.

PROVIDE SLACK IN THE CABLE LENGTH GOING TO THE PROAIM PAN TILT HEAD FROM THE CONTROL BOX TO AVOID TENSION ON THE CABLE AND CONNECTORS. TENSION WILL DAMAGE THE CABLE WHEN THE CRANE IS BOOMED UP OR DOWN

INTRODUCTION
The PROAIM™ GOLD PAN TILT HEAD comes fully assembled and ready to mount on a Jib arm. For Tripod use or for some jibs arms, you may require a plate the same as PROAIM™ GOLD PAN TILT HEAD base platform.

WHAT'S IN THE BOX
Please inspect the contents of your shipped package to ensure you have received all that is pictured and listed below. The grey foam shipping /storage container has been especially designed to protect your purchase while in transit and is a good place to keep your PROAIM GOLD PAN-TILT HEAD when not in use.

- PROAIM Gold Pan Tilt Head
- Joystick Control Box
- 12volt AC Adapter
- 9 meter cable with two 4-pin male connectors
- 3 meter long 4pinXLR cable (for using 12VDC Battery Packs)
- Camera Mounting Screw (1/4")
- 4 Head Mounting Screws
- Carrying Case With Custom-Fit Packing
- This Manual
1. Gear for Tilting Movement  
2. Gear for Panning Movement  
3. 12v motor for Panning Movement  
4. 12v motor for Tilting Movement  
5. Adjustable Camera Platform  
7. Joystick for pan/tilt movement  
8. On/Off Switch  
9. Dead Spot Knob  
10. Speed Knob  
11. 2/24 V DC Input – 4 Pin XLR  
12. Fuse Holder  
13. 4-Pin power out to Head  
14. AC Adapter  
15. 9 meter long cable  
16. Pan Direction Switch  
17. Damping  
18. Joystick Cap  
19. Tilt Direction Switch

Please use the following sequence of pictures and text in the order they appear to set up your new Gold Pan and Tilt Head. Technical assistance is available by contacting your sales representative.

- Attach the PROAIM™ GOLD PAN TILT HEAD base platform to the Tripod or jib arm using the four ¼”screws. Tighten to secure.

CABLES & CONTROL BOX
- Install the 12 volt DC power (4 pin XLR) in rear of Joystick Box.

Note: Any 12 volt battery may operate the PROAIM™ GOLD PAN TILT HEAD as long as the connector mates and is #1 pin Negative and #4 pin Positive.
CAUTION: DO NOT USE A UNREGULATED POWER SUPPLY! IF USING A REGULATED POWER SUPPLY IT MUST PRODUCE LESS THAN 12 VOLTS. MORE THAN 24 VOLTS MAY CAUSE PERMANENT DAMAGE.

JOYSTICK
- The joystick may be operated hand held, from a flat surface like a table top or attached to the boom arm of the jib.

HEAD CABLE
PROAIM™ GOLD PAN TILT HEAD Digital only
- Attach the 4-pin power cord to rear of joystick box.
- Attach the head cable to the cable connected to the gold pan tilt head for panning & tilting.
- If the joystick control is opposite, undo the connectors at the motors, rotate 180 degrees and re-install.
- Attach & secure your camera on the camera platform of Head with the help of provided bolt.

BALANCING
Balancing the camera on the head is critical to smooth operation.
- Find the horizontal balance point of your camera by using 2 fingers of one hand while holding the handle.
- Mark this point on the side of the camera with chalk or tape.
- Turn the unit on and move the tilt control until the camera plate is vertical.
- Loosen the two screws holding tilt motor. (DO NOT REMOVE).
- Grasp the motor and turn slightly to disengage gears.
- Mount the camera to the camera plate with the screw provided.
- Tighten by threading the nut up to the bottom of the camera plate securely.
- Make sure your balance point previously marked with chalk or tape is in the middle of the plate.
• Loosen the knob below the camera plate and slide the camera and plate up or down until the center line of your camera is about in the middle of the large gear. Now tighten knob.
• If the camera is perfectly balanced it will stay in any position while motor gear is still un-attached.
• Grasp the motor and turn it back until the gears mesh.
• Gently tighten motor screws.
• Secure the camera.

Note All reduction boxes have a small amount of backlash. The balancing of the camera will reduce the backlash to a minimum making it felt at the top of the tilt arc.

OPERATION
• With the camera set up as previously described above, Power ON by pressing the RED Switch on the top of the Joystick control box.
• For inverted use, disconnect the leads to the motors, rotate the control box 180 degrees and re-install.

Note Remember practice makes perfect and always watch the cables for binding.

PROAIM™ GOLD PAN TILT HEAD
The PROAIM™ GOLD PAN TILT HEAD circuitry is built entirely into the joystick box. The only other requirement is the AC power pack (provided) or battery power. The power pack can handle 90-240 volts. Users will need the appropriate plug adapter for local use.

JOYSTICK
The joystick is a two-axis variable speed servo controller. The further you move in one direction the faster the output to that motor. This will be a little tricky at first, but little practice will improve your success.

The joystick may be operated in a handheld position or from a flat surface such as a tabletop, or attached to the boom arm of Jib.

After plugging the power cord into a proper outlet, press ‘power on. The LED light on the control box should illuminate and the head may jump slightly on start up or shut down. This is normal. This can be controlled by Dead Spot. Adjust the joystick to ensure correct movement of the head. It may be necessary to reconnect to the motors if required.

DIGITAL CONTROL

POWER CONTROL
To the right and above the joystick is a knob labeled "SPEED". This is the power control knob. Turning to the right will be full power and back to the left will decrease the available power to both pan and tilt operation. The advantage of power control is to be able to limit power when only slow accurate movements are needed.
With the power control at half power (approx. 8 volts max. output) the full range of motion on the joystick will be between 0 and 8 volts making finer adjustments possible. The power control will be usable between a range of approximately 4 volts to 12 volts.

**DEAD SPOT**

The knob to the left is marked Dead Spot. Turned all the way to the left (counterclockwise) will create the smallest dead spot. Meaning that the head will begin to move as soon as the smallest deflection of the joystick is made. Moving to the right will increase the area where no power is sent to the head motors. At half way, the dead spot will close again, this helps to avoid crossing the tilt when only pan movement is desired.

The dead spot is so tight when the control knob is all the way to the left, it may be necessary to back it off slightly until no movement is seen in either axis.

**Note:** With the dead spot all the way left the head may move in both axis on it’s own. The dead spot should be set at approx. the 9:00 position to insure that no unwanted movement occurs.

**PAN DIRECTION SWITCH**

When the Pan Tilt Head is used on a Tripod or on a Jib.

When the head is shifted from a Jib to a tripod, it needs reversal of direction as the location of the head will be inverted. By switching “on” the pan direction switch, we can immediately reverse the direction. When the joystick is moved to the right it gives right rotation as it gives while mounted on the tripod directly.

**Tilt DIRECTION SWITCH**

When the Pan Tilt Head is used on a Tripod or on a Jib.

When the head is shifted from a Jib to a tripod, it needs reversal of direction as the location of the head will be inverted. By switching “on” the tilt direction switch, we can immediately reverse the direction. When the joystick is moved to the up it gives up rotation as it gives while mounted on the tripod directly.

**DAMPING KNOB**

Damping Knob is the ability to control the "damping" effect of the joystick interface with the pan/tilt action of the head being controlled. It does not matter what head you are using; the damping effect is a characteristic of the joystick output.

**Linear or Logarithmic taper joystick control**

All joysticks are linear, meaning that each degree of movement of the stick correlates to the output. On the 12 volt PROAIM™ GOLD PAN TILT HEAD half deflection of the joystick means approximately 6 volts sent to the motors. But with the advent of Digital we can now control the taper of the joystick, making in Logarithmic as well. Logarithmic taper being that the first of joystick movement only sends a small amount of power to the motors and the last of the deflection will send more power per degree of deflection. On Logarithmic taper 1/3 of joystick deflection might yield 2 volts output the next 1/3 will yield 4 volts output and the last 1/3 of yields 6 volts for a max. again of 12 volts. This mode gives the operator fine slow movements yet retains the ability to go to max. speed if necessary.
NOW, GOLD PAN TILT IS READY TO USE

Exclusive of Camera

WARRANTY

We offer a limited time warranty for our products. For Mechanical products we provide a 6 month warranty & for electronic products we provide a 3 month warranty from the date of purchase.

We will repair or replace your product, free of charge, in the event of a defect in materials or craftsmanship obtained during normal use or handling based on the user manual. Please note that we will not cover any shipping costs for returning the product to us. If any VAT or import duties are applied to the return, we will also charge these costs to the customer.

The warranty does not include, by the way of example, damage caused by products that we do not supply or from mishandling in transit, accident, misuse, neglect, lack of care of the product, or service by anyone other than our company.

We are not liable for incidental or consequential damages resulting from the use of the unit or occurring due to any breach of this warranty.

Replacement parts of the product will be provided at nominal cost (covering the cost price of the replacement parts only) to the customers after the Warranty Period has expired. We will cover the complete cost of sending replacement parts within the warranty period. After that, Nominal cost of the product & Actual shipping cost will be charged.

Do not send the unit to us without first getting a response and getting the approval to send back the item.

In case of any kind of dissatisfaction, we urge you to Contact us immediately and we shall do our best to help you out.

For any other assistance you can reach us via email.