VANTAGE
Lens Drive
Safety

Important information on the safe installation and operation of the product. Read this information before operating the product. For your personal safety, read these instructions. Do not operate the product if you do not understand how to use it safely. Save these instructions for future reference.

Warning symbols used in these instructions

Safety cautions are used in these instructions. These safety instructions must be followed to avoid possible personal injury and possible damage to the product.

WARNING! Where there is a risk of personal injury or injury to others, comments appear supported by the warning triangle symbol. Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word ‘CAUTION’.

Health and Safety

WARNING! Risk of personal injury or injury to others. All personnel must be fully trained and adhere to correct manual handling techniques and Health & Safety regulations. It is the responsibility of the local organisation to enforce safe working practices at all times.

Mounting and Installation

WARNING! The product is only intended to carry a payload consisting of camera equipment and associated accessories. Ensure the payload does not have protruding sharp edges or abrasive surfaces.

WARNING! Allow sufficient clearance around the products operational footprint when mounting near walls, ceilings and other objects.

WARNING! The product and payload must be securely mounted to a suitable base. When mounted on a wall or ceiling, ensure the product and any payload is fully secured using safety lanyards.

WARNING! Risk of electric shock. Always check cables for signs of damage. Damaged cables can cause personal injury and/or damage the equipment. The product and power supply are strictly for indoor use only.

WARNING! An abnormal or unbalanced payload can cause the product to become unstable. Strictly adhere to payload guidelines and mounting instructions presented in the user guide. Do not exceed the payload limit for the product.

WARNING! All personnel must be fully trained and adhere to correct manual handling techniques and Health & Safety regulations. It is the responsibility of the local organisation to enforce safe working practices at all times.

WARNING! Operators must familiarise themselves with the working footprint of the robotic head, including all associated equipment (lens, zoom and focus controls, viewfinder, prompter, etc.) to prevent inadvertent collisions. If personnel are too close to a head that is about to move, the operator should prevent the motion from starting or stop the motion if it has started. The operator must visually verify that the active area is clear of hazards and personnel, both before and during remote operation.
About this guide
This user guide is an important part of the product and is aimed at the personnel who operate and maintain the Lens Drive. It contains information about the product and its proper use and serves to safeguard users and their equipment.

Intended use
This Lens Drive has been designed for professional use in television studios and other indoor video production applications. Any use above and beyond this purpose is deemed improper and will void the warranty.

Warranty
The product is covered by a one year warranty.

The warranty will be invalidated if:

- The product is improperly installed or used in a manner contrary to this user guide.
- The housing is opened by unauthorised personnel.

We reserve the right to make changes to the product based on technological advances.
### Operating Elements

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<tr>
<th>Pos No.</th>
<th>Description</th>
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<tr>
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<td>Lens Drive Power Link Cable</td>
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*To drive Additional axes, the purchase of additional Lens Drive Motors will be required.
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<tr>
<td>12</td>
<td>24V 2.5A Link</td>
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</table>
Setting up the Lens Drive on the Vantage Head

1. Undo the 2 x cradle bolts
2. Remove the original cradle and store somewhere safe.

Assemble the Offset Cradle

- The external lens drive control box is already fitted to the cradle upright.

1. Using the supplied Cradle Base Plate Bolts M6x16, Attach the cradle base plate to the back plate.
2. The base plate can be attached in multiple positions in order to balance / support different positions. Pick the best position to suit your configuration.
Installation

Attach the Cradle to Vantage
1. Using the supplied Cradle to Head Mounting Bolts and Washers M5 x 20, attach the assembled cradle to the Vantage.

CAUTION! Do not use the original cradle bolts as they are too long, ensure the bolts (M5 x 20) supplied with the Lens drive kit are used.

Attach the Base Plate to Cradle
1. Using the supplied Cradle to Base Plate Bolts and Washers 3/8", attach the base plate to the cradle.
**Installation**

**Insert Rods into the Base Plate**
1. Insert one end of the rods into the support rod housing at the front of the Base Plate, and continue to slide back until it protrudes through the support rod housing at the rear of the Base Plate.
2. Adjust the support rod to the required position and secure with the support rod clamp.

**Mount Camera to the Slide Plate**
1. Attach the slide plate to the camera using the supplied screws.
2. Position the slider in a position best suited to your needs.

**Mount Camera to the Base Plate**
1. Attach the camera with slide plate to the base plate.
Installation

2. To adjust the height, rotate the height adjustment knob in a counter-clockwise direction to loosen the platform.

3. Adjust the Ace Base Plate platform to the required height and hold in position.

4. Rotate the height adjustment knob in a clockwise direction to secure the platform.

Attach the Gear Cog to the Lens Drive Motors
1. Align the motor retaining pegs with the location holes on the cog.
2. Push the cog onto the motor, ensuring it fully snaps into position.

Attach the Gear Drive(s)
1. Slide the motor assembly onto the rod.
2. Engage the gear drive with the desired control ring (zoom or focus) on the lens.
3. Check that the gears mesh correctly. If the lens control ring pitch is unsuitable, use the supplied flexi band as shown on “Attach the Flexi Band to Camera Lens” on page 11.
Attach the Flexi Band to Camera Lens

1. Feed the end of the band into the clamp block, while turning the lock screw clockwise, to reduce the size of the band.

2. Place the band on the camera lens over the lens control ring.

3. Tighten the band until it is firmly gripping the control ring.

4. Align the motor drive gear with the band and tighten the motor gear lock screw to secure its position.
Installation

Connections

1. Plug the lens motor cables into the zoom and focus ports on the control box, being careful to match the correct port to the motor for zoom or focus. **NOTE! Iris control will be available with a firmware update in early 2018.**

2. Use the Vantage power supply to supply power to the control box and the lens drive power link cable to supply the Vantage head. **NOTE! The power connections on the control box can be either way around.**
Calibrating a Lens with End Stops

1. For a lens that has end stops; press the button for zoom once, the drive will automatically calibrate the range from end stop to end stop.

2. The Green and Amber LED’s will flash while the calibration takes place.

3. When calibration has completed the Amber LED will go out and the Green LED will turn solid.

4. Repeat the procedure for focus.

5. Repeat the procedure for focus.

Manual Calibration for a Lens without End Stops

1. For a lens does not have end stops; press and hold the zoom button for 2 seconds to initiate the learning mode, the zoom LED’s begin to flash.

2. Manually move the lens zoom to the start point for zoom.

3. Press the zoom button again, and then move the zoom position of the lens to the end point.

4. Press the zoom button again. The motor will then move to the extremes to confirm end points; calibration is complete.

5. Repeat the procedure for focus.
The Lens Drive requires minimal routine maintenance, apart from regular cleaning and routine checks.

Routine checks

During use, check the following daily:

- Check cables for signs of wear or damage. Replace as necessary.
- Check that all cables are connected properly.

Cleaning

**WARNING! Risk of electric shock.** Disconnect and isolate the product from the power supply before cleaning.

During normal use the only cleaning required should be a regular wipe over with a dry, lint-free cloth. Dirt accumulated during storage or periods of disuse may be removed with a vacuum cleaner. Particular attention should be paid to all connection ports on the Lens Drive.

Firmware Update

1. Download the latest firmware update (www.vinten.com/en/service-support) and install it in the root directory of USB thumb drive.
2. Remove the USB cover from the Drive box.
3. Insert the thumb drive into the USB socket.
4. Hold down the Iris button and connect the power supply.
5. The LED’s will start to flash and the Iris button can be released.
6. The firmware update will take approximately 30 seconds to complete, confirmed by a solid LED.
Technical Specifications

Physical Data

Camera Base Plate

- **Weight**: 0.55 kg (1.2 lb)
- **Height**: Fully retracted - 4.8 cm (1.9 in.), Fully extended - 7.2 cm (2.8 in.)
- **Length**: 11.4 cm (4.5 in.)
- **Width**: 13.3 cm (5.2 in.)
- **Maximum payload**: 4.5 kg (9.92 lb)

Lens Drive

- **Weight (Without Clamp)**: 97g (0.21 lb) Without Gear, 110g (0.24 lb) With Small Gear
- **Length**: 63 mm (2.5 in.)
- **Width**: 25 mm (0.98 in.) (Without Gear)
- **Rod Clamp Diameter**: 15 - 19 mm (0.59 - 0.78 in.)

Available gear sizes

- 40 mm (1.6 in.) 0.8mm pitch
- 60 mm (2.4 in.) 0.8mm pitch

Cable length

- 40 cm (15.7 in.)

Connection Type

- RJ45

Electrical Data

- **Power input**: 24V Max.
- **Power consumption**: 250 mAh

Environmental Data

- **Operational temperature range**: 0°C to 40°C (32°F to 104°F)

Technical specifications are subject to change without notice.
General Notices

FCC Certification

FCC Notice
This product complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/television technician for assistance.

FCC Warning
Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

FCC Declaration of Conformity
This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This product may not cause harmful interference.
2. This product must accept any interference received, including interference that may cause undesired operations.

Declaration of Conformity
Vitec Videocom Limited declares that this product has been manufactured in accordance with BS EN ISO 9001:2008 and is in compliance with the essential requirements and other relevant provisions of the EC Directives 2014/30/EU EMC. A copy of the Declaration of Conformity is available on request.
Environmental considerations


This symbol marked on the product or its packaging indicates that this product must not be disposed of with general household waste. In some countries or European Community regions separate collection systems have been set up to handle the recycling of electrical and electronic waste products. By ensuring this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health. The recycling of materials helps conserve natural resources.

Visit our website for information on how to dispose of this product and its packaging.

In countries outside the EU:

Dispose of this product at a collection point for the recycling of electrical and electronic equipment according to your local government regulations.

Pollution statement

This equipment is designed for operation in Pollution Degree 2 environments.