

AutoPod (Version #2)

Powered Telescopic Elevation System



User Manual

Issue #1 covering:

Single Elevation - Product Code #510

Dual Elevation - Product Code #520

AutoPod wheeled protective transport case for both #510 and #520
Controls, Cables and Accesories included inside *(not shown)*



Single #510



Dual #520



Protective case open showing the Top tray contents (left) and the Bottom tray contents (right)



Safety



Water, Moisture and Dust

WARNING! The product is not intended to be used in wet or damp conditions. Protect against moisture and dust. The presence of electricity near water can be dangerous.



Ventilation

CAUTION! The product may get warm. Do not cover. Allow sufficient ventilation and airflow around the product to ensure reliable operation



Operating environment

CAUTION! The product should not be used outside the operating limits. Refer to the product technical specifications for the product operating limits regarding temperature, weight etc.



Cleaning

WARNING! Risk of electric shock! Always disconnect and isolate the product from all sources of power before cleaning.



CAUTION! Do not use abrasives, wire brushes or chemicals to clean the product. Clean with a soft dry cloth.



Maintenance

WARNING! Apart from regular cleaning, the product has no user serviceable parts and should not be opened by anyone other than Polecam authorised technicians. Care should be taken to regularly inspect all cables and accessories for signs of damage, wear and tear. Any damaged cables, connectors or accessories should be replaced with Polecam authorised replacements. If in doubt, contact: service@polcam.com who will be able to advise you.

The fitting of non-approved parts or accessories, or carrying out of non-approved alterations or servicing can be dangerous and could affect the safe operation of the product. It may also invalidate the terms and conditions of the product warranty.

Working with Robotic equipment

The equipment is operated remotely and as such can move suddenly without warning. No audible warning will be given as it is counter-productive to the broadcast environment.

It is recommended that only trained personnel be allowed to enter or work within the active operating areas where remotely operated robotic equipment is located. The recommended safe operating distance is a minimum of 1M (3ft)

Safety Continued.....

Operators guide for safe use

All Operators must familiarise themselves with the operation and working footprint of the Autopod, ancillary equipment and payloads including but not limited to (Robotic Heads, Jibs, Cameras, Lenses, Tele-prompters and Zoom/Iris/Focus drives etc.) before operation commences to avoid inadvertent collisions or injury to personnel.

Care should be taken to note the safe working minimum and maximum height of the equipment.

Operation should not begin or if in progress should stop immediately if the operator feels personnel or other equipment are too close.

It is strongly recommended that the operator visually verifies that the active operating area is clear of personnel and other hazards before and during remote operation.

Using more than one Autopod in series can be dangerous without sufficient planning. It is the operator's responsibility to check before operation begins that all equipment is securely fixed to level ground and each other and special care should be taken to check for overhead, cables, gantries, lighting rigs, sound equipment and any other hazard that may impede the safe operation of the Autopod(s) and cause damage to equipment or injury to personnel.

Make sure cables are safely routed and are long enough to avoid strain or entrapment.

Operator Notes:

Specifications *(images not to scale)*

AutoPod Control Unit (ACU)

- Dimensions 400mm x 105mm x 60mm
- Weight: 1.6KG
- Voltage In :110/230V AC or 24V DC
- Power in :300W
- Power consumption in standby : 0.1Watt
- Overload protection via current limitation
- Auto detection of how many elevation units connected.
- Soft start/ stop function built in.
- Connections are made using High Quality Neutrik industry standard XLR connectors

Control and Power connection end of ACU



Leg connection end of ACU



Elevation Column

- Design : 3 stage Elevation unit with built in motor and mechanism
- Standard Installation dimension 560mm (not including “V” plates or Base)
- Standard Stroke 675mm
- Weight : 8kg without mounting plates
- Noise level : low and uniform
- Speed 38mm/s Unloaded (16 second travel time - “stowed to up” or “up to stowed”)
- Max Thrust 700N - Max Payload 35kg (#510) & 25kg (#520)
- Hall Sensor to enable parallel drive
- Working Ambient Temperature +5 to +40 deg C
- Storage and Transport Temperature -10 to +70 deg C



Lightweight Base

- Footprint : 650mm x 650mm
- Height 70mm
- Weight : 2.5+KG

Heavy Duty Base - Wheeled

(optional Accessory)

- Footprint : 600mm diameter (12mm thick)
- Height 120mm
- Weight : 26KG



Heavy Duty Base - Folding Dolly

(optional Accessory)

- Footprint : 800mm
- Height 120mm
- Weight : 9KG



Operation

Getting Started

Before you start using your AutoPod system, you must familiarise yourself with the full list of components, their features and functions

What is in the box

The AutoPod is supplied and packaged in a protective roll-along case with foam inserts - one of which (top tray) is removable.

Lid Insert

- 1x Lightweight adjustable base (fitted with "V" quick block base connector)
- 1x Operators manual

Top Tray

- 1x Foot pedal controller
- 1x Hand/Desk Controller
- 1x Mains PowerCon cable
- 1x Elevation unit cable (2x if dual system is supplied)



Bottom Tray

- 1x AutoPod control unit (ACU)
- 1x Elevation unit (2x if dual unit is supplied) - each fitted with 1x "V" quick in line connector with inset XLR and 1x "V" quick block base connector
- 1x "V" quick connector Camera mounting plate
- 2x Extension roads (250mm long)
- 1x 100mm Riser bowl adapter
- 1x UK Mains 2m IEC cable
- 1x US Mains 2m IEC cable
- 1x Euro Mains 2m IEC cable



IMPORTANT:

Ensure that all connections are made before switching on any power; failure to do so may result in the system needing to be re-set and/or calibrated for effective and accurate operation

See connection set-up diagram on next page - do not apply power until configured

NOTE!

When operating the Autopod with a single elevation unit, the unit should be plugged into "LEG1 ". Leg 2 is not active when running a single Elevation unit.

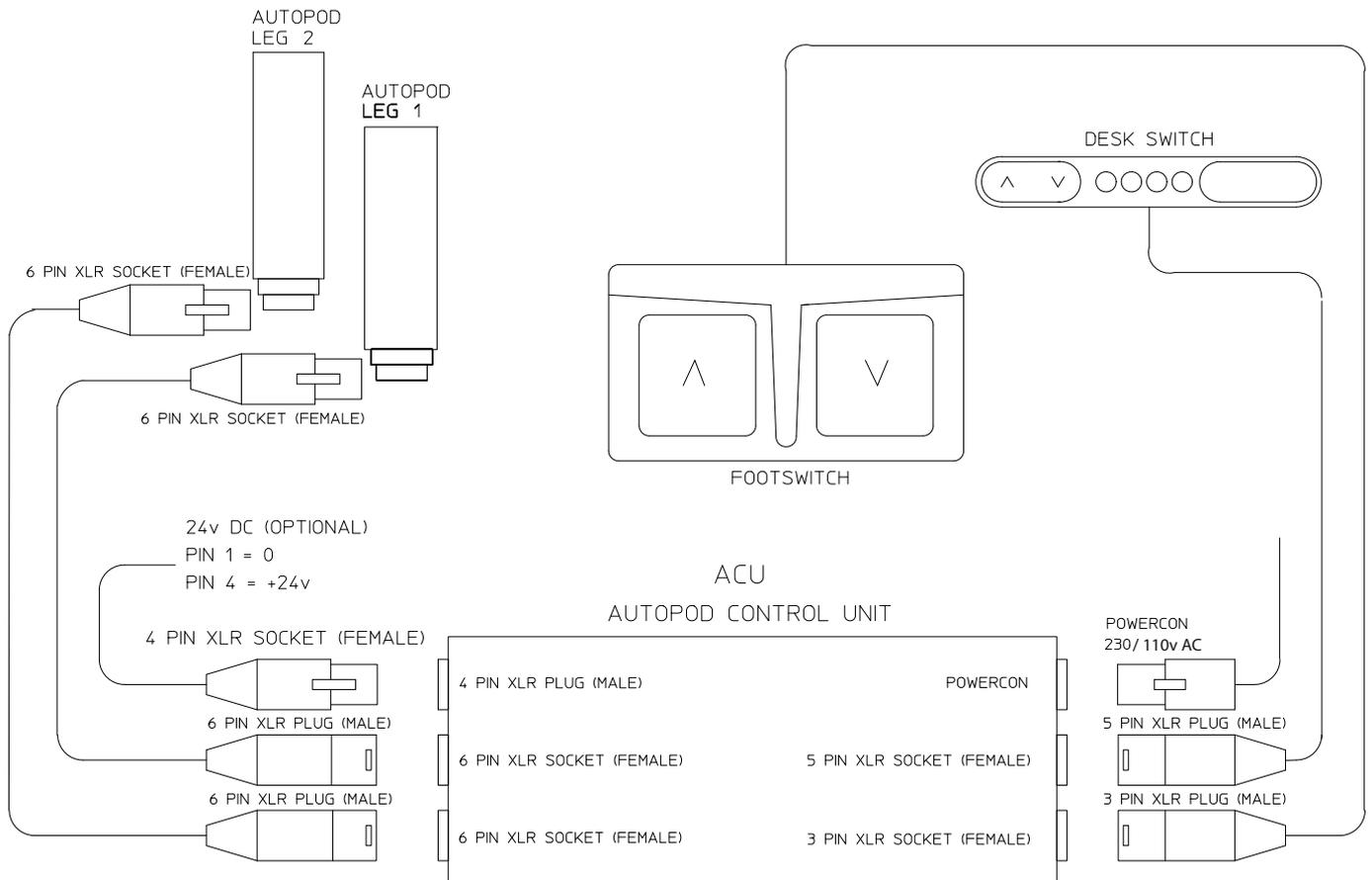
Operation continued...

Connecting your AutoPod

Plug in the all cables before plugging in the power cable as per the set-up diagram.

Remember:

Ensure that all connections are made before switching on any power; failure to do so may result in the system needing to be re-set and/or calibrated for effective and accurate operation



Controlling your AutoPod

The AutoPod can be controlled by the foot pedals or the hand control unit interchangeably.

To move the AutoPod simply press the pedal or hand controller and the AutoPod will continue to move up or down until it receives another signal to stop.

Your AutoPod hand control unit will allow you to store 3 pre-set positions. To store a position, move to the selected height required and stop. Press the "S" button followed by one of the three preset keys marked by ". / .. / ...". This stores the height position. You can then drive the AutoPod up and down.

By pressing the a pre-set key twice, the AutoPod will move to the previously stored position.

NOTE: Pre-set positions cannot be accessed with the foot control pedal.

Calibration

Calibrating your AutoPod

Your elevation should not need calibration as this is done from the factory but if for any reason the power is cut off when the unit is in the raised position or you are operating two elevation units together then you may need to re-calibrate the unit(s)

To calibrate remove the 15M leg extension cable, Network cables (if being used) and plug the leg(s) into the ACU using the 3M leg cable.

Using either the foot control pedal or hand control unit, press and hold down the "DOWN" button for 3-5 seconds until the leg moves down slightly. Then simply raise the leg up a few centimetres and calibration is complete.

You may now plug in your 15M leg extension cable if needed.

Hand controller height calibration

The hand control unit has a numerical display which measures in Centimetres and can be re-calibrated to your needs, either to the height of the equipment on top or centimetres from the bottom of the Autopod stroke.

If you want to change the display, move the AutoPod to the required position.

Simultaneously hold down the "up" and "down" arrows until 3 dashes appear on the display.

This will be followed by a number value being displayed. In order to change the numerical display you must press the "up" or "down" keys to select the numerical value you want displayed at the current height.

After several seconds the numbers will flash and the new setting is stored.

NOTE : The system will not let you choose value that would lead to a negative number on the display when the column is lowered.

Hand controller error codes

In the event of a system fault, your hand control unit may display an error code :

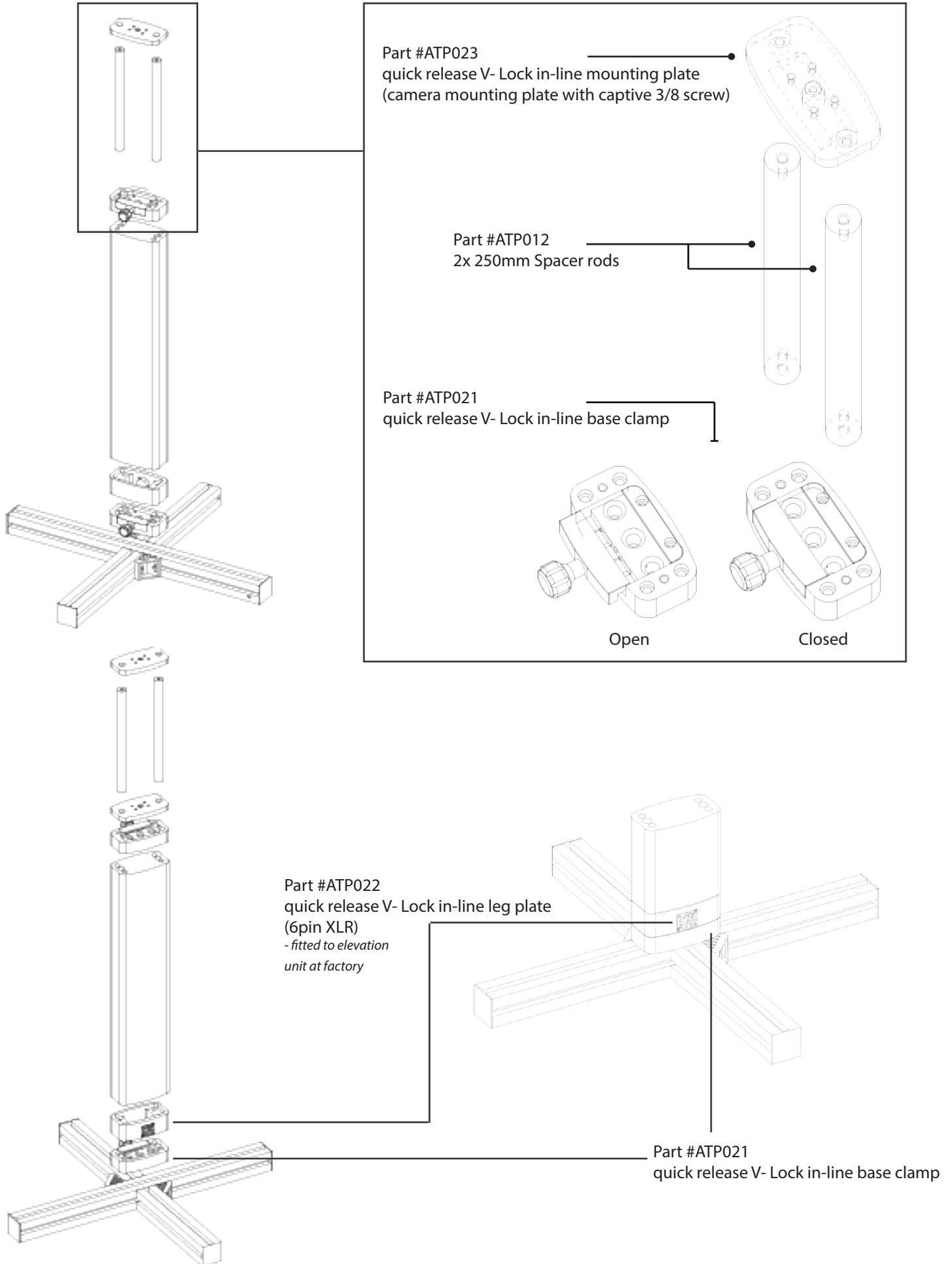
E01 : The Elevation unit position is unknown – Should this happen, re-calibrate the leg as explained in the calibration section above

E02: Overload in upward direction has occurred - reduce the payload.

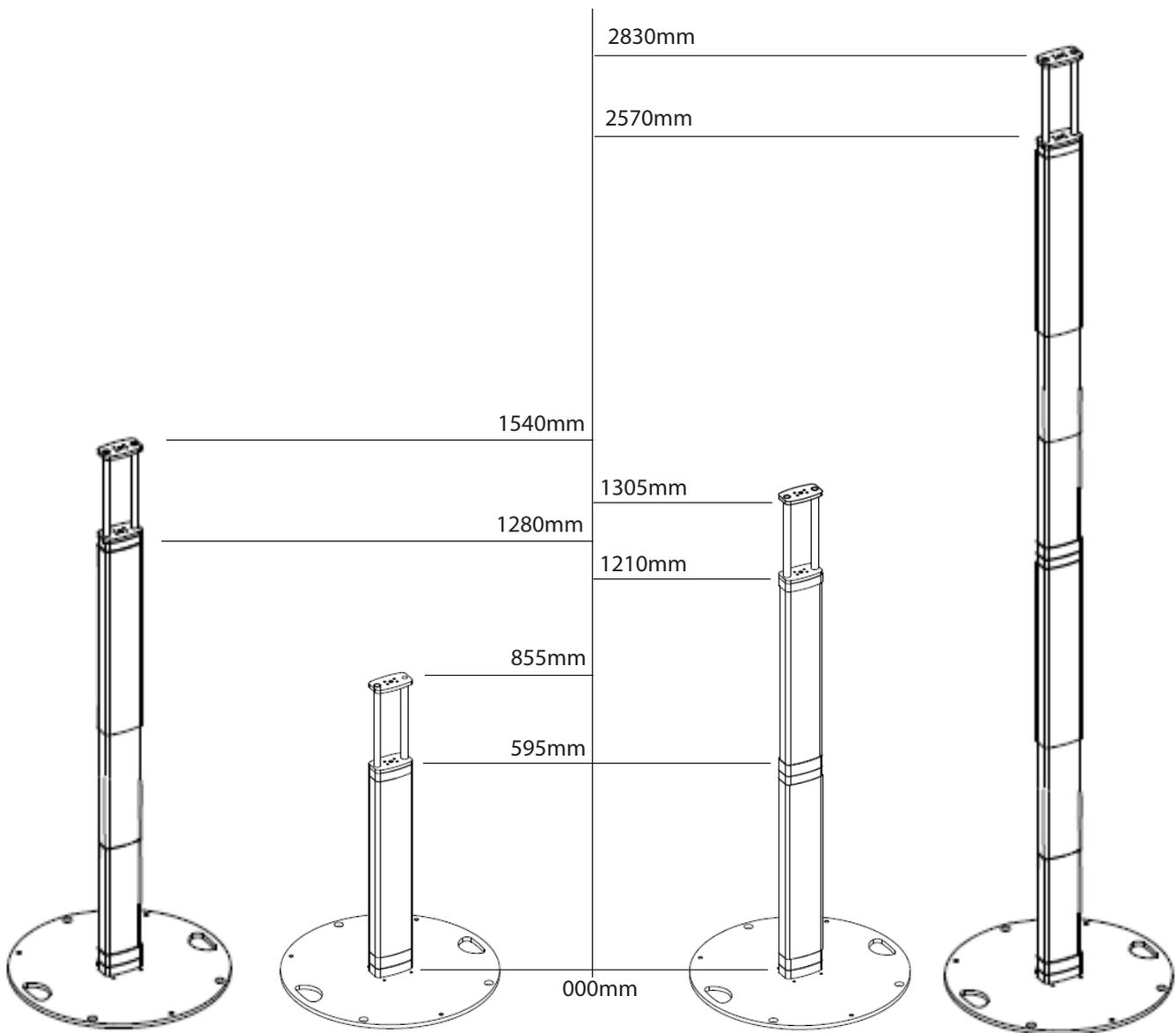
E03: Overload in downward direction has occurred - reduce the payload.

E16: illegal keys are pressed. – more than one signal/ command has been received by the system. Press one button at a time

Extended diagram *(draft diagrams - nts)*



Extended diagram *(draft diagrams - nts)*



ATP #510 - Single system stowed and extended

ATP #520 - Dual system stowed and extended

DECLARATION OF CONFORMITY

Polecam Limited
12 Wolseley Road
Woburn Road Industrial Estate
Kempston, Bedford
MK42 7TN



Hereby declares that the product known as AUTOPOD which is manufactured, assembled and Marketed by Polecam Limited in the United Kingdom, conforms with the essential requirements of the

EU Machinery Directive (2006/42/EU)

EMC Directive (2014/30/EU)

Low Voltage Directive (2014/35/EU)

RoHS2 (2011/65/EU)

Environmental considerations

This product must not be disposed of with general household waste.

In some countries or European Community Member States, 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.

Recycle where possible.

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.

NOTES:

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