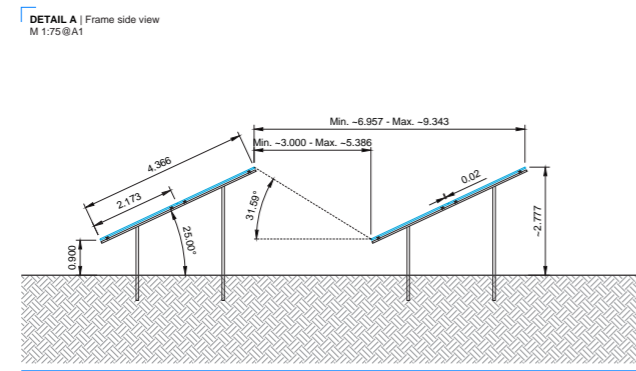
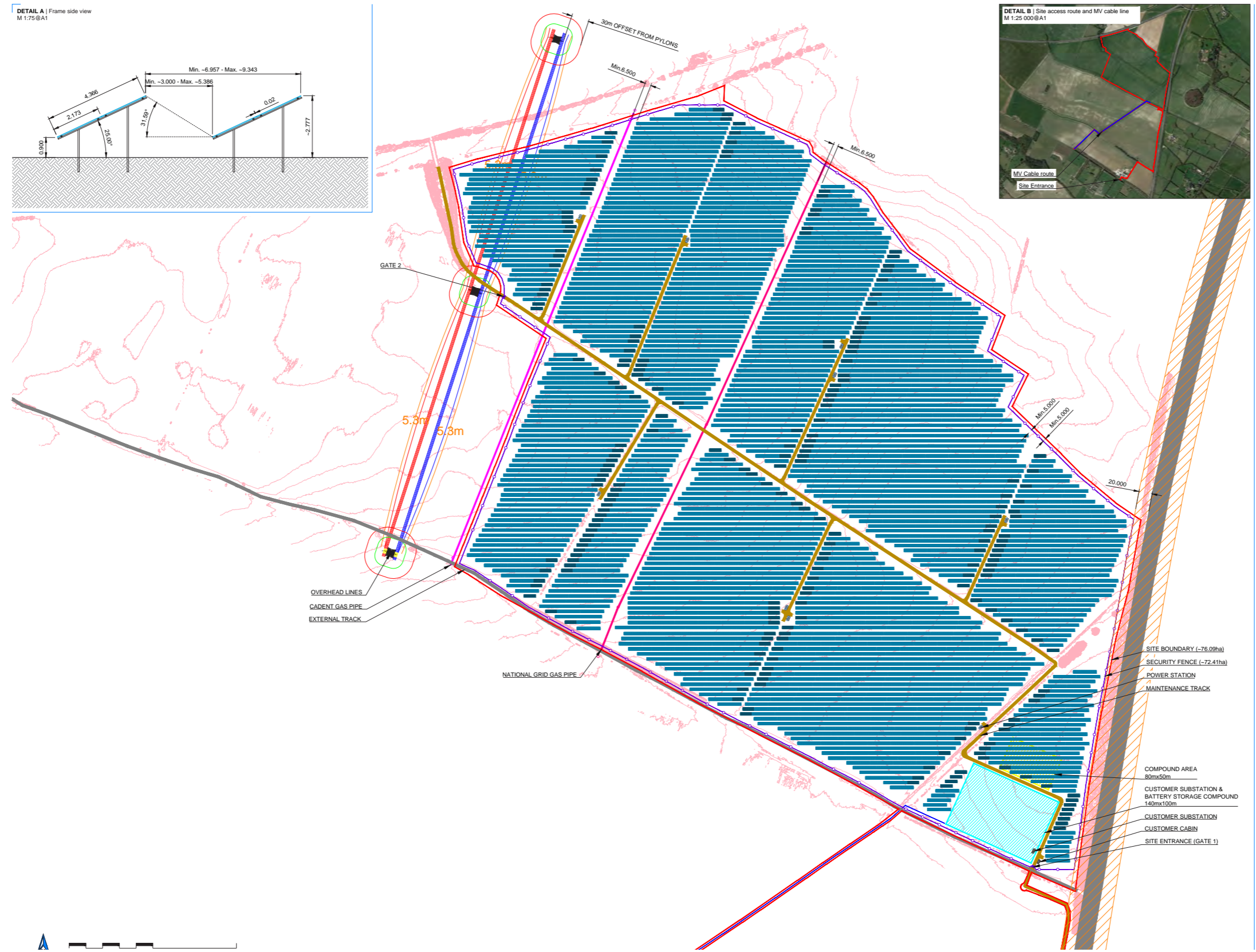


APPENDIX 2: LAYOUT INFORMATION USED FOR 3D MODEL CONSTRUCTION



Proposal only

Notes:

- All dimensions to be confirmed on site prior to installation.
- All dimensions are indicative only and in m unless otherwise specified.
- Drawing based on satellite data: Imagery date: 22/04/2021

Reference drawings:

Drawing Name	Rev	Date
Site Boundary and Access Point	1	01/08/22
Site Access	2	01/08/22

Legend:

- Site boundary
- Perimeter fence (-3.628 m)
- Maintenance track
- External track
- Cadent gas pipe
- National grid gas pipe
- Customer substation & Battery storage area
- Compound area
- Road restriction area
- Customer cabin
- DNO
- 20kV Customer Substation
- 20kV Power Station (6x 6 000 kVA)
- Table of 2P26 modules (2 185 pcs.)
- Table of 2P13 modules (232 pcs.)
- Gate

System description:

DC Power kWp: 70594.68
 AC Power kVA: 49880 (B Pmax) / 46400 (B Pnom)

No. of modules: 119652
 Module type: Canadian Solar CS7L-590MB
 Dimensions: 2173x1305x35

Substructure type: 2 modules in portrait
 Modules per string: 26
 Number of strings: 4562
 Tilt angle: 25°
 Shading angle: -31.59°
 Azimuth from South: 0°

Inverter model: Huawei SUN2000-215KTL-H1
 Inverter power, kVA: 215 (B Pmax) / 200 (B Pnom)
 No. of inverters: 232
 DC / AC ratio: 1.52 (B Pnom)

Proposed location:

Revisions:

Rev	Date	Comments	By	Appr
1	01/08/22	Final issue	MC	RB
2	01/08/22	Remove additional compound area	MC	RB

Project: Six Oaks
Location: Wilbraham Road, Six Mile Bottom, New Market, CB8 0UW, UK
 52.209753°, 0.287069°
Title: PV Layout

Drawn: Detra Solar / MC
Checked: RB
Scale: 1:2500 @ A1
Date: 04/08/22
Drawing No: RCE1002-100
Rev: A

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Spectra Precision SP80 GNSS Receiver



The Most Connected GNSS Receiver

CONNECTED
RELIABLE
RUGGED

INNOVATIVE



SP80 GNSS Receiver

The Spectra Precision SP80 is a next generation GNSS receiver that combines decades of GNSS RTK technology with revolutionary new GNSS processing. Featuring the new 240-channel "6G" chipset, the SP80 system is optimized for tracking and processing signals from all GNSS constellations.

In addition, SP80 is the most connected GNSS receiver in the industry. It is the first to offer a unique combination of integrated 3.5G cellular, Wi-Fi and UHF communications with SMS, email and anti-theft features.

These powerful capabilities, packaged in an ultra-rugged and cable-free housing with unlimited operation time (hot-swappable batteries), make SP80 an extremely versatile turnkey solution.

Key Features

- New 240-channel 6G ASIC
- Z-Blade GNSS-centric
- 3.5G cellular modem
- Internal TRx UHF radio
- Built-in WiFi communication
- SMS and e-mail alerts
- Anti-theft protection
- Hot-swappable batteries



Patented
inside-the-rod
mounted UHF
antenna design



Unique 6G GNSS-centric Technology

Exclusive Z-Blade processing technology running on a next-generation Spectra Precision 240-channel 6G ASIC fully utilizes all 6 GNSS systems: GPS, GLONASS, BeiDou, Galileo, QZSS and SBAS. The unique GNSS-centric capability optimally combines GNSS signals without dependency on any specific GNSS system; this allows SP80 to operate in GPS-only, GLONASS-only or BeiDou-only mode if needed. In addition, SP80 supports the recently approved RTCM 3.2 Multiple Signal Messages (MSM), a standardized definition for broadcasting all GNSS signals from space, regardless of their constellation. This protects the surveyor's investment well into the future by providing superior performance and improved productivity as new signals become available.

SMS and Email Messaging

SP80 has a unique combination of communication technologies including an integrated 3.5G GSM/UMTS modem, Bluetooth and Wi-Fi connectivity, and optional internal UHF transmit radio. The cellular modem may be used for SMS (text message) and e-mail alerts as well as regular Internet or VRS connectivity. Likewise, SP80 can use all available RTK correction sources and connect to the Internet from the field using WiFi hotspots, where available. The internal UHF transmit/receive radio allows for quick and easy setup as a local base station. This saves time and increases the surveyor's efficiency.



Anti-Theft Protection

A unique anti-theft technology secures SP80 when installed as a field base station in remote or public places and can detect if the product is disturbed, moved or stolen. This technology allows the surveyor to lock the device to a specific location and make it unusable if the device is moved elsewhere. In this case, SP80 will generate an audio alert and show an alert message on its display. Furthermore, an SMS or e-mail will be sent to the surveyor's mobile phone or computer and provides the receiver's current coordinates allowing tracking of its position and facilitating recovery of the receiver. SP80's anti-theft technology provides surveyors with remote security and peace of mind.

The Most Powerful Tool for Reliable Field Use

The SP80's rugged housing, created by Spectra Precision's engineering design lab in Germany, incorporates a host of practical innovations. Dual hot-swappable batteries can be easily exchanged in the field as a one hand operation for an interruption-free working day, ensuring surveyors remain productive until the job is done. The impact-resistant glass-fiber reinforced casing, designed to withstand 2m pole drops and waterproof to IP67, ensures that SP80 can handle the toughest outdoor conditions. The patented UHF antenna, set inside the rugged carbon fiber rod, extends the range of RTK radio performance at the same time as armoring protection. The sunlight-readable display offers instant access to key information like the number of satellites, RTK status, battery charge and available memory. These powerful design features combine to make SP80 the most capable, most reliable GNSS receiver, backed by a comprehensive standard 2 year warranty.



The Spectra Precision Experience

With the most advanced and rugged field data collectors from Spectra Precision, surveyors get maximum productivity and reliability every day. Spectra Precision Survey Pro or FAST Survey software is specifically tailored for the SP80 GNSS receiver providing easy-to-use, yet powerful GNSS workflows, letting the surveyor concentrate on getting the job done. Spectra

Precision Survey Office Software provides a complete office suite for post-processing GNSS data and adjusting survey data, as well as exporting the processed results directly back to the field or to engineering design software packages. Combined with Spectra Precision field and office software, SP80 is a very powerful and complete solution.

Power to evolve

EOS 5D Mark III

Canon

EOS 5D Mark III

Setting a new standard

A unique 22.3-megapixel full-frame CMOS sensor and DIGIC 5+ image processor come together to deliver stunning images. They're joined by increased clarity and astonishing low-light performance.

At the heart of the EOS 5D Mark III lies a sensor that delivers detail, tone and colour we never before. It's as if digital photography had been invented all over again.

The full-frame advantage

Engineered for performance

The EOS 5D Mark III is the result of continuous refinement and development, over generations of EOS design. Sophisticated electronics, optics and engineering - all pioneered by Canon.

EOS Movies

The EOS 5D Mark III lets you be as creative with moving pictures as you are with still photography. Shoot high-definition video in 1080p resolution, enjoying manual control over variables including shutter speed, aperture, ISO sensitivity, white balance, colour and frame rate. Access to Canon's extensive EF lens range provides new and exciting creative opportunities, such as the ability to exploit shallow focus and film in low light.

The EOS 5D Mark III uses a sophisticated 61-point High Density Reticular Autofocus system that is versatile enough to satisfy the demands of every type of professional photographer, from those shooting sports and photojournalism to portrait and wedding photographers. Manual controls and assisting low-light sensitivity, even in light as low as -2EV, result in a fast and reliable focusing system, no matter what the conditions throw out you.

High-performance shooting

Exposure control

EOS 5D Mark III provides a wide range of creative options, even in difficult lighting conditions.

Excellence through design

From the moment you pick it up you'll appreciate the collaboration of form and function that is the EOS 5D Mark III. Intuitive controls and superior handling provide the ultimate shooting experience.

Compose, shoot, review

Designed to perform, built to last

Connectivity and camera control

Creative flash photography

The EOS digital workflow

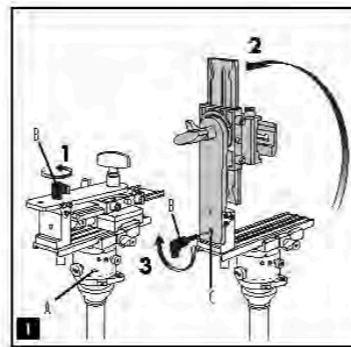
System chart

Specifications EOS 5D Mark III



MANFROTTO
INSTRUCTIONS

303SPH
SPHERICAL "VR" HEAD



SET UP 1
Fit the leveling device (not supplied) in the tripod, then fit the "VR" head on the leveling device via knuckle attachment "X". Completely remove knob "B", rotate the knocker into the vertical position as shown in Fig. 1 and lock it in place by screwing the knob "B" into hole "Y".

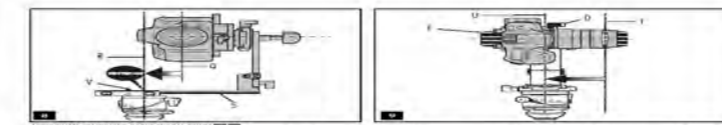
The spherical "VR" head is designed to allow virtual scenes to be created by Computer from a various panoramic sequences of digital or digital photographs, when at different vertical angles.

There are 4 requirements to achieve good panoramic sequence shots:

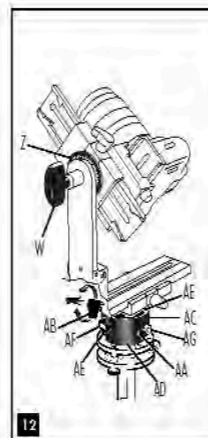
1. Accurate leveling of the panoramic axis.
2. A panoramic head that enables you to choose the angle of rotation between one shot and the next.
3. The ability to position the camera in the "Metal Point" of the lens (the front lens) is exactly above the panoramic axis of rotation, to eliminate any parallax problems between the near and distant objects in the scene.
4. An additional rotating axis that enables you to shoot several panoramic sequences at different vertical angles in order to achieve a complete spherical scene.

The spherical "VR" head comprises three main modules that perform the four functions mentioned above in points 2, 3 and 4.

After your tripod has a built-in leveling device (such as the one in the Ball Tripod's Spherical Head), you will need to use one of the leveling accessories available from the Manfrotto range to ensure accurate leveling of the head (see point 1).



LONGITUDINAL POSITIONING OF THE CAMERA
The camera is positioned vertically on the panoramic axis of rotation. To achieve this, the camera is moved up or down, by means of the knob "F" (see diagram 2) until the lens is exactly above the panoramic axis of rotation. The distance between the lens and the panoramic axis is measured by means of the graduated scale "Z" (see diagram 2).



INSTRUCTIONS FOR SPHERICAL PANORAMIC SHOOTING 12
A special panoramic sequence is obtained by adding together panoramic sequences taken at different angles from the horizontal. First you will need to choose the number of panoramic sequences you will need to complete the sphere depending on the angle of the lens you will be using. Before starting with the panoramic sequence, choose the initial vertical angle using the raised scale "Z" (Fig. 12). (Unscrew locking knob "AF" or remove it completely if you do not need it; it must be used to completely stop rotation when the head is used in non-vertical position, or to avoid any accidental movement of the head in any position).

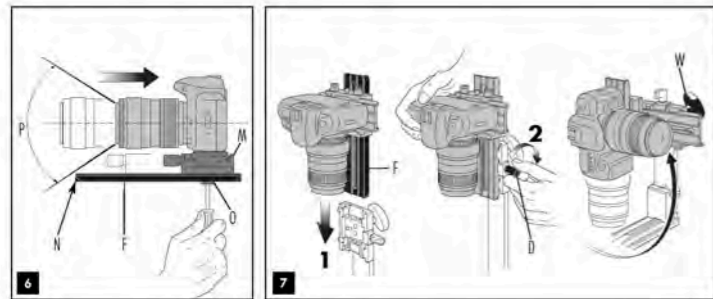
Decide the number of shots at the angle of rotation between each shot for the first panoramic sequence (see the chart below):

Angle	90°	60°	45°	36°	30°	24°	20°	15°	10°	5°
n. shots	4	6	8	10	12	15	18	24	36	72

- Screw knob "AB" into the selected setting hole "AA".
 - Release locking lever "AB" and rotate the camera on top plate "AE" to the position of the first shot.
 - Hold the camera in position and rotate the control barrel "AC" until the first "click stop" is reached, then lock lever "AB".
 - Take the first shot and then rotate the camera to the next "click stop" without releasing "AB" and take the next shot.
- Continue this process until the start position is reached.
- Once you have completed the first complete panoramic sequence, you can start with the other panoramic sequences needed to cover the sphere: change the vertical angle using knob "AF" and raised scale "Z", and repeat the operations described above for each full sequence.

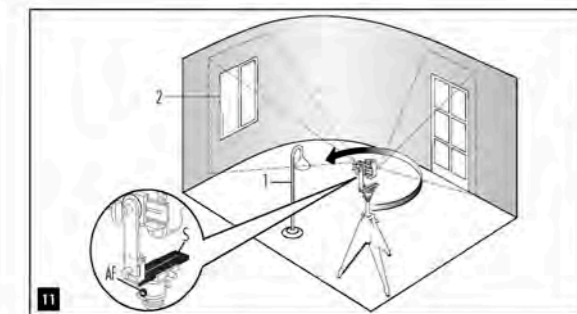
The base of the head "AD" has graduated scale markings from 0 to 360° and a reference index "AE" to the control barrel "AC". This lets you read the rotation angle on the chart. To use the head in this way, knob "AB" is disengaged, the "click stop" driving rotation of control barrel "AC" and lock the locking knob "AF" in the position during shooting.

NOTE: The angle of the lever on the ratchet knob "AB" can be repositioned as required without affecting the lock itself. Pull the lever upwards, rotate as required and release and it will locate in the new position.



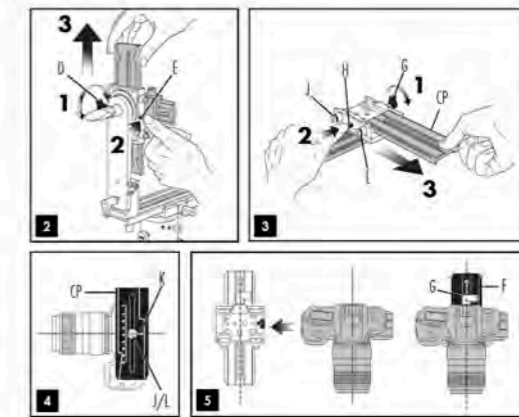
NOTE 6
The position of the housing "M" relative to the long plate "P" will need to be adjusted: loosen screw "C" to slide the housing. The ideal position is with the camera body as far back on the plate as it can go before the front edge "N" of the long plate "P" becomes visible in the camera's field of view "P".

MOUNT THE CAMERA ON THE HEAD 7
Mount the whole top assembly + camera on the head as shown in figure 7 by sliding the long plate "P" into the housing and locking it by screwing knob "D". Then screw knob "W" and move the camera on the vertical plane.

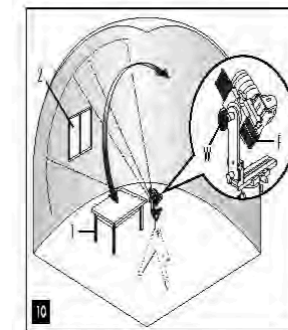


LATERAL POSITIONING 11
(Ref. Figure 11): Choose a frame that contains both a near object "1" and a distant object "2" situated along the same horizontal line of vision.
1. (See Figure 11A and 11B): unscrew knob "AF" and move the camera around the panoramic axis so that the two objects are first on the left hand side of the frame, then on the right. Check whether the horizontal gap "X" between the two objects varies in the two frames: the more constant the distance remains, the more accurately the "Metal Point" has been positioned.
2. For optimum results, make minor adjustments by moving plate "S".

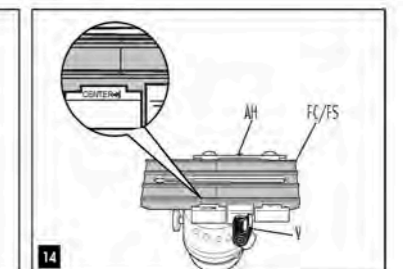
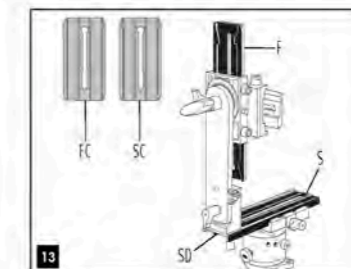
Once the right position is achieved it is VERY USEFUL to memorize it by noting the position of the plate "S" on the index on the graduated scale.



MOUNTING THE CAMERA 3 4 5
Remove the top assembly (Fig. 7) by releasing knob "D". To slide it completely out of the housing, push safety button "E".
Remove camera plate "CP" (Fig. 3) by releasing knob "G". To slide it completely out of the housing, push safety button "H".
You will find two screws attached to the top assembly: screw "I" (Fig. 3) is 1/4 in. "J" is 3/8 in. Depending on your camera tripod attachment, choose the correct screw and use it to fix your camera to plate "CP" (Fig. 4). Use a coin or screwdriver to lock: take care to align the lens with the centre of the plate indicated by letter "K".
Mount the camera on the top assembly as shown in figure 5 by sliding the camera + plate into the housing following the direction shown by the "insert" arrow. Lock in place using knob "G", before locking, take care to align the lens with the long plate "P" - the lens axis must be perfectly above the slot of the plate as shown in figure 5.
The angle of the lever on the ratchet knob "G" can be repositioned as required without affecting the lock itself. Pull the lever upwards, rotate as required and release and it will locate in the new position.



ADJUST POSITIONING OF THE "MEDIUM POINT" 10
If the two axes (near and distant objects) of varying distance from the point where the shot is being taken (near and distant objects), the "Metal Point" needs to be more accurately positioned to follow (the greater a possible UNIT with wider camera).
Note:
- FIRST AXIS LONGITUDINAL POSITIONING -
- SECOND AXIS LONGITUDINAL POSITIONING -
- FIRST AXIS LATERAL POSITIONING -
- SECOND AXIS LATERAL POSITIONING -
- FIRST AXIS LONGITUDINAL POSITIONING -
- SECOND AXIS LONGITUDINAL POSITIONING -
- FIRST AXIS LATERAL POSITIONING -
- SECOND AXIS LATERAL POSITIONING -
- FIRST AXIS LONGITUDINAL POSITIONING -
- SECOND AXIS LONGITUDINAL POSITIONING -
- FIRST AXIS LATERAL POSITIONING -
- SECOND AXIS LATERAL POSITIONING -



ADDITIONAL PLATES 13
If you have a very compact camera we suggest you to use the short plate "SC" (Fig. 13) and "FC" (supplied with the head) instead of the two long plates "P" and "S" in order to reduce size and weight of the system.
To replace the plate "S" unscrew screw "SO" (Fig. 13).
To replace the plate "FC", please refer to Fig. 6 and unscrew screw "FO".

USE OF THE KIT AS AN OBJECT PANORAMA TURNTABLE 14
The head can also be used as a turntable, useful for shooting object panoramas. For this use, loosen knob "H" and push button "AF" to slide the lower plate "S" out of the housing on the panoramic rotation base unit. In place of the long plate and top assembly, mount one of the two shorter plates supplied as a base for your object. The plate housing has a "center" mark to help you position your object accurately above the center of panoramic rotation.