

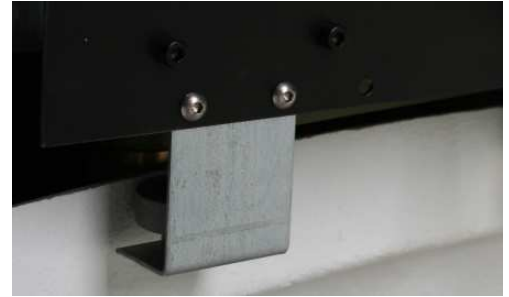
2.2 METRE DOME ROTATION DRIVE INSTALLATION

The motor unit uses a single drive wheel driven by a powerful 12 V motor and battery pack.

When switched to ON, the drive controller allows the user to slew the observatory dome in either direction, using the supplied transmitter job. The drive controller will then move the observatory dome at intervals, using the adjustable TRACKING SPEED dial. The unit is fitted with a 10amp anti-surge fuse, a spare fuse is provided.

- **PREPARING THE DOME WALLS**

The motor unit is fitted to the rear wall of the dome top, opposite the aperture opening. The motor drive wheel should be within 4mm from the top of the drive rail. This can be seen in the picture. There is a slot cut in the rear of the motor housing to allow the unit to fit over the wall flange. The lower bolt on the flange will have to be removed first. It can then be replaced when the motor unit is bolted in place.



- **INSTALLING THE MOTOR UNIT.**

Remove the guide wheel from the motor unit. Position the unit to the back of the dome wall and swing the unit forward until the drive wheel touches the glassfibre drive rail, and mark the fixing holes with a marker pen. You will need assistance to do this. The top of the drive wheel should be 4mm down from the top of the drive rail. Drill the holes 9mm diameter, this will allow for some adjustment of the unit. Push the 2 longer 8mm bolts through the 2 lower holes, from the outside, and secure them tight with a standard 8mm bolt on the inside. Thread a 8mm nyloc nut onto each of these bolts to within 6mm of the first nut. These nyloc nuts will act as adjusters to ensure that the motor drive wheel is hard up against the glassfibre drive rail. Fix the motor to the wall, using the shorter 8mm bolts and nuts for the top fixings. A small amount of silicone sealant under the bolt head, outside, will prevent water leaks. Adjust the 2 nyloc nuts on the lower bolts to ensure that the drive wheel is hard up against the glassfibre track. When adjusted, secure with the 2 remaining 8mm nuts. Re-attach the guide wheel; making sure that it is very tight.



- **INSTALLING THE SOLAR PANEL**

The solar panel is fitted to the rear of the dome top, on the outside, immediately behind the motor unit. Use the bolts provided, and apply a small amount of silicone under the bolt, to prevent any water leaks. Run the cable under the dome rim and plug into the charger socket on the drive unit.

Ensure that the cable is tied up out of the way. The solar panel will recharge the battery during daylight hours. Park the observatory with the solar panel facing south when observing is finished.

- **USING THE DRIVE**

Switch on the power on the control unit. The unit will step periodically to keep up with the telescope. This sidereal speed rate can be adjusted on the tracking speed dial, if required. When slewing the dome greater distances, it is advised to go in a clockwise direction to prevent the motor from going against the normal tracking direction. The key fob receiver will work from up 75 metres away. For complete remote operation, from a near by building, a wireless camera is available, which will allow visual aligning of the telescope with the dome aperture slit. (CALL FOR PRICE).

Keep the dome wheel track clean from dirt and grease at all times to prevent the wheels from slipping, methylated spirit is best for this. Should the drive wheels slip for any reason, adjust the tension on the inner guide wheel. Also, rub the drive wheel rubber tyres with medium abrasive paper to improve the grip.

FOR TECHNICAL SUPPORT CALL +44(0) 1353 886128