Mobile Surveillance Trailer Guide and Troubleshooting

Revised February 15, 2024

Install Procedure

1. Position Trailer

- Ensure the back door of the trailer is facing South so that when the solar panels are raised they will have optimal exposure to sunshine.
- Ensure the trailer is level, both front/rear and side-to-side.
- Check for shade from trees or buildings obstructing solar panels.

2. Disconnect and Prepare

- Disconnect Trailer Light Cable from the towing vehicle.
- Lift lever to release the trailer from the vehicle ball hitch.
- Deploy the main jack to set the trailer to level.
- Move the vehicle.

3. Deploy Equipment

- Raise the mast. The mast must be raised BEFORE the solar panels or it could damage the panels and the audio speaker.
- Release solar panel hold downs and slide out both sides of the panel.
- Expand solar panels and ensure they click locked in place.
- Deploy outriggers and ensure hitch pins are installed.
- Raise outrigger jacks until the pad hits the ground, slightly lifting the trailer.

4. Install Cameras and Lights

- Install the main camera, lights, and thermal camera, connecting cables as needed.
- Route cables through cable guides on the side of the tower, ensuring no kinks or snags.

5. Power On and Adjust

- Turn on all circuit breakers.
- Raise Tower to desired height using the switch on the main panel.

- Raise solar panels using the switch on the main panel.
- Adjust solar panels for maximum efficiency based on location and sun position.

6. Activate Accessories

- Turn on Accessories Switch to power POE Switch and Cradlepoint Router.
- Check for green light status on the Cradlepoint Router indicating connection to the Internet Provider.
- Ensure all equipment has an ethernet connection.
- Verify lights and other accessories are functioning properly.

Recovery Procedure

1. Lower Equipment

- Lower solar panels until nested position is reached.
- Slide solar panels in towards trailer and ensure they lock in.
- Secure panels using rubber straps.
- Lower Tower until all tube tops touch the tube below it, ensuring uniform descent.

2. Disconnect and Stow

- Disconnect all cables, coil them, and stow inside the trailer.
- Remove lights and cameras, and secure inside the trailer.

3. Prepare for Transport

- Raise outrigger jacks and slide outriggers in.
- Install hitch pins.
- Turn off Accessories Switch and all circuit breakers.
- Close the back door.

4. Connect and Test

- Connect trailer to towing vehicle.
- Connect trailer light cable and safety chains
- Raise main tongue jack.
- Check trailer lights for proper function.

Troubleshooting

- **Connection Issues**
  - Ensure cables are connected properly.
  - Check ethernet connections for proper seating.
- **Power Issues**
  - If lights on POE Switch are off, check the fuse panel for blown fuses.
  - Replace blown fuses with ones of the same amp rating.
  - Verify power at main breaker and solar panel breaker.
- **Low Voltage**
  - Check voltage meter; ensure voltage is above 20 VDC.
  - If voltage is low, connect a 120VAC extension cord to the inlet for recharging.

Note: Do not attempt to chare batteries using jumper cables from a 12 VDC power source.