

# SPiDER Scanner - Tripod Field Instructions

P/N MH901, v. Original



## CUES Manhole Inspection Division

3600 Rio Vista Avenue  
Orlando, Florida 32805

Start of day / Install charged batteries:

1. Connect the two fully charged batteries into the SPiDER.
2. Ensure the tablet Wi-Fi is connected to 'CUES.SPIDER.XXXX'.
3. Verify the tablet date and time are current.
4. Turn ON the tablet SPiDER user interface using a web browser and browsing to <http://10.66.171.50>
5. Replace the batteries every four hours.



**Remember to check the batteries every (4) hours!**

At each manhole, perform the following:

1. Open the manhole.
2. Erect the tripod to the side of the open manhole, not above it.
3. Clean all 4 SPiDER camera lens well.
4. Mount the SPiDER to the tripod and connect using the push pin tethered to the carbon fiber pole.
5. Move the tripod over the open hole and level it.
6. Enter the Project, Manhole Number and Operator Field using the tablet to unlock the "Start Recording" button.
7. Turn on the lighting to default 20% if it is a standard 4-6 foot wide manhole. LED intensity should be increased if the manhole is wider or dark than normal.
8. Raise the SPiDER as high as possible.
9. Block any sun glare from appearing inside the manhole to minimize loss of point cloud using the supplied light diffuser (black side facing the sun).
10. Go back to the PROJECTS screen and press "Start Recording".
11. Deploy the SPiDER using the drill at speed 1 and half press on the trigger for approximately 10 feet/min descent.
12. Add a carbon fiber pole, as needed.
13. When the scanner reaches the chimney and the pavement is no longer visible in the tablet, stop the descent of the SPiDER for a few seconds to allow the scanner to adjust to the darker surroundings.
14. Continue to deploy the SPiDER until you reach the bottom of the manhole (ideally 6 inches from bottom) and the channel is clearly visible in the tablet.
15. Press "Stop Recording".
16. Lights will flash 3 times to indicate the SPiDER has stopped recording. If so, raise the manhole at drill speed 2 out of the manhole. If the lights do not flash, then the unit is still recording and the batteries must be removed. If the lights flash 10 times, it means less than 10% recording space remains on the SPiDER. If the SPiDER flashes continuously, the SPiDER is out of hard drive space.
17. When the SPiDER reaches the surface, turn off the lights.
18. Store the equipment, remove the SPiDER, close the manhole and proceed to the next manhole.



**For help and support, contact CUES: 800.327.7791, x. 407**



**Always block direct sunlight into the manhole!**



**Clean all (4) SPiDER lens before each scan is started!**

