

SPIDERCAM SYSTEM SPECIFICATION

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spidercam[®]



SPECIFICATIONS

A more compact system perfectly suited for studio productions, or smaller sports venues. A compact winch design aided by a fully stabilized remote-head enables steady shots with a minimum of space requirement.

FLYING AREA

- Square setup: up to 70m x 70m (77yards x 77 yards) / up to 100m (110 yards) diagonal
- Height-loss due to cable sag: 6% of diagonal

DOLLY

The main requirement is that the Flying Area must be completely unobstructed, e.g. no other cables, constructs or big screens in the Flying Area.



- Maximum speed: 5m/s (11mph)
- Remote-head (Newton):

o Pan: 180°/s stabilized, endless

Tilt: 180°/s stabilizedRoll: 180°/s stabilized

Dimensions: 50cm x 50cm x 75cm (20in x 20in x 30in)

Weight: 15kg (33lbs) without Payload

Maximum Payload: 8kg

SUPPORTED CAMERAS

Sony HDC P-1

Grass Valley LDX-C80

SUPPORTED LENSES

• Wide (4.5) and Ultrawide (4.3) lenses



WINCHES

Each power supply has to be secured by an individual fuse and a B RCD (as per EN501778), which is immune to interferences of a power converter.



- No obstruction between the Winch and the respective Pulley for the catenary cable
- Dimensions: 80cm x 60cm x 75cm (32in x 24in x 30in)
- Weight: 140kg (308lbs)
- Winches must be protected against unauthorized access with security barriers and security personnel, or setup in an area that is inaccessible to the public
- Power requirement:
 - 400VAC, 32A, 50Hz/60Hz, 3 Phase plus ground and neutral (IEC 60309 400V 32A 6h IP44 3P+N+G)

CONTROL STATION



- The Control Station location must grant an unimpaired view of the entire Flying Area
- Footprint: Minimum 3,0m x 2,5m (10ft x 8ft)
- Weight without Operators: approximately 120kg (260lbs)
- Power requirements: 230VAC, 16A, 50/60Hz, 1 Phase plus ground and neutral

CONNECTION CONTROL STATION TO THE BROADCAST COMPOUND / OB-VAN

- 1x video BNC camera signal (HD/SDI)
- 1x video BNC program (HD/SDI)
- 1x Ethernet, RJ-45 8-pin for RCP/CCU
- 2x 3-Pin XLR for intercom
- 1x 3-Pin XLR for tally



PULLEYS

The main requirement is that there must be no obstruction between the Pulley and the Winch, as well as the Pulley and any possible Dolly position.



Mounting Plate Dimensions: 30cm x 30cm (12in x 12in)

Weight: 5kg (11lbs)

Load during regular operation: max 1.2kN

Load Bearing Capacity: 12kN

The spidercam® Pulleys are designed to withstand forces of 10kN. The force exerted on the Pulleys by the system during operation does not exceed 1,8kN. The actual dimensioning of the anchor points depends on the local legal regulations, weather influences etc., and has to be determined by a local static engineer or specialist.

INTERCONNECTIONS

The Winches and Control Station need to be interconnected with Fiber cables. Spidercam Gmbh will provide heavy duty outdoor cables to connect them, and the setup crew will put them in place during the system setup.



SPECIAL FEATURES (OPTIONAL)

These features can be booked for each job separately.

4K READY

The 4k feature allows the spidercam system to handle the increased data rate requirement for 4k cameras. All cables interconnecting the winches and control station, as well the fiber cores in the catenary cables are single mode cables, allowing much higher data traffic. Furthermore, all media converters, rotary joints etc. are upgraded to meet the transmission requirements.

MOTION PLAYBACK

The Motion Playback feature enables spidercam systems to record and playback paths. A separate GUI allows the user a quick intuitive way to save moves, and have the system replay them with 99,9% accuracy. While the dolly movement will be fully controlled by Motion Playback, the crew can operate Pan, Tilt and camera functions as usual. The Motion Playback feature is an addition to the regular operating method via joystick, and can always be overruled with joystick commands.

EXTERNAL AUGMENTED REALITY (AR) TRACKING SYSTEM

For increased AR support spidercam systems can be outfitted with additional tracking systems. Every "external tracking system feature" consists of a specific "equipment Kit", holding mounting brackets, media converters and all required material to setup and operate the tracking system. Please note, that the actual tracking system is not supplied by spidercam. The following external tracking systems are supported:

- Ncam: A tracking solution with optical and mechanical sensors
- Trackmen: An optical tracking system
- Mo-sys: An optical tracking system



EXAMPLE SETUP

