THE MARKET LEADER IN BROADCAST CABLE CAMERA SYSTEMS

Spidercam has been providing cutting-edge cable-cam solutions to sporting events, concerts, television shows, and more for almost 20 years. These systems carry a variety of gimbals and camera setups, including 4K broadcast cameras with ultra-wide lenses, and they deliver fast, smooth camera shots that provide a unique perspective to the production. Spidercam offers a range of solutions that scale from news studios, concert halls, and arenas to the largest outdoor stadiums in the world. While our systems have traditionally been targeted at the rental market, they are also available for fixed installations.

VERSATILITY

Spidercam systems can be used in a variety of ways in any production, offering steady shots like a stationary camera or dynamic moves like a crane. Furthermore, a Spidercam can reach virtually any position in the flying area while having a minimal footprint – if necessary, the winches can be placed further away.

OPTIONS

Spidercam systems support different remote heads and can be outfitted with a variety of broadcast and film cameras (or even specialty sensors or monitoring equipment) and lenses. Further options include virtual/augmented reality support, a two-way audio interview platform (“Spidercom”), a multi-purpose screen, and more. We always find the right payload for the customer.

RELIABILITY

Spidercam systems are built to withstand frequent transports, different weather conditions, and more. We use proven, rugged materials in all our systems, perform regular maintenance, upgrade the software, and offer quick support in case of trouble. We do not just sell or rent systems – we design them, build them, and work with them ourselves.
**SYSTEM OVERVIEW**

The camera dolly is held by four (single cable system) or eight (twin/double cable systems) catenary cables. These cables run through a pulley in the corner of the flying area and are attached to a motorized winch on the ground. The winches wind and unwind the cables, effectively moving the dolly through the flying area in three dimensions. The main control station allows the pilot to ‘fly’ the dolly around the space by controlling the winches, while there is a separate station for the camera operator to control pan, tilt, zoom, focus, and iris on the camera.

**EXAMPLE SETUP**

**DEFLECTION PULLEY**

The dolly is held by four catenary cables. Those cables each run through a Pulley in the corner of the Flying area and are attached to a Motor Winch on the ground.

**OPERATOR POSITION**

The operating position needs unobstructed view to the dolly. The control station acts as the input device for all commands. By utilizing two joysticks the Pilot operates the Winch commands and thus the dolly, while the Camera Operator controls the Pan-Tilt-Unit and the camera functions.

**DOLLY / CAMERA PLATFORM**

The most visible part of the spidercam system, the dolly carries the camera. The control and video signals are transmitted over optical fiber that is woven into the catenary cable.

**MOTORIZED WINCH**

By controlling the four Winches the cable can be wound and unwound, effectively moving the dolly through the flying space — in all three dimensions.
MODELS

**Spidercam FIELD** – This 3D solution is suitable for outdoor productions or other stadium events, such as horse racing, cricket, football, and concerts. Usually equipped with a broadcast camera and a wide-angle lens, the Spidercam Field can provide beauty shots, showcase close-ups of players or actors, follow entire plays, or display a birdseye view of the overall action.

Covers an area roughly 250x250m

**Spidercam LIGHT/MINI** – This smaller, lighter dolly was designed to perform in smaller venues like TV or news studios, concert halls or smaller sports arenas, movie sets, and more. The reduced footprint of the winches makes placement easier, while the dolly can achieve a greater flying height than comparable systems, thanks to the lightweight construction and strong winches.

Covers an area roughly 80x80m (mini – 60x60m)

KEY FEATURES

- The Spidercam flight space can be shaped in any form. It can be a square, a trapezoid, or any other form of a four-sided figure. In fact, triangular and even linear setups are possible.

- Winches can effectively be put anywhere. The catenary cables can be deflected several times before running through the final pulleys. This allows for unlimited set-up scenarios, where the winches can be set up all in one place, outside the venue, or even above the pulleys and many other ways.

- Supported cameras include all major brands of box cameras, including the Ross AcidCam, as well as Sony, Grass Valley, Panasonic, and Ikegami. We have also worked with a variety of cinema cameras and lenses, including Arri, Red Dragon, and more. 4K cameras are not a problem!

- Spidercam was the first system to provide augmented/virtual tracking on cable suspended systems, where we have developed our own optical tracking solution.

- The dolly and head operate silently by producing almost no sound and hence can be equipped with microphones. And although our winches can move a dolly at astonishing speeds, they are amazingly quiet in operation. At full speed, the winches produce less than 65db (measured 1m away from the winch).

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th><strong>FIELD</strong></th>
<th><strong>LIGHT</strong></th>
<th><strong>MINI</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degrees of Freedom</strong></td>
<td>3D (x,y,z)</td>
<td>3D (x,y,z)</td>
<td>3D (x,y,z)</td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td>250x250m</td>
<td>80x80m</td>
<td>60x60m</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>400-480VAC 32A</td>
<td>208-480VAC 32A</td>
<td>208-480VAC 32A</td>
</tr>
<tr>
<td><strong>Battery Run-time</strong></td>
<td>4-5hrs</td>
<td>2-3hrs</td>
<td>2-3hrs</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td>9.5m/s (21mph)</td>
<td>4.5m/s (10mph)</td>
<td>3m/s (6.5mph)</td>
</tr>
</tbody>
</table>

rossvideo.com/spidercam