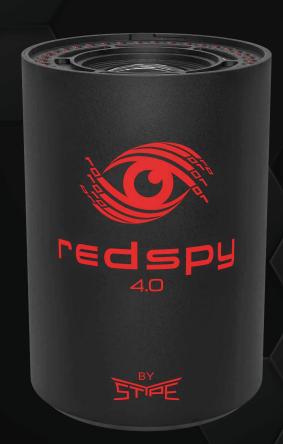


# CAMERA TRACKING

FOR XR, AR, VR PRODUCTION IN TV AND FILM







#### **REDSPY - INTRODUCTION**

RedSpy by stYpe is a wireless, optical camera-tracking system which delivers ultra-high-precision tracking. RedSpy combines infrared camera, accelerometer and gyroscope sensors, which are then interpreted by finely tuned, intelligent algorithms to deliver this high level of camera tracking quality. This means that RedSpy can deal with heavy, sudden shaking of camera perfectly, making it suitable for anything from cranes and Steadicams to handheld cameras. RedSpy is suitable for indoor and outdoor use and the tracking data can be sent wirelessly or via ethernet cable. New RedSpy 4.0 version comes with 22% lighter camera, better cooling performance and 20% higher recording frame rate.

#### **USE ON TV SETS**

Join the company of world renowned TV stations: CNN, MTV, BBC, FOX, SKY and let RedSpy include Virtual or Augmented Reality effects to your set and make your scenes come alive. Virtual effects are especially fitting for big election, sports and e-sports shows and live entertainment events like concerts or ceremonies. RedSpy integrates seamlessly with all standard rendering engines, and also supports direct integration with Unreal engine via our special plugin.

#### **USE ON FILM SETS**

RedSpy is used to introduce real-time previsualizations for film scenes which include virtual elements. Seeing virtual elements in real-time makes it easier for your staff and actors to play their role more naturally than if they were relying just on their memory and imagination. RedSpy's tracking data can be stored in FBX and XML file format, along with LTC timecode and lens distortion data. You can use this stored data later, which means you have information about all camera movements, as well as zoom and focus data. This makes post-processing a much easier task. RedSpy integrates with Maya and Unreal engines via our proprietary plugins.



### MAIN UNIT CONNECTIONS



| 1 POWER   | Power source.   | 6  | DVI     | Connection for monitor output.            |
|-----------|---|----|---------|---|
| 2 HDMI    | Connection for monitor output.                            | 7  | IPMI    | Server management.                        |
| 3 INT LAN | Connection to RedSpy camera.                              | 8  | SUB     | USB connection.                           |
| 4 LTC     | Used to receive SMPTE timecode data via BNC connector.    | 9  | EXT LAN | Ethernet connection to the render engine. |
| 5 SYNC    | Genlock signal via BNC connector (bi-level or tri-level). | 10 | VGA     | Connection for monitor output.            |

## A TRACKING SYSTEM THAT IS EASY TO SET UP AND WORKS EVERYWHERE, EVEN OUTDOORS.



| CAMERA WEIGHT         | 0.311 kg                    |
|-----------------------|-----------------------------|
|                       |                             |
| DATA DELAY            | 5ms (0.25 frames on 50 fps) |
|                       |                             |
| USER INTERFACE        | Touch screen                |
|                       |                             |
| POSITIONAL RESOLUTION | < 0.1 mm                    |
|                       |                             |
| ANGULAR RESOLUTION    | < 0.003°                    |



#### **TECHNICAL SPECIFICATION TABLE**

| INSTALLATION TIME   | Marker setup time + 6 sec per m² (or each 10ft²) of space covered. |
|---------------------|--|
|                     |  |
| RE-CALIBRATION TIME | Automatic (20 sec after power on).                                 |
|                     |  |
| ETHERNET            | UDP over IP and wireless support.                                  |
|                     |  |
| DATA RECORDING      | Supported in FBX format, for post processing requirements.         |
|                     |  |
| PROTOCOLS           | FreeD, Stype HF, EEVEC   |
|                     |  |
| DRIFT               | System does not accumulate any drift.                              |
|                     |  |
| WARRANTY            | 1 year warranty.   |

#### **SUPPORTED LENSES**





#### CANON DIGITAL CABLE

Ability to read the data from the virtual encoder. If no virtual encoder is installed, external encoders can be used.

Suitable for IASE, IRSE and Box lenses.

#### FUJINON DIGITAL CABLE

Ability to read the data from the virtual encoder. If no virtual encoder is installed, external encoders can be used.

Suitable for Portable and Box lenses equipped with Virtual Connector.

#### OTHER LENSES

stYpe external Zoom and Focus encoders can be easily mounted on lenses that do not have internal encoders.

Encoders can be daisy-chained, with up to 6 supported in total.



### WIRELESS MODULE / BATTERY MODULE.



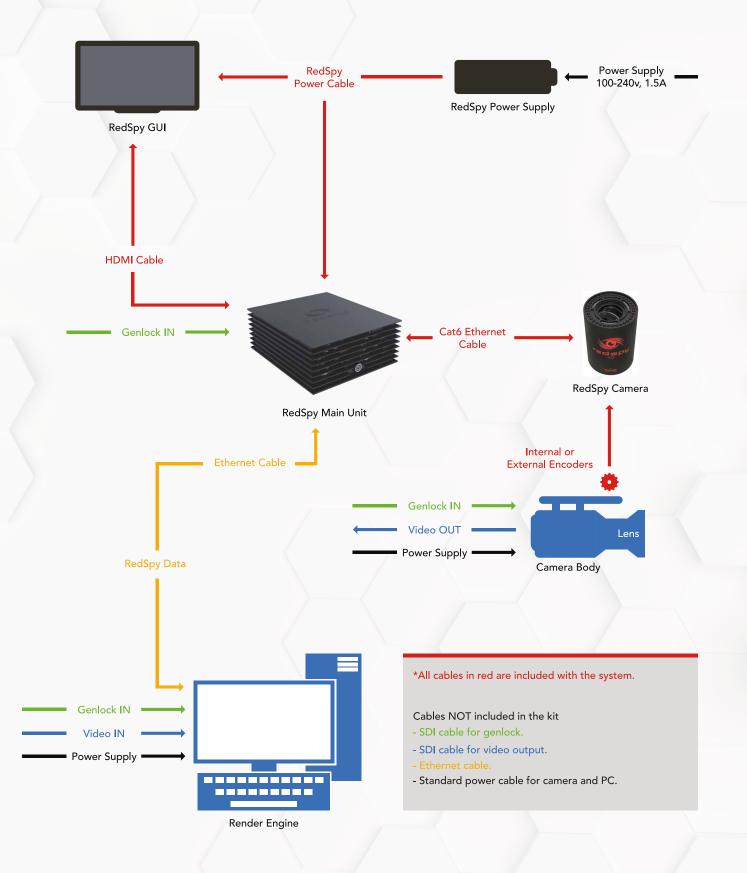
| WIRELESS MODULE      |                    |
|----------------------|--------------------|
|                      |                    |
| RADIO RANGE INDOORS  | 50 meters*         |
|                      |                    |
| RADIO RANGE OUTDOORS | 150 meters**       |
|                      |                    |
| DELAY                | 1 additional field |
|                      |                    |
| BATTERY MODULE       |                    |
|                      |                    |
| OPERATING TIME       | 8 hours***         |

- \* In a typical studio environment.
  \*\* In a typical open space environment.
  \*\*\* With standard 98Wh, 14.8V battery.



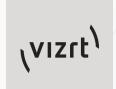


#### CONNECTIVITY.





#### COMPATIBLE RENDER ENGINES.































#### PARTNERS.













#### CONTACT US FOR MORE INFORMATION.

| WEBSITE | www.stype.tv |
|---------|--------------|
|         |              |
| E-MAIL  | hi@stype.tv  |







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