bluespy

WWW.STYPE.TV

CAMERA TRACKING
FOR XR, AR, VR PRODUCTION IN TV AND FILM

bluespy

Television Academy

PROUD WINNER OF THE
ENGINEERING, SCIENCE & TECHNOLOGY
EMMY® AWARDS

STYPE

v0.1

BLUESPY - INTRODUCTION

BlueSpy by stYpe is an optical camera-tracking system which delivers ultra-high-precision tracking. BlueSpy 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 BlueSpy can deal with heavy, sudden shaking of camera perfectly, making it suitable for anything from cranes and Steadicams to handheld cameras.

BlueSpy is suitable for indoor and outdoor use and the tracking data can be sent via ethernet cable.

USE ON FILM SETS

BlueSpy 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. BlueSpy'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. BlueSpy integrates with Maya and Unreal engines via our proprietary plugins.

USE ON TV SETS

Purchasing a broadcasting license allows legal utilization of the BlueSpy software for broadcasters. Join the ranks of world-renowned TV stations and enhance your productions with BlueSpy. Incorporate Virtual or Augmented Reality effects to breathe life into your scenes. Virtual effects are particularly well-suited for major election, sports and e-sports shows, as well as live entertainment events like concerts or ceremonies. BlueSpy seamlessly integrates with all standard rendering engines and also offers direct integration with Unreal Engine or Unity.

SYNC UNIT CONNECTIONS

1	**CAM**	Connection to BlueSpy camera.
2	**LTC**	Timecode LTC signal via BNC connector.
3	**SYNC**	Genlock signal via BNC connector (bi-level or tri-level).
4	**PC**	RJ45 ethernet port to connect Sync Unit with BlueSpy server (PC/RenderEngine)

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	MS Windows application
POSITIONAL RESOLUTION	< 0.1 mm
ANGULAR RESOLUTION	< 0.003°

TECHNICAL SPECIFICATION TABLE

INSTALLATION TIME	Marker setup time + 6 sec per m^2 (or each 10ft^2) of space covered.
RE-CALIBRATION TIME	Automatic (20 sec after power on).
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

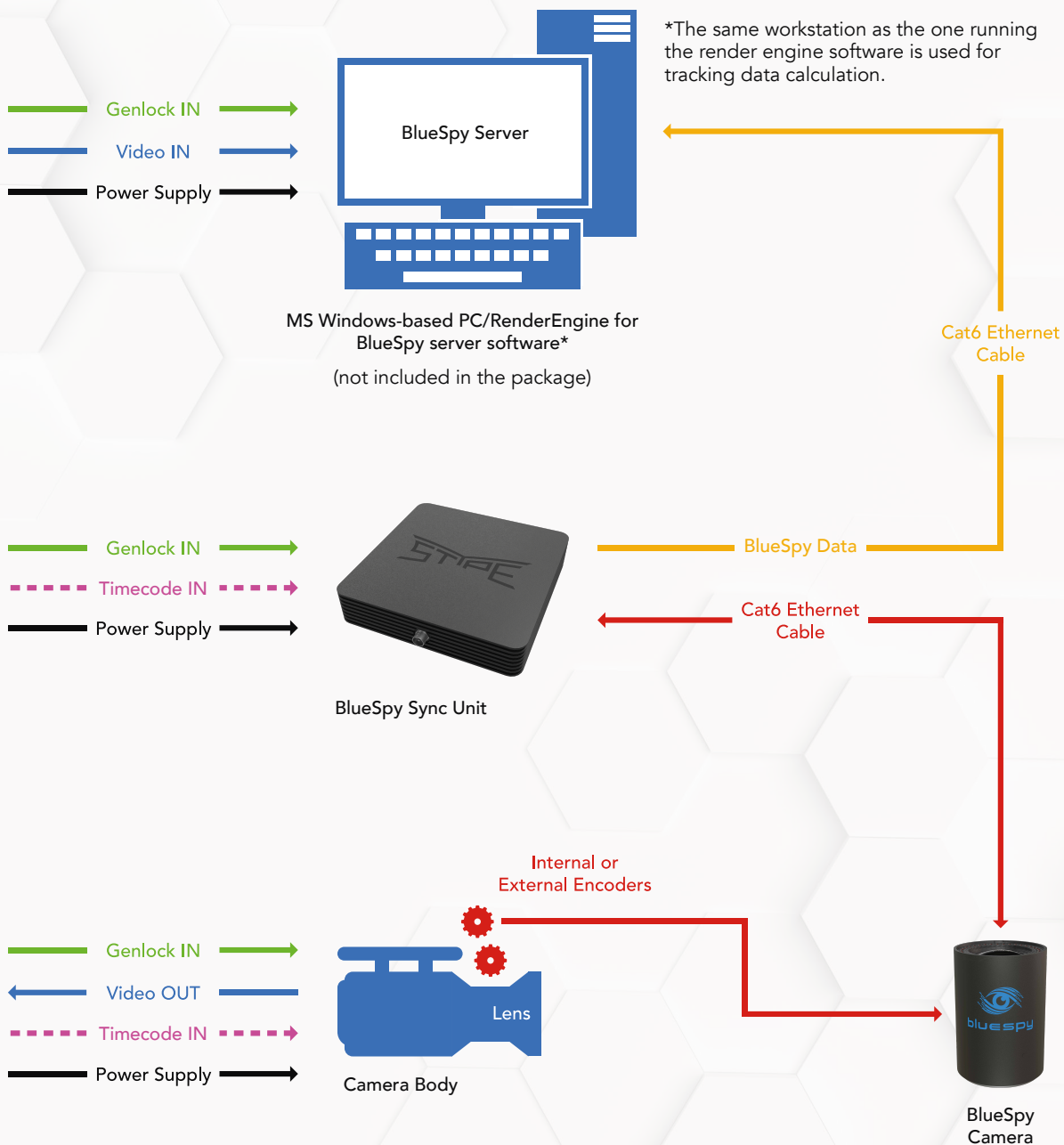| **CANON DIGITAL CABLE**	**FUJINON DIGITAL CABLE**	**OTHER LENSES**
Ability to read the data from the virtual encoder.If no virtual encoder is installed, external encoders can be used. Suitable for IASE, IRSE and Box lenses.	Ability to read the data from the virtual encoder.If no virtual encoder is installed, external encoders can be used. Suitable for Portable and Box lenses equipped with Virtual Connector.	stYpe external Zoom, Focus and Iris 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.

CONNECTIVITY

BlueSpy Server

Genlock IN

Video IN

Power Supply

MS Windows-based PC/RenderEngine for BlueSpy server software*

(not included in the package)

*The same workstation as the one running the render engine software is used for tracking data calculation.

Cat6 Ethernet Cable

BlueSpy Sync Unit

Genlock IN

Timecode IN

Power Supply

BlueSpy Data

Cat6 Ethernet Cable

Camera Body

Genlock IN

Video OUT

Timecode IN

Power Supply

Lens

Internal or External Encoders

BlueSpy Camera

SCOPE OF DELIVERY / STADARD PARTS

• BlueSpy camera with mounts
• BlueSpy Sync Unit
• CAT6 Ethernet Cable (2m, 20m)
• Pre-cut markers
• BlueSpy USB dongle

SCOPE OF DELIVERY / OPTIONAL PARTS

• High Resolution Lens Encoders with gears
• 20-pin Fujinon ENG Lens Cable
• 20-pin Canon ENG Lens Cable
• Additional mounts

COMPATIBLE RENDER ENGINES.

vizrt

StypeLand

ROSS
Production Technology Experts

Aximmetry

PIXOTOPE

BRAINSTORM

AVID

UNREAL
ENGINE

disguise

NOTCH

VOYAGER
4.0

MAYA®

blender

CINEMA 4D

3 3DS MAX

PARTNERS.

BBC

CCTV

FOX
SPORTS

Paramount

Televisa

★ Star

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