

# Tech Spec

## RoboSHOT HD-SDI High-Definition PTZ Cameras

Professional HD PTZ cameras with simultaneous HD-SDI, HDMI and IP (H.264) streaming outputs, featuring Vaddio™ Tri-Synchronous™ Motion.

#### RoboSHOT™ 12 HD-SDI:

999-9930-000 (North America), 999-9930-001 (international)

#### RoboSHOT 30 HD-SDI:

999-9933-000 (North America), 999-9933-001 (international), Black 999-9933-000W (North America), 999-9933-001W (international) White

The enterprise-class, high-definition RoboSHOT HD-SDI PTZ cameras offer exceptional image quality, color reproduction and detail. With simultaneous HD-SDI and HDMI digital video outputs and full HD IP streaming (H.264) capabilities, this camera offers incredible flexibility and price-performance benefit over similar cameras available today.

Designed for small to medium-sized meeting and training rooms, classrooms, and small video studios, the RoboSHOT 12 HD-SDI camera provides incomparable support for applications such as videoconferencing, distance learning, lecture capture and telepresence.

The optical zoom power of the RoboSHOT 30 HD-SDI camera is ideal for medium to large venues such as large auditoriums and lecture halls, houses of worship, and live event theatres. The RoboSHOT 30 HD-SDI camera provides exceptional support for A/V systems, IMAG for performances, lecture capture and more!

The camera's lens, Exmor® 1/2.8", 2.38 Megapixel, Full HD (native 1080p/60) high-speed, low noise CMOS image sensor and ISP are the serious magic behind the video performance characteristics, producing vivid, realistic and accurate color with extraordinarily fast, sharp and transparent automatic focus and iris routines. The RoboSHOT 12 HD-SDI lens provides a 12X optical zoom with a 73° horizontal field of view. The powerful RoboSHOT 30 HDMI offers a 30X optical zoom with an impressive 2.3° tele end and 65° field of view.

The Tri-Synchronous Motion algorithm manages silky smooth, direct-drive motor movements between presets, moving the RoboSHOT camera in all three axes (pan, tilt and zoom) at once and calculating the position and velocity so pan, tilt and zoom movements finish simultaneously. Finally – no more pan/tilt, then zoom. Unlike other cameras, RoboSHOT cameras allow smooth and manageable on-air preset camera movements.

- PoE+ GB Ethernet port Power the camera over the network or with a PoE+ mid-span power injector.
- Web interface Control the camera over the IP network using a browser, from anywhere in the world. Perfect for remote management, network operating centers and overall IT control!
- IP streaming Use any standards-based (H.264, RTSP format) media player to watch the IP stream.

### What's Included

Each RoboSHOT HD-SDI camera is shipped with one each of the following items:

- RoboSHOT 12 or 30 HD-SDI PTZ camera
- Vaddio IR Remote Commander
- 12 VDC, 3.0 A switching power supply with North American AC cordset or UK + European AC cordsets
- Thin Profile Wall Mount with mounting hardware
- EZCamera<sup>™</sup> RS-232 control adapter
- Quick Start Guide

Download complete product documentation from www.vaddio.com.

## **Rear Panel Features**

From left to right:

- Power Connector, 12 VDC, 3.0 Amp EIAJ-04 with positive center
- Shielded RJ-45 for GB Ethernet with PoE+ for streaming IP/H.264 video, web and Telnet control, and camera power
- Rotary switch for setting HD-SDI and HDMI output resolutions
- DIP switches for IR frequency, IR on/off, image flip for inverted operation, Normal or Super-Wide mode
- HD-SDI Connector carrier-class, edge mount gold contacts, 3Gb/s compliant
- HDMI video output connector
- RS-232 port on shielded RJ-45 connector

### **Connection Example**



#### **Specifications**

Specification	Value
Image device	1/2.8-Type Exmor CMOS sensor
Effective pixels	2.14 Million Effective pixels (2.38 Million Total Pixels)
Lens and horizontal FOV	RoboSHOT 12 – Super Wide 12X Optical Zoom, 73.0° (wide) to 6.6° (tele),f=3.91mm to
	47.0mm, F1.8 to F3.4
	Normal 10X Optical Zoom, 67.3° (wide) to 7.6° (tele), f=3.8mm to 38.0mm, F1.8 to F3.4
	RoboSHOT 30 – 30X optical zoom, 65° (wide end) to 2.3° (tele end), F1.6 to F4.7
Video outputs	HD-SDI, HDMI
Supported resolutions	1080p60/59.94/50/30/25, 1080i/60/59.94i/50, 720p/60/59.94/50
Video aspect ratio	16:9 for all resolutions
Streaming	Simultaneous IP (RTSP format with H.264 compression) up to 1080p/30
Minimum illumination	1.0 lx (F1.8, 50IRE); recommended illumination 100 lux or more
Minimum working distance	RoboSHOT 12: 10mm (wide), 0.8m (tele); RoboSHOT 30: 10mm (wide), 1.2m (tele)
Pan and tilt angle	Pan: ±160°, Tilt: +90°, -30°
Pan and tilt speed	Minimum: 0.35°/sec; maximum: 120°/sec
Vaddio Special Features	<ul> <li>Tri-Synchronous Motion: Concurrent PTZ motor movement, simultaneous arrival at preset</li> </ul>
	• Advanced ISP: Accurate color reproduction with fast, sharp automatic focus and iris routines
Network connection	PoE+ (IEEE 802.3at), Gigabit Ethernet
S/N Ratio	Greater than 50 dB
Sync System	Internal
Control Methods	Ethernet (web interface and Telnet); IR Remote Commander; RS-232 for external controllers.
Operating Temperature	0°C to +40°C (32°F to 104°F), 20% to 80% Relative Humidity
Dimensions/Weight	6.942" (176.3mm) H x 7.056" (179.2 mm) W x 6.757" (171.6mm) D; 4.85 lbs.(2.2 kg)

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