TECH SPEC

RoboSHOT™ HD PTZ Cameras

RoboSHOT 12 HD PTZ

High Definition PTZ Conferencing Camera Featuring Tri-Synchronous™ Motion and 12X Wide Angle Lens

Image: RoboSHOT 12 HD PTZ Camera

The all-new RoboSHOT 12 HD PTZ Camera is a professional quality PTZ camera with super high quality imaging, fine detail and exceptional color reproduction. This camera offers integrators, dealers and end users with an incredible improvement over other conferencing cameras available today.

The RoboSHOT 12 is perfect for small to medium sized conference rooms, training rooms or classrooms and provides incomparable support for applications including, UC conferencing, videoconferencing, distance learning, lecture capture, telepresence and more!

The key features of the RoboSHOT cameras are Tri-Synchronous Motion, the silent direct drive pan/tilt motors, advanced Exmor® image sensor, multi-element lens and ISP (image signal processor) combination.

The Tri-Synchronous Motion algorithm in the RoboSHOT cameras is capable of moving all three (pan, tilt and zoom) axes simultaneously. The algorithm calculates the position and velocity of the smooth, direct-drive motor movements between the presets so pan, tilt and zoom arrive at the preset subject simultaneously, which finally allows for smooth and manageable on-air camera movements. Yep, there's no more pan/tilt, then zoom like other PTZ cameras available today.

The lens, image sensor and ISP are the magic behind this camera's remarkable video performance characteristics. The lens is a multi-element, glass lens featuring a 12X optical zoom with a 73° wide horizontal field of view (wow). The latest generation Exmor® 1/2.8", 2.34 Megapixel, Full HD (1080p/60) high-speed, low noise CMOS image sensor combined with the new ISP produces vivid, realistic and accurate color with extremely fast, razor sharp automatic focus and iris routines.

The RoboSHOT 12 uses the Vaddio EZCamera™ System to transport HSDS™ differential video, power and control to and from the camera over Cat-5e cables. The proven Quick-Connect™ Interfaces immediately provide the ultimate in configuration flexibility. Five models of Quick-Connects are available including the Quick-Connect USB Mini, Quick-Connect SR, Quick-Connect DVI/HDMI Quick-Connect USB and the Quick-Connect Universal CCU.

The RoboSHOT 12 has an Ethernet port and a built-in web server, which allows the user to control the camera functions on a web page with any browser from anywhere in the world over the IP network. Telnet, IR Remote and RS-232 control for the camera are available to satisfy almost any, if not all, system control requirements.

The RoboSHOT cameras were designed for the times and represent a new era in specifying and integrating professional quality cameras into A/V and conferencing system configurations. In short, it has never been easier to integrate cameras into any small to medium room project than with the RoboSHOT 12.

Example: Built-in Camera Control Web Page

CAMERA SYSTEMS

The RoboSHOT 12 is paired with all five of the Vaddio Quick-Connect Interfaces and shipped as a complete camera system. The available systems are as follows:

- **RoboSHOT 12 QMini:** RoboSHOT 12X Camera & Quick-Connect USB Mini, PN: 999-9901-000 North America 999-9901-001 (Int'l)
- **RoboSHOT 12 QSR:** RoboSHOT 12X Camera & Quick-Connect SR, PN: 999-9905-000 North America 999-9905-001 (Int'l)
- **RoboSHOT 12 QDVI:** RoboSHOT 12X Camera & Quick-Connect DVI/HDMI SR, PN: 999-9906-000 North America 999-9906-001 (Int'l)
- **RoboSHOT 12 QUSB:** RoboSHOT 12X Camera & Quick-Connect USB, PN: 999-9909-000 North America 999-9909-001 (Int'l)
- **RoboSHOT 12 QCCU:** RoboSHOT 12X Camera & Quick-Connect CCU, PN: 999-9907-000 North America 999-9907-001 (Int'l)

Please see the System Manuals for more information on system contents at support.vaddio.com

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TECHNICAL IMAGE

Recessed Rear Panel Connections

Rear View of the RoboSHOT 12 HD PTZ Camera

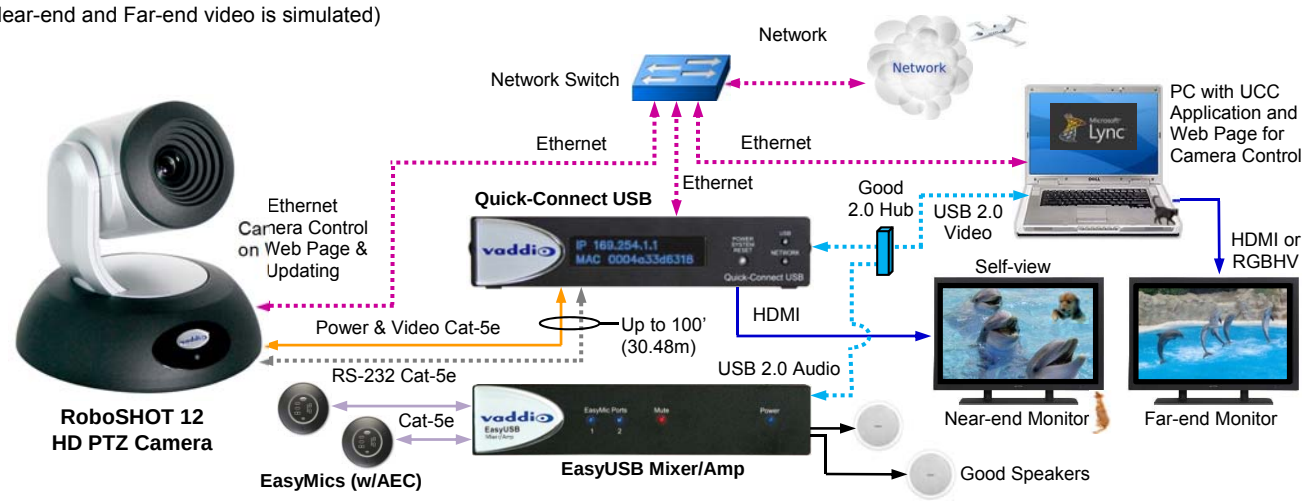
Rear Panel Connections (left to right):

1. Ethernet 10/100 port on shielded RJ-45 for access to the built-in web pages, Telnet control or system updates/upgrades
2. HD Video Select rotary switch for setting the cameras HD output resolution
3. Camera Settings DIP switches for 3-IR frequency, IR on/off, Image Flip (camera is invertible), Normal or Super-wide Mode
4. RS-232 port on shielded RJ-45 connector used with all Quick-Connect Interfaces
5. EZ-Power Video port on shielded RJ-45 for 24 VDC Quick-Connects (2-Cat-5 up to 100'/30.48m) or video only for the CCU systems
6. 36 VDC Port on shielded RJ-45 connector for power over Cat-5e up to 500' (152,4m), video from EZ-Power Video port

SYSTEM DRAWING

Configuration Example

RoboSHOT 12 with Quick-Connect USB, EasyUSB™ Mixer/Amp, EasyMics, UC Conferencing Application, Monitors and Speakers (Near-end and Far-end video is simulated)



GENERAL SPECIFICATIONS*

Image Sensor	Exmor 1/2.8", 2.34 Megapixel, Full HD (1080p/60 native) High-speed, Low Noise CMOS Image Sensor
Lens Characteristics (2 modes)	Super-Wide Mode: 12X Optical Zoom with 73.0° (wide end) to 6.6° (tele end), f=3.91mm to 47mm, F1.8 to F3.4 Normal Mode: 10X Optical Zoom with 67.3° (wide end) to 7.6° (tele end), f=3.8 to 38mm, F1.8 to F3.4
Supported Resolutions	HD Resolutions: 1080p/60/59.94/50/30/25, 1080i/60/59.94/50, 720p/60/59.94/50, 16:9 Format
Vaddio Special Features	Tri-Synchronous Motion: Concurrent PTZ motor movement and simultaneous PTZ arrival at a stored preset. Advanced ISP: Vivid and accurate color with extremely fast, razor sharp automatic focus and iris routines.
S/N Ratio	> 50 dB
Minimum Illumination	1.0 lux (F1.6, 50IRE), Recommended illumination >100 lux and above (Normal office lighting is 375-500 lux)
Minimum Distance	10mm (wide end) and 800m (tele end)
Pan & Tilt Angle/Speed	Pan/Tilt Angles: ±160°, Tilt: +90° to -30° Pan/Tilt Speeds: Both Axes 0.35°/sec to 120°/sec
Sync System	Internal
Control Methods	Ethernet for Internal Web Pages and Telnet, IR Remote Commander and RS-232 for external controllers.
Operating/Storage Temperature	0°C to +40°C (32°F to 104°F), 20% to 80% Humidity
Dimensions/Weight	6.942" (176.3mm) H x 7.056" (179.2 mm) W x 6.757" (171.6mm) D 4.85 lbs.(2.199923 kg) (About 2500 plain M&Ms)

*Specifications are subject to change and revision without notification or obligation.