

# **Preliminary**

InfoComm 2014 Special Edition, Preliminary Tech Spec



ROBOSHOTT CONFERENCE

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

The all-new RoboSHOT Conference 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.

With a list of features as long as my arm, the RoboSHOT Conference, as the name suggests, 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, Range-Set<sup>™</sup> for setting optical limits and the advanced image sensor, 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 Range-Set feature allows the camera's zoom range to be custom tailored to the room by setting optical zoom limits on both the tele and wide ends of the lens. With Range-Set there is no way for the end-user to mess up the shot by zooming-in too close (viewing nose hairs) or zoom-out too far capturing a nice view of the floor, fluorescent lights and ceiling tiles. The Range-Set ensures that in enterprise-wide implementations, the camera has a fighting chance to perform admirably.

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

The RoboSHOT Conference 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 Conference.



#### WHAT'S INCLUDED

One (1) RoboSHOT Conference HD Robotic PTZ Camera

One (1) IR Remote Commander

One (1) Thin Profile Wall Mount and mounting hardware

One (1) EZCamera Control Adapter

One (1) User and Installation Guide

\*Choice of Quick-Connect System (sold separately)

#### QUICK-CONNECT SYSTEMS\*

Quick-Connect System Interface Choices Include:

- Quick-Connect USB Mini
- Quick-Connect SR
- Quick-Connect USB
- Quick-Connect Universal CCU

(Interfaces include power supply and some cables)



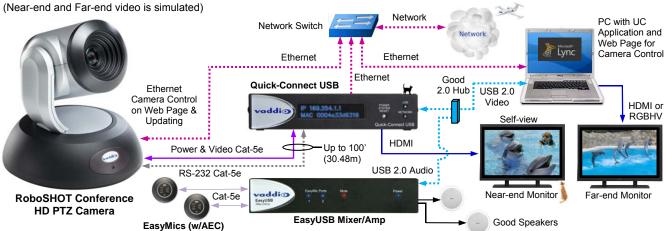
#### Rear Panel Connections (left to right):

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



### **GENERAL SPECIFICATIONS\***

Part Number	RoboSHOT Conference 999-9900-000 (Worldwide) Quick-Connect Interface Required
Image Sensor	Exmor 1/2.8", 2.34 Megapixel, Full HD (1080p/60 native) High-speed, Low Noise CMOS Image Sensor
Lens (2 modes)	Normal Mode: 10X Optical Zoom with 67.3° (wide end) to 7.6° (tele end) limited Super-Wide Mode: 12X Optical Zoom with 73.0° (wide end) to 6.6° (tele end)
Supported Resolutions	HD Resolutions: 1080p/60/59.94/50/30/25, 1080i/60/59.94/50, 720p/60/59.94/50/30/25 16:9 Format
Vaddio Special Features	Tri-Synchronous Motion: Concurrent PTZ motor movement and simultaneous PTZ arrival at a stored preset Range-Set: Optical zoom limits on tele end and wide end to limit shot badness 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 lx (F1.6, 50IRE), Recommended illumination >100 lux and above (Normal office lighting is 400-500 lux)
Minimum Distance	10mm (wide end) and 1.4m (tele end)
Pan & Tilt Angle/Speed	Pan/Tilt Angles: ±165°, Tilt: +90°, -30°, Pan/Tilt Speeds: Pan:120°/sec, Tilt: 100°/sec
Sync System	Internal
Control Methods	Ethernet: Internal Web Pages and Telnet, IR Remote Commander and RS-232 for external controllers
Dimensions/Weight	Dims: 6.942" (176.3mm) H x 7.056" (179.2 mm) W x 6.757" (171.6mm) D, Weight: 5.215463 lbs. (2.3729895kg)
Quick-Connect Systems (Choose one)	Quick-Connect USB: USB 2.0 (UVC) or IP (H.264) Streaming, Simultaneous HDMI and YPbPr outputs Quick-Connect Universal CCU: Simultaneous HD-SDI, HDMI and YPbPr (HD) outs with image controls Quick-Connect SR: YPbPr output with IR forwarding Quick-Connect USB Mini: USB 2.0 Streaming Only

<sup>\*</sup>Specifications are subject to change and revision prior to product release.