

# RoboSHOT™ 12 USB

**High Definition PTZ Conferencing Camera with USB 3.0 and IP (H.264) Streaming, HDMI Output, Tri-Synchronous™ Motion and Wide Angle 12X Optical Zoom Lens**  
**Part Numbers: 999-9920-000 (North America), 999-9920-001 (Int'l)**

The Vaddio™ RoboSHOT 12 USB Camera is an Enterprise-Class, high definition PTZ conferencing camera with very high quality imaging, truly fine detail and exceptional color reproduction. With simultaneous USB 3.0 and IP Streaming (H.264) capabilities with an HDMI video output, 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 especially in 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, wide angle 12X lens, built-in web server and an advanced ISP (image signal processor).

The lens, image sensor and ISP combination are the real 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. The latest generation Exmor® 1/2.8", 2.38 Megapixel, Full HD (native 1080p/60) high-speed, low noise CMOS image sensor combined with the new ISP produces vivid and realistic color with very fast, razor sharp auto-focus and iris routines.

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 RoboSHOT 12 USB has an PoE+ GB Ethernet port and a built-in web server, which allows the user to power the camera and control the camera's functions with an internal web page with any browser from anywhere in the world, over the IP network, while watching the RTSP format video stream with H.264 compression. This feature is perfect for remote management, network operating centers and overall IT control. Telnet, IR Remote and RS-232 control for the camera are available to satisfy almost any, if not all, system control requirements.

The RoboSHOT 12 USB camera was designed for the times and represents a new era in specifying and integrating professional quality cameras into UC Conferencing and Pro AV system configurations. The features, flexibility and the value of the RoboSHOT 12 USB conferencing camera is unparalleled in today's PTZ camera market. All this and it's made in the USA, at the Vaddio HQ in Minnetonka, Minnesota.



**Image:** RoboSHOT 12 USB, HD PTZ Camera with 12X Optical Zoom and 73° Wide Horizontal Field of View



**Example:** Built-in Camera Control Web Page

## WHAT'S INCLUDED

Each RoboSHOT 12 USB Camera is packed to be a complete system and includes the following items:

- One (1) RoboSHOT 12 USB HD PTZ Camera
- One (1) Vaddio IR Remote Commander
- One (1) 12 VDC, 3.0 Amp Switching Power Supply
- One (1) AC Cord Set
- One (1) Thin Profile Wall Mount & Mounting Hardware
- One (1) EZCamera™ Control Adapter
- One (1) 6' (1.83m) USB 3.0 Cable
- One (1) Quick Start Guide

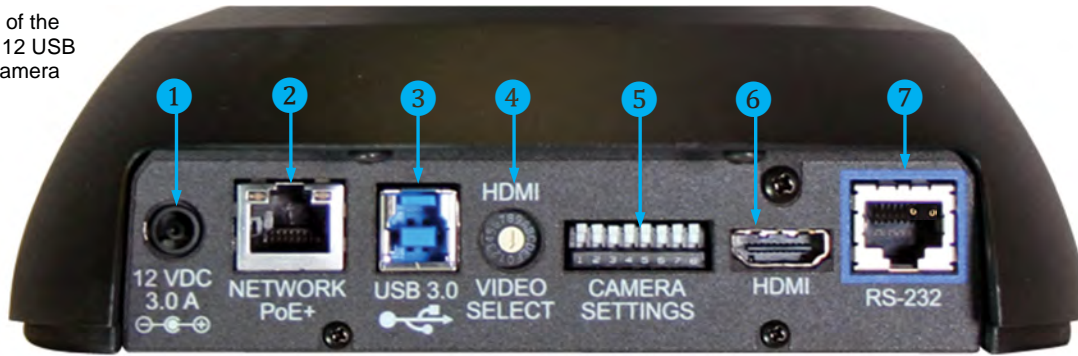
*Note: Full Manuals are downloaded from [vaddio.com](http://vaddio.com)*



# TECHNICAL IMAGE

# Recessed Rear Panel Connections

Rear View of the RoboSHOT 12 USB HD PTZ Camera



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

- ① 12 VDC, 3.0 Amp EIAJ-04 Power Connector (positive center)
- ② GB Ethernet RJ-45 with PoE+ (for streaming IP/H.264 video, Telnet control, remote management and camera power)
- ③ USB 3.0 Video Device Connector (for streaming uncompressed UVC standard video)
- ④ HDMI Video Select rotary switch for setting the HDMI output resolution of the camera
- ⑤ Camera Settings DIP switches for 3-IR frequency, IR on/off, Image Flip (camera is invertible), Normal or Super-Wide Mode
- ⑥ HDMI Video Output Connector
- ⑦ RS-232 Port on shielded RJ-45 connector

# SYSTEM DRAWING

# Configuration Example

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



# GENERAL SPECIFICATIONS FOR ROBOSHOT 12 USB

Image Sensor	Exmor 1/2.8", 2.38 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	HDMI Resolutions: 1080p/60/59.94/50, 1080i/60/59.94/50, 720p/60/59.94/50, 16:9 Format
Supported Streaming	Simultaneous IP (RTSP format, H.264 compression) up to 1080p/30 and USB 3.0 (UVC) streaming up to 1080p/60
USB and Network	USB: Type-B USB 3.0 Compliant Connector, Network: Shielded RJ-45 PoE+ GB Ethernet Port
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)
Pan & Tilt Angle/Speed	Pan/Tilt Angles: ±160°, Tilt: +90° to -30°, Pan/Tilt Speeds: Both Axes 0.35°/sec to 120°/sec
Control Methods	Ethernet for Internal Web Pages and Telnet, IR Remote Commander and RS-232 for external controllers.
Operating 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.(2.19923 kg) (About 412 cat's eye marbles)

Learn more about our cameras, audio devices and controllers at 800-572-2011 or [vaddio.com](http://vaddio.com)



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