



ZyPerUHD60 Huddle Room Certification

ZeeVee, Inc.
295 Foster Street, Suite 200
Littleton, MA 01460 USA
April 3, 2024

Table of Contents

Huddle Room Overview	3
Key Features of Huddle Rooms/Spaces.....	3
Basic Huddle Rooms and Spaces	3
Content Sharing.....	3
Huddle Room Example with the ZyPerUHD60.....	4
ZeeVee Advantages	4
Technology Basics	5
USB Cable Lengths.....	5
USB Transport.....	5
Common Huddle Room Equipment tested/validated with ZyPerUHD60	6
Displays/Projectors.....	6
USB Cameras	6
USB Speakers/Microphones	7
USB Touch panels/overlays	7
USB Mice/Keyboards	7
USB Storage Devices.....	8
Other USB Devices.....	8
Laptops/Video Sources.....	9
Disclaimers	10

Huddle Room Overview

A huddle room is a **small and private meeting area**. Much like a traditional conference room, huddle rooms are generally outfitted with audio and video conferencing equipment, a display system and a traditional or digital whiteboard.

Huddle rooms are **collaborative spaces meant for informal, peer-to-peer communication**.

Perfect for brainstorming or touching base with co-workers or classmates, huddle rooms are becoming a popular addition to modern working spaces.

They're small, convenient meeting spaces that enable a few employees to quickly meet. They eliminate cumbersome reservation processes. And they're all about ad hoc conversation.

Huddle **spaces** lose the walls and serve the same purpose within open areas. Either way, huddle areas facilitate informal closeness and easy collaboration.

Key Features of Huddle Rooms/Spaces

- **Small and intimate.** Huddle spaces typically accommodate groups of 2 to 6.
- **Informal.** Need a quick conversation with coworkers? Huddle rooms let you drop in as needed. Freedom from scheduling is a key factor.
- **Versatile.** Huddle spaces are available as needed to support any business objective. They're outfitted with a range of furniture, equipment, and technology to support these needs.
- **All about spontaneous collaboration.** Huddle rooms enable a spontaneous, collaborative flow of information.

They promote productive work by providing a quiet, enclosed space for:

- Project team meetings
- Client meetings
- Brainstorming sessions
- Staff meetings or manager/employee one-on-ones
- One-on-one or small group presentations
- Private space for traveling/remote employees

Basic Huddle Rooms and Spaces

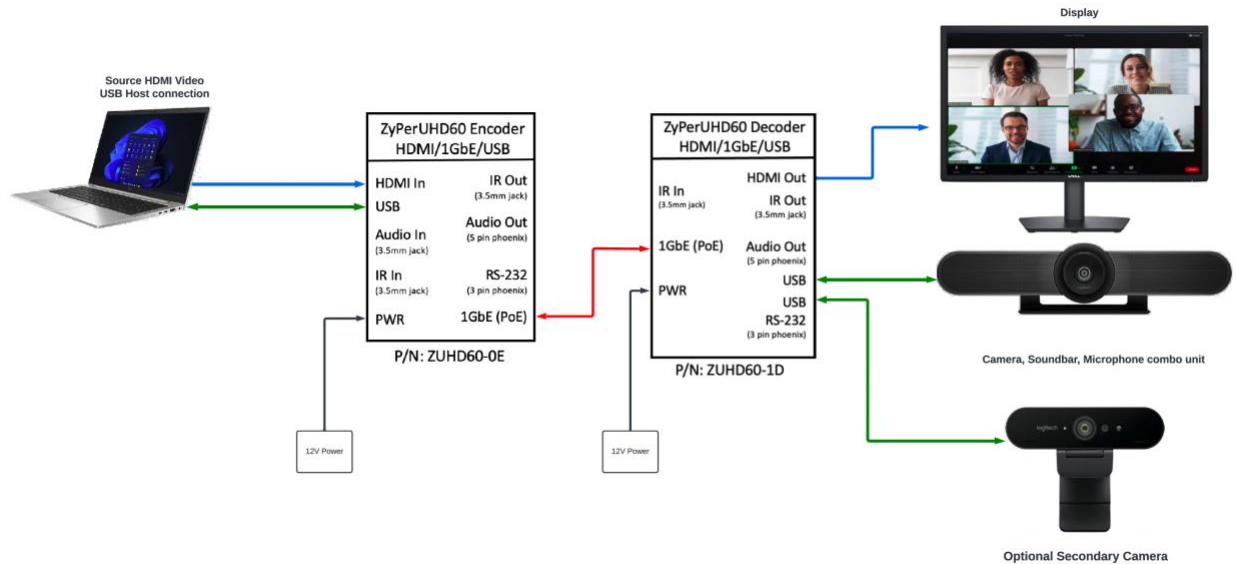
At its most basic, a walled huddle room will include a central surface (table or other furniture) with 2-6 chairs. It will contain one or more whiteboards or a display device. There will be one or more cameras used for video conferencing as well as appropriate speakers and microphones.

Content Sharing

The ability to easily share content on a display expands a workgroup's collaborative capabilities. Ideally, everyone who walks into a huddle room should be able to quickly connect, share and manipulate content. It should be easy to join remote meetings using such conferencing tools as Teams, Zoom or Skype.

Huddle Room Example with the ZyPerUHD60

The ZyPerUHD60 system eliminates the need for extensively long HDMI or USB cables by providing a simple solution with one device located near the display/camera system and another device located more convenient to the user. Note that typically the ZyPerUHD60 units are mounted out of sight and connected into via a convenient adapter located on a tabletop or wall plate.



ZeeVee Advantages

The example dedicated Huddle Room above can easily be converted to an interconnected Huddle/Overflow room by connecting the ZyPerUHD60 endpoints to a network switch creating a many to many AV over IP deployment where any source can be routed to any display and any camera can be routed to any source.

Technology Basics

This section explores and explains some basic technology related to Huddle Rooms and why the ZyPerUHD60 is an ideal solution.

USB Cable Lengths

Camera, speaker and microphone signals are typically transported using the USB 2.0 standard over USB cable. The maximum recommended cable length for USB 2.0 cables is only 5 meters (16 feet). This makes a direct connection between a camera for example and the user a problem in all but the smallest of Huddle Rooms.

The ZyPerUHD60 solves this problem by keeping the “Decoder” device located near the camera and display while the “Encoder” device can be located anywhere in the room. (See diagram on previous page)

USB Transport

To support Video/Camera transmission over USB, the system must support Isochronous transport mode. Not all USB delivery systems support this transport mode. The ZyPerUHD60 fully supports this mode of USB transportation, and the “Encoder” device can be linked back to multiple camera feeds simultaneously via the use a virtual USB Hub inside the “Encoder” device.

Common Huddle Room Equipment tested/validated with ZyPerUHD60

(Note: this is not intended as a complete list of all supported equipment)

Displays/Projectors

Benq BL2711
Dell U2414Hb
Dell P2415Qb
Dell U2718Q
Epson EB-PU2220B
Hannspree HF199H
Insignia
LG 43UK6500AUA
LG 43UM7300PUA
LG 24UD58B
LG 43UF7600
LG 55SK8000PUA
Monoprice GS27Q
Optoma UHL55
Optoma UHD51ALV
Optoma ZU606TST
Phillips
Samsung LN46C550
Samsung U28E590D
Samsung UN40J5200AFXZA
Samsung UN40JU6500
Samsung LU28D590DS
Samsung UN49MU7000
Sharp LC-46D65U
Sharp LC-43LBU591U
Sony KDL-32BX330
Sony XBR43X800E
Vizio E24-C1
Vizio M50-E1
ViewSonic VA2265Smh

USB Cameras

Ausdom AW615
AVer PTZ330
Avonic CM70/71
BlueLover T3200
Generic USB webcam
HP Pro Webcam C920
Logitech C270 HD Webcam with Noise reducing MIC

Logitech C615 HD Webcam
Logitech C1000e
Logitech C920
Logitech C925e
Logitech C930e
Logitech Rally Ultra HD PTZ
Lumens VC-R30
Microsoft LifeCam Studio
NEXIGO N60
Panasonic AW-UE40
Poly Studio X70
Polycom EagleEye mini
ProITAV UC-G48
ProITAV UC-GL18
ProITAV UC-HAI18
ProITAV UC-MA180
ProITAV UC-UAI48
Sony SRG-X40UH/BC
VHD J1702CS
VHD JX1700US
VHD UC-V-L 17

USB Speakers/Microphones

Audio-Technica AT9933 Microphone
Jabra UC Voice 550A
JBL Pebbles Mini Wireless
Logitech C270 HD Webcam with Noise reducing Mic
Logitech Headset H390 with Noise Cancelling Mic
MPOW Headset/Microphone
ProITAV USP-G008
ProITAV USP-G006

USB Touch panels/overlays

DeYoWo IR touch frame
HiteVision ICB-N550 White board
MAXHUB EC55CAB White board

USB Mice/Keyboards

A4Tech KR-85 keyboard
Apple M7803 keyboard
Apple USBM2352 keyboard
Cherry JM-0300 mouse
Dareu EK810 keyboard

Dareu EK819 keyboard
DeLux KA280 wireless combo
DeLux M269 wireless combo
Fuhlen X100 mouse
HP K500 mouse
HP KUS1206 keyboard
Jelly Comb KUT091 wireless combo
Logitech G15Y-W93 keyboard
Logitech G903 mouse
Logitech M215 wireless mouse
Logitech M185 wireless mouse
Logitech M170 wireless mouse
Logitech Wireless Combo MK270
Logitech MK Keys keyboard
Newmen GL600 keyboard
Nulaxy 2.4G Wireless Optical Mouse
Redragon M801P-RGB wireless mouse
Rapoo V150S mouse
Razer RZ03 keyboard
Rii 2AJU3RT716 mini keyboard
SteelSeries Kinzu mouse
Sunsonny SM-8509 III mouse

USB Storage Devices

ADATA UV350 64G Flash Disk
Aigo U330 64G Flash Disk
HP X306W 64G Flash Disk
Kingston 16G Flash Disk
LaCie P'9223 Porsche Design Slim Drive 1T HDD
Lexar M45 64G Flash Disk
Netac 32G Flash Disk
Samsung 32G Flash Disk
Samsung MU-PC1T0K 1TB SSD
SanDisk Cruzer Glide 64GB
SanDisk Ultra 32GB
4GB Generic Memory stick
Teclast 64G Flash Disk
Toshiba 16G Flash Disk
Western Digital 1T HDD

Other USB Devices

Honeywell Barcode scanner
Microsoft Xbox One X Console to Xbox One X Controller

MonoPrice Aquagate 2.0 (7-port USB Hub)
Mokin USB-C Adapter (USB Hub)
Q-Sys Core 8 Flex

Laptops/Video Sources

Apple MacBook Pro 15 2015
Apple MacBook via USB-C and HDMI adapter
Apple MacBook Pro via USB-C and HDMI adapter
Apple TV
Dell Inspiron 15
Dell XPS 15 9530
Dell XPS 15 9570
Dell G5 15 5587
Dell Inspiron 13 7347
Dolemee media player
Gigabyte GB-BXCE-3205
HP 15-ax230TX
HP 15-au195TX
Intel NUC BOXNUC7CJYH1
LG 15Z950-GT70K
LG 15UD470-GR3NK
Lenovo ThinkPad
Marshall Electronics Test Generator
Microsoft Xbox One X
Murideo Test Generator
Nexsmart media player
Sony Blu-Ray player
Sony PlayStation 5
ZettaGuard HDMI 1x2 Splitter

Disclaimers

ZeeVee has striven to ensure that this document is accurate and represents the described products fully. Although, ZeeVee assumes no responsibility for errors found, should any be found, please contact support@zeevee.com and corrections will be issued as appropriate.

Customers should always consult with qualified Network Engineers regarding all network designs. Design guidance provided by ZeeVee should be considered for reference only. It is up to the customer to validate and implement any network designs. ZeeVee cannot and will not be held responsible for network designs, equipment, cabling or other installation related network items.

ZeeVee hardware designs are property of ZeeVee.

Components, sub-assemblies, and methods utilized in the designs are free of any encumbrances or appropriate licenses and rights have been obtained by ZeeVee for the use in the described products in the intended manner.

ZeeVee software is the sole property of ZeeVee except within the restrictions and guidelines of any open-source or public-license component utilized. ZeeVee represents that normal usage of the product in a typical customer installation is fully within the granted rights and privileges of any licensed component. Visit www.zeevee.com for further details.

The specifications of the described products may change at any time without notice.

ZeeVee forbids unauthorized disassembly, reverse-engineering, duplication, or any other attempt to recreate all or portions of the hardware or software outside of any use explicitly authorized in writing by ZeeVee.

Trademarks

All trademarks are the property of their respective owners.

Copyright

This document is copyrighted with all rights reserved. This document or any portion contained may not be reproduced or copied by any means - graphically, mechanically, or electronically - without express written authorization of ZeeVee.

© 2023 ZeeVee, Inc. All rights reserved