

OTTO[®]

Enhanced Spatial Positioning Hub

Technical Manual and Instructions for Use



ESP Hub PTT Introduction

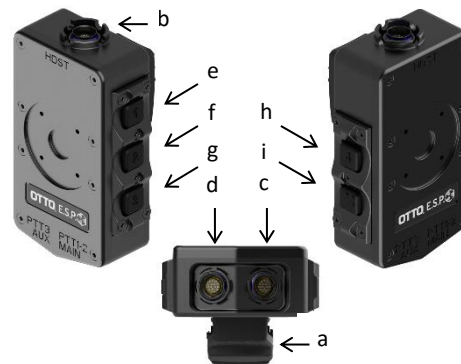
The Enhanced Spatial Positioning (ESP) Hub PTT allows for operation of an OTTO® headset with up to four radios or other communications devices. Incoming audio from the attached devices is spatially distributed, providing enhanced intelligibility and situational awareness. The hub provides a PTT button for each device and a multi-function button for configuring and controlling other hub features.

Features of the ESP Hub PTT

- Enhanced spatially positioned incoming audio
- 4 separate PTT buttons
- Multi-function button
- Single/Dual/Triple/Quadruple communications modularity
- Ambidextrous MOLLE attachment system
- Small, lightweight form factor
- Detachable cables for each device
- No batteries required

ESP Hub PTT Diagram

- a) MOLLE Clip
- b) Headset jack
- c) Main jack PTT 1-2
- d) Auxiliary jack PTT 3-4
- e) PTT 1 button
- f) PTT 2 button
- g) PTT 3 button
- h) PTT 4 button
- i) Multi-function button



Radio Cables

OTTO has cables for a wide variety of radios, intercoms, headsets, and other accessories to interface with the hub. Please email info@ottoexcellence.com for more details.

PTT and Multi-function Buttons

The ESP Hub PTT has three PTT buttons marked 1, 2 and 3 on one side of the hub. On the other side there is a fourth PTT marked 4 and a multi-function button (MFB) below PTT 4.

- The PTT 1 button controls the primary device plugged into the jack labeled PTT 1-2 MAIN.
- The PTT 2 button controls the secondary device plugged into the jack labeled PTT 1-2 MAIN.
- The PTT 3 button controls the primary device plugged into the jack labeled PTT 3 AUX
- The PTT 4 button controls the secondary device plugged into the jack labeled PTT 3 AUX.
- The MFB is used to configure or control various ESP Hub PTT features such as toggling the Spatial Audio Positioning and Mic mode features.



Radio Configuration

1. Radios that will be powering the hub must have an accessory power supply capable of 200mW and be configured for 5V.
2. The spatial audio performance is optimal when the radio's internal speaker is disabled while the headset speaker is enabled.
3. When the Mic Mode is PTT, the radio should be configured for accessory PTT. In Hot Mic Mode, hub PTT or radio PTT may be used.

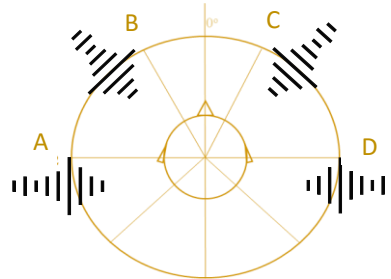
Device Operation

Note that the connectors on the ESP Hub PTT are keyed to create proper alignment of the connector pins.

1. Plug the audio connector cable on the OTTO® headset into the jack marked **HDST** on the top of the hub.
2. Plug a device connector cable into the bottom of the hub. The cable must be the appropriate cable for the device in use. Plug the other end of the cable into the device.
3. Devices plugged into the **MAIN** jack are controlled by PTT 1 and 2.
4. Devices plugged into the **AUX** jack are controlled by PTT 3 and 4.
5. **When using a Y cable, the radio that is to supply power must be connected to the shorter lead of the cable labeled PTT1.**
6. **When using a straight single channel cable, devices plugged into MAIN use PTT 1. Devices plugged into AUX use PTT 3.**
7. Listening volume for radio communications is controlled by the volume controls on the radios.
8. The Mic Mode on a channel is toggled between PTT and Hot by simultaneously pressing the MFB and the PTT button for that channel.

Spatial Audio Positioning

The Spatial Audio Positioning is entirely dependent on the attached device configuration. With the Spatial Audio Positioning feature enabled, audio is positioned according to the following table. If Spatial Audio Positioning is disabled, all receive audio is binaural.



		Audio Positioning			
Main	Aux	Zone A	Zone B	Zone C	Zone D
SINGLE NET	∅	Main	X	X	Main
SINGLE NET	SINGLE NET	Main	X	X	Aux
SINGLE NET	Helo ICS Vehicle ICS	Main	X	X	Aux
SINGLE NET	5 Pin Radio (unpowered) 117G	Main	X	X	Aux
SINGLE NET	DISCONNECTED RADIO	Main	X	X	X
DUAL NET	∅	Main Net 1	X	X	Main Net 2
DUAL NET	SINGLE NET	Main Net 1	Main Net 2	X	Aux Net 3
DUAL NET	DUAL NET	Main Net 1	Main Net 2	Aux Net 4	Aux Net 3
DUAL NET	Helo ICS	Main Net 1	Main Net 2	X	Aux Net 3
DUAL NET	5 PIN Radio (unpowered) 117G	Main Net 1	Main Net 2	X	Aux Net 3
DUAL NET	Unplugged DUAL NET	Main Net 1	Main Net 2	X	X
DUAL NET	Unplugged ICS or SINGLE	Main Net 1	Main Net 2	X	X

Warranty and Support

The ESP Hub PTT includes a one-year warranty from the date of purchase.

Product Registration

Register to receive email alerts whenever updates or mission critical information regarding your product becomes available. <https://otto-comm.com/product-registration>



This product can expose you to chemicals including lead, which is known to the State of California to cause cancer & other reproductive harm.

For more information go to <http://www.P65Warnings.ca.gov>

For questions or more information, please contact:

OTTO[®]

10 West Main Street Carpentersville, IL U.S.A. 60110

Toll Free Phone: 888-234-OTTO (6886)

Phone: 847-428-7171

Fax: 847-551-1343

E-mail: info@ottoexcellence.com

www.otto-comm.com



To view the ESP Hb PTT manual please visit <https://otto-comm.com/manuals>