

# PAL Mini Technical Manual

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# 1. Installation and Hardware

This section will illustrate how to mount the sensor onto a standard tripod mount. Two potential tripod mounting options on the sensor unit are:

1. Using the standard UNC 1/4" mount provided on the top of the camera
2. Using the standard UNC 1/4" mount provided on the bottom of the camera

In both cases, the final position of the central axis of the sensor will be in line with the central axis of the tripod.

The UNC 1/4"-20 mount (both top and bottom) is provided in the centre and is compatible with standard tripods.

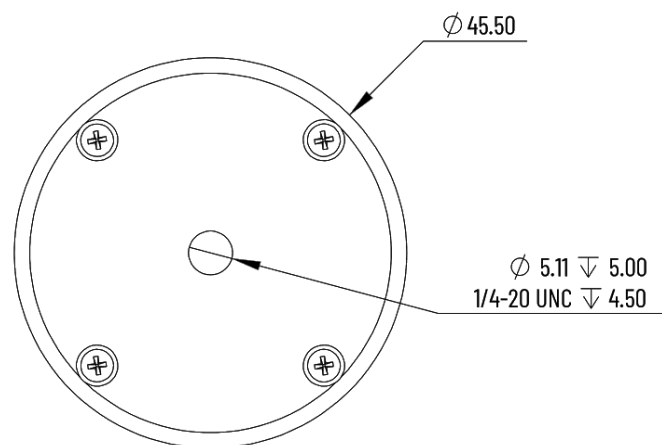


Figure 1.1: Mounting holes on the bottom

## Installation procedure for inverted mounting of Pal Mini:

- 1) The adapter ring part has annular snap fit feature A in it and entire part is already can be fixed to the top cover of Pal mini unit using glue
- 2) The adapter cover part has annular snap fit feature B in it and it's a removable part. It has 1/4"-20 UNC insert provision which help to mount the unit in tripods

- 3) Align and fix the adapter cover to the adapter ring. The annular snap fit feature A & B will help in locking both parts together
- 4) This locking feature must be used only for static condition only and not advisable to use it in transient / vibration conditions

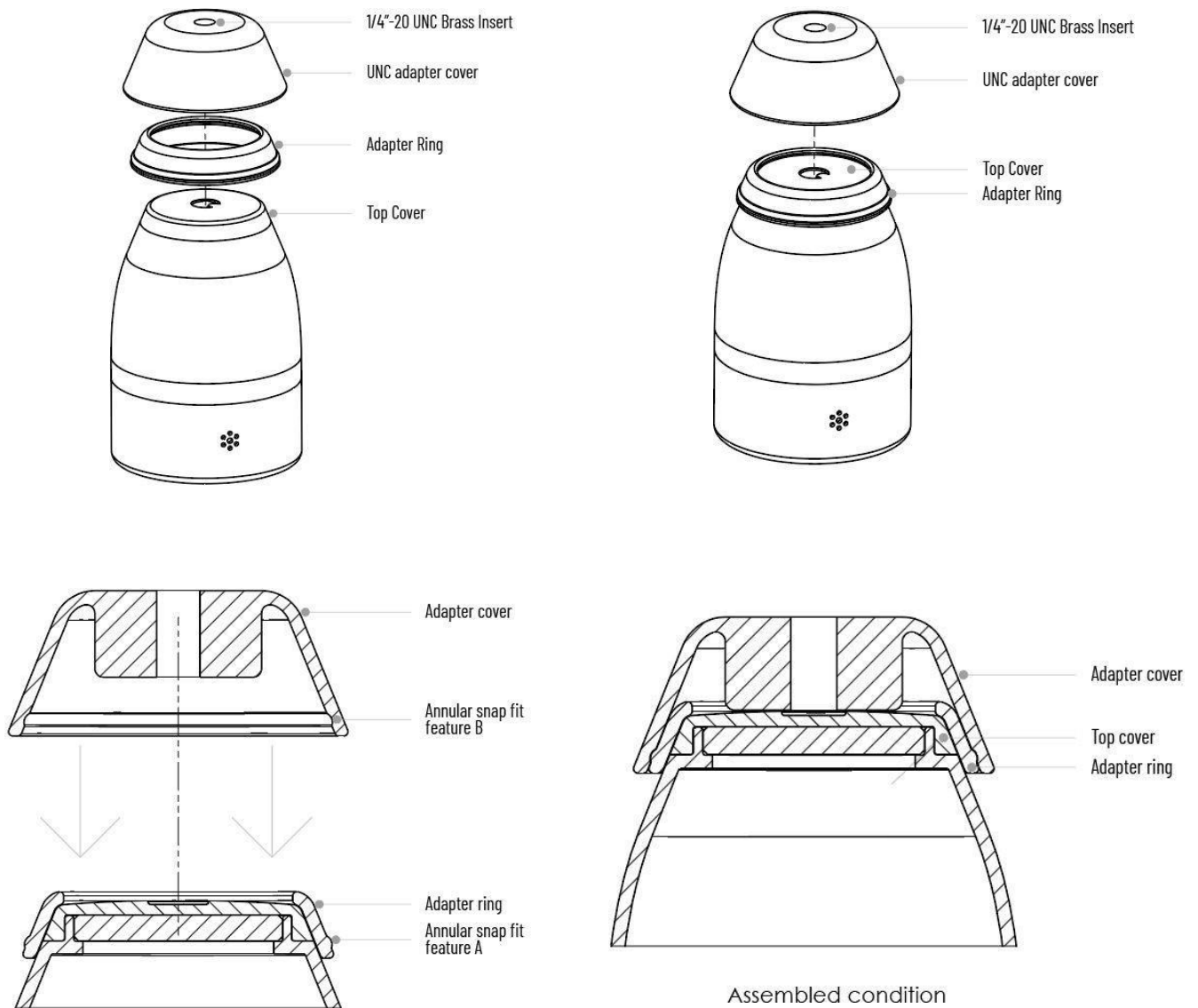
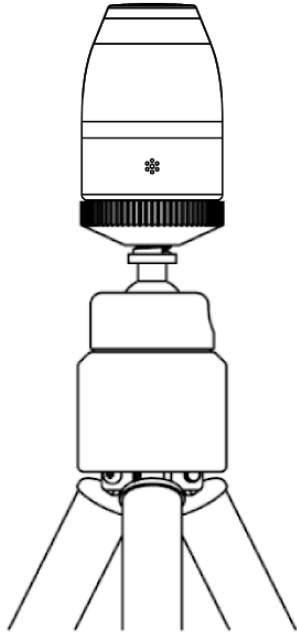


Figure 1.2: Mounting holes on the top



*Figure 1.3: Final mounting at the bottom*



*Figure 1.4: Final mounting at the top*

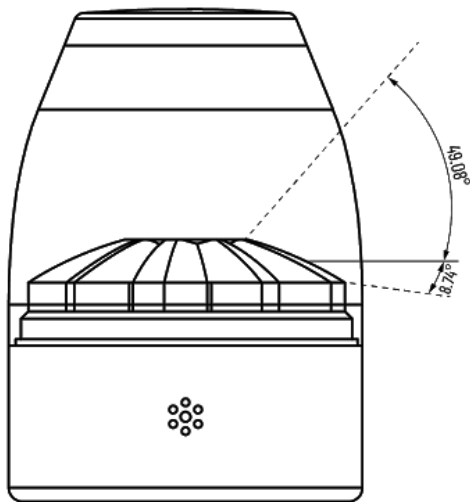
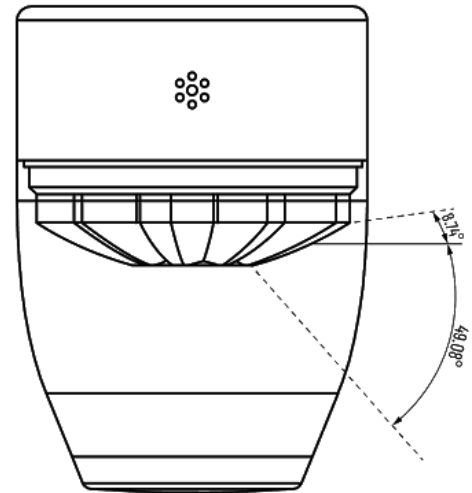
*Other possible mounting options: 1- At different angles*

## 2. Operating Conditions

The sensor works reliably within ambient temperatures of  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) to  $+75^{\circ}\text{C}$  ( $167^{\circ}\text{F}$ ). We recommend storing the sensor within a temperature range of  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ ) to  $85^{\circ}\text{C}$  ( $185^{\circ}\text{F}$ ).

## 3. Vertical Field of View

The Vertical Field of View of PAL is asymmetric about the central horizontal plane. The field of view covered above and below this plane is depicted in the figures below.

*Figure 3.1: VFoV at bottom mount**Figure 3.2: VFoV at top mount*

## 4. Right Practices

Avoid dropping the sensor in any scenario. It will affect the physical integrity of the product.

Avoid touching the transparent enclosure of the sensor. It may affect the image quality of the sensor. If cleaning is required, use a microfiber cloth to gently clean the surface.

Do not open the transparent enclosure of the sensor. The image will be adversely affected.

## 5. Power Specifications

DC Voltage: 5V (From USB 3.0 port)

Rated Current : 400mA

Rated Power : 2 W

## 6. Contents of Package

Item	Quantity
PAL 360 ° depth sensor	1
Inversion mount accessory	1
Microfiber cloth	1
USB Type C cable	1
Wet Wipe	1