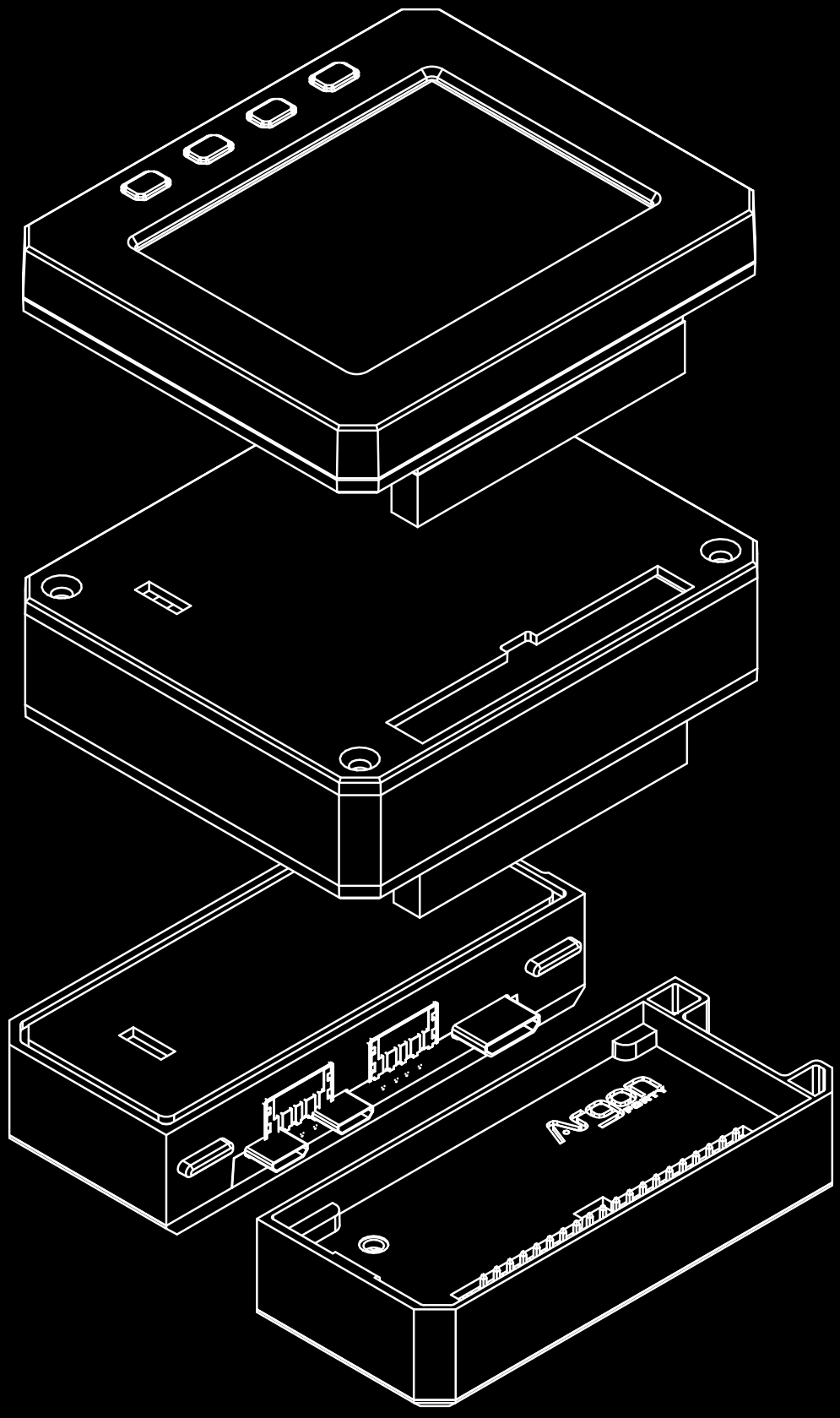
Argon

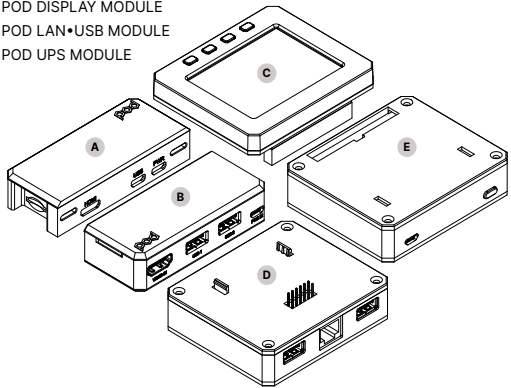
pod



ARGON POD

MODULE

- **A** POD CASE MODULE
- **B** POD HDMI•USB MODULE
- **C** POD DISPLAY MODULE
- **D** POD LAN•USB MODULE
- **E** POD UPS MODULE



"YOUR CREATIVITY IS LIMITLESS."

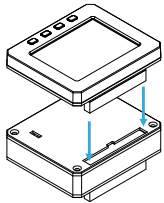
The Argon **POD** System is specifically designed for the latest Raspberry Pi Zero 2 W Boards, but it will also work with earlier Zero and Zero W Board.

The main **POD** Module is the HDMI-USB Hub module which converts the miniHDMI of the Zero boards into a regular HDMI and adds 2 additional USB2 ports. This module also allows for a seamless integration of other POD modules.

There are 2 ways to expand the POD System:

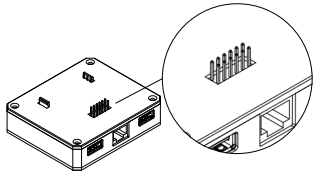
(1) via GPIO which are basically pHAT modules; which you can stack on top of the POD

Ex: Display Module, UPS Module



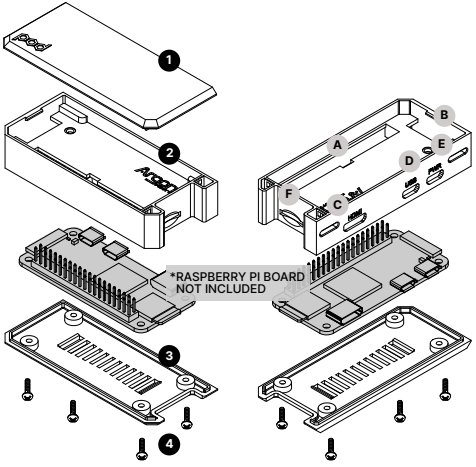
(2) via USB2 communications through the 12-PIN connectors located at the bottom of the POD systems. USB Communications like GSM modem, LORA are possible expansion modules for the POD.

Ex: LAN-USB Hub Module



ARGON POD CASE

MODULE



PARTS

1. Snap On Top Cover Flat
2. Aluminum Heatsink Case
3. Screw On Bottom Cover
4. 4 pcs M2 × 8mm screws

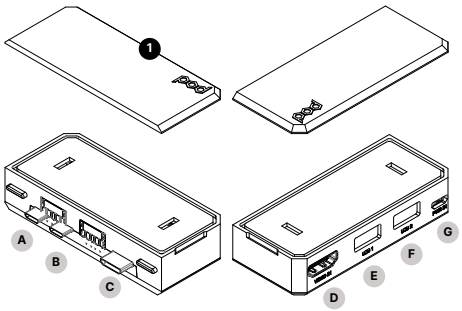
PORTS (Located on the case itself)

- A GPIO Port
- B Camera Strip Port
- C Mini HDMI Port
- D Micro USB Data (USB2)
- E Micro USB Power
- F Micro SD Card Slot

ASSEMBLY INSTRUCTIONS

1. Remove the Bottom Cover of the POD Case.
2. Drop inside the Raspberry Pi Zero 2 W Board.
3. Make sure that the SD Card is NOT inserted to the RPi Board.
4. Secure the 4 screws at the bottom of the case.
5. Place the desired Top Cover for your given use case.
6. Insert micro SD Card.

ARGON POD HDMI-USB
MODULE



PARTS

1. Snap On Top Cover Flat

SIDE A - IN CONNECTORS

- A Male microUSB Power OUT
- B Male microUSB Data
- C Male Mini HDMI

SIDE B - OUT PORTS

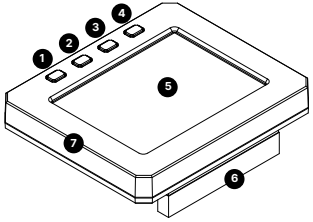
- D Regular HDMI
- E USB A Port 1
- F USB A Port 2
- G Female MicroUSB Power IN

ASSEMBLY INSTRUCTIONS

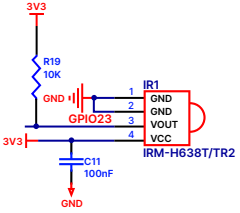
1. Remove the Bottom Cover of the POD Case.
2. Drop inside the Raspberry Pi Zero 2 W Board. Make sure that the SD Card is NOT inserted to the RPi Board.
3. Secure the 4 screws at the bottom of the case.
4. Place the desired Top Cover for your given use case.
5. Insert micro SD Card
6. After assembly, Argon POD Case is ready to use or connect to other POD Modules

ARGON POD DISPLAY

MODULE



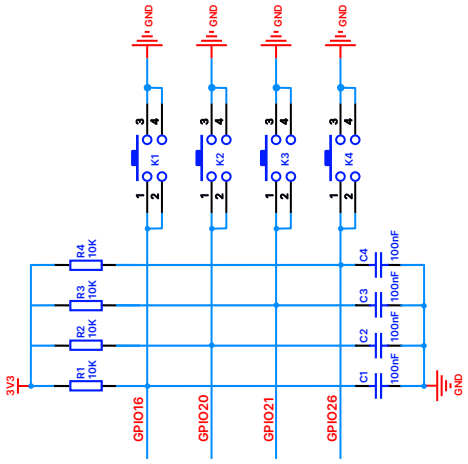
WIRING DIAGRAM FOR IR



PARTS

1. Button 1 - GPIO 16
2. Button 2 - GPIO 20
3. Button 3 - GPIO 21
4. Button 4 - GPIO 26
5. 2.8 Inch Screen with Resistive Touch
6. 40 PIN Female Header
7. Embedded IR GPIO 23

WIRING DIAGRAM FOR BUTTONS



ASSEMBLY INSTRUCTIONS

1. Get your fully assembled POD + HDMI-USB Module.
2. Remove your micro SD Card from the POD case to prevent any damage
3. Make sure that your Zero 2 W Board has the Male 40-PIN Headers that are soldered and aligned properly.
4. Remove the Top Covers of the POD Case and POD HDMI-USB Module.
5. Connect the 40-PIN Female connector on the POD DISPLAY Module with the 40-PIN Male Headers on the Zero 2 W Case. Make sure that the PINS are aligned properly.
6. Insert micro SD Card.
7. Connect other peripherals as needed like another HDMI Display and Power and other USB Accessories (Keyboard, Mouse, etc.)

NOTE:

During disassembly, take extra caution not to bend the GPIO PIN on the Raspberry Pi Board.

You may need to use a plastic prying tool to remove the POD Display Module.

INSTALLING THE DISPLAY DRIVER

1. You will need access to the Terminal App in your Raspberry Pi Zero. You can do this either via SSH or connecting another HDMI Display and Keyboard to your setup.
2. Connect to the INTERNET.
3. Type the text below in the “TERMINAL” to initiate the installation of the POD DISPLAY Driver.

```
curl https://download.argon40.com/podsystem.sh | bash
```

4. Select the appropriate Menu Settings.
5. Reboot to initiate the changes.
6. Type the command below in the TERMINAL to enter the POD SYSTEM CONFIG Settings,

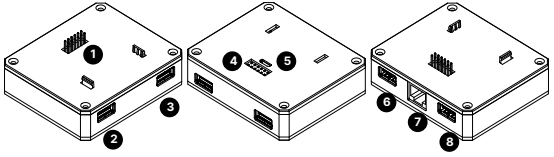
```
argonpod-config
```

7. To uninstall the POD Script type in the TERMINAL the command

```
argonpod-uninstall
```

8. Always REBOOT after changing any configuration of uninstallation in order for changes to take effect.

ARGON POD LAN-USB
MODULE



PARTS

TOP
1. 12-PIN Male Connector (USB Communication)

FRONT SIDE
2. USB A Port 1
3. USB A Port 2

BOTTOM
4. 12-PIN Female Port (USB Communication)
5. microUSB Female Port (Power IN)

BACK SIDE
6. USB A Port 3
7. LAN Ethernet Port
8. USB A Port 4

ASSEMBLY INSTRUCTIONS

1. Get your fully assembled POD + HDMI-USB Module.
2. At the Bottom of the POD HDMI-USB Module there is a 12-PIN Female Port.
3. Connect the 12-PIN Male Connectors of the POD LAN-USB Hub Module.
4. Insert micro SD Card.
5. Power the unit thru the POD HDMI-USB Module.
6. The unit is Plug and Play and should be detected by the Raspberry Pi OS.

Information and community engagement
Go to our FORUM **https://forum.argon40.com/**

Product Information
Visit https://www.argon40.com/

Digital Copies of Instruction Manuals
Go to https://www.argon40.com/blogs/argon-resources

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ARGON ONE M.2 SATA | NVMe

EON Pi NAS

ARGON ONE V2

NEO

DESIGNED FOR **RASPBERRY PI 4**

FORTY