



TOPOSENS

ECHO ONE[®]

Quick Start Guide



Quick Start Guide

For Use with Toposens ECHO ONE® Sensor and Toposens Processing Unit (TPU)

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For more information on the Toposens ECHO ONE® 3D Collision Avoidance System, its installation, configuration, and maintenance, please refer to the Instruction Manual.

For more information on advanced configuration, parametrization, and optimization of the Toposens ECHO ONE® system, please refer to the Application Manual.

These documents and other resources are available online at toposens.com/downloads

If you are experiencing difficulties setting up the system, please contact us at support@toposens.com

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Electrical Voltage Warning: Shut down power supply before installing or maintaining the sensor, TPU or wiring. Use the recommended fuses or other safety measures to avoid dangerous situations. **Qualified personnel only.**

Ultrasonic Emission Warning: Keep at least **0.15m / 6 inches distance** to an active sensor. Do not touch the front of an active sensor. Don't hold an active sensor up to ears or point at people or animals from close range. Do not operate the product in the vicinity of non-compatible ultrasonic devices.

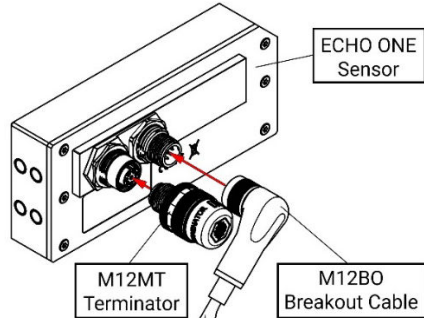
Automatic Startup Warning: When working on a product or machine, **consult its documentation** to avoid unexpected movement and to ensure a safe working environment.

Comprehensive Information: Read the **Toposens ECHO ONE® 3D Collision Avoidance System Manual** before installation, setup, use and maintenance of the product for more comprehensive information.

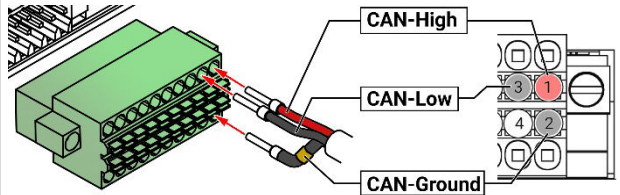
Personal and occupational Safety: Adhere to local and national regulations. Don't use the product as a safety component as it **does not offer a personal safety level.**

1
PREPARE COMPONENTS

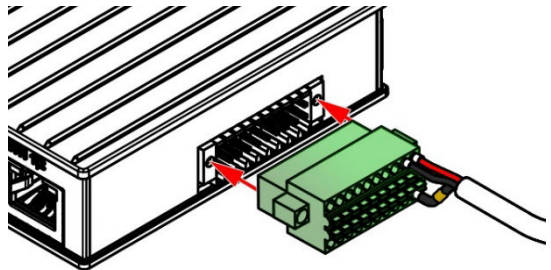
Ensure secure mounting of the sensor and TPU. Connect the included **M12MT Terminator** and **M12BO Breakout Cable** to the sensor and tighten sufficiently.


2
CONNECT SENSOR TO TPU

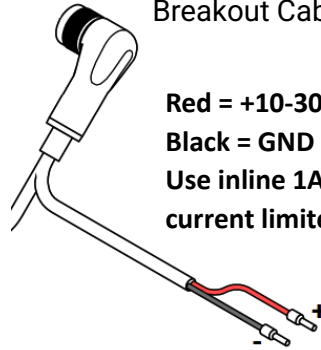
Connect the conductor wires of the included **M12BO** cable to the corresponding terminals "CAN High", "CAN Low" and "CAN Ground" on the included **terminal block**.



Plug and secure the terminal block in the **matching socket** on the TPU.



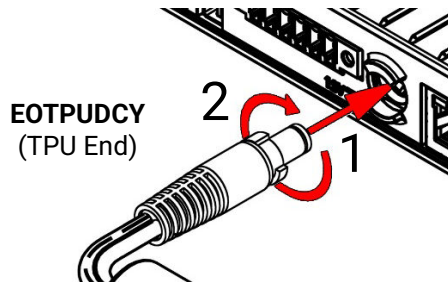
Connect the power conductors of the **M12BO** cable to an **unpowered** power source through a **1A slow blow DC-rated fuse** or use a current limited power supply. The permissible voltage range is **10-30 VDC**.



M12BO
Breakout Cable

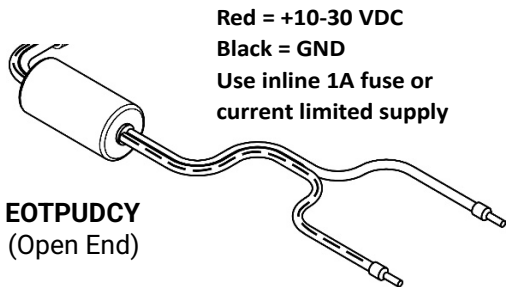
Red = +10-30 VDC
Black = GND
Use inline 1A fuse or current limited supply

Plug and lock the included **EOTPUDCY** cable to the TPU's power input.



EOTPUDCY
(TPU End)

Connect an **unpowered** power source through a **1A slow blow DC-rated fuse** or use a current limited power supply to the open ended conductors of the cable. The permissible voltage range is **10-30 VDC**.

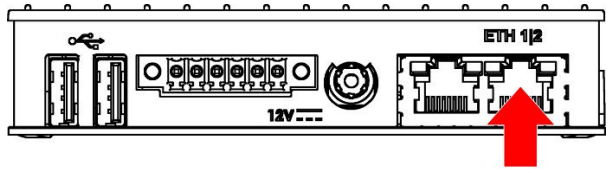


EOTPUDCY
(Open End)

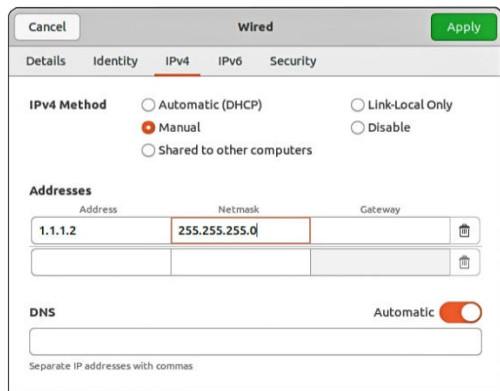
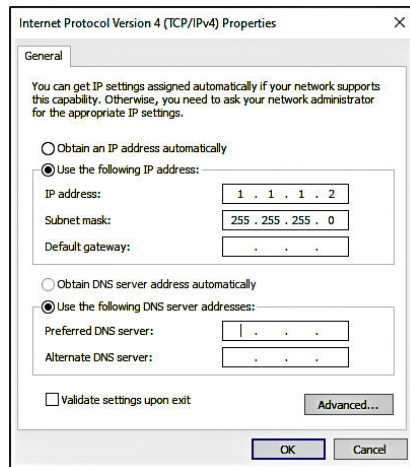
Red = +10-30 VDC
Black = GND
Use inline 1A fuse or current limited supply

3
CONNECT TPU TO PC

Use **Ethernet cable** (CAT5e RJ45) to connect your PC to the **ETH2-Port** of the TPU.



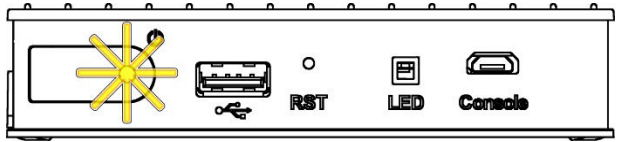
Set your network adapter's **IPv4 settings** to **DHCP** or configure the **static IP** "1.1.1.2". Disconnect other network connections.



4
POWER ON THE SYSTEM

Check all connections and enable the power supply.

The TPU's **power button** will **light up**. Wait 75 seconds for the system to fully start.


5
CONNECT TO THE TPU GUI

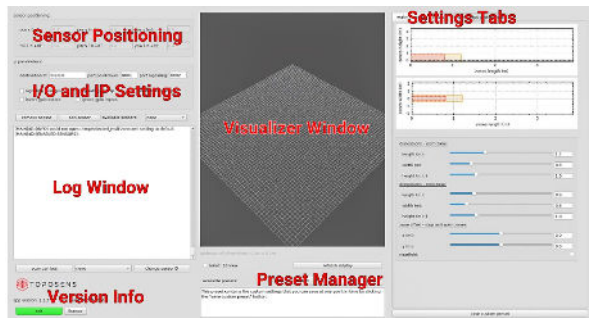
Start your **RDP-client software**. Use the following credentials:

Username: **toposens**

Password: **toposens**

and connect to host IP **"1.1.1.1"**.

The graphical user interface (GUI) of the TPU will appear.

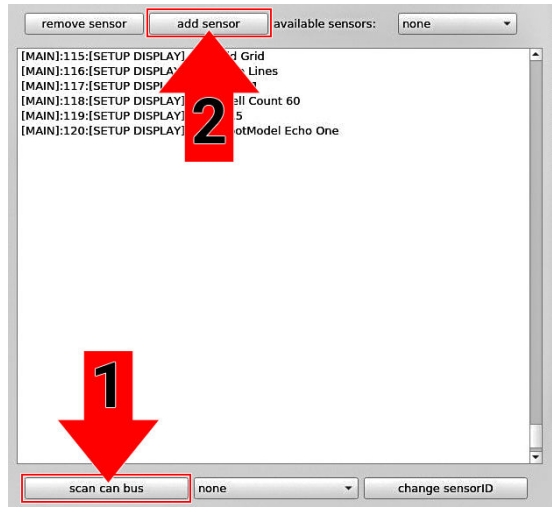


6
ESTABLISH COMMUNICATION WITH SENSOR

Click **“scan can bus”** button below the log window.

Check **drop down box** next to **“scan can bus”** button for the detected **sensor ID**.

Click **“add sensor”** and enter sensor ID without **“0x”**-prefix.



After a few seconds, the live **point cloud data** will be displayed in the central **visualizer window**.

