Mobileye 8 Connect

EyeNET User Manual v0.4

mobileye
An Intel Company

Table of Contents

1. EyeNET3

1.1 Introduction

Mobileye EyeNET3 adapter is a USB-C to Ethernet interface.
It is used for installation & calibration of the Mobileye 8 Connect system.

Mobileye 8 Connect service port uses a USB Type C interface for faster & reliable data transfer rate.

NOTE →

The USB Type C connector has a specific connection layout.
Please refrain from connecting it to a cellular phone with a similar connector

1.2 EyeNET3 Components Overview

The EyeNET3 (P/N CAB000613) adapter is a single cable adapter.

Below you can find the connection layout:

Property	Description
USB type C	Mobileye 8 Connect system
RJ45 (ethernet connector)	Laptop ethernet port

1.3 EyeNET3 Technical specification

Property	Description
cable length	1.5 meter
Bit rate	1Gbps
Weight	120 grams

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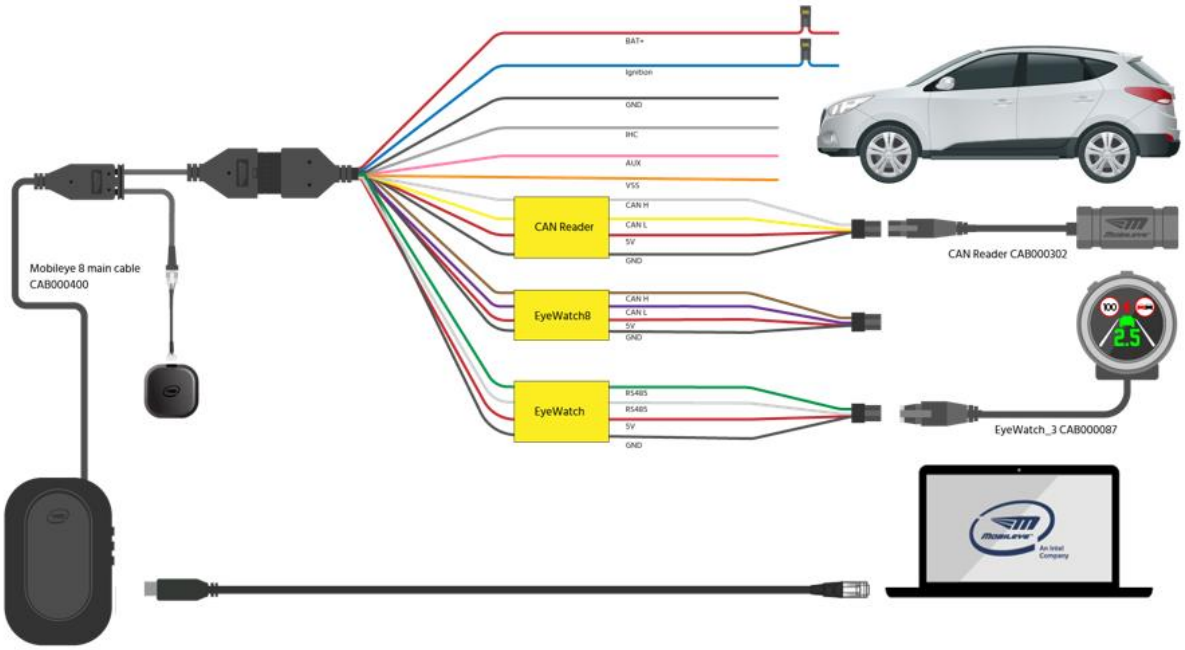
1.4 EyeNET3 Connection Scheme



NOTE →

If your laptop does not have a built-in ethernet port, please use a USB3 to ethernet adapter (see image below).
Same configurations are applied as described in section 3.

2. EyeNET1

2.1 Introduction

Mobileye EyeNET1 adapter is a RGMII to Ethernet interface.
It is used for installation & calibration of the Mobileye 8 Connect system.

Mobileye 8 Connect service port uses a RGMII interface (**R**educed **G**igabit **M**edia-**I**ndependent Interface) for data transfer.
The Ethernet port of the EyeNET provides a universal and very common connection method for the end-user.

The EyeNET Support up to 1Gbit/s transfer rate

2.2 EyeNET1 Components Overview

The EyeNET (P/N EYENET0001) adapter composed of the following elements:

- EyeNET – Ethernet service port interface
- EyeNET short flex flat cable x2
- Ethernet cable

description	P/N	
EyeNET main unit	ASY000355	
2 X EyeNET cable	BRD000350	
Ethernet cable	CAB000260	

2.3 EyeNET1 Connection description

The following paragraphs describes in detail the function of the cables and connections shown below:

Layout description	function	view
CONF	N/A	
RST	N/A	
LED	communication status	
RGMI port	communication	
Ethernet port	communication	
Reset switch		
Octopus	N/A	
SPI	N/A	

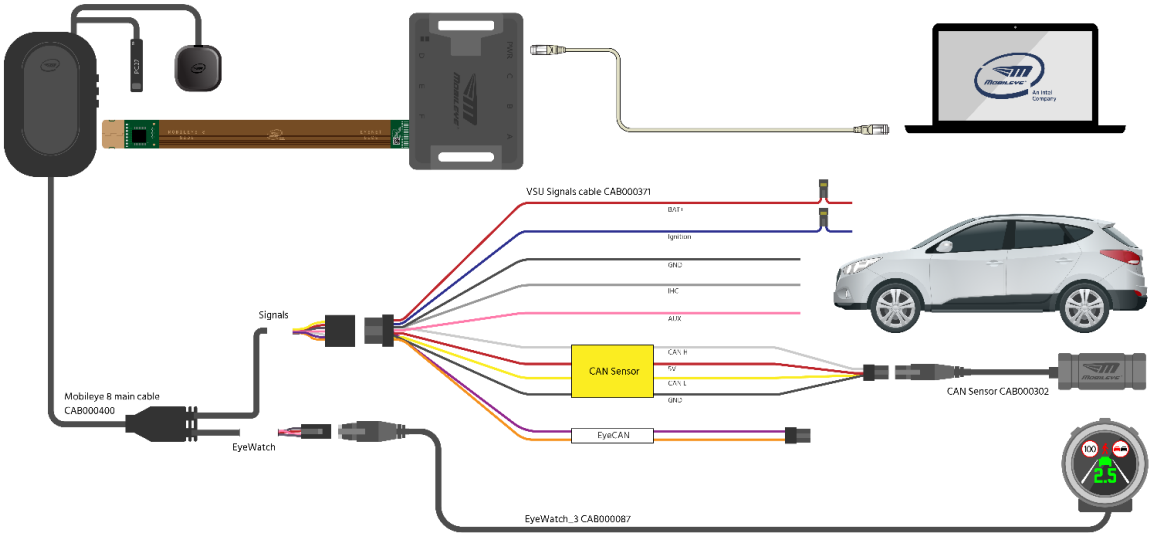
The Mobileye 8 service port Male connector (P2) is used for connection with the Mobileye EyeNet1 cable female connector labeled “xxx” (J5).

Wire Name	Wire Color	Connector	Connect to
EyeNet cable	Black	XX - Male	Mobileye 8 service port
EyeNet main unit	Black	XX – Female	EyeNet interface`s connector labeled "XXX"
EyeNET Ethernet port	Gray	RJ45	Laptop Ethernet port

2.4 EyeNET1 Technical specification

Property	Description
EyeNET short cable length	12cm
Ethernet cable length	1 Meter
Ethernet cable type	CAT5 / CAT6
Bit rate	1Gbps
Dimensions (W*L*H)	60.5mm X 91mm X 27mm
Housing	Black plastic
Weight	120 grams

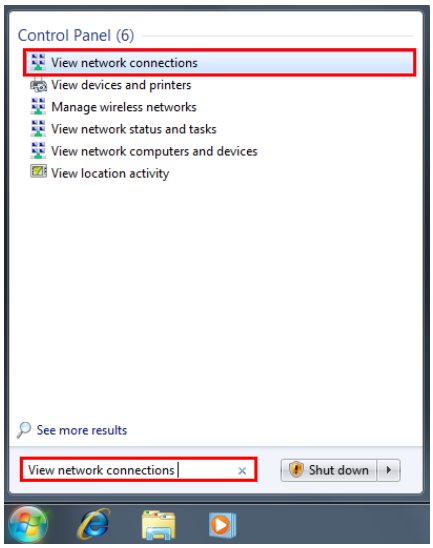
2.5 EyeNET1 Connection Scheme



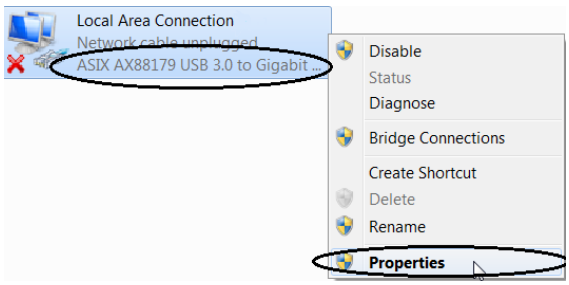
3. Ethernet port configuration

Please follow the below steps to configure the Ethernet adapter (either the build-in LAN port or USB to LAN adapter)

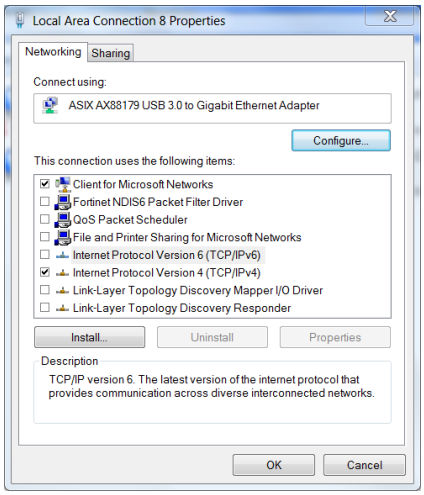
1. Click Start, and in the search field, type **View network connections**



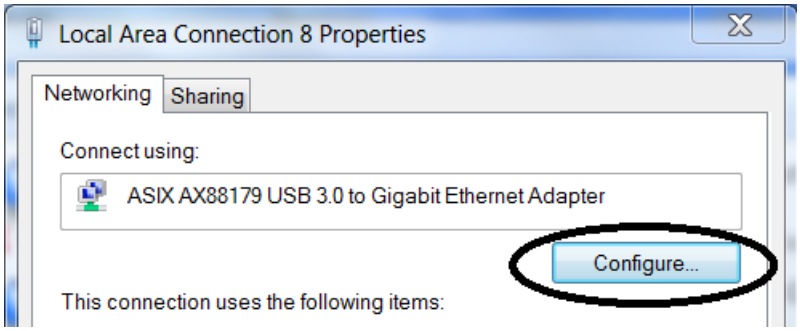
2. Press the right click on **Local Area Connection (ASIX AX88179 USB 3.0 to Gigabit Ethernet Adapter)** and press on Properties



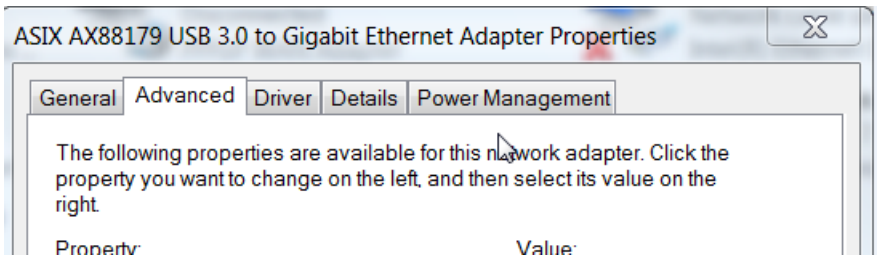
3. In the window "Local Area Connections Properties" uncheck all the [Check Box] except: **Client for Microsoft Network** and **Internet Protocol Version 4**



4. When completing step 4 above, press on the **Configure** button

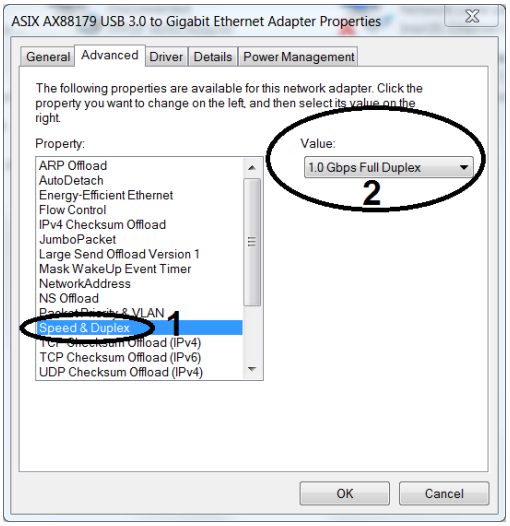


5. After pressing Configure a new Window will Open, Go to **Advanced** Tab

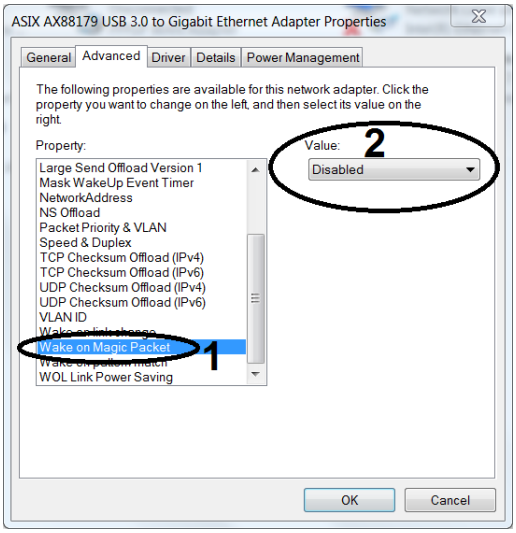


6. in the **Advanced Tab** Search for the following parameters and change them accordingly to the following settings:

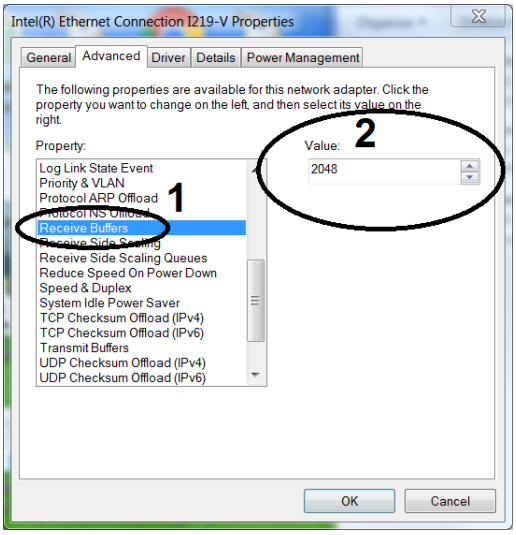
6.1 Speed Duplex – and change the Value to **1.0 Gbps Full Duplex**



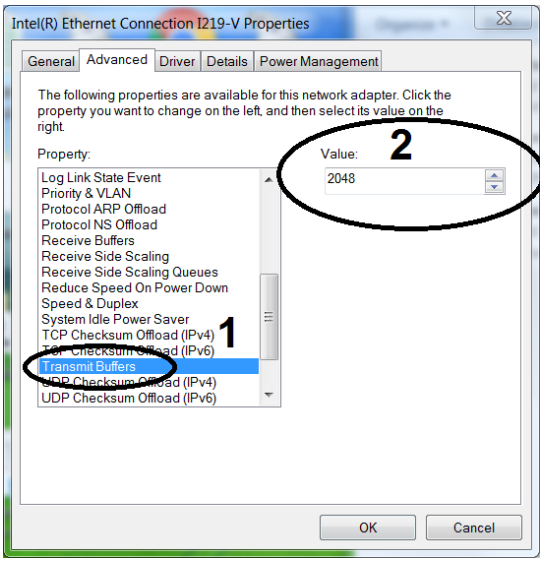
6.2 search **Wake on Magic Packet** - and change the Value to **Disabled**



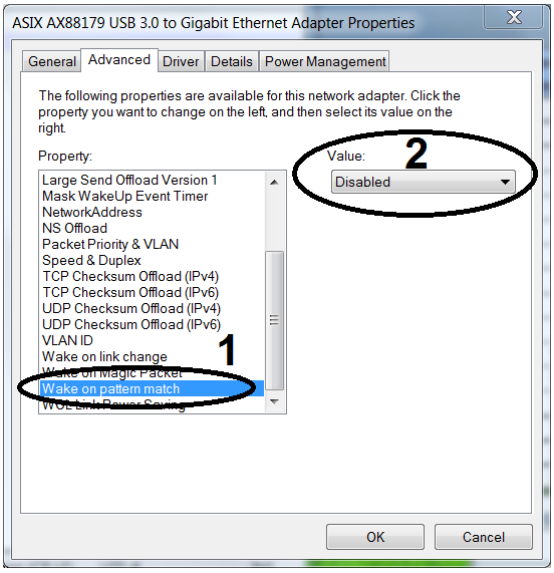
6.3 search **Receive Buffers** - and change the Value to **2048**



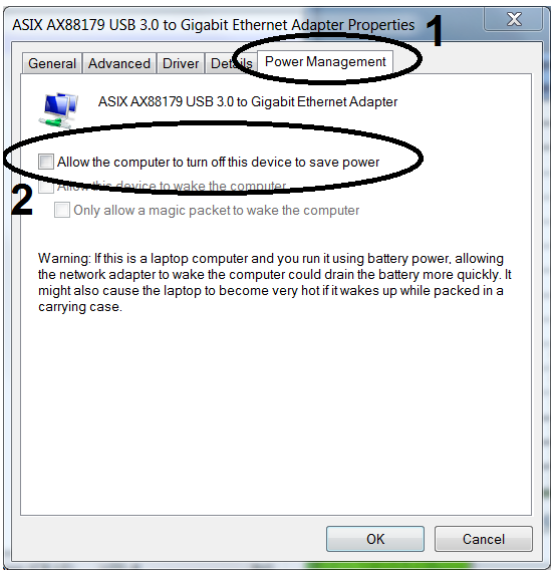
6.4 search **Transmit Buffers** - and change the Value to **2048**



6.5 search **Wake on pattern match** - and change the Value to **Disabled**



7. go to **Power Management** Tab and Uncheck the **Allow the computer to turn off this device to save power**



8. Press on **Ok** Button

4. Troubleshooting

In some cases when using of a USB to CAN adapter result a video delay in the calibration step, please connect Mobileye EyeNET directly to the build-in LAN port (if exist).
If not, try to change USB port. If the problem consists, try to replace the adapter.