Mobileye 8 Connect

EyeNET User Manual v0.4





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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
0	·

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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 (Reduced Gigabit Media-Independent 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	EyeNET
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

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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:

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

ASIX AX88179 USB 3.0 to Gigabit Ethernet Adapter Properties	X
General Advanced Driver Details Power Management	
The following properties are available for this network adapter. Click the property you want to change on the left, and then select its value on the right.	
Property: Value:	
ARP Officad AutoDetach Energy-Efficient Ethernet Flow Control IP4 Checksum Officad JumboPacket Large Send Officad Version 1 Mask WakeUp Event Timer NetworkAddress NS Officad Deutothere 2 VLAN Espeed Duplex To Obscham Officad (IPv4) TCP Checksum Officiad (IPv4)	•
ОКС	ancel

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

ASIX	AX88	179 USB 3.0	to Gig	abit Ethe	rnet	Adap	ter Pr	operties			X
Ger	neral	Advanced	Driver	Details	Pow	er Ma	nagen	nent			
TH pr rig Pr L M N N N N N N N N N N N N N N N N N N	ne folli operty ht. arge \$ lask V letwor S Offi acket peed CP CI DP C LAN I <i>L</i> ako / Ako / OL Li	owing prope y you want to Send Offload VakeUp Eve kAddress oad Priority & VL & Duplex tecksum Offl hecksum Of	tties are change I Version nt Time AN oad (IP) oad (IP) load (IP) load (IP) cket aving	available on the le	e for t ft, and ≣	his nei d then	work a select Value Disa	idapter. its value bled	Click th	Đ	
								OK		Cance	:I



6.3 search Receive Buffers - and change the Value to 2048

I	ntel(R) Eth	ernet Conn	ection I	219-V P	operties		(ingenie)		X
	General	Advanced	Driver	Details	Power Ma	anageme	nt		
8	The foll propert right.	owing prope y you want to	rties are change	available on the le	e for this ne ft, and then	twork ada select its	apter. Click value on th	the ie	
	Propert	y:				Value:	4		
	Log Lin Priority Protoc Recein Recein Recein Recein Recein Recein Recein CPC TCPC TCPC TCPC TCPC TCPC UDPC	nk State Ever & VLAN ol ARP Offloz ol INS Offloz ol INS Offloz ve Side Scali e Speed On 1& Duplex n Idle Power hecksum Offl nit Buffers thecksum Offl thecksum Offl	nt ad 1 ng Queu Power I Saver oad (IP) load (IP) load (IP)	ues Down (4) (6) (4) (6)	THE T	2048			
						0	к	Cano	el

6.4 search Transmit Buffers - and change the Value to 2048





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

AS	IX AX88179 USB 3.0 to Gigabit Ethernet Adapter Properties	_ <u>×</u>
	General Advanced Driver Details Power Management The following properties are available for this network adapter. Click the property you want to change on the left, and then select its value on the right. Value: 2 Property: Large Send Offload Version 1 Value: 2 Nask WakeUp Event Timer NetworkAddress NS Offload Disabled Packet Priority & VLAN Speed & Duplex TCP Checksum Offload (IPv6) Dup Checksum Offload (IPv6) UDP Checksum Offload (IPv6) UDP Checksum Offload (IPv6) E E VLAN ID Make on link change 1 E Wrot tank Revers Sources T T E	
	OK Can	cel

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

ASIX AX88179 USB 3.0 to Gigabit Ethernet Adapter Properties	J
General Advanced Driver Details Power Management	
ASIX AX88179 USB 3.0 to Gigabit Ethernet Adapter	
Allow the computer to turn off this device to save power	
2 Only allow a magic packet to wake the computer	
Warning: If this is a laptop computer and you run it using battery power. allowing the network adapter to wake the computer could drain the battery more quickly. It might also cause the laptop to become very hot if it wakes up while packed in a carrying case.	
OK Cancel	

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.