



CenturyArks Co., Ltd.

SilkyEvCam SYNC_IN/SYNC_OUT
Signal Connection
– Appendix –

Dated: 2020/10/25

<http://www.centuryarks.com/>

[English]

Synchronizing *SilkyEvCam*: SYNC_IN/SYNC_OUT connection

[Parts Model]

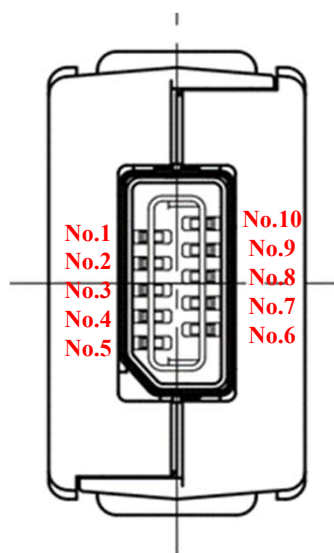
Receptacle (SilkyEvCam)	IX Series Connector (IX80G-B-10P : HIROSE)	
Plug (either for use)	IX30G-B-10S-CV(7.0) (HIROSE)	IX31G-B-10S-CV(7.0) (HIROSE)
Cable (UTP Cable*)	Cable diameter $\Phi 6.3 \sim 7.2 \text{mm}$ AWG#26~28, Core cable diameter $\Phi 0.95 \sim 1.05$	Cable diameter $\Phi 6.3 \sim 7.2 \text{mm}$ AWG#24~25, Core cable diameter $\Phi 1.1 \sim 1.25$

*Commercially available UTP(Unshielded Twisted Pair) cables are without standard(RJ-45) connectors.
Synchronous signal connection uses only 4-core wires of 8-core. You can connect 5-8-core to a free terminal.

[Cable]

Please make a cable referring to the following.

IX connector Plug

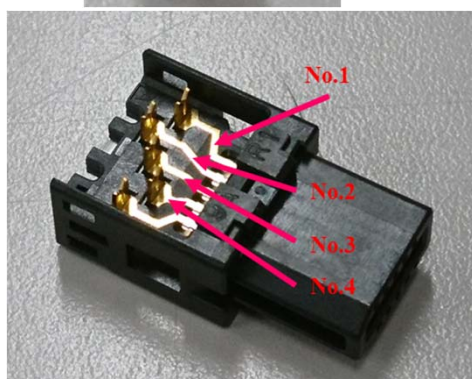
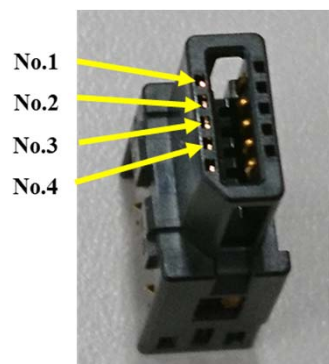
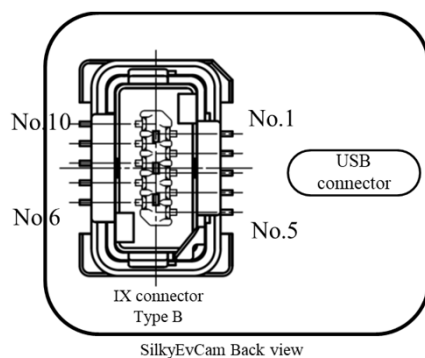


Pin No.	Signal	Pin No.	Signal
1	TRIGGER_OUT/SYNC_OUT_P +3.3V	6	TRIG_IN_N -opto-coupled
2	SYNC_OUT_N	7	No use
3	SYNC_IN_P -opto-coupled	8	No use
4	SYNC_IN_N -opto-coupled	9	No use
5	TRIG_IN_P -opto-coupled	10	No use

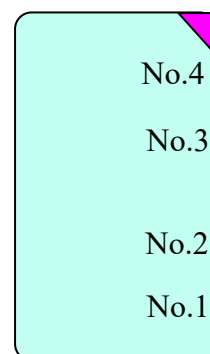


[English]

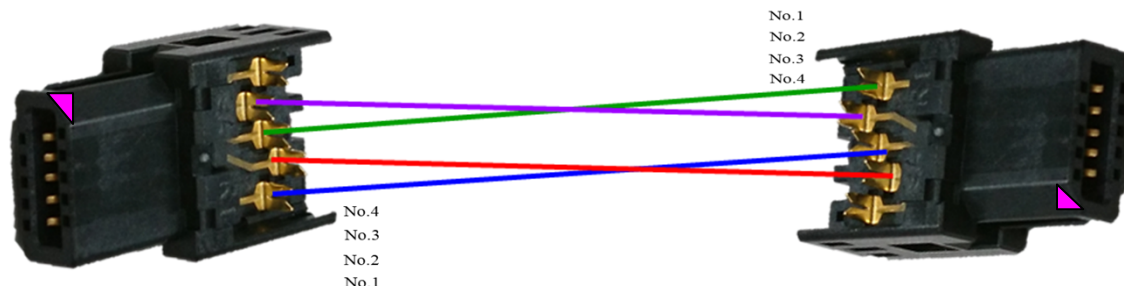
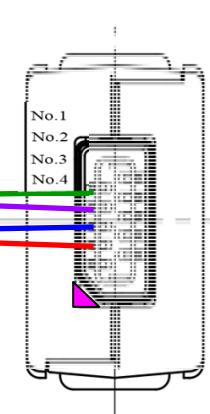
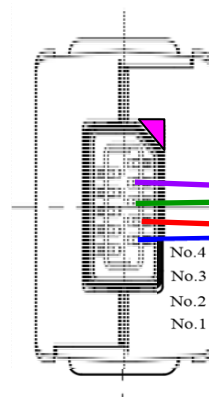
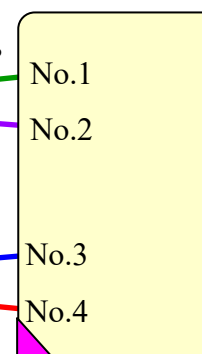
Synchronizing *SilkyEvCam*: SYNC_IN/SYNC_OUT connection



IX connector Plug



IX connector Plug

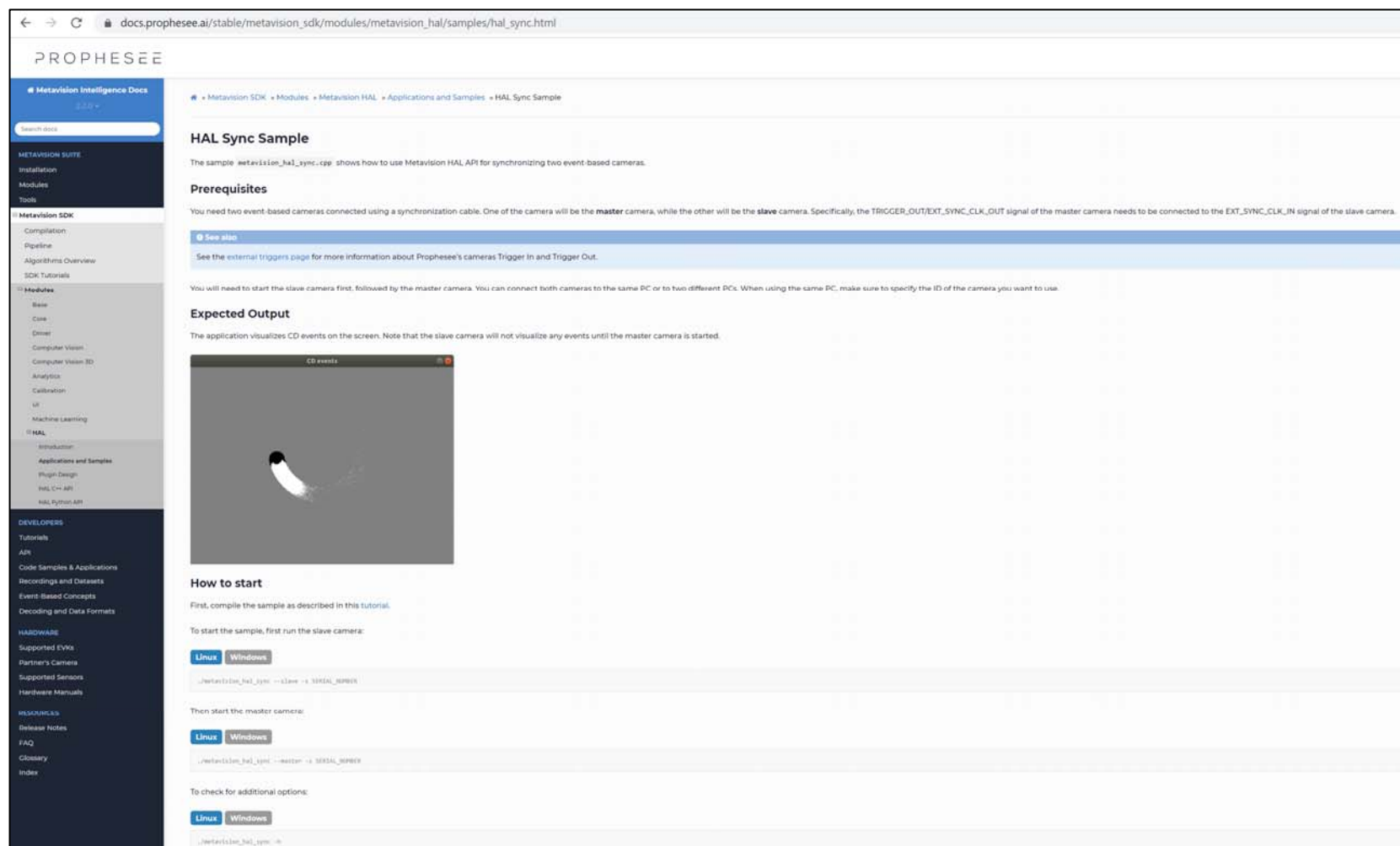


[English]

- Execute Sync sample

The following PROPHESSEE web site has a description of Sync Sample using metavision_hal_sync.exe.

https://docs.prophesee.ai/stable/metavision_sdk/modules/metavision_hal/samples/hal_sync.html?highlight=sync



The screenshot shows the PROPHESSEE documentation website for the HAL Sync Sample. The page is titled "HAL Sync Sample" and is part of the "Metavision SDK" documentation. It includes a sidebar with navigation links for "Metavision Intelligence Docs", "Metavision Suite", "Metavision SDK", "Modules", "Tools", "DEVELOPERS", "Tutorials", "API", "Code Samples & Applications", "Recordings and Datasets", "Event-Based Concepts", "Decoding and Data Formats", "HARDWARE", "Supported EVIs", "Partner's Camera", "Supported Sensors", "Hardware Manuals", "RELEASENOTES", "Release Notes", "FAQ", "Glossary", and "Index".

The main content area includes the following sections:

- HAL Sync Sample**: The sample `metavision_hal_sync.cpp` shows how to use Metavision HAL API for synchronizing two event-based cameras.
- Prerequisites**: You need two event-based cameras connected using a synchronization cable. One of the camera will be the **master** camera, while the other will be the **slave** camera. Specifically, the `TRIGGER_OUT/EXT_SYNC_CLK_OUT` signal of the master camera needs to be connected to the `EXT_SYNC_CLK_IN` signal of the slave camera.
- See also**: See the external triggers page for more information about Prophessee's cameras Trigger In and Trigger Out.
- Expected Output**: The application visualizes CD events on the screen. Note that the slave camera will not visualize any events until the master camera is started.
- How to start**: First, compile the sample as described in this tutorial. To start the sample, first run the slave camera:


```
Linux Windows
./metavision_hal_sync --slave -s SERIAL_NUMBER
```

 Then start the master camera:


```
Linux Windows
./metavision_hal_sync --master -s SERIAL_NUMBER
```

 To check for additional options:


```
Linux Windows
./metavision_hal_sync -h
```