



*SilkyEvCam* SYNC\_IN/SYNC\_OUT  
Signal Connection  
– Appendix –

Dated: 2020/10/25

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

[ English ]

# Synchronizing *SilkyEvCam*: SYNC\_IN/SYNC\_OUT connection

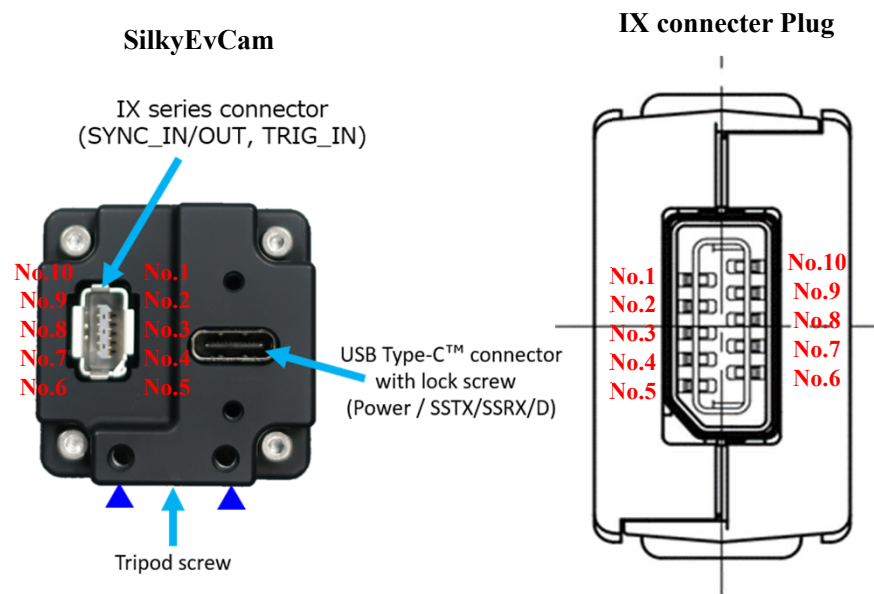
[ Parts Model ]

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 ]

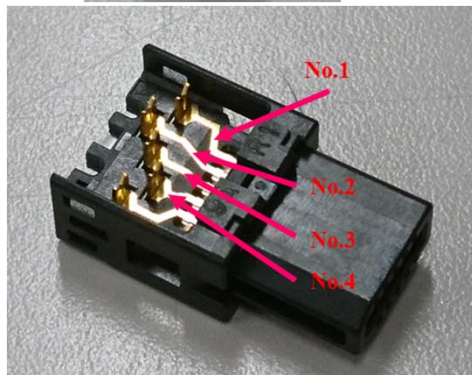
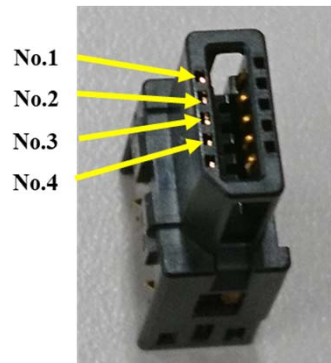
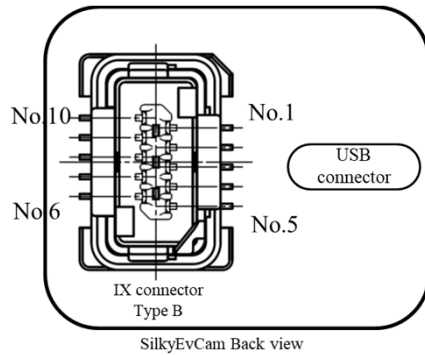
Please make a cable referring to the following.



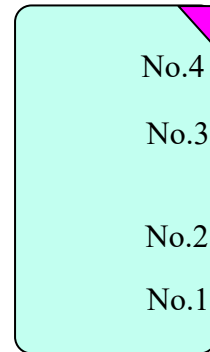
Pin No.	Signal	Pin No.	Signal
1	TRIGGER_OUT/SYNC_OUT_P +3.3V	6	TRIG_IN_N -opto-coupled
2	SYNC_OUT_N	7	No use
3	SYNC_IN_P -opto-coupled	8	No use
4	SYNC_IN_N -opto-coupled	9	No use
5	TRIG_IN_P -opto-coupled	10	No use

[ English ]

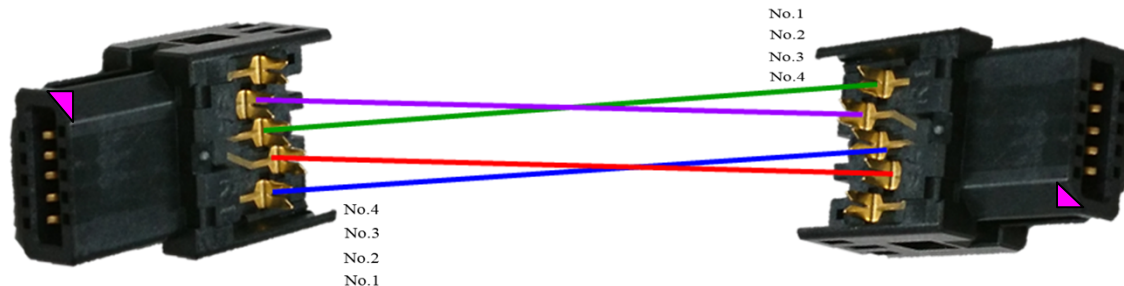
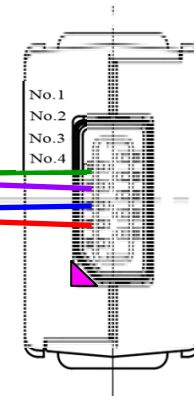
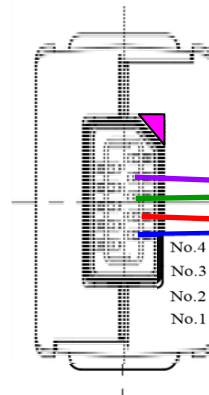
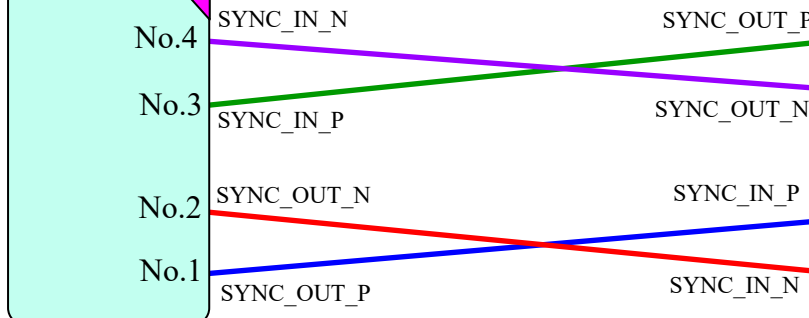
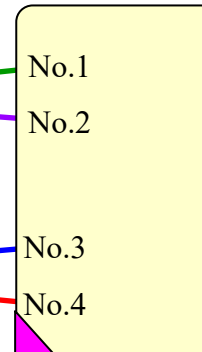
# Synchronizing *SilkyEvCam*: SYNC\_IN/SYNC\_OUT connection



IX connector Plug



IX connector Plug

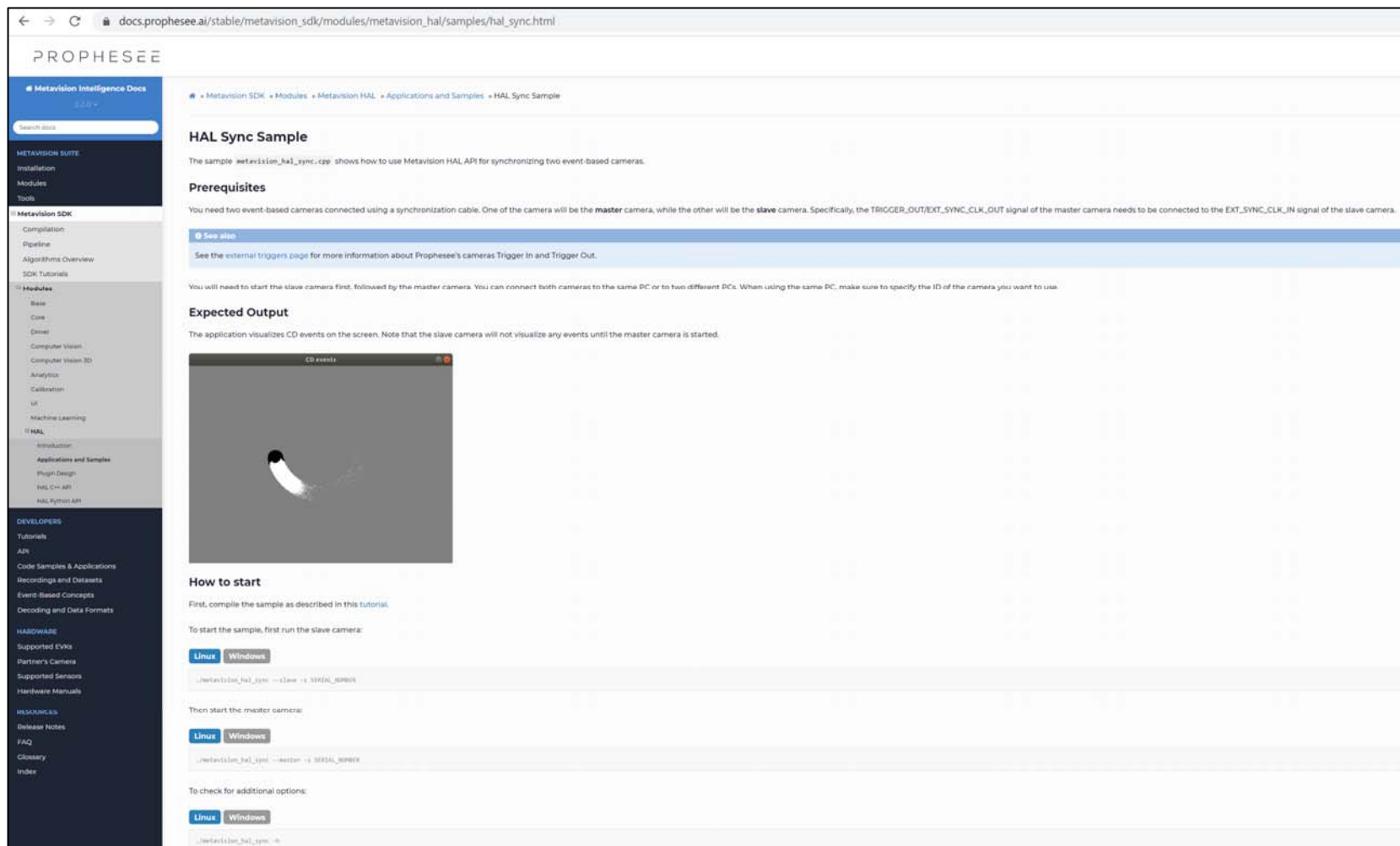


[ English ]

## - Execute Sync sample

The following PROPHESÉE 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](https://docs.prophesee.ai/stable/metavision_sdk/modules/metavision_hal/samples/hal_sync.html?highlight=sync)



The screenshot shows the PROPHESÉE documentation website for the HAL Sync Sample. The page title is "HAL Sync Sample" and it describes how to use the Metavision HAL API for synchronizing two event-based cameras. The page includes a search bar, a navigation menu, and a main content area with sections for prerequisites, expected output, and how to start.

**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 Prophesee's cameras Trigger In and Trigger Out.

You will need to start the slave camera first, followed by the master camera. You can connect both cameras to the same PC or to two different PCs. When using the same PC, make sure to specify the ID of the camera you want to use.

**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
```