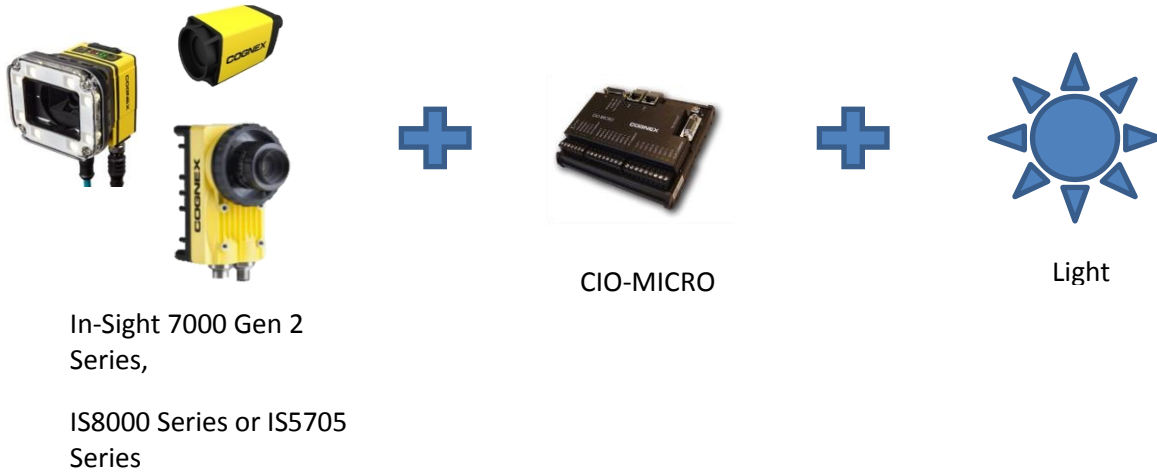


SurfaceFX sample job for use with In-Sight Master, CIO-MICRO and External Light



This MASTER job requires a single start signal – this could be from a photo eye when the part is in position; or a PLC; etc. After In-Sight receives the start sequence signal – it will trigger itself until all 4 images are acquired. All of the MASTER->CIO-MICRO jobs are designed to function this way.

Works on all IS8000, IS7000G2 and 5705 systems connected to the CIO-MICRO. Any single quadrant light or a combination of lights can be used. Keep in mind – the light will need to have bare wires and be limited to the power output from the CIO-MICRO (24V).

Setup:

- Hook up the light to CIO-MICRO. This job uses Discrete Out 0,1,2, and 3.
 - Make note which direction the light is coming in from each Discrete Output connection
 - Example of using a CCS quadrant controlled light is below
- Load job
- Connect to the CIO-MICRO
- Set update rate on CIO-MICRO to 3ms
- Set each Discrete output to Pulse and 10ms
- Adjust the Gain and Offset (these jobs were created on the 8000 platform therefore the gain and offset is **DRASTICALLY** different on the 5705. Please adjust these accordingly in A0)

Test setup:

- Set the EditInt in cell E5 to 2000 seconds.
 - This will put a delay between each trigger so you can verify the light is working, and the quadrants are correctly enabled and aligned.
- Once you verified what each discrete output matches each quadrant, correct the image references in SurfaceFX as necessary.

- Set the EditInt in cell E5 to 5ms.
 - Verify the timing is correct, you may need to increase this depending on your light setup.
- Save the job for your setup.

Deployment

- Enable all cells based on Cell A31.
- Use the SurfaceFX image in cell A30, or any of the other images captured to complete your application setup.

Example 1: HW Setup

IS8000/IS7802/IS5705 using CIO-MICRO and CCS quadrant controlled light. This setup requires breakout cable Gardasoft PP716 adapter or bare wires.

Connect one end of the cable to the CCS quadrant controlled light:

ICRR-HPR2S-75RD or ICWR-HPR2S-150SW or ICWR-HPR2S-75SW

Connect the flying leads from the adapter cable to the CIO-MICRO:

- Grey is Discrete Output 3
- Black is Discrete Output 2
- Blue is Discrete Output 1
- White is Discrete Output 0
- Brown is power and connected to +24V on the CIO-MICRO.
- Output Common on the CIO-MICRO is connected to Ground on the CIO-MICRO.

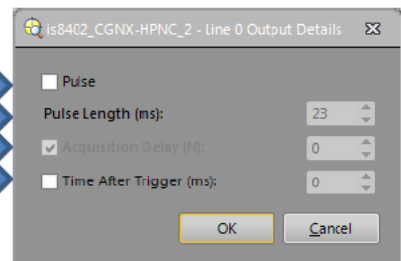
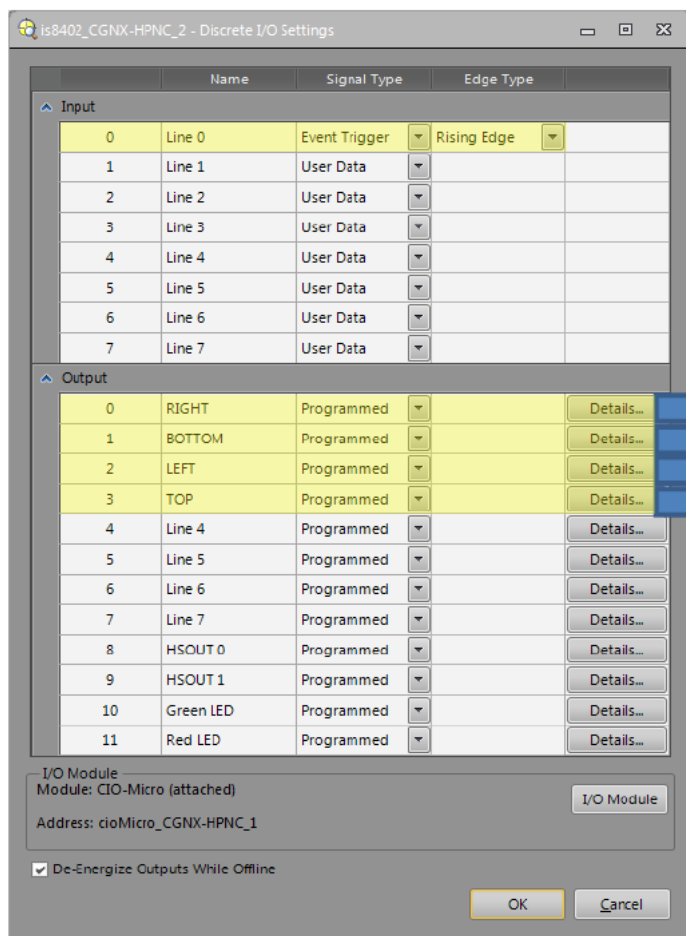
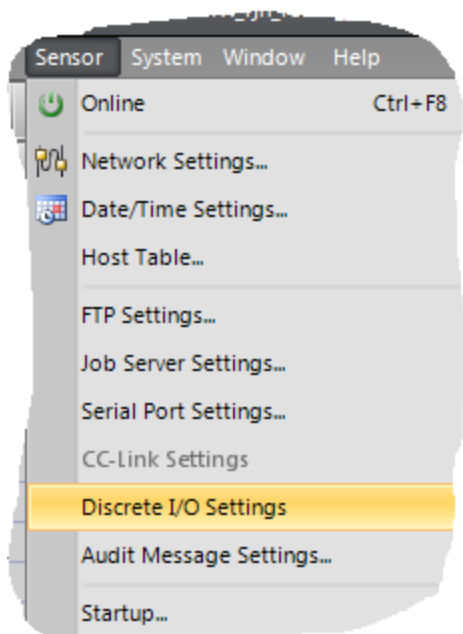
When using the IS8000, a bracket has been made to position the 8000 to the light: BKT-HPR2-150-IS8

Example 2: HW setup

IS8000/IS7802/IS5705 using CIO-MICRO and 4 x Smart Vision lights. This example uses the IS8000 to demonstrate the setup. You will need the yellow IO cable(CCB-M8IO-xx) for this setup.

NOTE: These SVL lights are NOT overdriven lights

Set the IO configuration:



The input Event Trigger is to start the sequence.

In the SFX_rev07..... job sample – this is monitored in cell C8.

If using the SurfaceFX_Sample_External_Light_CIO-MICRO job – it does not need this input event – it just needs to be triggered.

Connect the SVL lights to the CIO-MICRO:

