

Date	18-Jul, 2019
Reference No.	GSC17072019-SI

Subject

Announcement: Additional functions and specification changes to PF series and POD series control units to improve noise resistance

What's new?

We have found that in rare cases, the PF Series and POD Series strobe control units may malfunction when used in environments with a high level of external noise.

To improve noise resistance, we have added additional functions and changed the specifications for these series.

1. Subject models

Product Code	Model name
2001187	PF-A16048-4
2001127	PF-A4048-2
2001189	POD-22024-4-PEI
2001070	POD-5024-2-PEI

※This is limited to the case of using parallel communications or trigger signal input.

2. Malfunction details

1. Operating any one of the OUTWR, DLYWR, or PLSWR signals may unintentionally change the value of the B8 signal or other WR signals.
2. When flashing multiple channels at once with a trigger signal input, other channels may also be turned on.

3. Software filter time settings with parallel communications

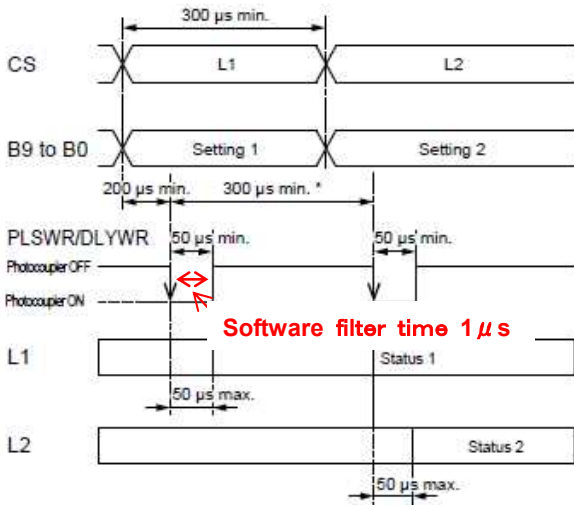
In instruction guide, we indicate that the filter time of OUTWR, DLYWR and PLSWR signals with parallel communications is min 50 μ s.

To improve the noise resistance, we will increase the filter time of software.

※1 μ s \Rightarrow changed to 49 μ s

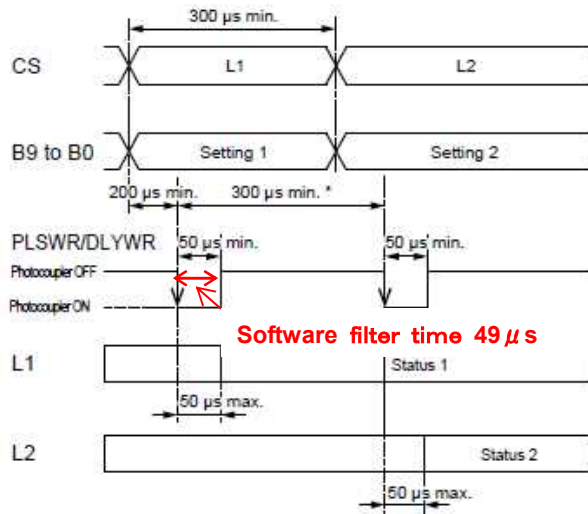
Before the changes

Strobe Time or Lighting Delay



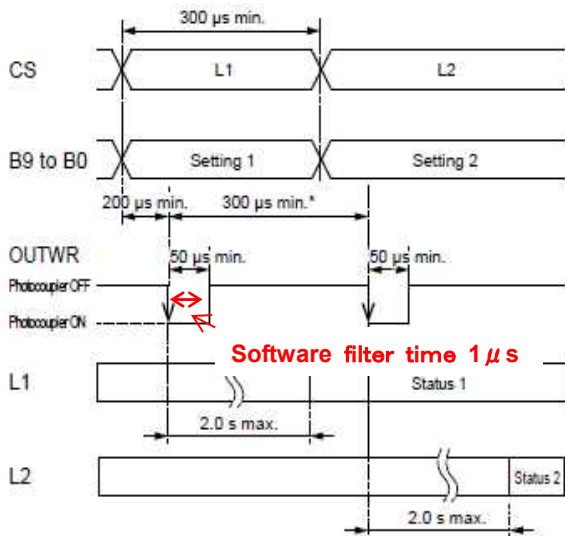
After the changes

Strobe Time or Lighting Delay



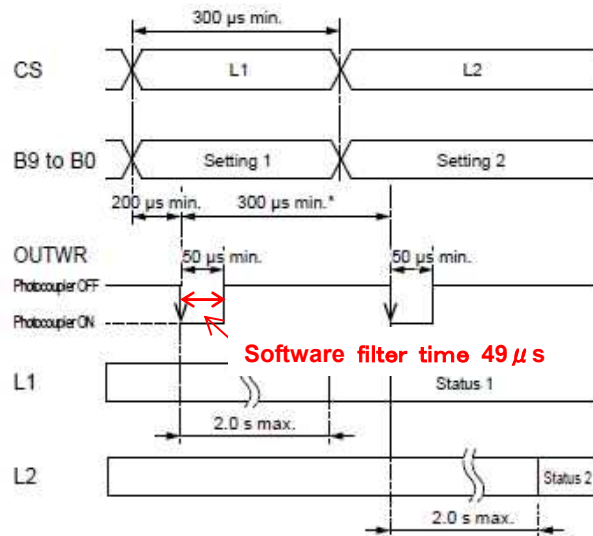
Before the changes

Output Voltage



After the changes

Output Voltage



1. Sequence for writing data

4. Additional functions of trigger signals

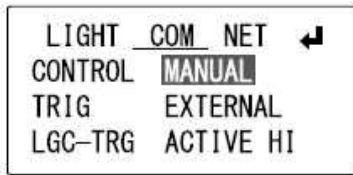
We add the functions which can adjust the filter time settings to trigger input.

(Standard model: 1 μs~50 μs)

It is possible to prevent from the effect of external noise with adjusting the filter values above.

4-1. PF series control units

4-1-1. Menu display and additional items



2. COM Menu Display (operation setting display)

TRG-FILTER1 TRG-FILTER2	1 to 50	1	<p>Sets the trigger filter time. (Unit: μs)</p> <p>Set in the event that noise is mixed with the trigger signal. Signals with a duration shorter than the set trigger filter time will be regarded as noise and discarded by the Control Unit.</p> <p>TRG-FILTER1 and TRG-FILTER2 correspond to the channels L1 and L2, respectively.</p>
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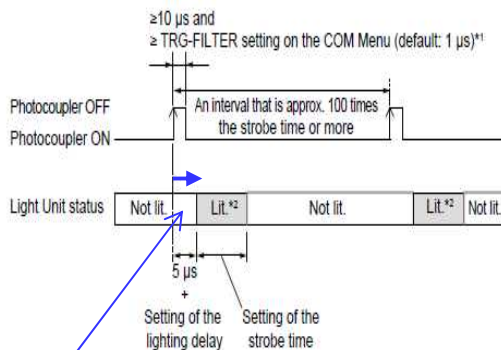
3. Extract of additional functions from Instruction guide (Trigger filter time settings)

PF-A4048-2 : TRG-FILTER1,2

PF-A16048-4 : TRG-FILTER1,2,3,4

4-1-2. Trigger signal input sequence

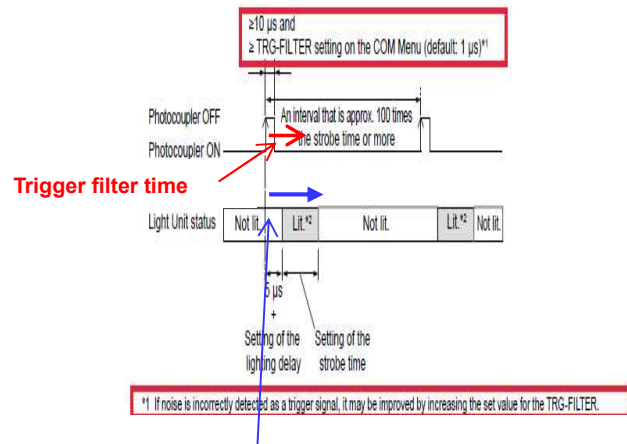
Before changes



More than $10\ \mu\text{s} + 5\ \mu\text{s} +$ lighting delay settings ($0 \sim 100\ \mu\text{s}$)

Fixed value $1\ \mu\text{s}$ of TRG-FILTER is included in the $5\ \mu\text{s}$ above.

After changes



More than $10\ \mu\text{s}$ and TRG-FILTER settings ($1\ \mu\text{s} \sim 50\ \mu\text{s}$)

$+5\ \mu\text{s} +$ lighting delay setting ($0 \sim 100\ \mu\text{s}$)

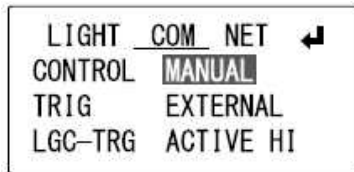
$1\ \mu\text{s}$ of TRG-FILTER settings is included in the $5\ \mu\text{s}$ above.

Fixed value $1\ \mu\text{s}$ is included in the $5\ \mu\text{s}$ above.

4. Trigger input sequences

4-2. POD series control units

4-2-1. Menu display and additional items



5. COM Menu Display (operation setting display)

TRG-FILTER1 TRG-FILTER2	1 to 50	1	Sets the trigger filter time. (Unit: μs) Set in the event that noise is mixed with the trigger signal. Signals with a duration shorter than the set trigger filter time will be regarded as noise and discarded by the Control Unit. TRG-FILTER1 and TRG-FILTER2 correspond to the channels L1 and L2, respectively.
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6. Extract of additional functions (Trigger filter)

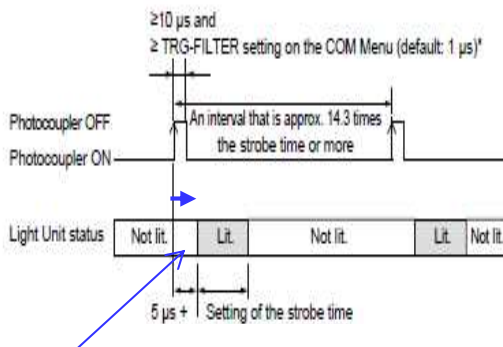
POD-5024-2-PEI : TRG-FILTER1,2

POD-22024-4-PEI : TRG-FILTER1,2,3,4

4-2-2. Trigger input sequence

(1) When the lighting mode is set to O/D Mode

Before changes



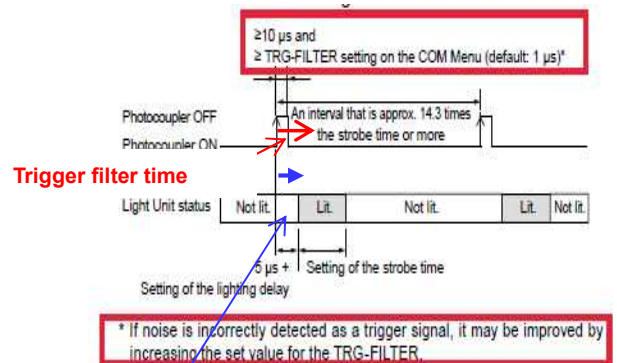
More than $10 \mu\text{s} + 5 \mu\text{s} +$ lighting delay settings

($0 \sim 100 \mu\text{s}$)

Fixed value $1 \mu\text{s}$ of TRG-FILTER is included

in the $5 \mu\text{s}$ above.

After changes



More than $10 \mu\text{s}$ and TRG FILTER settings ($1 \mu\text{s} \sim 50 \mu\text{s}$)

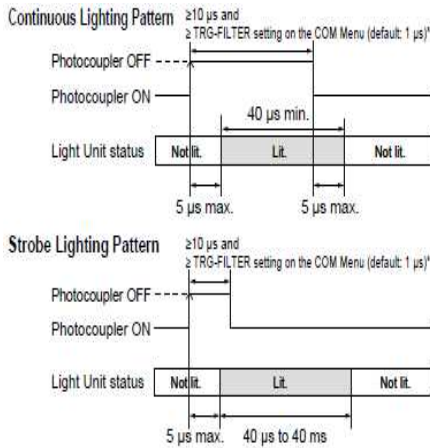
$+5 \mu\text{s} +$ lighting delay setting ($0 \sim 100 \mu\text{s}$)

$1 \mu\text{s}$ in TRG FILTER settings is included in the $5 \mu\text{s}$ above.

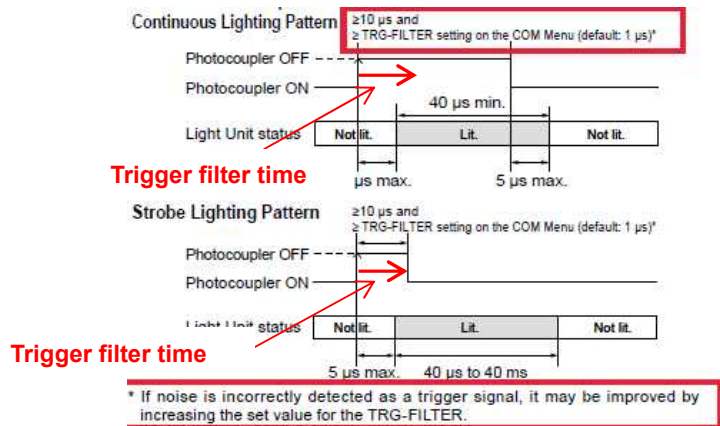
Fixed value $1 \mu\text{s}$ is included in the $5 \mu\text{s}$ above.

(2) When the light mode is set to PWM Mode

Before changes



After changes



8. Trigger input sequence

If you could not change the lighting delay, the cables with enhanced noise resistance properties are also available.

5. The products after changes

These changes are applied to the subject models from the production in August, 2019.

6. The download of Instruction guide from our website

The instruction guide after changes can be downloaded from our website on 1st August, 2019.

For any other inquiries, please feel free to contact us. Thank you.

CCS Global Sales Control section