

Digital Overdrive Controller

LAN Communication Multi-channel Overdrive Controller [IJS Series]

Achieve over four times the constant light output with overdrive up to 36V

Six models ranging from 30W/ 2ch to 40W /8ch lined up !



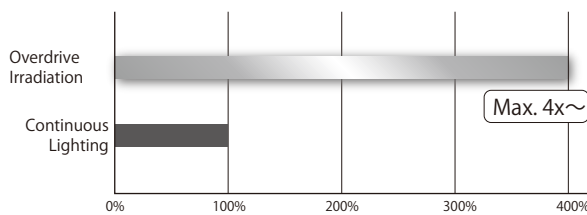
Ideal for high-speed motion imaging applications, as they allow easy synchronization of LED illumination and camera exposure timing.



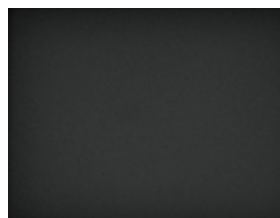
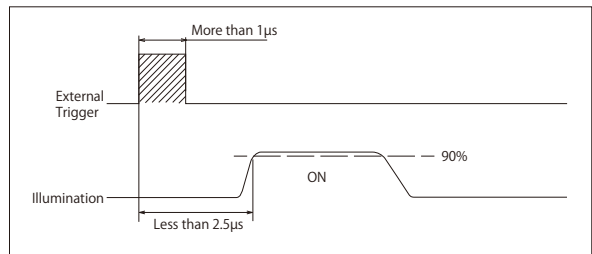
- The body size is more compact compared to the conventional SAG Series.
- 256 levels of output control are achievable, ranging from 6V up to the set SAG value.
- There are four connection ports available, allowing control from up to four computers.

Enhanced Illumination Effect Through Overdrive Dimming

- By connecting DC12V LED illumination and overdriving it up to a maximum of 36V, it is possible to achieve illumination that is more than 4 times brighter than continuous lighting.
- In scenes where the object moves rapidly, increased light output allows for high-speed motion imaging to be achieved.
- By increasing the aperture value of the lens, the depth of field expands, allowing for tolerance in focus even with minor shifts caused by equipment vibrations.



Responsiveness of External Trigger



[Continuous Lighting]

- Controller : ILP-30M2
- Image Grayscale Value: 53/255
- Used Illumination: IHMA-66/60R
- Shutter Speed: 1/40,000



[Overdrive Irradiation]

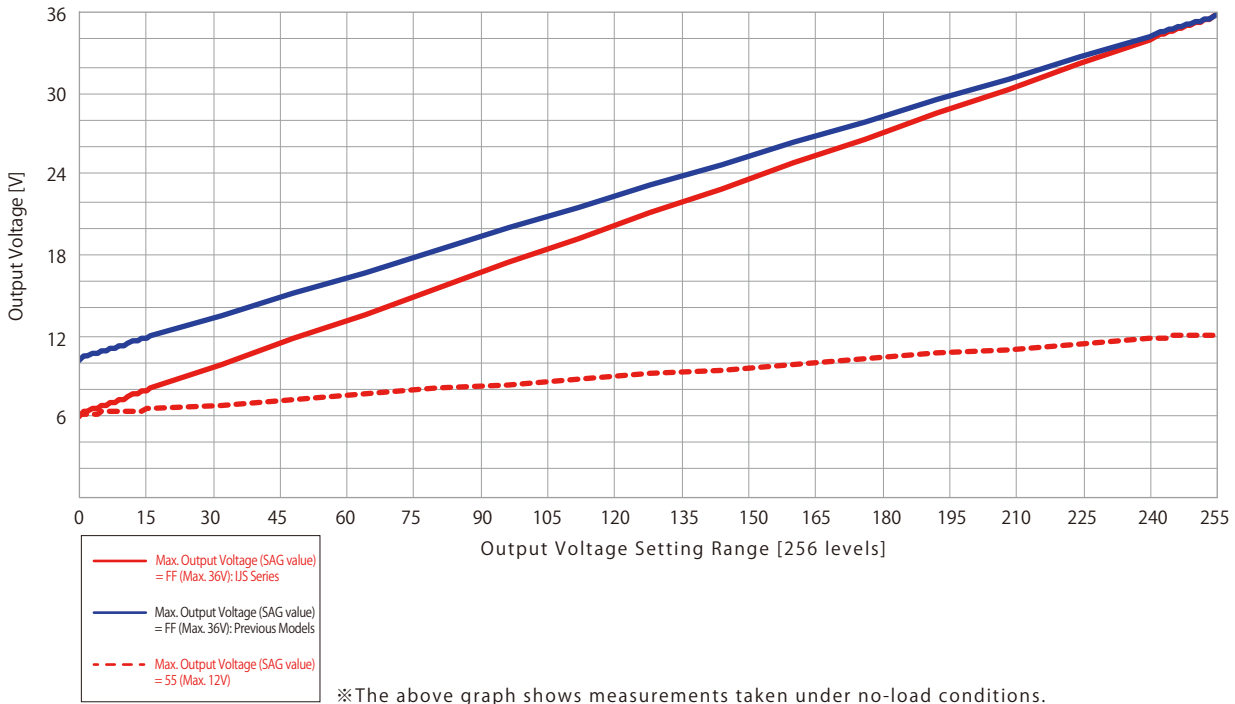
- Controller : IJS-30M2-TP
- Image Grayscale Value: 230/255
- Used Illumination: IHMA-66/60R
- Shutter Speed: 1/40,000

- IDBB-LSRF
- IDBC-LSR
- IDBB-LSRH
- IDBB-LSRA
- IDBB-LSRS
- IDBC-LSRC
- IDBB-LSRC
- IDBC-RE
- IDBB-RE
- IDBA-RK
- IQDH-RE
- IMAR-D_8ch
- IDR-LA-8ch
- IDRA-T-8ch
- IMAR-D
- IMAR-CT D
- IHR-LE
- IHRB · IHRA
- IDR-F
- IDR-F33/16
- IDR
- IDR-LA
- IDRA-T
- IFR · IPR
- IDBA-HM
- IDBA-HMS
- IDBA-HMS-IR
- IDBA-FD
- IDBA-LEH2
- IDBA-LEH
- IDBA-LE
- IDBA-SE
- IDBA-SL
- IDBA
- IDBA-Q
- IFLA · IFLB
- IDHM
- IHMA
- IHMA-V
- IFPA
- IFD-IR
- IHMA-40D
- IFPA-D
- IPOC
- IFHA
- IDDB-KH · IDDA-KH
- IDUB
- IDD
- IDD-CB
- IQD · IQDH
- IQDA-CB
- IFVA · IFVB
- IFVA-ST
- IFV
- IV-14 · IV-30
- IHV-20 · IHVE-21
- IHVA-SP · IHSL-SP
- IBF
- IHV-FX
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- ISC-24
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- IDPA
- IDCA
- IMC
- IWDV-24
- IWDV(S)-48
- ISC
- IJS
- IJS-30M2-TP/SS
- ILS-40M2-PI/SS
- SAG
- SLLUB
- LLUB
- IFIC

Line illumination products
 Ring illumination products
 Bar illumination products
 Transmitted/area illumination products
 Dome illumination products
 Special illumination products
 Controller products

Expanded Output Voltage Range Compared To Previous Models

The lower output voltage value has been improved from 10.5V to 6V, allowing for a wider range of output control at lower power levels.

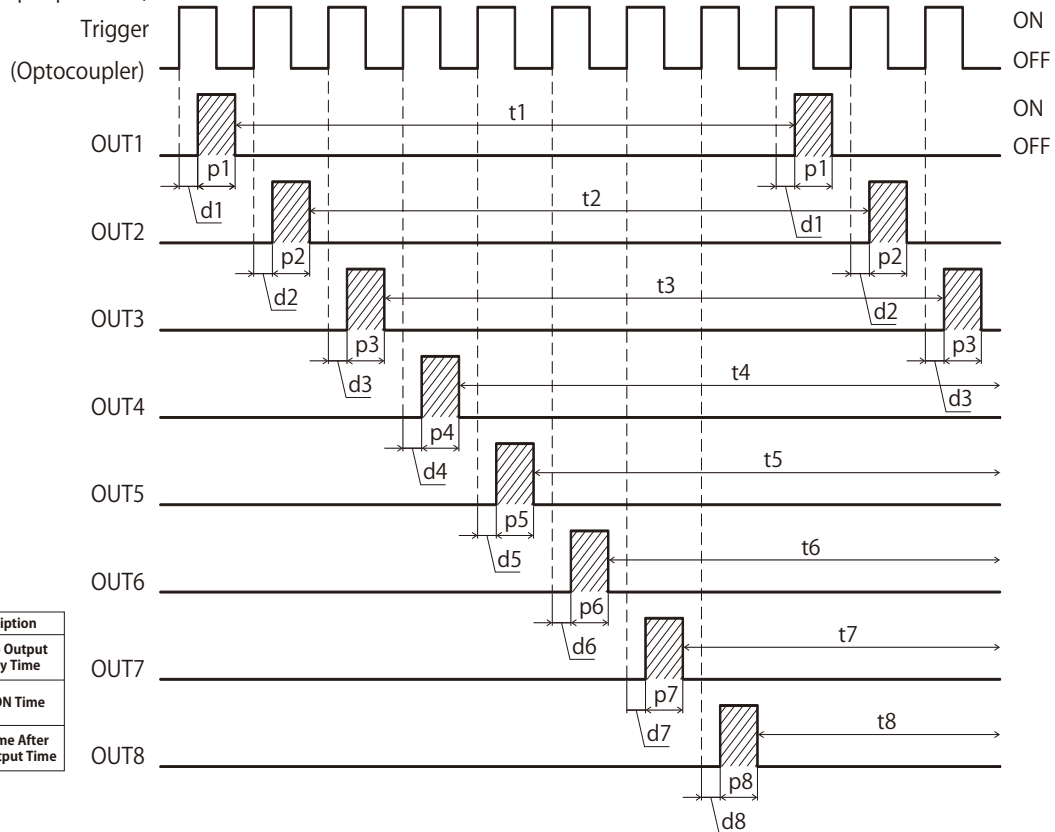


Sequential Output Mode Function Equipped

Operating Specifications: Sequentially outputs only one channel in a predetermined order. Output patterns can be selected from three patterns.

- Output Pattern 1: Outputs all channels in ascending order. (OUT1 → 2 → 3 → 4 → 5 → 6 → 7 → 8 → 1 → 2 → ...)
- Output Pattern 2: Outputs odd-numbered channels in ascending order. (OUT1 → 3 → 5 → 7 → 1 → 3 → 5 → 7 → 1 → 3 → ...)
- Output Pattern 3: Outputs even-numbered channels in ascending order. (OUT2 → 4 → 6 → 8 → 2 → 4 → 6 → 8 → 2 → 4 → ...)

• Output Image (Output pattern 1)



Symbol	Item	Description
d1-8	Delay Time	Trigger to Output ON Delay Time
p1-8	Pulse Width	Output ON Time
t1-8	Trigger Inactive Time	Invalid Time After Trigger Output Time

IDBB-LSRF
 IDBC-LSR
 IDBB-LSRH
 IDBB-LSRA
 IDBB-LSRS
 IDBC-LSRC
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 IDBA-HMS
 IDBA-HMS-IR
 IDBA-FD
 IDBA-LEH2
 IDBA-LEH
 IDBA-LE
 IDBA-SE
 IDBA-SL
 IDBA
 IDBA-Q
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 IDHM
 IHMA
 IHMA-V
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 IFD
 IFD-IR
 IHMA-40D
 IFPA-D
 IPQC
 IFHA
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Code Open Sample Software For IJS

Easily configure and check various settings of the target controller from your PC.

- You can read, modify, and save the output control settings (pulse width, output voltage, delay time, SAG value) for easy configuration.
- You can configure the network settings (IP address and port number).
- ★ The sample software download from our company's website is available

Channel

IP Address: 192.168.1.10 Port no: 1680 Open Close Network Setting

IJS-30M2-TP
 IJS-30M3-TP
 IJS-30M4-TP
 IJS-30M6-TP
 IJS-40M4-TP
 IJS-40M6-TP

Lamp Control

	1CH	2CH	3CH	4CH	5CH	6CH	7CH	8CH	
Pulse width	0	0	0	0	0	0	0	0	Write Read
Voltage	0	0	0	0	0	0	0	0	Write Read
Delay	0	0	0	0	0	0	0	0	Write Read
Limit (SAG)	00	00	00	00	00	00	00	00	Write Read
Status	No Ctrl	No Ctrl	No Ctrl	No Ctrl	No Ctrl	No Ctrl	No Ctrl	No Ctrl	Read
Version	0000	Read							
Revision	0000	Read							Save

Lamp Control (Internal)

	1CH	2CH	3CH	4CH	5CH	6CH	7CH	8CH	
Pulse width	0	0	0	0	0	0	0	0	Read(INT)
Voltage	0	0	0	0	0	0	0	0	Read(INT)

Send data: Receive data: Clear

Various Configuration Items
 • Pulse Width
 • Output Voltage
 • Delay Time
 • Output Voltage Upper Limit (SAG)

Various Verification Items
 • State (Normal, Short Circuit, Out of Control)
 • Software Version

Settings Reading · Writing"

State Reading

Settings Writing

Internal Output Control Settings Reading

External Trigger Cable

Model	Length (m)
IC-MIL-20-1	1
IC-MIL-20-2	2
IC-MIL-20-3	3
IC-MIL-20-5	5
IC-MIL-20-10	10

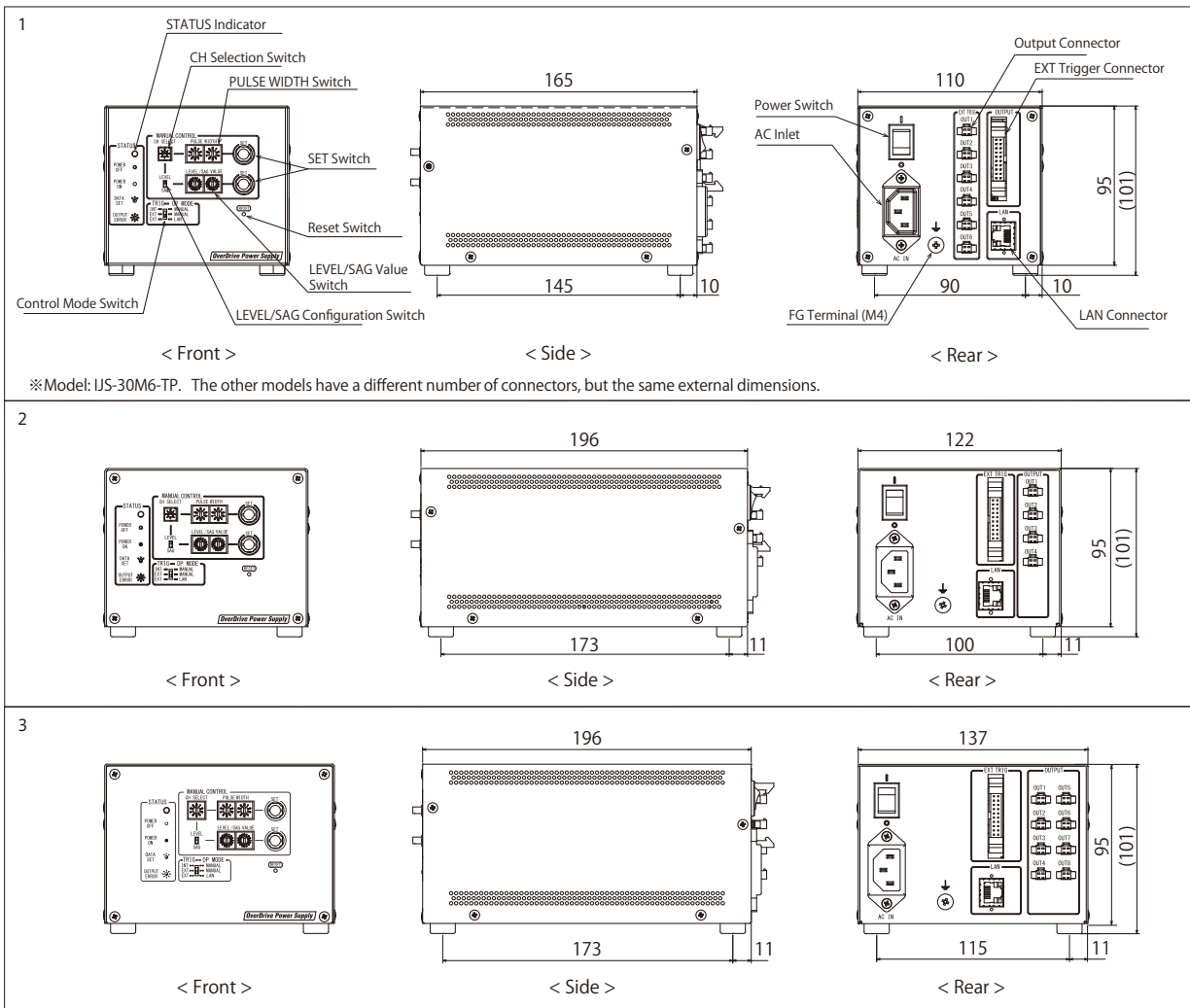
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- IMAR-CT D
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- IDBA-SE
- IDBA-SL
- IDBA
- IDBA-Q
- IFLA · IFLB
- IDHM
- IHMA
- IHMA-V
- IFPA
- IFD-IR
- IHMA-40D
- IFPA-D
- IPOC
- IFHA
- IDDB-KH · IDDA-KH
- IDUB
- IDD
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Model	Number of Outpt Channels	Capacity (※1)	Exterior Diagram
IJS-30M2-TP	2CH	15W×2 Total 30W	1
IJS-30M3-TP	3CH	10W×3 Total 30W	
IJS-30M4-TP	4CH	10W×2、5W×2 Total 30W	
IJS-30M6-TP	6CH	5W×6 Total 40W	2
IJS-40M4-TP	4CH	10W×4 Total 40W	
IJS-40M8-TP	8CH	5W×8 Total 40W	3

※1.Without Delay, under the condition where the pulse width is less than 5% of the pulse period

Input Voltage	AC100~240V 50/60Hz
Output Voltage	DC 6-36V (256-step variable output voltage)
Pulse Width Setting	0 μs~990 μs(10 μs step) (Duty: Less than 5%)
Trigger Signal	Synchronized Lighting Function (Internal/External switchable)
Trigger Responsiveness	Approx. less than 2.5μs
Trigger Response Speed	"00" → "FF": Less than 200ms, "FF" → "00": Less than 1s (*2)
Internal Trigger	50Hz Fixed
External Control Function	LAN Communication (TCP / IP)
Variable Delay	Range of 0 to 5,000 μs at 1 μs Intervals (External Control Mode Only)
Other Items	Interlock Function, Short Circuit Detection Function

※2 The measured values obtained when connecting the rated load (equivalent to 12V/5W) to IJS-30M6-TP.



★Please refer to P.247 for the details of external trigger cables.

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for products

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