Creating the future with light

REVOX
Solutions by Photon

LED LINE LIGHTING

SPX-TB80

LED line lighting for line scan cameras, to make the invisible visible.

REVOX.JP

LED LINE LIGHTING

SPX-TB80

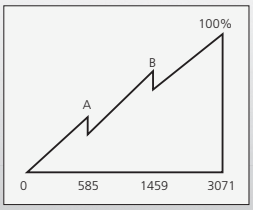
FEATURES | SPX-TB80

- High speed pulse control mode available (Rising time: 300 ns)
- Industry's first high-speed dimming function (trigger period: 5 µs)
- Two types of dimming range available: full range and partial range
- The market's widest dynamic range: 10 to 100% with high uniformity less than ± 6%
- Light emitting length: 120 to 3,960 mm (in 120 mm increments)
- Natural air cooling body and excellent heat dissipation

>> Customization is available

LINEARITY

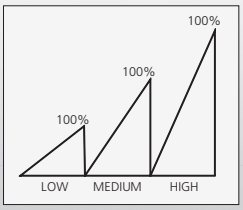
- Enhanced linearity adjustment function, one of the advantages of SPX-TA series



FULL RANGE MODE

Realizing 12-bit dimming (0 to 3071), seamlessly supports a wide range from low to high illuminance.

* At the above two points (A, B), illuminance control is not linear



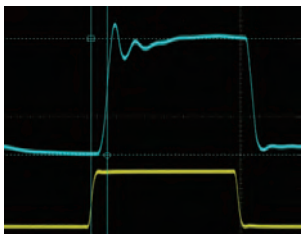
PARTIAL RANGE MODE

One of the three Partial Dimming Ranges, Low (SPX-TA07), Medium (SPX-TA30) and High (SPX-TA70) can be exclusively selected. Dimming range is adjustable for various types of cameras.

RESPONSE PERFORMANCE

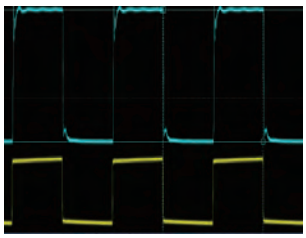
- High-speed pulse control enables use as a flash illuminator
- Realized rising time at the fastest speed of about 300 nsec (0.3 µsec)

RISING TIME

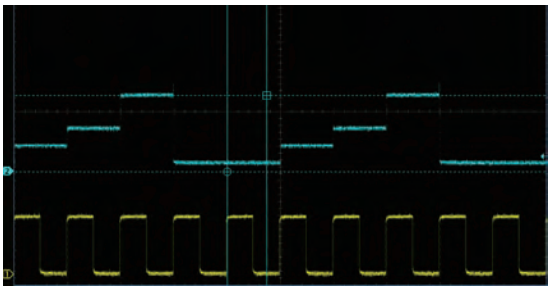


※ Illuminance level 100%, external pulse input

HIGH SPEED PULSE MODE WAVEFORM



HIGH SPEED DIMMING



- Continuous and fast switching to arbitrarily set dimming value
- 16 dimming values can be registered

TECH SPEC | SPX-TB80

* Specifications are subject to change without notice

Model No.	SPX-TB80
LED color	White, Red, Green, Blue, Amber ※ Red, Green, Blue, Amber : under development
Light emitting length	120 to 3,960 mm (120-mm increment)
Power consumption (At maximum light intensity)	225 W/m
Dimensions Length × width × height (Excluding protrusions)	(Light emitting surface length + 120) × 50 × 70 mm
Effective light emitting length	Light emitting length minus 160 mm (Applicable to those with emission length of 360 mm and more)
Expected Lifetime (LED)	50,000 hours ※1 Calculated value until the light output decreases to 70% of the maximum light intensity at the time of shipment, under the specified environment and when the body temperature is from 0 to 50 degree C, and not guaranteed.
Cable length (Dedicated cable: CBL-TB)	Pulse control: Up to 20 m (maximum length to satisfy pulse response specification) Continuous lighting: Up to 50 m
Operating environment	5 to 40 degree C, 20 to 80% RH (noncondensing)
Storage environment	-10 to 60 degree C, 20 to 85% RH (noncondensing)

※1 The above data are subject to change by individual difference of LED

Dedicated power supply for SPX-TB80

CB-TB

TECH SPEC | CB-TB

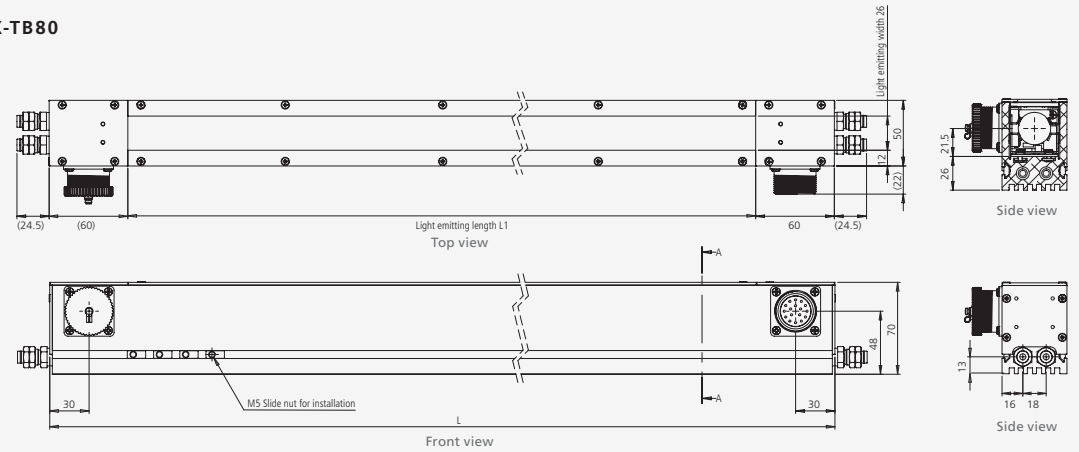
* Specifications are subject to change without notice

Model No.		**CB-TB600 / CB-TB1200**
Dimensions Width× height × depth (Protrusions excluded)		140 × 177 × 250 (mm)
Weight		Approx. 3.5 kg / Approx. 4.3 kg
Rated input		100 to 240 VAC, 50/60 Hz ± 10%
Power consumption (Changes depending on light emission length and illuminance)		600 W max / 1200 W max.
Installation conditions (Clearance)		Front 100 mm, rear 100 mm
Operating environment		5 to 40 degree C, 20 to 80% RH (noncondensing)
Storage environment		-10 to 60 degree C, 20 to 85% RH (noncondensing)
Control method	**input**:	Manual control (front panel)
		External analog voltage input control (0 to 5 VDC)
		Partial Range: 8-bit (256 steps) or 10-bit (1024 steps)
		Full Range: 12-bit (3072 steps)
		ON/OFF pulse control by external signal (LVDS differential driver can be installed as an option)
		Dimming lock by external signal (only for analog input)
		Serial communication control (RS232C)
		Ethernet communication control
	output:	LED open error output
		LED Temperature abnormality output (When a thermistor temperature is over 120 degree C. abnormality status is output.)
		LED temperature warning (warning when the thermistor temperature reaches 108 degree C)
		Communication error
		Power supply abnormality
AC power cable		One 2-m-long 3-pole AC power cable with ground terminal (125 VAC)
Power supply input terminal		AC input: 3P inlet
Chemical substances		The amount of six substances (lead, mercury, cadmium, hexavalent chromium,PBB, PBDE) specified in "Directive 2002/95 / EC: RoHS 1" do not exceed the specified threshold.

APPEARANCE | SPX-TB80

* Specifications are subject to change without notice

SPX-TB80



unit: mm

MODEL NUMBER | SPX-TB80

SPX-TB80□-□□□□-□
① ② ③

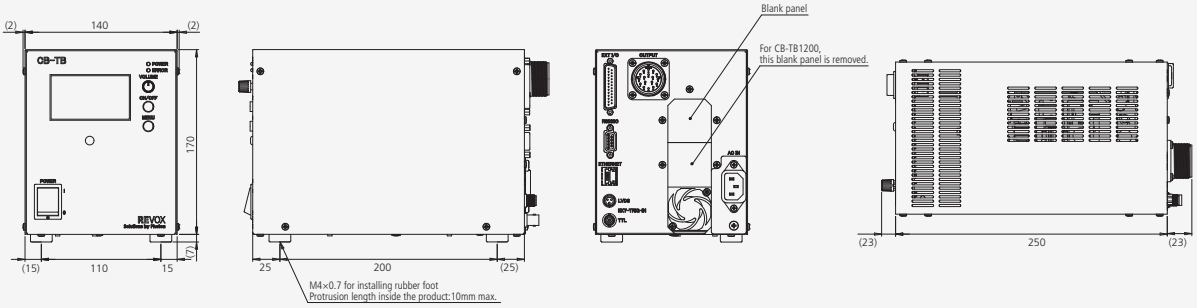
① Connector position: Standard→ None, End surface→ M

② Light emitting length: 120 to 3,960 mm (in 120 mm increments)

③ LED color: White → W, Red → R, Green → G, Blue → B ※RGB：under development

APPEARANCE | CB-TB

CB-TB600 / 1200



unit: mm

MODEL NUMBER | CB-TB

CB-TB□□□□
①

① Power supply capacity: 600 W → 600, 1200 W → 1200

CABLE MODEL NUMBER

CBL-TB-□□
①

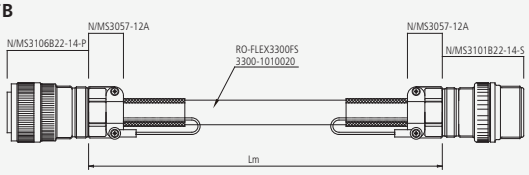
① Cable Length※1

Model number	Cable length
CBL-TB-050	5m
CBL-TB-100	10m
CBL-TB-150	15m
CBL-TB-200	20m
CBL-TB-250	25m
CBL-TB-300	30m

※1 Pulse control: Up to 20 m. Continuous lighting: Up to 50 m

CABLE APPEARANCE

CBL-TB



For inquiries

Note: Please carefully read the operation instruction guide prior to use. The above specifications are subject to change without notice.

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