

# 11. Lasers/ Optical Equipment



- Carpenter's Squares
- Stainless Steel Rules/  
Machine Scale
- Aluminum Rules
- Resin Folding Rules/  
Bamboo Rules
- Squares/  
Protractors
- Vernier Calipers/  
Micrometers
- Tape Measures
- Surveying Products
- Scales
- Levels
- Lasers/  
Optical Equipment
- Lines/  
Chalklines/  
Plumbholders
- Circular Saw Guides
- Construction Tools
- Industrial Tools
- Thermometers/  
Hygrometers/  
Enclimometers
- Outdoor Products
- Magnifying Glasses
- Drawing Tools
- Magnets



# LASER ROBO Xline-E

Ceiling Marking/Ground Marking Cross Sensor + Magnetic Damper Type



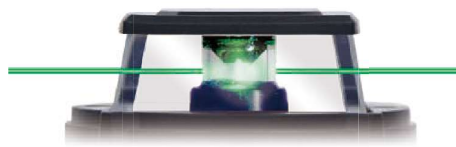
# LASER ROBO Xline

Ceiling Marking/Ground Marking Cross Pendulum + Magnetic Damper Type

## Features of Laser ROBO Xline series \*Laser light depicted is an illustration.

### 360° irradiation with 1 light source

- Adoption of a cone mirror enables 360° irradiation with one light source. Greatly improves work efficiency since there is no need to rotate the main body.



### Ceiling marking/ground marking lines cross

- The 360° full line crosses at 90°, forming the ceiling marking point/ground marking point



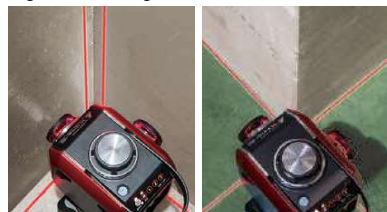
### Easy-to-see Line/Bright Line

- Highly visible green-colored laser, bright and vivid red-colored laser



### Inside corner 10 mm, outside corner 0 mm

- Can be used for inside corners from 10 mm\* and outside corners from 0 mm since the ground marking cross lines can be irradiated



\*When protective caps on the lasers have been

### Body and rotary plate can be separated

- Separating makes it easier to mark in lower positions, easier to carry, and further improves usability



### Fixed line mode

- All models feature a convenient fixed line mode for irradiating a line diagonally



### IP54

- No concern about malfunction due to dust or water splashes, thanks to IP54 level dustproof and waterproof construction



- Carpenter's Squares
- Stainless Steel Ruler / Machine Scale
- Aluminum Rules
- Bein-Folding Rules / Bamboo Rules
- Squares / Protractors
- Venier Calipers / Micrometers
- Tape Measures
- Surveying Products
- Scales
- Levels
- Lasers / Optical Equipment
- inklines / Chalklines / Plumblines
- Circular Saw Guides
- Construction Tools
- Industrial Tools
- Thermometers / Hygrometers / Humidity Measuring Instruments
- Outdoor Products
- Magnifying Glasses
- Drawing Tools
- Magnets

Carpenter's Squares / Stainless Steel Rules / Machine Scale / Aluminum Rules / Resin Folding Rules / Bamboo Rules / Squares / Protractors / Vernier Calipers / Micrometers / Tape Measures / Surveying Products / Scales / Levels / Lasers / Optical Equipment / Inklines / Chalklines / Plumblines / Circular Saw Guides / Construction Tools / Industrial Tools / Thermometers / Hygrometers / Environmental Meters / Outdoor Products / Magnifying Glasses / Drawing Tools / Magnets

**Laser ROBO X line-E** **NEW**

Electronic level sensor + motor

Full Circumference Accuracy **±1.5/7.5** mm/m  
 Dust/Waterproof **IP54**  
 For Laser Receiver  
 Dual Power Source Battery AC

**Do not stare into beam**  
 Maximum Output 1 mW Frequency 5.5 kHz  
 Wavelength 635 ~ 638 nm  
 Class 2 Laser Product JS C6802: 2014

High Brightness **GREEN**



71610

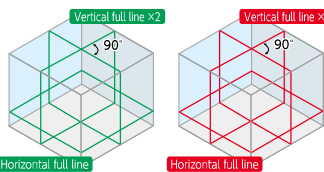


**Do not stare into beam**  
 Also do not expose to a user of a telescopic optical system  
 Maximum Output 1 mW Frequency 5.5 kHz  
 Wavelength 635 ~ 638 nm  
 Class 2 Laser Product JS C6802: 2014

High Brightness **Twice More**



71609



Item Code	Description	JAN Code	Packing Unit	Package
71610	X line-E Green	4 960910 716100	1	<b>B</b>
71620	X line-E Green with Receiver and Tripod	4 960910 716209	1	<b>B</b>
71609	X line-E Red	4 960910 716094	1	<b>B</b>
71619	X line-E Red with Receiver and Tripod	4 960910 716193	1	<b>B</b>

**Laser ROBO X line** **NEW**

Pendulum + magnetic damper

Full Circumference Accuracy **±1.5/7.5** mm/m  
 Dust/Waterproof **IP54**  
 For Laser Receiver  
 Dual Power Source Battery AC

**Do not stare into beam**  
 Maximum Output 1 mW Frequency 5.5 kHz  
 Wavelength 635 ~ 638 nm  
 Class 2 Laser Product JS C6802: 2014

High Brightness **GREEN**



71608

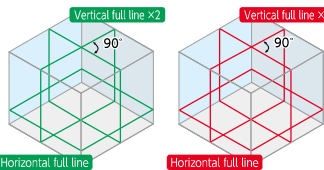


**Do not stare into beam**  
 Also do not expose to a user of a telescopic optical system  
 Maximum Output 1 mW Frequency 5.5 kHz  
 Wavelength 635 ~ 638 nm  
 Class 2 Laser Product JS C6802: 2014

High Brightness **Twice More**



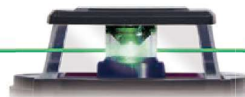
71607



Item Code	Description	JAN Code	Packing Unit	Package
71608	X line Green	4 960910 716087	1	<b>B</b>
71618	X line Green with Receiver and Tripod	4 960910 716186	1	<b>B</b>
71607	X line Red	4 960910 716070	1	<b>B</b>
71617	X line Red with Receiver and Tripod	4 960910 716179	1	<b>B</b>

Features

●Adoption of a cone mirror enables 360° irradiation with one light source. Greatly improves work efficiency since there is no need to rotate the main body.



●360° full line crosses the 90° line, forming ceiling marking/ground marking



●Since the ground marking cross lines can be irradiated, can be used for inside corners from 10 mm\*, and outside corners from 0 mm



\*When protective caps on, the lasers have been removed.

●Separating makes it easier to mark in lower positions, easier to carry, and further improves usability



●All models feature a convenient fixed line mode for shining a line diagonally



Use

●For all types of referencing

Specifications

●Mentioned on page 98

\*Laser light depicted is an illustration.

Accessories



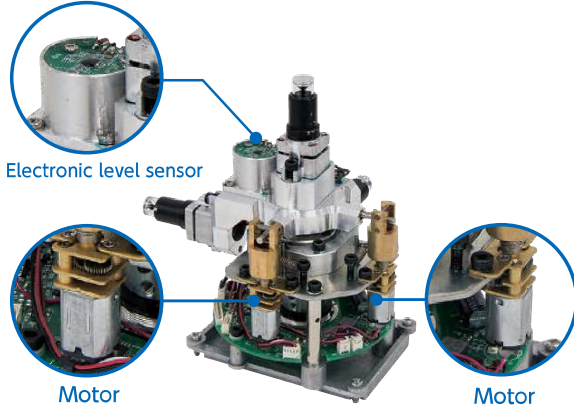
Receiver and Tripod Set Items



## Differences in Braking Systems

### Electronic level sensor + motor

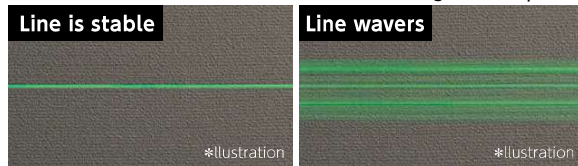
Since inclination is sensed by the electronic level sensor and adjustment is done automatically by the two motors, the line is stabilized even in work sites with many vibrations, such as a high-rise building or a road with high traffic volume, and the line can be determined quickly.



### — Work Sites with Many Vibrations —

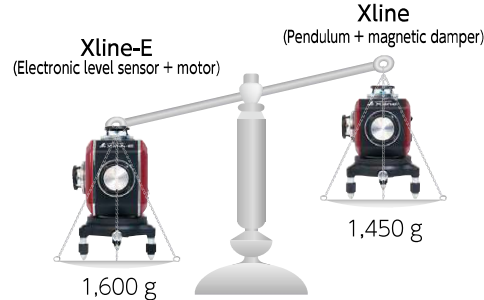
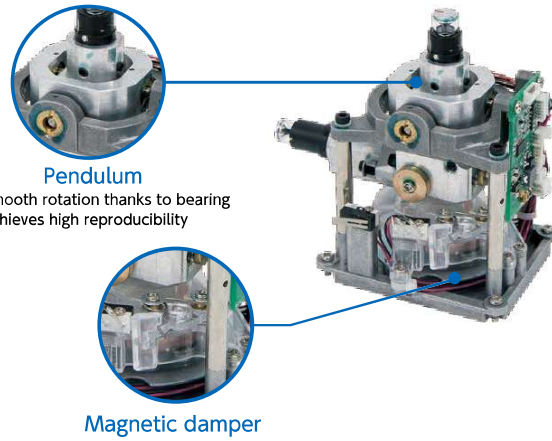
Electronic level sensor + motor

Pendulum + magnetic damper



### Pendulum + magnetic damper

Swinging can be quickly stopped by braking with pendulum and magnetic damper. Simple construction also makes it lightweight.



## Specifications Laser ROBO X line series

	71610	71609	71608	71607
Type	X line-E Green	X line-E Red	X line Green	X line Red
Light Source	Visible light semiconductor laser			
Output	1 mW Less than(Class2 JIS C6802: 2014)	2 mW Less than(Class2M JIS C6802: 2014)	1 mW Less than(Class2 JIS C6802: 2014)	2 mW Less than(Class2M JIS C6802: 2014)
Wave Length	510 - 538 nm	635 - 638 nm	510 - 538 nm	635 - 638 nm
Display Accuracy	±1.5 mm per 7.5 m			
Plumbpoint Accuracy	±1 mm per 3 m			
Vertical Accuracy	90°±0.03°			
Base Line Accuracy	±1.5 mm per 7.5 m			
Line Diameter	5 m About 2 mm(7.5 m About 3 mm)			
Automatic Correction Range	±4°		±3°	
Tilt Alarm	Laser light blinks when it gets over automatic correction range(about a 1-second interval)			
Rotary Fine-Adjustment Range	360°			
Braking System	Sensor, motor system		Pendulum, Magnetic damper	
Power Source	4x AA Alkaline batteries or AC adapter *1			
Continuous Usage Time (1): 1 line *4 (2): 2 lines (3): 3 lines	(1)About 10 hrs (2)About 4 hrs (3)About 2 hrs	(1)About 14.5 hrs (2)About 6.5 hrs (3)About 3 hrs	(1)About 10.5 hrs (2)About 4.5 hrs (3)About 2 hrs	(1)About 17 hrs (2)About 8 hrs (3)About 4.5 hrs
Battery Usage Alarm	Power lamp flashes during use, laser light blinks for 8 secs. When turned on (at 0.5 sec. intervals), or when battery is nearly depleted, the device no longer does automatic leveling and laser light blinks for about 1 sec. intervals.		Power lamp blinks during use; laser line flashes for approximately 8 seconds (approximately 0.5-second intervals) when the power is ON; when multiple laser lines are irradiated and battery consumption continues, the device will automatically switch to irradiating only a horizontal line.	
Maximum Range of Line	About 35 m (when with optical receiver) *5			
Dustproof/Waterproof	IP54 (when with battery) *6			
TriPod Screw	5/8 inch			
Size	Height 213 mm × Width 127 mm × Depth 182 mm		Height 188 mm × Width 127 mm × Depth 182 mm	
Approximate Weight (including batteries)	About 1,600 g		About 1,450 g	

\*1 AA Ni-MH rechargeable batteries can also be used, but will not be recharged with the AC adapter. \*2 When using for a long time at about 20°C, we recommend using the AC adapter instead of AA alkaline batteries. \*3 This is based on the number of lines, so continuous usage time is the same with any combination. \*4 When the power switch is turned ON, a horizontal line will be automatically irradiated. \*5 Maximum reachable distance varies depending on the working environment and measurement position used. \*6 Dustproof performance: Prevents dust from penetrating inside the device. A small amount of dust that has penetrated inside will not hinder normal operation. Waterproof performance: It will not be harmfully affected by a splash of water from any direction.

JIS JIS mark With red numbers cm/shaku (Upper side for Front metric / Lower side for Back shaku) With magnet Vial with luminous sheet Thermometer Double-sided tape Letters in Japanese With stopper Oil Glass lens With edge  
 Japanese zodiac signs With battery shaku/cm (Upper side for Front shaku / Lower side for Back metric) With non-slip pad Thermometer/Hygrometer Hygrometer With hanging hole Letters in English With direction arrow With grid scale Plastic lens

Carpenter's Squares  
 Stainless Steel Rules / Machine Scale  
 Aluminum Rules  
 Bevel Folding Rules / Bamboo Rules  
 Squares / Protractors  
 Vernier Calipers / Micrometers  
 Tape Measures  
 Surveying Products  
 Scales  
 Levels  
 Lasers / Optical Equipment  
 Milling / Drilling / Preamblers  
 Circular Saw Guides  
 Construction Tools  
 Industrial Tools  
 Thermometers / Hygrometers / Humidity Measuring  
 Outdoor Products  
 Magnifying Glasses  
 Drawing Tools  
 Magnets

- Carpenter's Squares
- Stainless Steel Rules / Machine Scale
- Aluminum Rules
- Resin Folding Rules / Bamboo Rules
- Squares / Protractors
- Venier Calipers / Micrometers
- Tape Measures
- Surveying Products
- Scales
- Levels
- Lasers / Optical Equipment
- Marking / Chalklines / Plumblines
- Circular Saw Guides
- Construction Tools
- Industrial Tools
- Thermometers / Hygrometers / Environmental Meters
- Outdoor Products
- Magnifying Glasses
- Drawing Tools
- Magnets

# Vibration-resistant Sensor + Motor

LASER ROBO NEO  
**GREEN**  
E-SENSOR

LASER ROBO NEO  
**E-SENSOR**

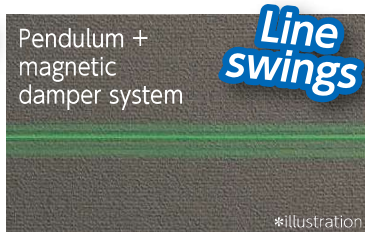
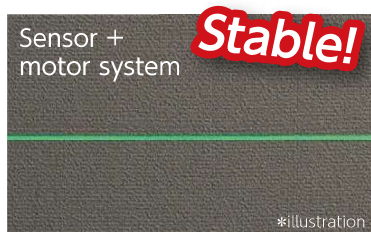


## Features of Laser ROBO Neo E Sensor series

\*Laser depicted is an illustration.

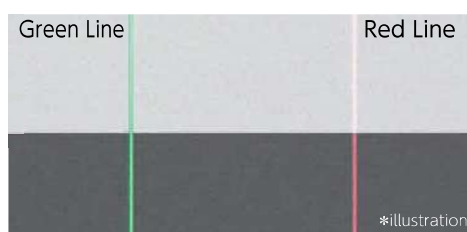
### Vibration resistant

- Quickly determine the line even in a work location with large vibrations and shaking



### Easy-to-see Line/Bright Line

- Highly visible green-colored laser, bright and vivid red-colored laser



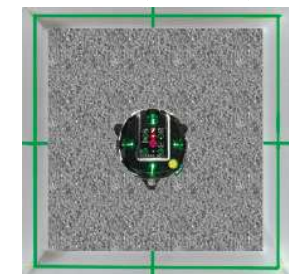
### Fixed Line Mode

- Convenient when wanting to expose the line diagonally, etc.



### Full Horizontal Line

- Emits laser lights in all 4 horizontal directions, spreading out in a full horizontal line (51 AR model)



### AC adapter

- Continuous use possible over a long time



### 360° Rotary fine-adjustment

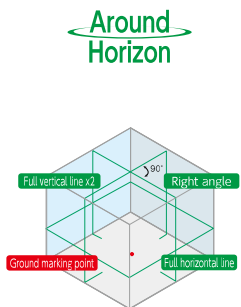
- Can be adjusted to a precise reference with rotary fine-adjustment knob capable of 360° rotation



# Laser ROBO Green Neo E Sensor

High Brightness GREEN  
 Full horizontal Accuracy  $\pm 1.5/7.5$  mm  
 High Precision  $\pm 1$  mm /  $7/5$  mm  
 Dust/Water-resistant IP54  
 For Laser Receiver  
 Dual Power Battery AC  
 Do not stare into beam  
Maximum Output 1 mW, Frequency 5.5 KHz, Wavelength 510 ~ 530 nm, Class 2 Laser Product, JIS C5802: 2014

- Full line type with full horizontal line and 4 vertical lines



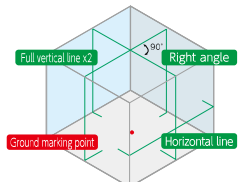
71606



- High class type with full vertical lines



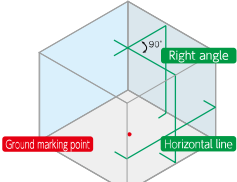
71605



- Reveals right angle to improve work efficiency



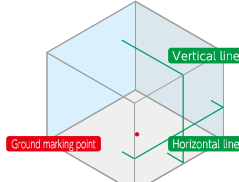
71603



- Basic vertical and horizontal line



71602

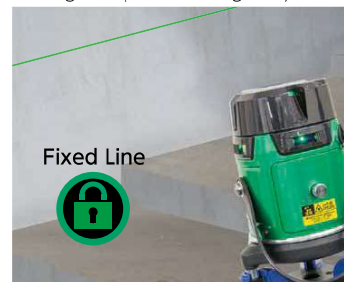


## Features

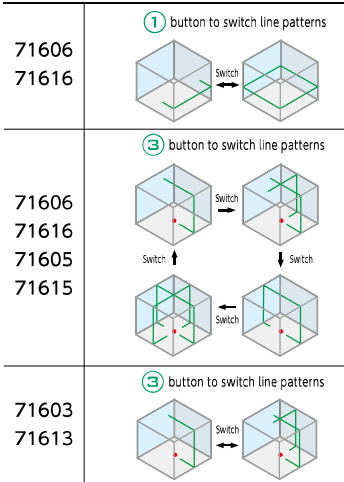
- Uses a sensor + motor system that is resistant to strong vibrations



- With convenient Fixed Line Mode when wanting to expose line diagonally



- Enables changing exposure only to necessary lines for horizontal circumference, full vertical and triangle-shape projection to reduce power consumption



## Use

- For all types of referencing

## Specifications

- Mentioned on page 102

\*Laser depicted is an illustration.

Item Code	Description	JAN Code	Packing Unit	Packaging
71606	Green Neo E Sensor 51 AR	4 960910 716063	1	B
71616	Green Neo E Sensor 51 AR with Receiver and Tripod	4 960910 716162		
71605	Green Neo E Sensor 51	4 960910 716056		
71615	Green Neo E Sensor 51 with Receiver and Tripod	4 960910 716155		
71603	Green Neo E Sensor 31	4 960910 716032		
71613	Green Neo E Sensor 31 with Receiver and Tripod	4 960910 716131		
71602	Green Neo E Sensor 21	4 960910 716025		
71612	Green Neo E Sensor 21 with Receiver and Tripod	4 960910 716124		

## Accessories



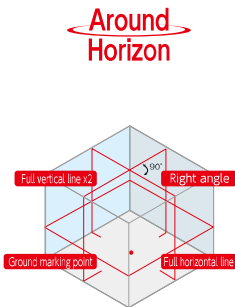
## Receiver and Tripod Set Items



Laser ROBO Neo E Sensor

High Brightness **Twice More** Full horizontal Accuracy  $\pm 1.5/7.5$  mm High Precision  $\pm 1mm/7.5$  mm Dust/Waterproof **IP54** For Laser Receiver Dual Power Source Battery AC **Do not stare into beam** Maximum Output: 1 mW Frequency: 5.3 kHz Wavelength: 635 ~ 650 nm Class II Laser Product: JS C6602: 2014

● Full line type with full horizontal line and 4 vertical lines



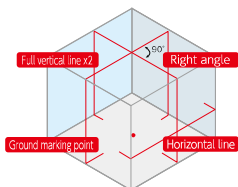
71506



● High class type with full vertical lines



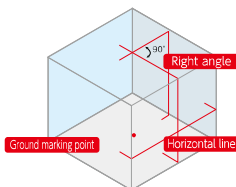
71505



● Reveals right angle to improve work efficiency



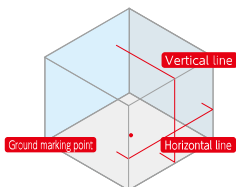
71503



● Basic vertical and horizontal line



71502

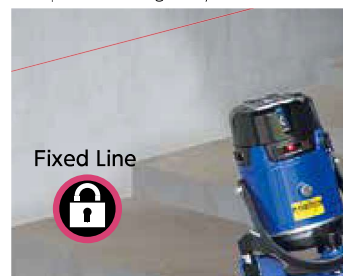


Features

● Uses a sensor + motor system that is resistant to strong vibrations



● Convenient Fixed Line Mode when wanting to expose line diagonally



● Includes Level Adjustment Tripod Adapter that makes it easy to adjust level when using a tripod



● Can be adjusted to a precise reference with rotary fine-adjustment knob capable of 360° rotation



Use

● For all types of referencing

Specifications

● Mentioned on page 102

\*Laser depicted is an illustration.

Item Code	Description	JAN Code	Packing Unit
71506	Neo 51 AR E Sensor	4 960910 715066	1 B
71516	Neo 51 AR E Sensor with Receiver and Tripod	4 960910 715165	
71505	Neo 51 E Sensor	4 960910 715059	
71515	Neo 51 E Sensor with Receiver and Tripod	4 960910 715158	
71503	Neo 31 E Sensor	4 960910 715035	
71513	Neo 31 E Sensor with Receiver and Tripod	4 960910 715134	
71502	Neo 21 E Sensor	4 960910 715028	
71512	Neo 21 E Sensor with Receiver and Tripod	4 960910 715127	

**Accessories**

- AC Adapter
- Laser Glasses
- Level Adjustment Tripod Adapter
- Aluminum Case
- 4x AA Alkaline batteries

**Receiver and Tripod Set Items**

- Optical Receiver Laser Receiver II Plus with Holder
- Tripod with Handle Elevator A Lightweight Type

JIS JIS mark With red numbers cm/shaku (Upper side for Front metric / Lower side for Back metric) With magnet Vial with luminous sheet Thermometer Double-sided tape Letters in Japanese With stopper Oil Glass lens With edge  
 Japanese zodiac signs With battery shaku/cm (Upper side for Front shaku / Lower side for Back metric) With non-slip pad Thermometer/Hygrometer Hygrometer Vibration Letters in English With direction arrow With grid scale Plastic lens

**Specifications Laser ROBO Neo E Sensor series**

	71606	71605	71603	71602
Type	Green Neo E Sensor 51AR	Green Neo E Sensor 51	Green Neo E Sensor 31	Green Neo E Sensor 21
Light Source	Visible light semiconductor laser			
Output	Less than 1 mW (JIS class 2 C6802: 2014)			
Wave Length	520 nm (Green) Ground Marking Point: 650 nm (Red)			
Display Accuracy	Vertical: ±1 mm per 7.5 m Horizontal Circumference: ±1.5 mm per 7.5 m	Vertical/ Horizontal Line ±1 mm per 7.5 m		
Plumb Point Accuracy	±1 mm per 3 m			-
Vertical Accuracy	±0.03° at 90°			-
Base Line Accuracy	±1 mm per 7.5 m		-	
Angle of Emergence	Vertical: About 120° Horizontal: About 100° (Front 115°)	Vertical: About 120° Horizontal: About 115°		
Line Diameter	About 1.8 mm at 5 m ahead (about 2 mm at 7.5 m ahead)			
Automatic Correction Range	±3°			
Tilt Alarm	Laser light blinks when it gets over automatic correction range (about a 1-second interval) *1			
Rotary Fine-Adjustment Range	360°			
Braking System	Sensor + motor system			
Power Source	4x AA Alkaline batteries or AC adapter *2			
Continuous Usage Time *3	①Mode *4 (A)7.5 hrs (B)35 hrs ②Mode (A)12 hrs (B)2 hrs ③Mode (A)24 hrs (B)12 hrs (C)12 hrs (D)5.5 hrs	①Mode *5 (A)35 hrs ②Mode (A)12 hrs (B)4.5 hrs ③Mode (A)24 hrs (B)12 hrs (C)12 hrs (D)5.5 hrs	①Mode *5 (A)35 hrs ②Mode (A)12 hrs (B)9 hrs ③Mode (A)24 hrs (B)12 hrs	①Mode *5 (A)35 hrs ②Mode (A)12 hrs ③Mode (A)24 hrs
Battery Usage Alarm	Power lamp flashes during use, laser light blinks for 8secs. When turned on (at 0.5sec. intervals), or when battery is nearly depleted, the device no longer does automatic leveling and laser light blinks for about 1sec. intervals.			
Maximum Range of Line	About 35 m (when with optical receiver) *7			
Dustproof/Waterproof	IP54 (when with battery) *8			
Tripod Screw	5/8 inch			
Size	Diameter 128 mm × Height 190 mm (body 105 mm × 96 mm)			
Approximate Weight (including battery)	1,325 g	1,280 g	1,265 g	1,250 g

\*1 All of the lines will turn off, and only the horizontal line will blink. Return to automatic correction range and it will return to the previous state. \*2 AA nickel hydride batteries can be used, but the AC adapter will not charge the device. \*3 When using AA alkaline batteries at 20°C. \*4 With the AR Series, turning the power switch ON automatically goes into ① mode's full horizontal line. \*5 Turning the power switch ON automatically goes into ① mode. \*6 Hold down the ② button to turn on all the lines. Using an AC adapter is recommended when using full lines over a long period of time. \*7 Depends on circumstance and position of use. Receiving over 20m ahead is possible but accuracy is not guaranteed. \*8 Dustproof: Protected from limited dust ingress. Waterproof: Protected from water spray from any direction.

	71506	71505	71503	71502
Type	Neo E Sensor 51AR	Neo E Sensor 51	Neo E Sensor 31	Neo E Sensor 21
Light Source	Visible light semiconductor laser			
Output	Less than 1 mW (JIS class 2)			
Wave Length	635 nm Ground Marking Point: 650 nm (Red)			
Display Accuracy	Vertical: ±1 mm per 7.5 m Horizontal Circumference: ±1.5 mm per 7.5 m	Vertical/ Horizontal Line ±1 mm per 7.5 m		
Plumb Point Accuracy	±1 mm per 3 m			-
Vertical Accuracy	±0.03° at 90°			-
Base Line Accuracy	±1 mm per 7.5 m		-	
Angle of Emergence	Vertical: About 120° Horizontal: About 100° (Front 115°)	Vertical: About 120° Horizontal: About 115°		
Line Diameter	About 1.5 mm at 5 m ahead (about 2 mm at 7.5 m ahead)			
Automatic Correction Range	±3°			
Tilt Alarm	Laser light blinks when it gets over automatic correction range (about a 1-second interval) *1			
Rotary Fine-Adjustment Range	360°			
Braking System	Sensor + motor system			
Power Source	4x AA Alkaline batteries or AC adapter *2			
Continuous Usage Time *3	(1)11.5 hrs *4 (2)22 hrs (3)9 hrs	(1)44.5 hrs *5 (2)22 hrs (F)7.5 hrs (3)9 hrs	(1)44.5 hrs *5 (2)22 hrs (F)14 hrs (3)22 hrs	(1)44.5 hrs *5 (2)22 hrs (3)35.5 hrs
Battery Usage Alarm	Power lamp flashes during use, laser light blinks for 8secs. When turned on (at 0.5sec. intervals), or when battery is nearly depleted, the device no longer does automatic leveling and laser light blinks for about 1sec. intervals.			
Maximum Range of Line	About 35 m (when with optical receiver) *7			
Dustproof/Waterproof	IP54 (when with battery) *8			
Tripod Screw	5/8 inch			
Size	Diameter 128 mm × Height 190 mm (body 105 mm × 96 mm)			
Approximate Weight (including battery)	1,325 g	1,280 g	1,265 g	1,250 g

\*1 All of the lines will turn off, and only the horizontal line will blink. Return to automatic correction range and it will return to the previous state. \*2 AA nickel hydride batteries can be used, but the AC adapter will not charge the device. \*3 When using AA alkaline batteries at 20°C. \*4 With the AR Series, turning the power switch ON automatically goes into ① mode's full horizontal line. \*5 Turning the power switch ON automatically goes into ① mode. \*6 Hold down the ② button to turn on all the lines. Using an AC adapter is recommended when using full lines over a long period of time. \*7 Depends on circumstance and position of use. Receiving over 20m ahead is possible but accuracy is not guaranteed. \*8 Dustproof: Protected from limited dust ingress. Waterproof: Protected from water spray from any direction.

Carpenter's Squares  
Stainless Steel Rules / Machine Scale  
Aluminum Rules  
Rein-Folding Bamboo Rules  
Squares / Protractors  
Vernier Calipers / Micrometers  
Tape Measures  
Surveying Products  
Scales  
Levels  
Lasers / Optical Equipment  
Millirules / Chalklines / Plumbholders  
Circular Saw Guides  
Construction Tools  
Industrial Tools  
Thermometers / Hygrometers / Humidity Measuring  
Outdoor Products  
Magnifying Glasses  
Drawing Tools  
Magnets



Carpenter's Squares  
 Stainless Steel Rules / Machine Scale  
 Aluminum Rules  
 Resin Folding Rules / Bamboo Rules  
 Squares / Protractors  
 Vernier Calipers / Micrometers  
 Tape Measures  
 Surveying Products



Scales  
 Levels



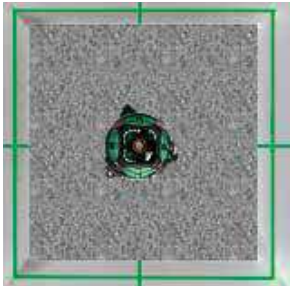
Lasers / Optical Equipment  
 Inklines / Chalklines / Plumblines  
 Circular Saw Guides  
 Construction Tools  
 Industrial Tools  
 Thermometers / Hygrometers / Environmental Meters

## Features of Laser ROBO Green Neo AR BRIGHT series

\*Laser depicted is an illustration.

### Full Horizontal Line

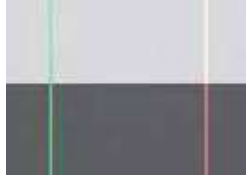
- Emits laser lights in all 4 horizontal directions, spreading out in a full horizontal line



### Outstanding visibility

- Green line visually easier to see than red line

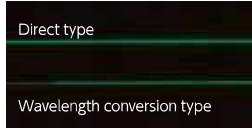
Comparison of green line and red line



\*Actual lines may look different.

### Direct semiconductor laser

- Direct laser diode stable even under low or high temperature
- Compared to wavelength conversion type, direct type exposes a line with entirely uniform and stable width and strength



### Level Adjustment Tripod Adapter

- Easy to turn and finely adjust level when using tripod
- Shinwa's original innovative adapter that allows leveling without adjusting tripod legs



## Laser ROBO Green Neo AR BRIGHT

High Brightness **GREEN** Full horizontal Accuracy  $\pm 1.5/7.5$  mm High Precision  $\pm 1mm/7.5$  mm Dust/Water-resistant **IP54** For Laser Receiver Dual Power Source Battery AC Around Horizon Do not stare into beam  
Maximum Output: 1 mW Frequency: 5.2 kHz Wavelength: 510-530 nm Class 2 Laser Product JIS C6802:2014

- Full line type with full horizontal line and 4 vertical lines

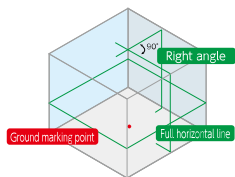


78279

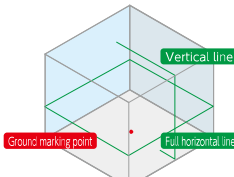
- Full horizontal line and right angle
- Full horizontal line and vertical line



78278

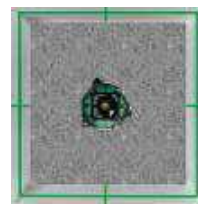


78277

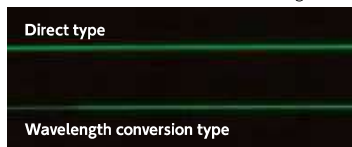


### Features

- Emits laser lights in all 4 horizontal directions, spreading out in a full horizontal line



- Uses a direct type semiconductor laser which, compared to a wavelength conversion type, exposes a line with entirely uniform and stable width and strength



- Enables changing exposure only to necessary lines for horizontal circumference, full vertical and triangle-shape projection to reduce power consumption

78279 78289 78278 78288 78277 78287	① button to switch line patterns 
78279 78289	② button to switch line patterns 
78278 78288	③ button to switch line patterns 

- Includes Level Adjustment Tripod Adapter that makes it easy to adjust level when using a tripod
- Can be adjusted to a precise reference with rotary fine-adjustment knob capable of 360° rotation

### Use

- For all types of referencing

### Specifications

- Mentioned on page 108

\*Laser depicted is an illustration.

<b>Accessories</b> AC Adapter Level Adjustment Tripod Adapter Aluminum Case 4x AA Alkaline Batteries	<b>Receiver and Tripod Set Items</b> Laser Receiver II Plus for Laser ROBO Green with Holder Tripod with Handle Elevator A Lightweight Type
--	---

Item Code	Description	JAN Code	Packing Unit	Package
78279	Green Neo 51 AR BRIGHT	4 960910 782792	1	B
78289	Green Neo 51 AR BRIGHT with Receiver and Tripod	4 960910 782891		
78278	Green Neo 31 AR BRIGHT	4 960910 782785		
78288	Green Neo 31 AR BRIGHT with Receiver and Tripod	4 960910 782884		
78277	Green Neo 21 AR BRIGHT	4 960910 782778		
78287	Green Neo 21 AR BRIGHT with Receiver and Tripod	4 960910 782877		

**Laser ROBO Neo AR BRIGHT**

- High Brightness **Twice More**
- Full Horizontal Accuracy  $\pm 1.5/75$
- High Precision  $\pm 1mm/75m$
- Dust/Water-proof **IP54**
- For Laser Receiver

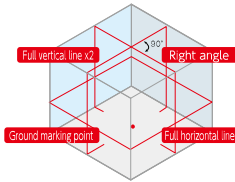
**Around Horizon**

**Do not stare into beam**  
 Maximum Output 1 mW Frequency 55 kHz  
 Wavelength 635-638 nm  
 Class 2 Laser Product JIS C6802:2014

- Full line type with full horizontal line and 4 vertical lines



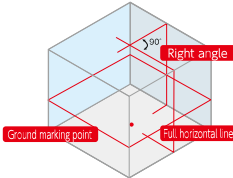
78241



- Full horizontal line and right angle



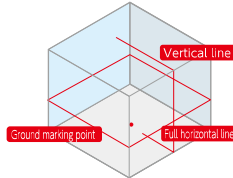
78240



- Full horizontal line and vertical line



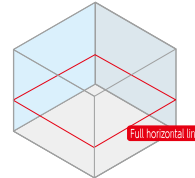
77508



- Full horizontal line only

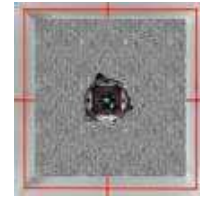


77507

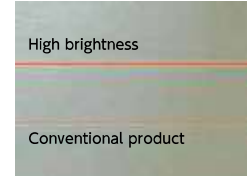


**Features**

- Emits laser lights in all 4 horizontal directions, spreading out in a full horizontal line



- Vivid line can easily be seen even in bright worksites



- Includes Level Adjustment Tripod Adapter that makes it easy to adjust level when using a tripod



- Can be adjusted to a precise reference with rotary fine-adjustment knob
- Dustproof, water-resistant construction for use even in dusty environments or during sudden rain



**Use**

- For all types of referencing

**Specifications**

- Mentioned on page 108

\*Laser depicted is an illustration.

Accessories	Receiver and Tripod Set Items
Laser Glasses	Optical Receiver Laser Receiver II Plus with Holder
Level Adjustment Tripod Adapter	Tripod with Handle Elevator A Lightweight Type
Aluminum Case 4x AA Alkaline batteries	

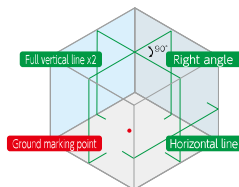
Item Code	Description	JAN Code	Packing Unit	Packaging
78241	Neo 51 AR BRIGHT	4 960910 782419	1	B
78244	Neo 51 AR BRIGHT with Receiver and Tripod	4 960910 782440	1	B
78240	Neo 31 AR BRIGHT	4 960910 782402	1	B
78243	Neo 31 AR BRIGHT with Receiver and Tripod	4 960910 782433	1	B
77508	Neo 21 AR BRIGHT	4 960910 775084	1	B
78219	Neo 21 AR BRIGHT with Receiver and Tripod	4 960910 782198	1	B
77507	Neo 01 AR BRIGHT	4 960910 775077	1	B
78218	Neo 01 AR BRIGHT with Receiver and Tripod	4 960910 782181	1	B

JIS JIS mark With red numbers cm/shaku (Upper side for Front metric/Lower side for Back shaku) With magnet Vial with luminous sheet Thermometer Double-sided tape Letters in Japanese With stopper Oil Glass lens With edge  
 Japanese zodiac signs With battery shaku/cm (Upper side for Front shaku/Lower side for Back metric) With non-slip pad Thermometer/Hygrometer Hygrometer Vibrating tool Letters in English With direction arrow With grid scale Plastic lens

## Laser ROBO Green Neo BRIGHT

High Brightness **GREEN** High Precision **±1mm/7.5m** Dust/Waterproof **IP54** For Laser Receiver Dual Power Source Battery **AC** **Do not stare into beam**  
Maximum Output 1 mW Frequency 5.5 kHz Wavelength 510 - 538 nm Class 2 Laser Product JIS C6802: 2014

●High-class green type with full vertical lines



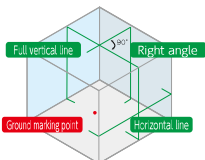
78276



●Multi-purpose green type that gives all required reference lines



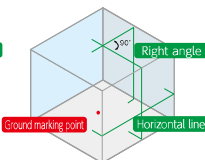
78271



●Green type with right angle



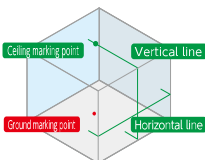
78275



●Green type with ceiling marking point



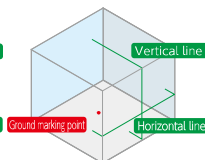
78273



●Green type with basic vertical & horizontal line



78274

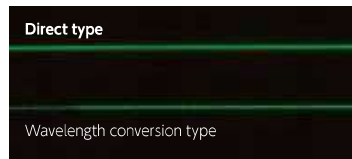


Item Code	Description	JAN Code	Packing Unit	Package
78276	Green Neo 51 BRIGHT	4 960910 782761	1	B
78286	Green Neo 51 BRIGHT with Receiver and Tripod	4 960910 782860	1	B
78271	Green Neo 41 BRIGHT	4 960910 782716	1	B
78291	Green Neo 41 BRIGHT with Receiver and Tripod	4 960910 782914	1	B
78275	Green Neo 31 BRIGHT	4 960910 782754	1	B
78285	Green Neo 31 BRIGHT with Receiver and Tripod	4 960910 782853	1	B
78273	Green Neo 21P BRIGHT	4 960910 782730	1	B
78283	Green Neo 21P BRIGHT with Receiver and Tripod	4 960910 782839	1	B
78274	Green Neo 21 BRIGHT	4 960910 782747	1	B
78284	Green Neo 21 BRIGHT with Receiver and Tripod	4 960910 782846	1	B

JIS JIS mark With red numbers cm/shaku (Upper side for Front metric / Lower side for Back shaku) With magnet Vial with luminous sheet Thermometer Double-sided tape Letters in Japanese With stopper Oil Glass lens With edge  
 Japanese zodiac signs With battery shaku/cm (Upper side for Front shaku / Lower side for Back metric) With non-slip pad Thermometer/Hygrometer Hygrometer With hanging tab Letters in English With direction arrow With grid scale Plastic lens

### Features

●Uses a direct type semiconductor laser which, compared to a wavelength conversion type, exposes a line with entirely uniform and stable width and strength



●Enables changing exposure only to necessary lines for horizontal circumference, full vertical and triangle-shape projection to reduce power consumption

button to switch line patterns

78276  
78286

Switch ↑ Switch ↓

button to switch line patterns

78271  
78291

Switch ↑ Switch ↓

button to switch line patterns

78275  
78285

Switch →

button to switch line patterns

78273  
78283

Switch ←

●Includes Level Adjustment Tripod Adapter that makes it easy to adjust level when using a tripod

●Can be adjusted to a precise reference with rotary fine-adjustment knob capable of 360° rotation

### Use

●For all types of referencing

### Specifications

●Mentioned on page 108

\*Laser depicted is an illustration.

Accessories	Receiver and Tripod Set/Items
AC Adapter	Laser Receiver II Plus for Laser ROBO Green with Holder
Level Adjustment Tripod Adapter	Tripod with Handle Elevator A Lightweight Type
Aluminum Case	
4x AA Alkaline batteries	

Carpenter's Squares  
 Stainless Steel Rules / Machine Scale  
 Aluminum Rules  
 Reinforcing Rules / Bamboo Rules  
 Squares / Protractors  
 Vernier Calipers / Micrometers  
 Tape Measures  
 Surveying Products  
 Scales  
 Levels  
 Lasers / Optical Equipment  
 Incliners / Chalklines / Plumbholders  
 Circular Saw Guides  
 Construction Tools  
 Industrial Tools  
 Thermometers / Hygrometers / Humidity Measuring Instruments  
 Outdoor Products  
 Magnifying Glasses  
 Drawing Tools  
 Magnets

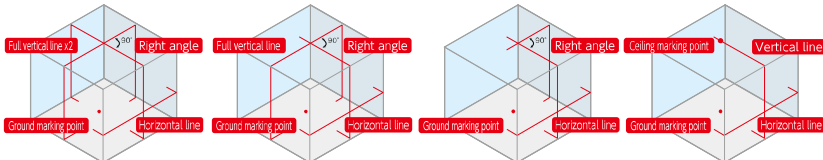
Laser ROBO Neo BRIGHT

**High Brightness** **High Precision** **Dust/Water-proof** **For Laser Receiver**

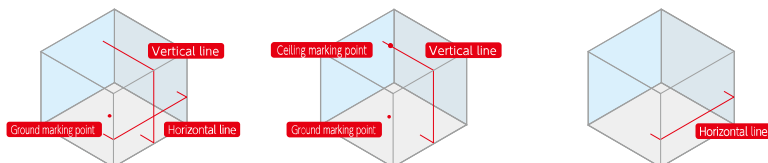
**Twice More** **+1mm/7.5** **IP54**

**Do not stare into beam**  
 Maximum Output 1 mW Frequency 5.5 kHz  
 Wavelength 635 ~ 638 nm  
 Class 2 Laser Product JIS C6802: 2014

- Premium product with two full lines
- Multi-purpose type that gives all required reference lines
- Reveals right angle to improve work efficiency
- Reveals ceiling marking point



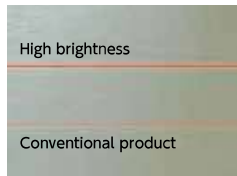
- Basic vertical and horizontal line
- Reveals ceiling marking point
- Horizontal line only



Item Code	Description	JAN Code	Packing Unit	Package
77362	Neo 51 BRIGHT	4 960910 773622		
77625	Neo 51 BRIGHT with Receiver and Tripod	4 960910 776258		
77361	Neo 41 BRIGHT	4 960910 773615		
77609	Neo 41 BRIGHT with Receiver and Tripod	4 960910 776098		
77360	Neo 31 BRIGHT	4 960910 773608		
77608	Neo 31 BRIGHT with Receiver and Tripod	4 960910 776081		
77355	Neo 21P BRIGHT	4 960910 773554		
77606	Neo 21P BRIGHT with Receiver and Tripod	4 960910 776067		
77354	Neo 21 BRIGHT	4 960910 773547		
77605	Neo 21 BRIGHT with Receiver and Tripod	4 960910 776050		
77389	Neo 11P BRIGHT	4 960910 773899		
77388	Neo 01 BRIGHT	4 960910 773882		

Features

- Vivid line can easily be seen even on bright worksites



- Includes Level Adjustment Tripod Adapter that makes it easy to adjust level when using a tripod



- Can be adjusted to a precise reference with rotary fine-adjustment knob capable of 360° rotation



- Dustproof, water-resistant construction for use even in dusty environments or during sudden rain



Use

- For all types of referencing

Specifications

- Mentioned on page 108

\*Laser depicted is an illustration.

Accessories	Receiver and Tripod Set Items
Laser Glasses	Optical Receiver Laser Receiver II Plus with Holder
Level Adjustment Tripod Adapter	Tripod with Handle Elevator A Lightweight Type
Aluminum Case 4x AA Alkaline batteries	

## Specifications Laser ROBO Neo BRIGHT Series

	78279	78278	78277	78276	78271	78275	78273	78274	
Type	Green Neo 51 AR BRIGHT	Green Neo 31 AR BRIGHT	Green Neo 21 AR BRIGHT	Green Neo 51 BRIGHT	Green Neo 41 BRIGHT	Green Neo 31 BRIGHT	Green Neo 21P BRIGHT	Green Neo 21 BRIGHT	
Light Source	Visible light semiconductor laser								
Output	Less than 1 mW (JIS class 2)								
Wave Length	520 nm (Green) Ground Marking Point: 650 nm (Red)								
Display Accuracy	Vertical: ±1 mm per 7.5 m Horizontal Circumference: ±1.5 mm per 7.5 m			Vertical/ Horizontal Line ±1 mm per 7.5 m					
Plumb Point Accuracy	±1 mm per 3 m		-		±1 mm per 3 m			-	
Vertical Accuracy	±0.03° at 90°		-		±0.03° at 90°			-	
Base Line Accuracy	±1 mm per 7.5 m		-		±1 mm per 7.5 m			-	
Angle of Emergence	Vertical: About 130° Horizontal: About 105°		-		Vertical: About 130° Horizontal: About 120°			-	
Line Diameter	About 1.8 mm at 5 m ahead (about 2 mm at 7.5 m ahead)								
Automatic Correction Range	±2.5°								
Tilt Alarm	Laser light blinks when it gets over automatic correction range (about a 1-second interval)*1								
Rotary Fine Adjustment Range	360°								
Braking System	Pendulum + Magnetic damper								
Power Source	4x AA Alkaline batteries or AC adapter *2								
Continuous Usage Time *3	①Mode (A)7 hrs (B)27 hrs ②Mode (A)11 hrs (B)2 hrs ③Mode (A)19 hrs (B)11 hrs (C)11 hrs (D)4.5 hrs	①Mode (A)7 hrs (B)27 hrs ②Mode (A)11 hrs (B)3.5 hrs ③Mode (A)19 hrs (B)11 hrs	①Mode (A)7 hrs (B)27 hrs ②Mode (A)11 hrs (B)4 hrs ③Mode (A)19 hrs	①Mode (A)27 hrs ②Mode (A)11 hrs (B)4 hrs ③Mode (A)19 hrs (B)11 hrs (C)11 hrs (D)4.5 hrs	①Mode (A)27 hrs ②Mode (A)11 hrs (B)4.5 hrs ③Mode (A)19 hrs (B)11 hrs (C)11 hrs (D)7 hrs	①Mode (A)27 hrs ②Mode (A)11 hrs (B)7 hrs ③Mode (A)19 hrs (B)11 hrs	①Mode (A)27 hrs ②Mode (A)11 hrs (B)7 hrs ③Mode (A)19 hrs (B)11 hrs	①Mode (A)27 hrs ②Mode (A)11 hrs ③Mode (A)19 hrs	
Battery Usage Alarm	Laser light blinks for 8secs when turned on. (at 0.5-sec intervals)								
Maximum Range of Line	About 35 m (when with optical receiver) *6								
Dustproof/Waterproof	IP54 *7								
Tripod Screw	5/8 inch								
Size (mm)	Diameter 128 × Height 190 (body φ110 mm)				Diameter 128 × Height 180 (body φ94 mm)				
Approximate Weight (including battery)	1,320 g	1,290 g	1,260 g	1,215 g	1,210 g	1,200 g	1,195 g	1,190 g	

\*1 All of the lines will turn off, and only the horizontal line will blink. Return to automatic correction range and it will return to the previous state. \*2 AA nickel hydride batteries can be used, but the AC adapter will not charge the device. \*3 When using AA alkaline batteries at 20°C. \*4 With the AR Series, turning the power switch ON automatically goes into (3) mode's full horizontal line. \*5 Hold down the (2) button to turn on all the lines. Using an AC adapter is recommended when using full lines over a long period of time. \*6 Depends on circumstance and position of use. Receiving over 20m ahead is possible but accuracy is not guaranteed. \*7 Dustproof: Protected from limited dust ingress. Waterproof: Protected from water spray from any direction.

	78241	78240	77508	77507	77362	77361	77360	77355	77354	77389	77388	
Type	Neo 51 AR BRIGHT	Neo 31 AR BRIGHT	Neo 21 AR BRIGHT	Neo 01 AR BRIGHT	Neo 51 BRIGHT	Neo 41 BRIGHT	Neo 31 BRIGHT	Neo 21P BRIGHT	Neo 21 BRIGHT	Neo 11P BRIGHT	Neo 01 BRIGHT	
Light Source	Visible Light Semiconductor Laser											
Output	Less than 1 mW (JIS class 2)											
Wave Length	635 nm (ground marking point: 650 nm)			635 nm		635 nm (ground marking point: 650 nm)				635 nm		
Display Accuracy	Vertical: ±1 mm per 7.5 m Horizontal circumference: ±1.5 mm per 7.5 m			Horizontal Circumference: ±1.5 mm per 7.5 m		Vertical/ Horizontal Line ±1 mm per 7.5 m				Vertical: ±1 mm per 7.5 m Horizontal Circumference: ±1 mm per 7.5 m		
Plumb Point Accuracy	±1 mm per 3 m		-		±1 mm per 3 m			-		±1 mm per 3 m		
Vertical Accuracy	±0.03° at 90°		-		±0.03° at 90°				-		-	
Base Line Accuracy	±1 mm per 7.5 m		-		±1 mm per 7.5 m			-		-		
Angle of Emergence	Vertical: About 130° Horizontal: About 105°		-		Vertical: About 130° Horizontal: About 120°				Vertical: About 130° Horizontal: About 105°			
Line Diameter	About 1.5 mm at 5 m ahead (about 2 mm at 7.5 m ahead)											
Automatic Correction Range	±2.5°											
Tilt Alarm	Laser light blinks when it gets over automatic correction range (about a 1-second interval)											
Rotary Fine Adjustment Range	About 5° (500 mm per 5 m)					360°						
Braking System	Pendulum + Magnetic damper											
Power Source	4x AA Alkaline batteries											
Continuous Usage Time *1	(1):①Mode (2):②Mode (F):All Lines Mode *2 (3):③Mode	(1):13 hrs (2):17.5 hrs (F):4 hrs (3):10 hrs	(1):13 hrs (2):17.5 hrs (F):6.5 hrs (3):24 hrs	(1):13 hrs (2):17.5 hrs (F):6.5 hrs (3):32 hrs	(1):13 hrs	(1):58 hrs (2):24 hrs (F):8 hrs (3):12 hrs	(1):58 hrs (2):24 hrs (F):12 hrs (3):16 hrs	(1):58 hrs (2):24 hrs (F):16 hrs (3):25 hrs	(1):58 hrs (2):24 hrs (F):24 hrs (3):37 hrs	(1):58 hrs (2):24 hrs (3):42 hrs	(1):37 hrs	(1):58 hrs
Battery Usage Alarm	Laser light blinks for 8secs when turned on (at 0.5-sec intervals)											
Maximum Range of Line	About 35 m (when with optical receiver) *3											
Dustproof/Waterproof	IP54 *4											
Tripod Screw	5/8 inch											
Size (mm)	Diameter 128 × Height 190 (body φ110 mm)					Diameter 128 × Height 180 (body φ94 mm)						
Approximate Weight (including battery)	1,320 g	1,290 g	1,260 g	1,190 g	1,215 g	1,210 g	1,200 g	1,195 g	1,190 g	1,150 g	1,140 g	

\*1 When using AA alkaline batteries at 20°C. \*2 Hold down the (2) button to turn on all the lines. \*3 Depends on circumstance and position of use. Receiving over 20 m ahead is possible but accuracy is not guaranteed. \*4 Dustproof: Protected from limited dust ingress. Waterproof: Protected from water spray from any direction.

Carpenter's Squares  
 Stainless Steel Rules / Machine Scale  
 Aluminum Rules  
 Resin Folding Rules / Bamboo Rules  
 Squares / Protractors  
 Vernier Calipers / Micrometers  
 Tape Measures  
 Surveying Products  
 Scales  
 Levels  
 Lasers / Optical Equipment  
 Killers / Chalklines / Plumbholders  
 Circular Saw Guides  
 Construction Tools  
 Industrial Tools  
 Thermometers / Hygrometers / Humidity Measuring Instruments  
 Outdoor Products  
 Magnifying Glasses  
 Drawing Tools  
 Magnets

**Laser ROBO Fine BRIGHT**

**High Brightness**  
Twice More

**High Precision**  
±1mm/10m

**Dust/No Hyphen**  
IP54

**For Laser Receiver**

**Do not stare into beam**  
Maximum Output 1 mW Frequency 5.5 kHz Wavelength 635 ~ 638 nm Class 2 Laser Product JIS C6802:2014

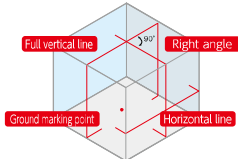
● Multi-purpose type that gives all required reference lines

● Reveals right angle to improve work efficiency

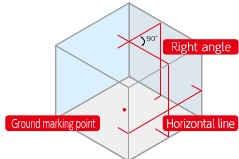
● Basic vertical and horizontal line



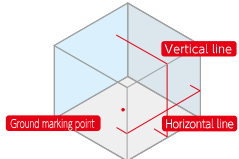
77467



77466



77465



Item Code	Description	JAN Code	Packing Unit	Package
77467	Fine 41 BRIGHT	4 960910 774674	1	B
77466	Fine 31 BRIGHT	4 960910 774667	1	B
77465	Fine 21 BRIGHT	4 960910 774650	1	B

**Features**

- High precision and bright high-grade model
- Compact size for single-hand operation

**Use**

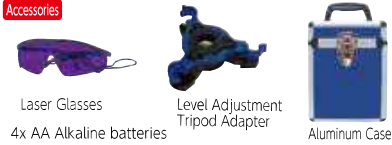
- For all types of referencing

**Specifications**

	77467	77466	77465
Light Source	Visible light semiconductor laser		
Output	Less than 1 mW (JIS class 2)		
Wavelength	635 nm (ground marking point: 650 nm)		
Display Accuracy	Vertical/ Horizontal Line ±1mm per 10 m		
Plum Point Accuracy	±1 mm per 5 m	—	
Vertical Accuracy	±0.012" at 90"		
Base Line Accuracy	±1 mm per 10 m		
Angle of Emergence	Vertical: About 135°	Horizontal: About 120°	
Line Diameter	1.5 mm at 5 m ahead		
Automatic Correction Range	±2.5"		
Tilt Alarm	Light turns off when over automatic correction range		
Rotary Fine-Adjustment Range	About 5" (500 mm per 5 m)		
Braking System	Magnetic damper		
Power Source	3x AA alkaline batteries		
Continuous Usage Time #1	(1)35 hrs	(1)35 hrs	(1)35 hrs
(2):(2)Mode #2	(2)17 hrs	(2)17 hrs	(2)17 hrs
(F):A Lines Mode	(F)9 hrs	(F)11 hrs	(3)27 hrs
(3):(3)Mode	(3)11 hrs	(3)11 hrs	(3)27 hrs
Battery Usage Alarm	Laser light blinks for 8 secs when turned on		
Maximum Range of line	About 35 m (with laser receiver) #3		
Dustproof/Waterproof	IP54 #4		
Tripod Screw	5/8 inch		
Size	Diameter 106 mm × Height 180 mm (body ø88 mm)		
Approximate Weight (including battery)	950 g	930 g	910 g

#1 When using AA alkaline batteries at 20°C. #2 Any combination of the same number of V1, V2, and H lines yields the same approximate continuous usage time. #3 Hold down the (2) button to turn on all the lines. #4 Depends on circumstance and position of use. Receiving over 20m ahead is possible but accuracy is not guaranteed.

**Accessories**



**Laser ROBO Fine 3C**

**Repeat Precision**  
±1mm/14m

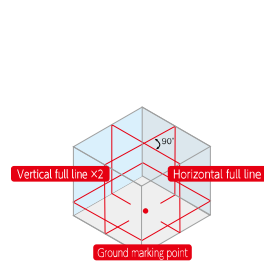
**Line Accuracy**  
±1mm/14m

**Dust/Water-proof**  
IP54

**For Laser Receiver**

**Dual Power Source**  
Battery AC

**Do not stare into beam**  
Maximum Output 1 mW Frequency 5.5 kHz Wavelength 635 ~ 650 nm Class 2 Laser Product JIS C6802:2014



77096



**Accessories**

- Spanner (for removing and replacing of tripod installation adapter)
- Laser glasses (improves visibility of laser)

- Quality aluminum case
- Exclusive AC adapter
- 4x AA Alkaline batteries
- Tripod installation adapter for 5/8 inch (already installed to lower part of unit)

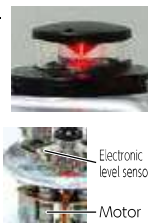


Item Code	Description	JAN Code	Packing Unit	Package
77096	Fine 3C1	4 960910 770966	1	B

\*Laser depicted is an illustration.

**Features**

- The world's first corn prism - due to 360° line with no joints, the unit does not have to be turned to level. Greatly increases workability.
- Auto-leveling function performed by electronic level sensor helps to expose stable laser line even at a place where strong vibration occurs.



**Use**

- For all types of referencing

**Specifications**

	77096
Light Source	Visible light semiconductor laser
Output	Less than 1 mW (JIS class 2)
Wavelength	620 - 660 nm
Line Accuracy	±1 mm per 14 m
Repeat Precision	±1 mm per 14 m
Plum Point Accuracy	±1 mm per 10 m
Vertical Accuracy	±0.0086" at 90"
Angle of Emergence	±1 mm per 14 m
Line Diameter	less than 3 mm at 5 m ahead
Automatic Correction Range	±4"
Tilt Alarm	Light turns off when over automatic correction range
Rotary Fine-Adjustment Range	About 2" (300 mm per 10 m)
Braking System	Auto-leveling function by electronic level sensor and motor
Power Source	3x AA Alkaline batteries / attached AC adapter
Continuous Usage Time #1	(1):1 Line #2 (1)10 hrs
(2):2 Lines (2)6 hrs	
(3):3 Lines (3)4 hrs	
Battery Usage Alarm	—
Maximum Range of Line	About 14 m (with laser receiver) #3
Dustproof/Waterproof	IP54 #4
Tripod Screw	M35 (5/8 inch when using tripod installation adapter)
Size	Diameter 195 mm × Height 230 mm (body ø150 mm)
Approximate Weight (including battery)	2,000 g

#1 When using AA alkaline batteries at 20°C. #2 Any combination of the same number of V1, V2, and H lines yields the same approximate continuous usage time. #3 Hold down the (2) button to turn on all the lines. #4 Depends on circumstance and position of use. Receiving over 20m ahead is possible but accuracy is not guaranteed.

## Laser Receiver II

Dust/Water-proof  
IP56



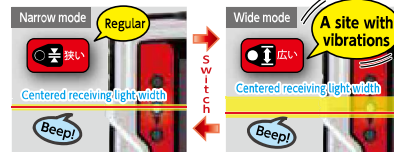
Compatible models

71500-77398		71501-77399	
X line Red Series	Fine 3C Series	X line Green Series	
Neo BRIGHT Series	Fine BRIGHT Series	Green Neo BRIGHT Series	
Neo E Sensor Series		Green Neo E Sensor Series	

Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
71500	Plus with Holder	150×67×34	190	4 960910 715004	1	B
71501	Plus for Laser ROBO Green with Holder	150×67×34	190	4 960910 715011	1	B
77398	with Holder	150×67×34	190	4 960910 773981	1	B
77399	for Laser ROBO Green with Holder	150×67×34	190	4 960910 773998	1	B

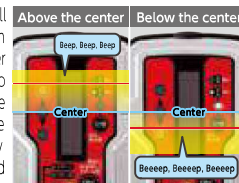
### Features

- Uses narrow mode during regular operation, and can be switched to wide mode for use on a site with vibrations (71500/71501)



(Centered receiving light width is just an illustration.)

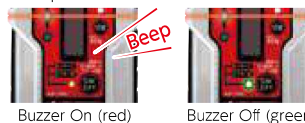
- The alarm sound will be different when higher or when lower than the center, so the position of the laser line can be understood by hearing the sound (71500/71501)



(Alarm can also be turned off when not needed.)

- Dust/Waterproof structure IP56
- 5 Dustproof performance: Protected from limited dust ingress
- 6 Waterproof performance: Protected from high pressure water jets from any direction

- Confirm power-on/off with buzzer and LED light



Buzzer On (red) Buzzer Off (green)

- Holder provided as standard

### Use

- For marking on bright worksites and places where the laser line can be hard to see

### Specifications

	71500	71501	77398	77399
Receiving Distance	1.5 - 20 m*1		1.5 - 20 m*2	
Receiving Accuracy	-		Within ±1.0 mm from the #2 center of laser line	
Centered Receiving Light Width	Narrow mode: Within 1.0 mm from the centered receiving light line Wide mode: Within 2.0 mm from the centered receiving light line		-	
Auto Power Off	Power automatically turns off 7 minutes after turning on.			
Battery Usage Alarm	Power LED blinks when turned on			
Power Source	1x 9V battery (Battery included is for trial use only and may not last as long)			
Continuous Usage Time	About 20 hrs			

- \*1 Receiving distance upper limit of 20 m is a reference value. Receiving over a farther distance depends on circumstance and position of use.
- \*2 Depends on circumstance and position of use. Receiving over 20 m ahead is possible but accuracy is not guaranteed.
- \*3 Depends on circumstance and position of use

## Rotating Table for Fine 3C



77099

Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
77099	Rotating Table for Fine 3C	150×120×120	1,050	4 960910 770997	1	B

### Features

- Movable system allows easy position adjustment
- Tripod legs are foldable to enable work near walls

### Use

- For Fine 3C Series position adjustment

### Specifications

Material	Body: Aluminum, stainless steel
Installation	M35
Compatible Models	Fine 3C Series

## Laser Safety Glasses



76793

Item Code	Description	Body Size (mm)	Weight (g)	JAN Code	Packing Unit	Packaging
76793	Laser Safety Glasses	150×55×60	32	4 960910 767935	5	C

### Features

- Red laser light is easier to see

### Use

- Red laser light can be spotted even in a bright environment

### Specifications

Material	Polycarbonate resin
Compatible Models	X line Red Series Neo BRIGHT Series Neo E Sensor Series Fine 3C Series Fine BRIGHT Series