

# MEDAL

MEDAL ELECTRICITY CO.

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## Laser Marker & LED Projector



Superior Reliability & Performance

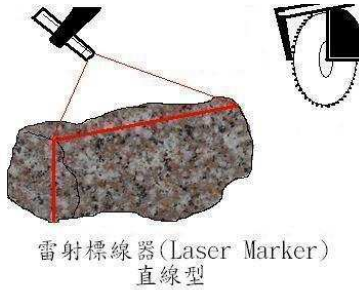
## What do you do by using the laser marker & LED projector?

### Positioning by watching

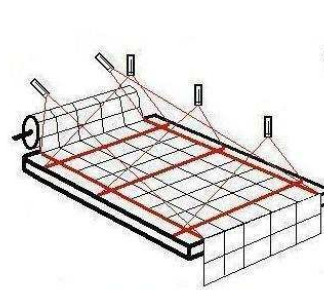
Indicating a machining position  
for Shoe-Making Machine



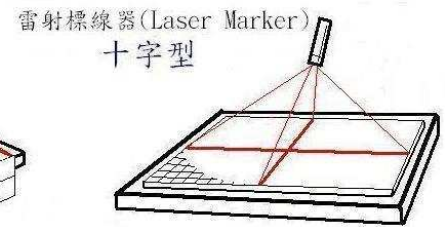
Indicating a cutting  
position for stone industry



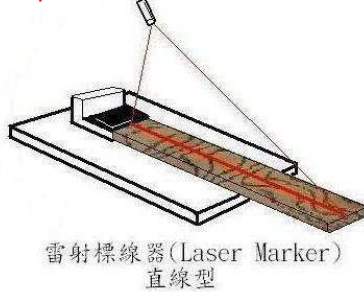
Indicating a machining  
position for Textile Printing



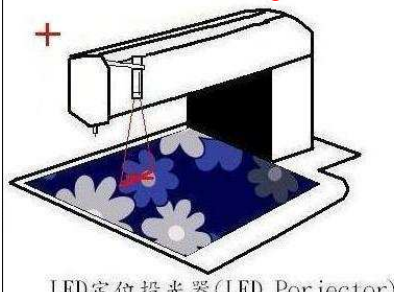
Indicating a cutting  
position for Paste



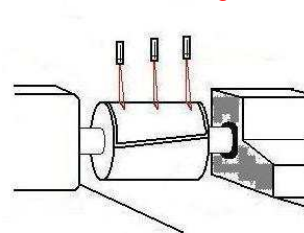
Indicating a cutting  
position for a sawmill



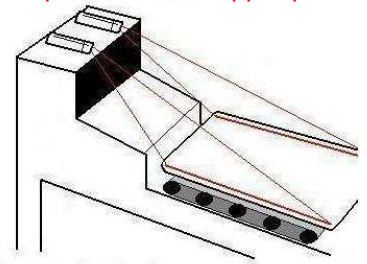
Indicating a needle position  
for an industrial sewing machine



Indicating a position  
for a tire building machine

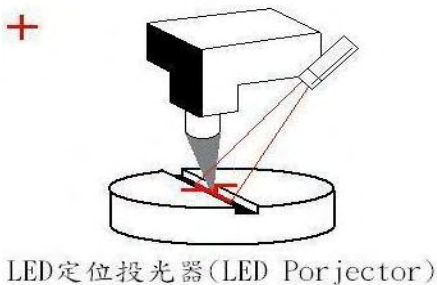


Indicating an edge cutting  
position on a copper plate

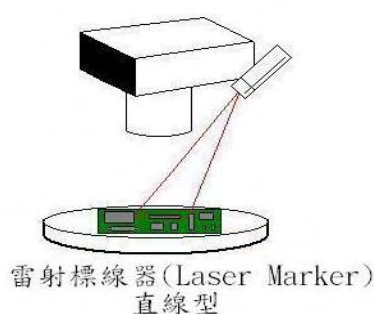


### Image processing with CCD

Indicating a position  
for inspection equipment

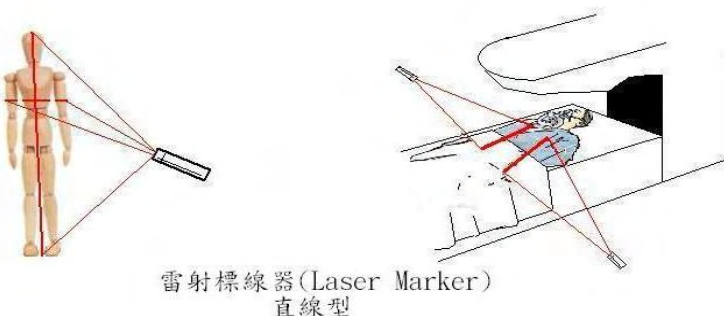


PCB mounting inspection



### Other sensing & measurement

Body profile measurement





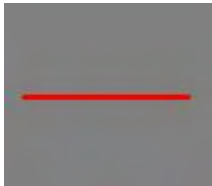
## Laser Marker Selector

MEDAL ELECTRICITY manufactures quality laser marker for alignment applications. Our laser line and cross-hair generators are used in indicating a machining position around the world.

### Pattern : What type of pattern do I want to project onto my target?

Common patterns used in alignment applications:

Single line



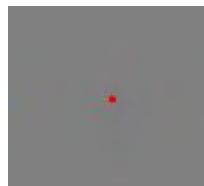
LD-061-03  
LD-061  
LD-062  
LD-063  
LD-065  
LD-066

Cross hair



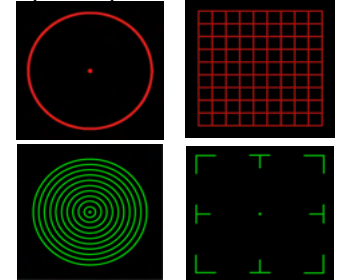
LDC-0603  
LDC-0605  
LDC-0608  
LDC-061  
LDC-062  
LDC-063

Dot



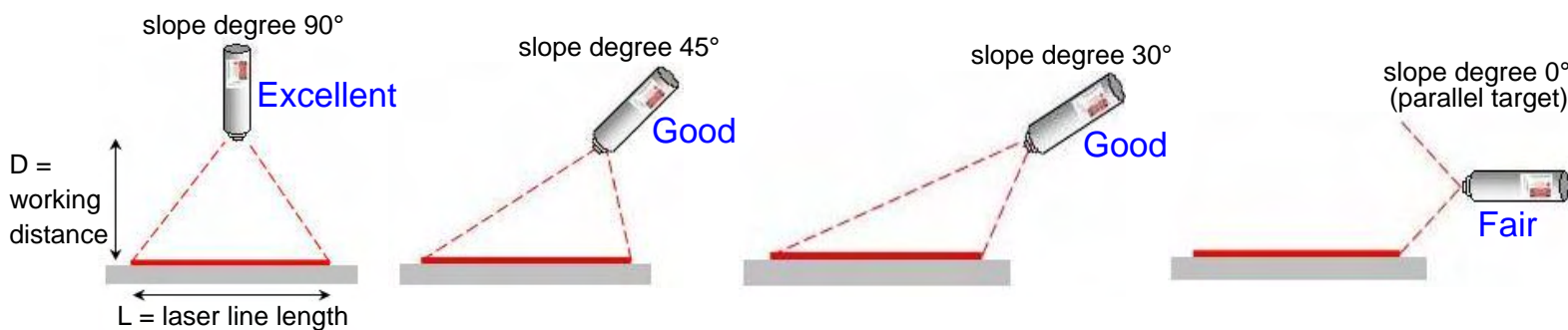
LD-060-1  
LD-060-2  
LD-060-3  
LD-060-5

Special pattern



etc.

Using method : working distance(far from the target) , laser marker slope degree  
laser line length(line on the target).



### Wavelength : What color should my laser emit?

Red (635 650nm) lasers are recommended and usually suitable for laser alignment applications. However, green (532 nm) lasers have a higher visibility, as the human eye is more sensitive to green. For example, a 1 mW green beam (532 nm) will be better perceived by the human eye than a 1 mW red beam (635 nm). Red lasers are generally less expensive than green lasers.

### Eye safety : Is my laser eye safe?

Keep your laser eye safe in class II (CDRH standards) or class 1/2/2M (IEC standards). The output power of your laser is directly proportional to the safety level of your laser. The higher the output power, the higher the class rating of your laser. The fan angle of your line laser can change the eye safety level of your laser. Generally, larger fan angles are more eye safe than smaller ones.

### Operating temperature : Will my laser function properly in my work environment?

We recommend our standard laser marker is operated in a normal environment (10 to 45°C)

### Accessories for your laser : What else do I need?

Power supply : A wall adapter that supplies 5 V of power to your laser for normal operation.  
(PS-1: one power supply to one laser marker , PS-3Y: one power supply to three laser marker , PS-5Y: one power supply to five laser marker)


A battery pack (for short term operation only).

Mounting holder : Position your laser marker for precise alignment.


Holder can be pivoting and also effective dissipaters of heat.

# Laser Marker Standard












	Single Line	LD-061-03	D=1m    L=300mm
		LD-061	D=1m    L=1m
		LD-062	D=1m    L=2m
		LD-063	D=1.5m    L=3m
		LD-065	D=2m    L=5m
		LD-066	D=2m    L=6m
	Cross hair	LDC-0603	D=300mm    L=180mm
		LDC-0605	D=500mm    L=260mm
		LDC-0608	D=800mm    L=400mm
		LDC-061	D=1m    L=1m
		LDC-062	D=1m    L=2m
		LDC-063	D=1.5m    L=3m

	Dot	LD-060-1	D=1m
		LD-060-2	D=2m
		LD-060-3	D=3m
		LD-060-5	D=5m

## Green Laser Marker Standard

	Single Line	LDG	
	Cross hair		
	Dot		

## LED Projector Standard

	   or custom	LED-02R	Distance : 100~350mm
		LED-02G	
	   or custom	LED-L02R	Distance : 100~350mm
		LED-L02G	
	   or custom	LED-03	Distance : 200~600mm
		LED-05	Distance : 350~800mm
		LED-15	Distance : 800~2000mm



## Summary Features :

- safety 、compact, light weight
- long service life 、high quality
- design for industry high reliability
- "Spot", "Line" patterns are available

PRODUCT	<b>LASER MARKER</b> (Single Line)		
TYPE	LD-061-03	LD-061	LD-062
LINE LENGTH	350mm	1m	2m
DISTANCE	0.5~1.5m	0.5~2m	1~2m
OUTPUT POWER	3mW	4.5mW	6mW
WAVE LENGTH	635~650nm (Visible red light)		
LINE WIDTH	0.6~1.0mm	0.6~1.0mm	0.8~1.2mm
LIFETIME	> 50000hr	> 50000hr	> 25000hr
POWER CONSUMPTION	DC 5V~6V 100mA		
TEMPERATURE RANGE	-10°C~ + 45°C		
WEIGHT	320g	320g	320g
VOLUMN	$\varnothing 22 \times 90$	$\varnothing 22 \times 83$	$\varnothing 22 \times 83$
HOLDER	B01	B01	B01
PS. : There are three types of PSU can be chosen to use with.( PS-1 、PS-3Y 、PS-5Y)			



## Summary Features :

- safety 、 compact, light weight
- long service life 、 high quality
- design for industry high reliability
- Clear projection with a far field
- "Spot", "Line" patterns are available

PRODUCT	<b>LASER MARKER</b> (Single Line)		
TYPE	LD-063	LD-065	LD-066
LINE LENGTH	3m	5m	5m~7m
DISTANCE	1~2m	1~2.5m	1~2.5m
OUTPUT POWER	8mW	12mW	16mW
WAVE LENGTH	635~650nm (Visible red light)		
LINE WIDTH	0.8~1.2mm	1.2~2.5mm	1.5~2.5mm
LIFETIME	> 25000hr	> 20000hr	> 20000hr
POWER CONSUMPTION	DC 5V~6V 100mA		
TEMPERATURE RANGE	-10°C~ + 45°C		
WEIGHT	360g	360g	650g
VOLUMN	$\varphi 22 \times 83$	$\varphi 22 \times 83$	$\varphi 38 \times 105$
HOLDER	B02	B02	B03
PS. : There are three types of PSU can be chosen to use with.( PS-1 、 PS-3Y 、 PS-5Y)			





## Summary Features :

- safty 、compact, light weight
- long service life 、high quality
- design for industry high reliability

PRODUCT	LASER MARKER (Cross Hair) (Working Distance <1m)		
TYPE	LDC-0603	LDC-0605	LDC-0608
LINE LENGTH	160mm	260mm	400mm
DISTANCE	300mm	500mm	800mm
OUTPUT POWER	3mW	3.3mW	3.5mW
WAVE LENGTH	635~650nm (Visible red light)		
LINE WIDTH	0.5mm	0.6mm	0.8mm
LIFETIME	> 50000hr	> 50000hr	> 50000hr
POWER CONSUMPTION	DC 5V~6V 100mA		
TEMPERATURE RANGE	-10℃~ + 45℃		
WEIGHT	320g		
VOLUMN	φ 22 × 88		
HOLDER	B02		
PS. ∴ There are three types of PSU can be chosen to use with.( PS-1 、PS-3Y 、PS-5Y)			





## Summary Features :

- safty 、compact, light weight
- long service life 、high quality
- design for industry high reliability

PRODUCT	LASER MARKER (Cross Hair) (Working Distance >1m)		
TYPE	LDC-061	LDC-062	LDC-063
LINE LENGTH	1m	2m	3m
DISTANCE	0.5~1.5m	1 ~2.5m	1~2.5m
OUTPUT POWER	4.5mW x2	6mW x2	8mW x2
WAVE LENGTH	635~650nm (Visible red light)		
LINE WIDTH	0.8~1mm	0.8~1mm	0.8~1.2mm
LIFETIME	> 50000hr	> 25000hr	> 20000hr
POWER CONSUMPTION	DC 5V~6V 100mA		
TEMPERATURE RANGE	-10°C~ + 45°C		
WEIGHT	700g		
VOLUMN	φ 38 × 91		
HOLDER	B03		
PS. ∴ There are three types of PSU can be chosen to use with.( PS-1 、PS-3Y 、PS-5Y)			



## Summary Features :

- safty,highly-bright LEDs
- Using easy-on-the-eyes
- LED colors: red and green
- "Cross", "Line" and "Spot" patterns are available.
- The lens focus is adjustable.

PRODUCT	LED PROJECTOR (Small cross pattern)			
TYPE	LED-02R	LED-02G	LED-L02R	LED-L02G
DISTANCE	100mm~350mm			
PATTERN DIMENSION	Focus : 150mm 	Focus : 150mm 	Focus : 200mm 	Focus : 200mm 
PROJECTION SYSTEM	Adjustable focus			
WAVELENGTH	red light 625nm	green light 525nm	red light 625nm	green light 525nm
POWER CONSUMPTION	DC 5V±5%			
TEMP. RANGE	-10°C~ + 50°C			
WEIGHT	260g	260g	270g	270g
VOLUMN	φ 22 × 105 mm			



## Summary Features :

- safty,highly-bright LEDs
- Using easy-on-the-eyes
- LED colors: warm white
- "Cross", "Line" and "Spot" patterns are available.
- The lens focus is adjustable.

PRODUCT	LED PROJECTOR (Large cross pattern)		
TYPE	LED-03	LED-05	LED-15
DISTANCE	200~600mm	350~800mm	800~2000mm
PATTERN DIMENSION (mm)	Focus : 350mm 	Focus : 600mm 	Focus : 1200mm 
PROJECTION SYSTEM	Adjustable focus		
COLOR	WARM WHITE , RED , GREEN		
POWER CONSUMPTION	DC 3.5V 650mA		
TEMP. RANGE	-10°C~ + 45°C		
WEIGHT	700g	720g	760g
VOLUMN	$\phi 38 \times 120$	$\phi 38 \times 160$	$\phi 38 \times 195$