# **INSTRUCTION MANUAL** CE LC-8(#10) LCD plate for welding

#### **1** General remarks

All persons staying in the danger zone of welding light must use an appropriate protecter. This product protects user from accidental exposure of welding light. This product meets the basic health and safety requirements of ppe regulation (EU) 2016/425, and harmonized standard EN 379: 2009-07.

**Before first use** Leave the solar panel on the parts facing the sun or bulb light for at least 1 hours before first use.

<b>Note</b> : Please check the CE declaration form from each page of the corresponding product at the following URL.	
https://yamamoto-kogaku.co.jp/en/ce/	

WARNING	<ul> <li>Do not use for laser welding or oxyacetylene welding / thermal cutting.</li> <li>Protection from strong shocks is impossible.</li> <li>Please use welding protector suitable for welding be used. Using wrong way leads to serious accidents.</li> <li>Before use, confirm that there is no abnormality such as cracking, peeling of coating, melting etc. in the housing, lens or sensor, and in such a case, stop using this product.</li> </ul>
CAUTION	<ul> <li>Substances that may harm the health or hygiene of the product wearer or other people who come into contact with the product are not confirmed in this product.</li> <li>May cause allergic reactions to people sensitive to substances that may come into contact with the wearer's skin.</li> </ul>

#### 2 Storing

- i .After use, please remove dirt from the product. Please keep them in a place without dust.
- ii .Keep in custody at the place that is free from sun light, high temperature, exposure to organic solvents.

#### 3 Cleaning

- Always clean the product, especially the light sensor part.
- i .When the plates are stained with dirt, dust, iron powder and oil, remove such dirt with a fingertip and wipe it with a soft cloth soaked in water.
- ii .The resin part of this product may be deformed or broken depending on the type of organic solvent, acid and alkali. Do not use these chemicals for cleaning.
- If these adhere, wash in the same way as (i) above.
  iii. If disinfection is required, wipe the product with a soft cloth
- containing a disinfection alcohol. After wiping off the disinfection alcohol well, please use it.

## 4 Expiration date for use

In case of following situations, please change the product to new one without using it.

- i .Bad condition such as scratches and cracks are found.
- ii .After the product receives strong impacts even if it has normal appearance.
- \*The damages on the product might be found.
- iii After exposing against strong light and high temperature % the change of color and deformation of the product might be found.
- iv.Three years later, the user should replace the product even under normal use and conditions.

#### 5 Meaning of markings

In order to be able to use the products as intended, certain markings have to be affixed to the frame which have the following meanings:



## 6 Certification body

The products of our company listed in this information brochure have been type-tested by

DIN CERTCO

Alboinstraße56, D-12103, Berlin, Germany Notified body 0196

and are subject to permanent quality controls. Therefore, this product is allowed to be marked with

# 7 Field of application

This product protects user from the light during working. In the following the characteristics of the filters is given:

Light state scale No.	Normal: # 3 / color plate attached: #4			
Dark state scale No.	Normal : # 10 / color plate attached : # 11			
Note: When luminous transmittance is less than 20%, please increase lighting in the				
workplace. Warning lights and warning notices might be difficult to read. This filter is				
not suitable for long-term use.				

This product has following features:

Optical class	1
Diffusion of light class	1
Variations in luminous Transmittance class	
Angle dependence of luminous Transmittance class	2

## 8.Name of each part

solar panel

Liquid crystal lens

## 9.Mounting method

 Sandwich LC-8 with a transparent cover plate **12**. Attach them on the inside of the welding surface so that the sensor part faces outward.
 To increase the degree of light shielding, attach the supplied color plate **9** between the LC-8 and the transparent cover plate **2**.

between the LC-8 and the transparent cover plate 2.
 \*\*Be sure to attach the outer and inner cover lenses 2 to prevent damage to the liquid crystal part.



[<Attachment> Heat shielding aluminum plate sticking method] This product may be deformed or melted due to heat such as welding. When using this product at a site where heat is generated, attach a "heat shield aluminum board (with adhesive)" to the front of this product.

### **When using, please remove the masking seal.**



\*Depending on the welding surface, mounting may not be possible.

## 10. Specifications of this product

Size	[Outline] $108 \times 50.8 \times 5$ mm , [Lens] $92 \times 35$ mm
Power supply	Solar cell • built-in battery / Automatic switch
Weight	36.5 g
Arc sensor	2 places
Degree of shading	Before arc ignition : # 3 (light) / Color plate attached : #4
	At arc ignition : #10 (dark) / Color plate attached : #11
UV / IR	99.9 % Over cut
Reaction time(23°C)	(Light to dark) about 0.00025 sec., (Dark to light) 0.25 sec. to 0.45 sec.
Operating temperature	-5 °C ~ 55 °C
Outer material	Housing part: Fireproof PA
Applicable welding	MIG, MAG / CO2, SMAW (coated arc welding), Plasma arc welding, TIG welding
Accessories	2 clear cover plates, 1 color plate, Heat shielding aluminum plate 1 sheet
Conforming standard	EN379, ANSI Z 87.1





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