NOTE: All specifications and technical data are subject to change without prior notification.

## Attached Table 1

## Recommended Shade Number According to BS679 and EN169

| Welding Process     | Arc Current(Amperes) |                        |  |  |  |  |  |   |    |    |  |    |    |    |    |    |    |    |   |    |   |    |
|---------------------|----------------------|------------------------|--|--|--|--|--|---|----|----|--|----|----|----|----|----|----|----|---|----|---|----|
| SMAW                |                      |                        |  |  |  |  |  | 9 | 1  | 0  |  |    | 11 |    |    | 12 |    |    |   | 13 |   | 14 |
| MIG(heavy)          |                      |                        |  |  |  |  |  |   | 1  | 0  |  |    | 11 |    |    | 12 |    |    |   | 13 |   | 14 |
| MIG(Light)          |                      | 10                     |  |  |  |  |  |   |    |    |  |    | 11 |    | 12 |    |    | 13 |   | 14 |   | 15 |
| TIG,GTAW            | 9 1                  |                        |  |  |  |  |  |   | 11 |    |  | 12 |    | 13 |    | 14 |    |    |   |    |   |    |
| MAG/CO <sub>2</sub> | 10 11 12             |                        |  |  |  |  |  |   |    |    |  |    | 13 | 13 |    |    | 14 |    | 5 |    |   |    |
| SAW                 |                      |                        |  |  |  |  |  |   |    |    |  |    | 10 | )  | 11 | 1  | 2  | 13 | 3 | 14 | 1 | 5  |
| PAC                 | 11 12                |                        |  |  |  |  |  |   |    |    |  |    |    | 13 |    |    |    |    |   |    |   |    |
| PAW                 | 2.5 3                | 2.5 3 4 5 6 7 8 9 10 1 |  |  |  |  |  |   | 1  | 12 |  |    | 13 |    |    |    | 14 |    |   |    | 1 | 5  |

Adopt greater or smaller shade number pursuant to the field condition.



# AUTO-DARKENING WELDING HELMET

**NO DAZZLING BUT SHINING** 

## **INSTRUCTIONS FOR USE**



## **Panoramic**

SOLAR POWER AUTO-DARKENING HELMET TYPE

**WARNING** 

## Read and understand all instructions before using!

**Panoramic** Welding helmets are designed to protect the eyes and face from sparks, spatter, and harmful radiation under normal welding conditions. They will not protect against severe impact hazards, including fragmenting grinding disks.

This helmet will never protect against explosive devices or corrosive liquids. Machine guards or eye splash protection must be used when these hazards are present.

Impact resistant, primary eye protection, spectacles or goggles that meet appropriate protection specifications, must be worn at all times when using this welding helmet.

Avoid work positions that could expose unprotected areas of the body to spark, spatter, direct and/or reflected radiations. Use adequate protection if exposure can not be avoided.

## **BEFORE WELDING**

Check the front cover lens to make sure that they are clean, and that no dirt is covering the sensors on the front of filter cartridge. Also check the front / inside cover lens and the front lens retaining frame to make sure that they are secure.

Inspect all operating parts before each use for signs of wear or damage. Any scratched, cracked, or pitted parts should be replaced immediately before using again to avoid severe personal injury.

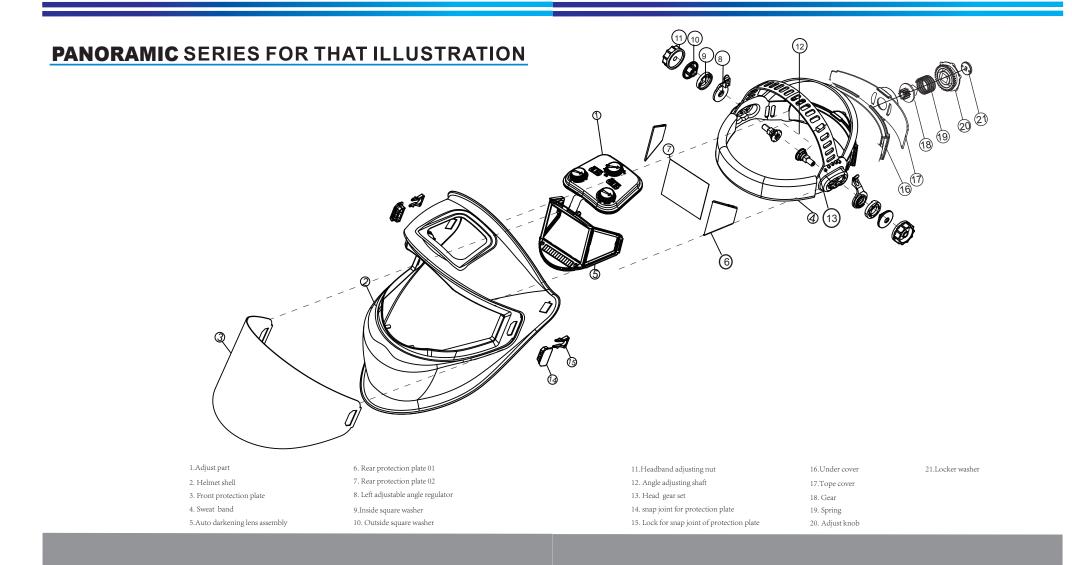
Check for light tightness before each use.

Select the shade number you require at the turn of a shade knob (len specific). Finally be sure that the shade number is the correct setting for your application.

Adjust headband so that the helmet is seated as low as possible on the head and close to your face. Adjust helmet's angle when in the lowered position by turning the adjustable angle limitation washer.

Do not make any modifications to either the welding lens or helmet, other than those specified in this manual. Do not use any replacement parts other than those specified in this manual. Unauthorized modifications and replacement parts will void the warranty and expose the user to the risk of personal injury.

Failure to follow these warnings and/or failure to follow all of the operating instructions could result in severe personal injury.



## DISASSEMBLY INSTRUCTIONS

1. Unlock the snap joint of protection plate if it is locked(A).

Press the snap joint for protection plate and then take out the plate(A).

nd then take

2. Change another protection plate and insert the snap joint and then lock it(B).

3. Take off the snap joint and pull out on the outer protection lens (C). Remove protective film from lens.

Place inside protection lens (C) back into the front of the helmet by inserting one side of the lens into either side slot and then bend the lens just enough that it will slip into the other side slot.

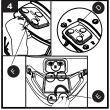


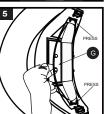
## DISASSEMBLY INSTRUCTIONS

4. Use a tool such as a long nose plier to pull out the 3 round knob covers on the adjustment panel.Use a screwdriver to pick out the 2 small switch covers from one side (D).

Take out the cover of the adjustment panel from the shell (E). Loosen all the five screws on the filter (F).

5. Take out the filter assembly from the shell, and change the filter assembly (G).





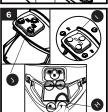
6. Place the adjustment panel cover back, and tighten all the five screws.

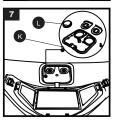
Rotate the 3 axes of round knobs counter-clockwise to the maximum position, place each knob cover back on related axis with arrow pointed at the maximum direction. Move the switch knob to one side, place back the switch cover accurately. Please be very careful. Otherwise it's easily to break the switch knob inside. (HIJ).

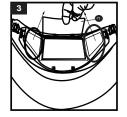
7. Pull down on the battery cover to remove(K).

Change the battery(L).

Reinstall the battery cover(K).







## **I.Product Features**

• This product is of completely new design, with shell material high-and-low-temperature resistant, corrosion resistant, flame retardant, soft, 1ight tight, intensity high, and durable.

• Clear vision on the work piece both prior and during welding, which means improved quality and higher efficiency.

• Overall-process protection against ultraviolet(UV)and infrared(IR)ratiation.Panoramic is equipped with lithium battery and solar cells that extends the life of the battery.

• The product is in full conformity with related ANSI, CE, CSA, AS/NZS safety standards.

## **II.Operating Instruction**

1.Peel off the protective film inside and outside the surfaces of lens.

2.Prior to welding, the filter screen is in a transparent and clear state, enabling a clear vision on work piece, at the moment of starting welding , it automatically changes the filter screen from clear to dark state. At the moment of stopping welding , the filter screen automatically changes from dark to clear state.

3. Adjust the operation mode to Welding or Grinding.(Len specific). While operating in Grinding mode, the filter do not react to welding arc and keep clear.

4. Adjust the Shade(Len specific) number knob according to different welding current and welding process to select proper shade number: see attached table 1;

5. Adjust the sensitivity level (Len specific) Stop welding, adjust the sensitivity level to high till filter flashes. Adjust the sensitivity level a little lower then.

6.Adjust the delay time(Len specific). Delay time feature the time the Len turn from dark to clear state after stop welding.

7. Adjust the headgear: see attached figure 2.

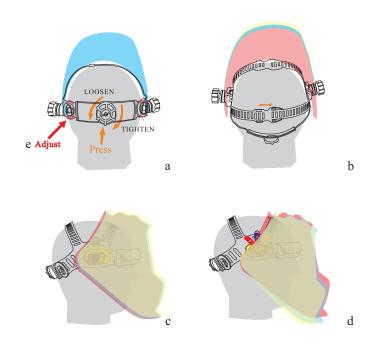
a. Put the helmet on the head, Press the adjustable knob down(at the rear head positon), at the same time, rotate the knob counterclockwise to increase the circumference of the headband, or rotate the knob clockwise to decrease the circumference. See figure 2.a

b. Adjust the depth of the helmet to best position. See figure 2.b

c. Adjust the distance between the helmet and your face. See figure 2.c

d. Adjust the Angle limitation position of the helmet. See figure 2.d

## Figure 2



e. Adjust the Angle behind you head to suit your headform

As a result of above mechanism action, the welder surely feels more comfortable than before, and are in working with more high proficiency at any time.

## **III. Adjustment Instruction**

**IMPORTANT NOTE:** Only the Front Facing View Panel is adjustable; the Panoramic Side Panels offer side protection at a fixed shade level 11. Use extreme caution when using for arc viewing conditions which may exceed shade level 11.

- Remove the protective fi lm from the inside and outside surfaces of the lens.
- With normal (non-welding), ambient light viewing through the lens, your view will have a green tint. When exposed to bright light or the fl ash of the welding arc, the lens will quickly darken your view.

The Sensitivity, Delay and Shade controls and switches are located at the top of the Welding Helmet under a removable protective cover and are adjustable as follows: **(FIG 1)** 

#### SENSITIVITY

Controls the Auto-darkening response when exposed to smaller arcs such as low-amperage TIG welding and conditions like welding outside in bright sunlight.

**To Adjust Sensitivity:** Turn dial Clockwise to increase sensitivity for low amperage welding. Turn Counter-Clockwise when welding in bright sunlight.

### DELAY

Delay controls the time interval for the Auto-darkening to return to normal view once arc is stopped.

**To Adjust Delay:** Turn dial Clockwise for helmet to return to normal view after arc is stopped. Turn Counter -Clockwise to Turn Counter-Clockwise to minimize the time for the helmet to return to normal view.



## SHADE

Shade is used to control the level of darkness as Auto-darkening is automatically activated when an arc is present. The Shade Control Knob is divided into 2 separate ranges; one for shade levels 4 through 8 and one for shade levels 8

through 11. Shade 4 is lightest while shade 12 is darkest. one for shade levels 8 through 11. Shade 4 is lightest while shade 12 is darkest. The ranges are selected by the Range Switch located at the top of the helmet.

## IV. Warning

- Panoramic applies to all kinds of welding operations.
- The Autodarkening filter must be equipped with outside protection plate to prevent potential unrepairable hazard.
- Change the scratched or broken lens frame that reduces visual field and protection as soon as possible.
- Change the scratched or broken protection plate, do not bump into lens during replacement.
- Before welding, select proper shade number according to welding process.
- The operating temperature range is 23° F to 131° F( $-5^{\circ}$ C to 55°C). When ambient temperature is below the lower limit, the response speed of liquid crystal materials of lens frame assembly slower a little, no other protections will be affected.
- Do not store lens frame in a location near a heat source or in a high moisture place.
- Do not clean lens frame with alcohol, gasoline, or diluted solvent; and do not immerse it into water.
- Frequently change the sweatband.
- Change failure parts with the parts provided by the authorized supplier.
- Should this helmet not darken upon striking an arc, stop welding immediately and contact your supervior or your dealer.

## **V. TECHNICAL SPECIFICATIONS**

MAIN WINDOW: Light shade: DIN3 Dark shade: DIN 4-8/8-12 Viewing area: 115x85 mm (4.53" x 3.35") SIDE WINDOW: Light shade: DIN3 Dark shade: DIN 10 or DIN 11 Viewing area: 2(pcs)x80(Top)/35(Bottom)x68(Height) mm (2(pcs)x3.15(Top)" /1.38(Bottom) x 2.68(Height)") Switching time: <1/10,000S at Room Temperature Sensitivity: Stepless Adjustment, Outside helmet Delay time: Stepless Adjustment Outside helmet 0.15S ~0.8S Shade Adjustment: Outside & Stepless Sensors: 4 Optical class: 1/1/1/2 / 1/1/1/1 TIG Capability: >2A Grinding: Outside switch Power Supply: Replaceable Li-Mn & Solar Combination UV & IR protection: Up to shade 16 Certification: CE ANSI AS/NZS Warranty (years): 2 Weight: 610G (1.35 Pound) Material of helmet: NYLON

Patented Design Patented Registration No.: ZL201630189579.0

#### **COMMON PROBLEMS AND REMEDIES**

#### \*Irregular Darkening Dimming

Headband has been set unevenly and there is an uneven distance from the eyes to the filter's lens(Reset headband to reduce the difference to filter).

#### \*\*Auto-Darkening Filter Does Not Darken Or Flickers

Front cover lens is soiled or damaged (change lens cover)

Sensors are soiled (clean the sensors' surface)

Welding current is too low (Adjust sensitivity to high)

\*\*\*Slow response

Operating temperature is too low(do not use at temperatures below-5°C or 23°F).

\*\*\*\* Poor Vision

Front / Inside cover lens and / or filter lens are soiled(change lens)

There is insufficient ambient light

Shade number is incorrectly set (reset the shade number)

\*\*\*\*\*Welding Helmet Slips

Headband is not adjusted properly(readjust headband)

**WARNING!** Operator must stop using the auto-darkening filter welding helmet immediately if the above-mentioned problems cannot be corrected.Contact the dealer.