



WELDING HELMET WITH AUTOMATIC DARKENING

meant for welding and grinding



CE

10.55-P800E,
10.55-P800E-C,
10.55-P800E-F,
10.55-P810E-RED

Dear customer, thank you for purchasing the PROTECO welding helmet.
Original Instructions for use for the automatically darkening welding helmet **10.55-P800E; (E-C); (E-F); 10.55-P810E-RED.**

INTRODUCTION

Please read the Instructions for use carefully.

The helmet is primarily intended for welding, but can also be used for grinding.

It has been designed to protect your eyes and face from UV/IR radiation and splashed metal particles during normal arc welding, and small particles flying off during grinding.

The model is equipped with a specially developed fully adjustable head cross. When lifting the helmet, the centre of gravity shifts to the centre of the head. This reduces the load on the neck and head. The filter is powered by a solar cell and long-lasting replaceable lithium batteries.

After the arc is ignited, the filter immediately darkens thanks to 4 high-performance sensors. The reaction time of the filter is 1/30000 sec. (0.033 ms). When the arc goes out, the filter automatically brightens.

The helmet is not intended for professional use and permanent load.

Do not use the helmet for any purpose other than that for which it is intended.

TECHNICAL DATA

Manufacturer's identification	10.55-P800E; (E-C); (E-F); 10.55-P810E-RED
Size of visor	98x43mm
Optical sensors	4
Filter switching on and off	fully automatic
Optical class – EN 379	1/1/1/1
Protection against UV/IR	DIN 16, for the whole time
Basic dimming of the filter	DIN 4
Dimming selection	DIN 9-13
Time of lightening – 3 degrees	0.1; 0.5; 1.0s
Sensitivity adjustment	continuous
Mode selection options	welding/grinding
Utilisable for the following methods	MMA, MIG/MAG, TIG>5A, SAW, SMAW, PAC, PAW
Filter power supply	solar cell + replaceable lithium batteries CR2450
Battery and filter capacity test	yes
Operating temperature	-5°C to +55°C
Storage temperature	-20°C to +70°C
Helmet material EN 175	polyamide
Weight	480g

WELDING HELMET ADJUSTMENT

Filter adjustment

DELAY – the time of delay with which the filter brightens after the arc switches off can be selected using the three-position switch on the right side of the helmet.

SLOW – long time, 1 second

MIDDLE – medium time, 0.5 second

FAST – short time, 0.1 second

SENSITIVITY – The sensitivity of the sensors is adjustable with the rotary knob on the right side of the helmet. Set the maximum sensitivity, when welding with small currents, especially with the TIG method.

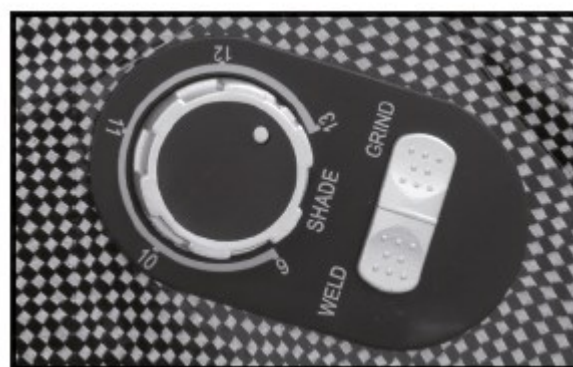
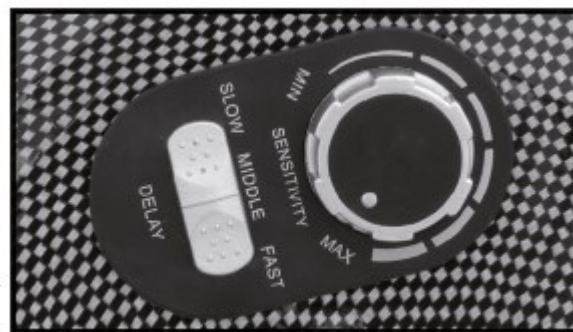
SHADE – dimming of the DIN 9-13 filter is adjustable using the rotary knob on the left side of the helmet. Select the correct DIN value according to the welding method and the welding current.

For the setting values see the table.

To disable the filter when grinding, use the switch on the left side of the helmet.

GRIND – grinding (filter does not darken)

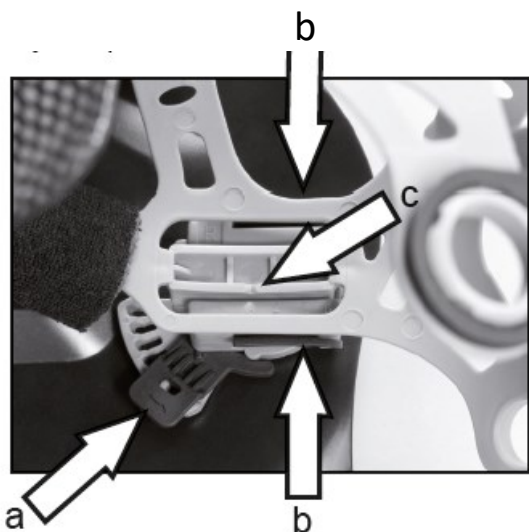
WELD – welding



Head cross adjustment

Adjust the upper straps of the head cross so that the helmet is comfortably seated as low as possible on the head. After putting the helmet on, lightly tighten the circumferential tape with the wheel on the back of the cross so that the helmet does not move on your head when you lower it. The distance of the helmet from your face can be adjusted in 6 positions by pressing the two locking buttons against each other (b) and moving the holder to the desired position (1-6). Make sure that the same numerical value is set on both sides opposite the cut-out (c). The tilt angle of the helmet can be adjusted with lever (a). Loosen the nut on the right side of the helmet enough. Swivel the lever (a) towards the helmet to pull out the locking teeth and move it in the direction of the arrows to the desired angle. Tighten the lock nut.

After lowering the helmet, the filter should be against the eyes. The star nuts on the pivot pins are used to adjust the resistance when lowering the helmet.



CHECK BEFORE WELDING

After unpacking, leave the helmet in daylight for about 5 minutes before welding to form the solar cell. Check the front filter protection foil to make sure it is clean and fits snugly around the perimeter of the cartridge.

Also check the inner protective foil of the filter.

Before each use, check the mounting of the cartridge, whether there is no light between the cartridge and the body of the helmet.

Switch the filter to the welding mode and press the **TEST** control button. The filter must darken. If the control LED (**LOW BATTERY**) flashes or lights up after pressing the button, or if the LED flashes during operation, do not use the helmet, as the batteries are empty and must be replaced so that the filter functions correctly. This will prevent possible damage to your eyes. Do not leave discharged batteries in the cartridge.

WARNING!

Before welding, be sure to activate the filter by turning the switch to the welding position (WELD).



WARNINGS AND IMPORTANT NOTICES

WARNING!

This welding helmet is not suitable for laser works and gas welding.

Never place the helmet on a hot surface or near sources of excessive heat!

When welding particularly with high currents, keep the helmet at a sufficient distance from the thermal radiation of the arc.

Use the helmet only with the temperatures ranging between -5°C and +55°C.

Never open the cartridge or make any modifications or repairs to it!

The helmet does not protect against heavy, risk factors, such as grinding wheel fragments, impacts, etc.

The helmet does not protect when working with explosives, caustics, and flammables.


The helmet does not protect against noise. Use a respirator and ear protectors when grinding and wearing the helmet.

Never use a damaged or incomplete helmet. Do not make any adjustments to the helmet or the cartridge! Any modifications of the structure will invalidate the warranty.

Never use the helmet without the original outer and inner protective foil!

When using the helmet without protective foils, the filter glass and the solar cell will be irreversibly damaged!

Never clean the helmet with compressed air, use a vacuum cleaner to remove dust! If need be, use a slightly damp textile cloth. Do not use any aggressive cleaning agents.

 **WARNING!** If the filter does not darken after the arc is ignited, stop using the helmet immediately! Try to find the cause (see the Troubleshooting section).
Radiation from the welding arc can seriously damage the eyes!

Do not expose the helmet to rain.

Do not immerse the filter cartridge into water or wash it with water!

Protect the helmet, especially the cartridge, from shocks and high temperatures!



MAINTENANCE

Batteries replacement

The batteries are located on the left and right inside of the controls. Press the lid and slide it out. Replace the battery and slide the case back in. Observe the right polarity!

Warning: Always change both batteries.

Regularly replace the protective foils of the filter, if they are scratched or dirty.



Replacing the outer protective foil

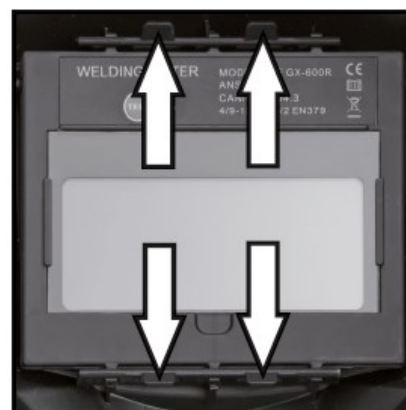
Unlock the cartridge on the inside of the helmet with two levers and lift the cartridge. Remove the damaged foil and insert a new foil. Snap both levers in place and carefully check that the foil fits all around the cartridge.

Be sure to remove the protective sticker before inserting the foil.

Replacing the inner protective foil

Lift the foil in the recess with your fingernail, bend it upwards until it comes out of the holder.

When reassembling, bend the foil again and slide it back into the holder. Be sure to remove the protective sticker.



Regularly clean the surface of the filter.

Always keep the solar cell, filter glass and sensors clean.

To clean the surface of the filter, use only a soft and clean textile cloth designed for cleaning optics.

Always use only original protective foils suitable for this type.

STORING

Store the helmet clean in a dry, dark and cool place, preferably in its original box.

When storing the helmet in light, especially fluorescent light, the filter darkens and brightens.

The result is unnecessary battery discharge.

TROUBLESHOOTING		
The filter does not darken or darkens irregularly.	1) Low batteries. 2) Dirty protective foil. 3) Low sensitivity setting.	1) Replace the batteries. 2) Replace the protective foil. 3) Set the sensitivity correctly.
The arc is slightly visible or dazzling during welding.	Improperly set DIN value.	Set the correct DIN value according to the table.
The filter does not darken.	1) The switch is in the GRIND position for grinding. 2) Heavily soiled protective foil.	1) Check the welding-grinding switch, whether it is in correct position. 2) Replace the protective foil.
Slow filter response.	Low operating temperature, insufficient ambient light.	Change the work environment.

WARNING: Do not use the helmet if you cannot eliminate the above-mentioned defects and contact your dealer or authorized service centre.

SETTINGS TABLE

Welding process	Current in amperes A																									
	1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600					
MMAW(Covered electrodes)	8						9			10			11			12			13			14				
MAG	8						9			10			11			12			13							
TIG				8			9			10			11			12			13							
MIG							9			10			11			12			13			14				
MIG with light alloys										10			11			12			13			14				
Air-arc gouging							10						11			12			13			14		15		
Plasma jet cutting													9			10			11			12			13	
Microplasma arc welding	4		5		6		7		8		9		10		11			12								
	1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600					

Note: The table recommends the most suitable welding filter darkening for various work applications. Slightly lower or higher values may be used depending on the conditions.

MMA W – manual arc welding with a coated electrode

MAG – welding in protective atmosphere using CO₂

TIG – arc welding with non-melting electrode

MIG – welding in protective atmosphere using Argon

MIG – with light alloys in protective atmosphere using Argon

Air-arc gouging

PAC – plasma jet cutting

PAW – microplasma arc welding

SAW – submerged arc welding

DISPOSAL

At the end of its service life, return the device, accessories, and packaging to a recycling centre in accordance with environmental protection requirements.

Electrical appliances do not belong in municipal waste.

Manufacturer's registration number: 02355/05-ECZ

The company PROTECO nářadí s.r.o. does not assume any responsibility for damage or injury caused by improper use.



INFORMATION

Any information, illustrations, and specifications are based on the latest product information available at the time of printing these Instructions for use.

There may be factors in a workplace that may affect the values with lasting effects that characterize the work area, such as sources of dust, noise, etc.

The permissible values in a workplace may also vary from country to country.

The information serves the user of the product to better assess the hazards and risks.

The manufacturer reserves its right to make technical, aesthetic and functional changes to its products without prior notice. This is in connection with the manufacturer's efforts to constantly develop and innovate its products.

The company reserves its right to change image and text information. Printing errors reserved.

EU DECLARATION OF CONFORMITY

Manufacturer: PROTECO nářadí s.r.o.
Radlická 2487/99, 150 00 Praha 5
Czech Republic, ID No. 47453630

Product: **10.55-P800E-C** Welding helmet with automatic darkening P800E with carbon print – PROTECO
10.55-P800E-F Welding helmet with automatic darkening P800E with a motive of FLAMES – PROTECO
10.55-P810E-RED Welding helmet with automatic darkening P810E RED – PROTECO

Type of product: GX-600R, SUPER

The product meets all relevant provisions of technical regulations, i.e. the relevant directives of the European Communities and government regulations of the Czech Republic.

Directive No. 89/686/EEC (Government Regulation No. 21/2003 Coll.)

Replaced by Directive (EU) 2016/425

The following standards were used within the conformity assessment:

DIN EN 379:2009-07

DIN EN 175:1997-08

GX EN 175 F CE

The conformity assessment was issued on the basis of the certificates and reports issued under the following Nos.:
C4946GX/R2, 11163-PZA-14, 10103-PZA-15, 13121-PZA-18, 1398-PZA-18, C4957GX/R2, 11252-PZA-14, 12091-PZA-16.

Issued by the test institute DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Alboinstr. 56, 12103 Berlin, Germany.

Last two digits of the year in which the CE marking was affixed to the product: 20

The person responsible for completing the technical documentation: Libor Knap
Podbřezí 63
518 03

In Podbřezí, date 20 April 2020

.....
Libor Knap
Managing Director
(Stamp)

WARRANTY CARD

Stamp and signature of the dealer:

.....

Date of sale:

Records on repairs made (date, signature):

1.

2.

3.



Manufacturer:
PROTECO nářadí s.r.o.
Branch: Podbřezí 63, 518 03
www.proteco-naradi.cz