

USER MANUAL

ITKU-07-03-05-22-EN



CONTENTS

| 1. | GENERAL INFORMATION | 5 |
|----|--|---|
| | WARRANTY CONDITIONS | |
| 3. | MAINTENANCE | 5 |
| | 3.1. Cleaning Stainless Steel Components | 5 |
| | 3.2. Cleaning ABS Components | 6 |
| 4. | SERVICE AND REPAIR | 6 |
| 5. | RECYCLING | 7 |
| 6. | MECHANICAL DESIGN | 7 |
| | 6.1. Dimensions | 7 |
| | 6.2. Fixing Method | 7 |
| | 6.3 Models | 8 |
| | 6.4. Technical Specifications | 8 |
| 7. | START-UP | 8 |
| 8. | COMMUNICATION WITH WEIGHING INDICATOR | 8 |
| 9. | COMMUNICATION PROTOCOL | 9 |
| | | |

PRECAUTIONS

Prior to installation, operation, or maintenance activities, carefully read this user manual. Follow the instructions strictly.

| | Prior to the first use, carefully read this user manual. Use the device only as intended. | | | | | | | |
|---------|--|--|--|--|--|--|--|--|
| | The device must not be used in environments with explosive gases or dust. | | | | | | | |
| | In the case of damage, immediately unplug the device from the mains. | | | | | | | |
| <u></u> | The device to be decommissioned must be decommissioned in accordance with valid legal regulations. | | | | | | | |

1. GENERAL INFORMATION

The WWG-2 large-size display is used to display mass from industrial scales in challenging ambient conditions with strong external lighting (sunlight) and at a great distance from the weighing indicator.

For use in harsh industrial environments, the display is housed in a stainless steel housing. An additional bracket allows the display to be mounted on the wall. The WWG-2 features a white diode backlight and a clear display indicating digits of 4.4" (11.2 cm) in height. Communication with the weighing indicator is established via the RS232 interface. The display is supplied with 230VAC.

2. WARRANTY CONDITIONS

- A. RADWAG is obliged to repair or exchange all elements that appear to be faulty by production or by construction.
- B. Defining defects of unknown origin and methods for eliminating them can only be accomplished with the assistance of the manufacturer and user representatives.
- C. RADWAG does not bear any responsibility for damage or losses resulting from unauthorised or inadequate performing of production or service processes.
- D. The warranty does not cover:
 - damage from improper exploitation, thermal and chemical damage, and damage caused by lightning, power grid overvoltage, or other random event:
 - inappropriate cleaning habits.
- E. Loss of warranty takes place if:
 - a repair is carried out outside RADWAG authorised service point,
 - the service claims intrusion into mechanical or electronic construction by unauthorised people,
 - the device does not bear security seal stickers.
- F. Contact with the central authorised service: +48 (48) 386 64 16.

3. MAINTENANCE

In order to clean the large-size display risk-free, it is necessary to disconnect it from the mains.

3.1. Cleaning Stainless Steel Components

Avoid using cleansers containing any corrosive chemicals, e.g. bleach (with chlorine). Do not use cleansers containing abrasive substances.

Always remove the dirt with a microfiber cloth. Do it to avoid damage to the protective coating.

Daily cleaning routine (removal of small stains):

- 1. Remove the dirt with a cloth dipped in warm water.
- 2. For best results, add a little bit of dishwashing detergent.

3.2. Cleaning ABS Components

To clean dry surfaces and avoid smudging, use clean, non-colouring cloths made of cellulose or cotton. You can use a solution of water and detergent (soap, dishwashing detergent, glass cleaner).

Gently rub the dirty surface and let it dry. Repeat the cleaning process if necessary.

In the case of hard to remove contamination, e.g. residues of adhesive, rubber, resin, polyurethane foam, etc., you can use special cleaning agents based on a mixture of aliphatic hydrocarbons that do not dissolve plastics. We recommend conducting tests before using the cleanser on all surfaces. Do not use cleansers containing abrasive substances.

4. SERVICE AND REPAIR

In the event of a problem with the device's proper operation, contact the nearest manufacturer's service point.



In the case of any sign of damage, it is necessary to disconnect the device from the mains immediately. The damaged component must be replaced or repaired by RADWAG service directly.

In the case of defects, deliver the faulty product to the manufacturer's service point. If the product cannot be delivered to the manufacturer's service point, call the service and report the defect. A repair scope and method will be set up.



The user is NOT ALLOWED to carry out any kind of repair on the device himself/herself. Any attempt at device modification, repair, etc. by unauthorised persons will result in the loss of validity of manufacturer-issued certificates, declarations, and warranty.

5. RECYCLING

The device must be recycled; it should not be disposed of as regular household waste. The device to be decommissioned must be decommissioned in accordance with valid legal regulations.



6. MECHANICAL DESIGN

6.1. Dimensions

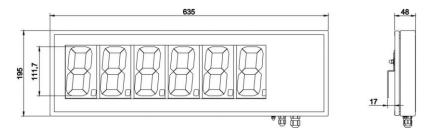


Fig.1. Dimensions of the WWG-2 large-size display

6.2. Fixing Method

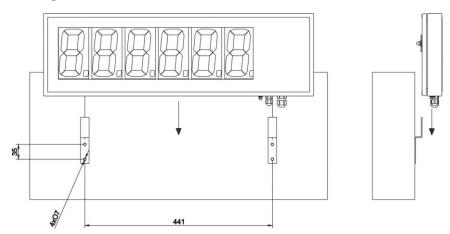


Fig. 2. Way of fixing the WWG-2 large-size display.

6.3. Models

| Symbol | Socket | Cable length (standard) | Cable length (maximum) | Housing | Associated equipment | | |
|---------|------------|-------------------------|------------------------|-----------------|---------------------------------------|--|--|
| WWG-2/4 | M12 8P | 3m | 10m | stainless steel | PUE H315, PUE HX7, PUE HY10, PUE 5 | | |
| WWG-2/5 | DSUB 15 3m | | 10m | stainless steel | PUE 7.1, PUE C32 | | |
| WWG-2/6 | M12 8P | 3m | 10m | stainless steel | DWT | | |
| WWG-2/7 | DB9/F | 3m | 10m | stainless steel | PUE C315 | | |

6.4. Technical Specifications

| Housing | Stainless steel | | | | |
|-----------------------------|-------------------|--|--|--|--|
| Digit height | 4.4" (11.2 cm) | | | | |
| Communication | RS232 | | | | |
| Connection | Socket | | | | |
| Power supply | 230VAC | | | | |
| Ingress protection | IP66/67 | | | | |
| Operating temperature | - 20 °C ÷ + 40 °C | | | | |
| Dimensions (without handle) | 635x195x48mm | | | | |

7. START-UP

The WWG-2 large-size display should be connected to the scale's RS232 port and then to the mains supply. When communication with the scale is established, the background of the display is backlit and the mass value is displayed.

8. COMMUNICATION WITH WEIGHING INDICATOR



The software manuals for individual weighing indicators contain detailed instructions for configuring their parameters for cooperation with the WWG-2 large-size display.

9. COMMUNICATION PROTOCOL

The display supports a communication frame sent as a continuous transmission.

Frame format supported by the display:

| 1 | 2 | , , | 3 | 4 | 5 | 6 | 7-15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|-----|-------|---------------------|-------|-----------|------|-------|----|------|----|----|----|
| S | ı | I | space | stability marker | space | character | mass | space | | unit | | CR | LF |

| Command | 3 characters, left justification | | | | |
|---------------------------------------|--|--|--|--|--|
| Stability marker | [space] if stable [?] if unstable [^] if high limit is out of range [v] if low limit is out of range | | | | |
| Character | [space] for positive values [-] for negative values | | | | |
| Mass | 9 characters with decimal point, right justification | | | | |
| Unit 3 characters, left justification | | | | | |

