

Wachendorff Display Series 1

DPL002-xxxxxx2P

Installation manual



Version 1.4

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1. Foreword

Thank you for choosing a Wachendorff product. We trust that the product will provide you with many years of valuable service. To ensure that the product has a long life expectancy, please check and compare all connections of the device with the installation guide before switching on the device.

2. Warranty conditions

Defective equipment will either be repaired or replaced.
However, this does not apply to the following:

1. The warranty is void if the equipment is more than 3 years old from the date of purchase.
2. Damage caused by force majeure, accident, negligence, improper installation, or misuse.
3. The product has been put into operation or repaired by unauthorized personnel.
4. By removing or damaging product sealings.

3. Warnings

Ensure that all local and national electrical standards are met when installing the unit.

4. Safety instructions



Power supply: Use output power that meets Safety Extra-Low Voltage (SELV) requirements. The device can only be operated with DC power, voltage range: 12 to 32 VDC, compatible with most controller DC systems. The peak starting current can be up to 4 A.

Fuse/Commissioning: Provide your system / machine with a fuse. If the display does not turn on within 5 seconds of turning it on, turn it off. Check for proper wiring and try turning the device back on.

Overvoltage: DC voltage sources should ensure adequate isolation from the main power supply and similar hazards.

Emergency stop: A hardwired emergency stop should be included in every system to meet ICS safety recommendations.

Supply voltage conditions: Do not switch on the device under inductive load or do not use the same supply voltage as that of the controller. Note: The 24 VDC output of some controllers does not provide enough power to operate the monitor.

Wiring:

- a. The length of the power cables should be minimized (Max: 500m shielded, 300m unshielded).
- b. If the wiring could be exposed to lightning or overvoltage, use appropriate surge arresters.
- c. Keep AC, high-energy, and fast-switching DC power cables separate from signal lines.
- d. Add a resistor and a capacitor in the parallel circuit between the ungrounded DC supply and chassis ground. This results in a path for static and high-frequency power loss. Typical values are 1M ohms and 4,700pF.

Note that the devices could fail due to an internal error and thus an unsafe state can be reached. In addition, electrical faults in the operator interface may cause the connected devices to start unintentionally. This can result in property damage and/or injury to the operator. When using programmable controllers whose use requires an operator, be aware of the safety risks and take appropriate precautions.

5. Commissioning

This document describes the commissioning and installation of the Wachendorff DPL002-xxxx2P monitor. Detailed descriptions of the specifications and applications can be found in the data sheet.

Electronic Environment	The DPL002-xxxx2P is tested and complies with the European CE requirements. This means that the electronics in the device are protected against external electrical interference. In special cases, however, there is no complete protection. Correct wiring and proper grounding ensure proper functioning of the device.
Environment	<ul style="list-style-type: none">• Make sure that the device has been installed correctly and that the device specifications have been complied with. Avoid installing the device in locations where mechanical vibrations or shocks are present.• Do not use this device in locations where there is a risk of explosion, e.g. due to flammable gases, vapors or dust.• Do not mount the device in places where corrosive gases, such as SO₂, exist.• The device is intended to be mounted vertically on a flat surface.• Do not expose the device to direct sunlight or other sources of heat.• Relative humidity: 10 % to 90 % (non-condensing)
IP-protection class	IP65 / front
Notes for cleaning	Disconnect the device from the power supply before cleaning it. Clean the device with cloths moistened with clean water. Do not use liquid or spray cleaning agents for cleaning.

6. Unpacking the device

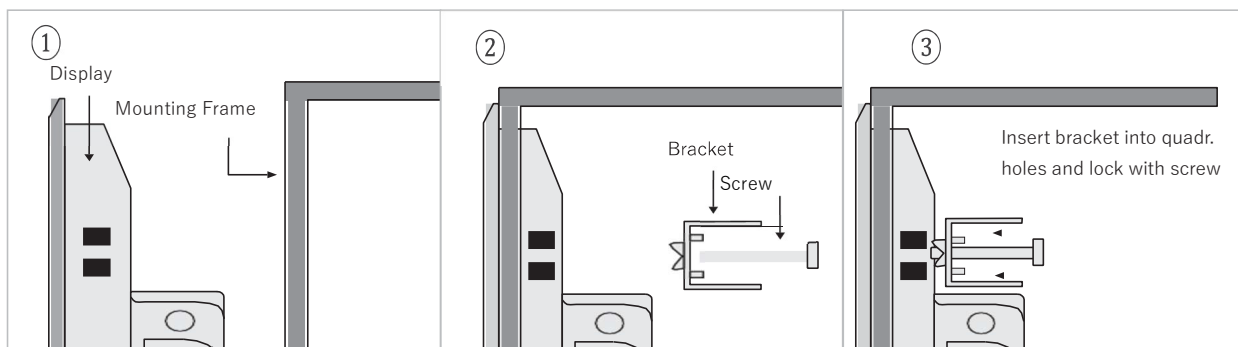
Unpack the delivery and check it for completeness. If any damage is found, inform the supplier.

Scope of delivery

- (1) Installation manual
- (2) DPL002-xxxxxx2P
- (3) Mounting material
- (4) RJ-45 to USB cable
- (5) VGA cable

7. Mounting instructions

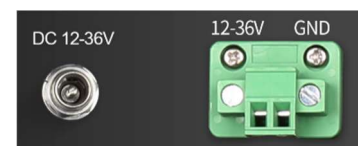
Use a mounting frame that provides sufficient rigidity. Refer to the data sheet for cutout dimensions. Mount the monitor using all mounting holes and the supplied brackets and screws. Screw torque: 0.294 to 0.441 Nm. (To achieve a watertight effect and to avoid deformation of the panel). Design sufficient space around the unit and inside the installation site, for ventilation and cables. Consider the heat from other equipment inside the installation location. The ambient temperature around the device must be within the temperature window -10 to 60°C. It is recommended design a distance of 3 cm between the back of the device and other devices.



8. Power supply connection

The Display provides 2 connections for power supply:

- 2-pole crew terminal for 12 to 36 VDC
- Socket 5.5 x 2,1 mm: 12 VDC to 36 VDV for external power supply (accessories)



Connection:

- 2-pole terminal block for 12 to 36 VDC:
 1. Connect the "+" lead of your DC power source to the "+" input of the 2-pole terminal block and the "-" lead to the "-" input.
 2. To avoid potential differences and damage to the USB ports, NEVER connect the display to multiple devices with different ground potentials.
- Socket for 12 - 36 VDC via external power supply unit:
An external power supply unit is available as an accessory for connection to 230 VAC mains voltage. This is not included in the scope of delivery.

Caution: NEVER use both connections at the same time. This can lead to damage.

9. Interfaces

Top view up to 12,1":



Bottom view up to 12,1":



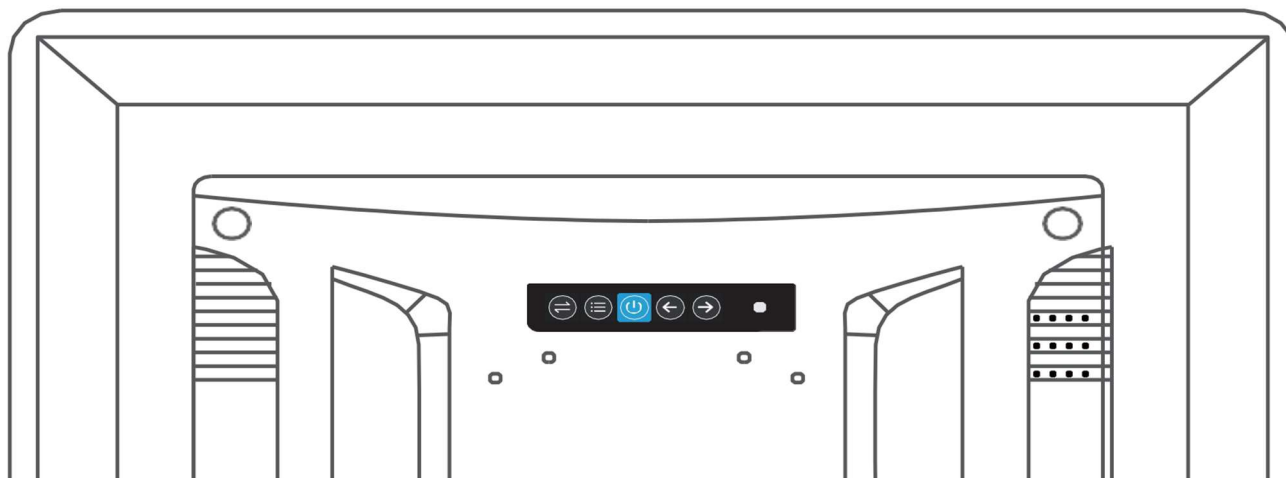
Top view from 13,3" to 23,8":



Bottom view from 13,3" to 23,8":



10. Setting options rear side



Symbol	Name	Instructions
↔	Source	Setting the signal source
≡	Main manu	Opening the main menu
⏻	On / Off	Turning the display on or off
←	Selection +	Navigation to the left / reduction of a value
→	Selection -	Navigation to the right / increase of a value

11. Ordering information

Article description	Best.-Nr.
Display, xx" TFT, with or without Touch	DPL002-xxxxxx2P
External power supply, 230 VAC to 12 VDC for display	DPL-PWRADAP_24VDC1.5A
230 VAC connection cable Power supply unit display	PPC-PWRCRD_01
RJ-45 to USB-Type-A Cabel	PPC-TOUCH-RJ-USB

If an external power supply is required, the power supply unit DPL-PWRADAP_24VDC1.5A and the connection cable PPC-PWRCRD_01 must be ordered.

12. Copyright

This document is the property of Wachendorff Prozesstechnik GmbH & Co.KG. Copying and reproduction are prohibited without prior permission. Contents of this documentation refer to the device described therein.

13. Exclusion of liability

All technical content within this document may be modified without prior notice. The contents of the document are subject to periodic revision. In case of loss due to fire, earthquake, third party interference or other accidents, or in case of intentional or accidental misuse or abuse, or use under abnormal conditions, repairs will be charged to the user. Wachendorff Prozesstechnik shall not be liable for any accidental loss resulting from the use or non-use of this product, such as loss of business income. Wachendorff Prozesstechnik is not liable for any consequences of improper use.

14. Other provisions and standards

WEEE information



Disposal of old electrical and electronic equipment (valid in the European Union and other European countries with separate collection system). This symbol on the product or on the packaging means that this product should not be treated as household waste. Instead, this product should be taken to the appropriate disposal point for recycling of electrical and electronic equipment. If the product is disposed of correctly, you will help prevent negative environmental impacts and health hazards that could be caused by improper disposal. Recycling material will conserve our natural resources. For more information about recycling this product, please contact your local city office, your household waste collection service or the retailer from whom you purchased this product.

RoHS guideline

The device complies with the latest version of the 2011/65/EU Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (commonly referred to as the Restriction of Hazardous Substances Directive or RoHS).

15. Technical consulting & service

If you have any questions about the product, you can find technical support on our homepage:

<https://www.wachendorff-prozesstechnik.de/tbs/>

- For technical support after a purchase (commissioning, project planning, parameterisation, configuration, programming, etc.), please dial: **+49 6722 9965-966** or send an e-mail to: support@wachendorff.de
- For application advice before a possible purchase (product selection, suitability, recommendation), please call: **+49 6722 9965-544** or send an e-mail to: beratung@wachendorff.de

In the event of a repair or device failure, please contact our technical advice & service team first. More than 75% of all cases are resolved over the phone, saving you any costs or the dispatch of your product. You will also receive information on the return procedure.

For the return process, please go to our homepage at <https://www.wachendorff-prozesstechnik.de/garantie-und-reparatur>, open the "Request return number" form and follow the instructions. After we have checked your form, we will send you a document with a return authorisation number (RSN) by e-mail. Please enclose this document with your return.



Note:

The return authorisation number (RSN) is generated specifically for your return. It regulates the conditions and ensures direct allocation and faster processing of your return. It is therefore extremely important that the RSN is enclosed with your return.

Contact:

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