

## Operating the plotter **PLOTMARK**

User manual

# User manual

## Operating the plotter PLOTMARK

UM EN PLOTMARK, revision 00

2017-04-04

---

This user manual is valid for:

Designation	Revision	Order No.
PLOTMARK		0804499

107753\_en\_00

---

PHOENIX CONTACT GmbH & Co. KG • Flachmarktstraße 8 • 32825 Blomberg • Germany  
[phoenixcontact.com](http://phoenixcontact.com)

# Table of contents

1	For your safety .....	4
	1.1 Designating the warning instructions .....	4
	1.2 User qualification .....	4
	1.3 Field of application.....	5
	1.4 Safety notes.....	5
2	Starting up the plotter .....	6
	2.1 Unpacking and setup .....	6
	2.2 Overview of the device .....	7
	2.3 Control panel .....	8
	2.4 Connecting the plotter .....	9
3	Operating the plotter .....	11
	3.1 Switching on the device.....	11
	3.2 Inserting marker pens .....	11
	3.3 Setting up the marker pens in CLIP PROJECT .....	13
	3.4 Inserting the magazines.....	13
	3.5 Creating print jobs.....	14
	3.6 Interrupting print jobs .....	14
	3.7 Setting up the writing function.....	15
	3.8 Blocking access to the pen magazine.....	16
4	Maintenance and troubleshooting .....	17
	4.1 Cleaning .....	17
	4.2 Troubleshooting.....	18
	4.3 Repairs .....	18
	4.4 Replacing the seal insert on the pen magazine.....	19
	4.5 Transporting the device .....	20
	4.6 Storage.....	21
	4.7 Disposal.....	21
	4.8 Firmware update.....	21
5	Appendix .....	22
	5.1 Ordering data.....	22
	5.2 Technical data .....	25

# 1 For your safety

Read this user manual carefully and keep it to hand for future reference.

## 1.1 Designating the warning instructions



This is the safety alert symbol. It is used to alert you to potential personal injury hazards.

There are three key words for the severity of the potential injuries.

### **DANGER**

Indicates a hazard with a high degree of risk. If the hazard is not avoided, it could result in death or a serious injury.

### **WARNING**

Indicates a hazard with a medium degree of risk. If the hazard is not avoided, it could result in death or a serious injury.

### **CAUTION**

Indicates a hazard with a low degree of risk. If the hazard cannot be avoided, then it could result in a minor or moderate injury.



This symbol, with the key word NOTE warns of actions that can result in material damages or malfunctions.



Here you can find additional information or further sources of reference.

## 1.2 User qualification

This user manual is directed at those persons who are familiar with the relevant safety concepts for handling electrical machines. Only persons who can commission, operate, and maintain the device are entitled to use the device, as well as identify the hazards.



## 1.3 Field of application

The PLOTMARK is a marking device for designating materials with a height of up to 10.5 mm.

Marking is implemented with special marker pens which are available in a range of stroke widths from Phoenix Contact. The materials are fixed into replaceable magazines.

The PLOTMARK is equipped with a slot for four marker pens. In this pen magazine (Penstation), the pens can remain in the integrated seal in intervals. At the end of the working day, remove the marker pens from the pen magazine. Close them with the supplied pen stations. Store the marker pens horizontally.

As the first marker pen line can be thinner, the plotter has a writing function. The plotter first of all writes on a marking preparation plate. Then it begins to mark.

You may only use the PLOTMARK with marker pens, materials, and magazines from Phoenix Contact which are intended for the PLOTMARK. The PLOTMARK sealing concept is designed for marker pens from Phoenix Contact. The use of other marker pens, materials, and magazines can result in damage to the device.

## 1.4 Safety notes

### Danger due to mains voltage

Never open the housing of the unit or power supply unit.

### Risk to operational reliability

Incorrect operation or modifications to the device can endanger your safety or damage the device. Do not repair the product yourself. If the device is defective, please contact Phoenix Contact.

### Damage to the device

- Only operate the device in dry locations, that are protected from spray and as dust-free as possible.
- Protect the device and materials from humidity, damp, and dirt.
- To operate the device on the power grid, only use the supplied wide range power supply unit. The device is designed for alternating voltage from 100 V to 240 V. The electrical connection conditions must comply with the details on the rating plate.

## 2 Starting up the plotter

### 2.1 Unpacking and setup

#### Scope of supply

- Plotters
- Power supply unit with Euro plug (EN 50075)
- USB cable
- 10 marking preparation plates
- Marker pen, stroke width 0.25 mm (CMS-PEN 0,25, 5067815)
- Data medium with driver and the CLIP PROJECT advanced software.  
Furthermore, the data medium also contains this user manual in several languages.
- User manual in German and English

#### Unpacking

- Check the device for damage which may have occurred during transport.
- Retain the original packaging for subsequent transport.

#### Requirements for the installation location

**NOTE: Damage to the device**

Place the device in a location that is as dry, dust-free, and protected from water as possible. Protect the device and materials from humidity, damp, and dirt. Do not expose the device to direct sunlight.

- Place the device on a level surface.
- Ensure that the connections on the rear of the device are accessible at all times.
- Ensure that the writing arm can move freely.

## 2.2 Overview of the device

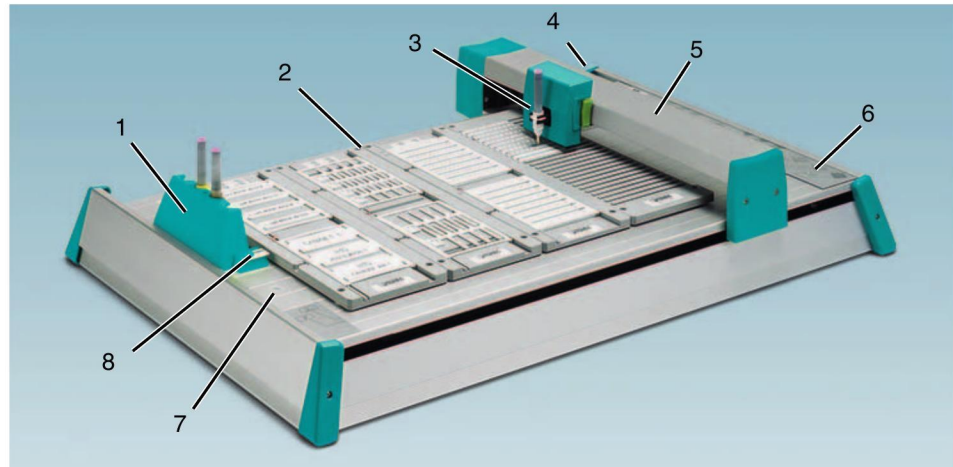
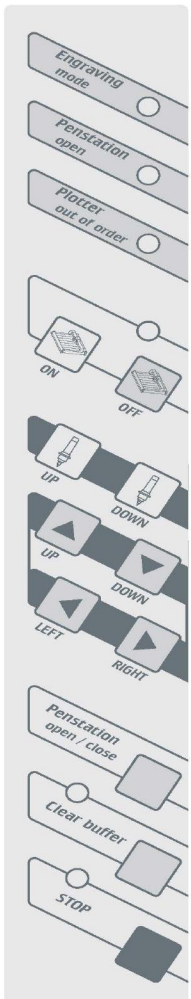


Figure 2-1 Overview

- 1 **Pen magazine (Penstation)**, for accommodating four marker pens
- 2 **Writing surface** with eight catch pins, for securing the magazines
- 3 **Lowering unit with pen holder**
- 4 **Connections** on the rear: USB connection, control connection for an optional engraving unit, mains connection
- 5 **Writing arm**
- 6 **Control panel**
- 7 For the optional engraving unit: **cover** for contact bolts for zero setting
- 8 **Marking preparation plates**

## 2.3 Control panel

Table 2-1 Description of the control panel

	Type	Printing	Meaning	
	<b>LED</b>	Green	Engraving mode	Engraving mode activated (only with the optional engraving unit)
		Yellow	Penstation open	Pen magazine open
		Red	Plotter out of order	ERROR
		Green	ON/OFF	Plotter ready for operation
		Yellow	Clear buffer	Data available in the storage memory. You can delete the data by pressing the "Clear Buffer" button.
		Red	STOP	Plotter in stop mode
	<b>Button</b>	ON/OFF	Switching on and off	
		Pen UP/ Pen DOWN UP/DOWN LEFT/RIGHT	These button functions are not used for normal operation. They are only used for settings and for services.	
		Penstation open / close	Pen magazines open or close, to use marker pens. After approx. two minutes after opening or switching off, the pen magazine closes automatically.	
		Clear buffer	Delete the print data from the storage memory. The device must be in stop mode.	
		STOP	<p>Stop the current print job</p> <p>If you press the "STOP" button during a current print job, this is interrupted.</p> <p>The marker pens are stored in the pen magazine. The writing arm travels to the top right corner of the device. The red LED indicates the interruption.</p> <p>If you press the "STOP" button again, the plotter calibrates itself and the print job continues. The red LED goes out.</p>	

## 2.4 Connecting the plotter

Ensure that when establishing electrical connections, all devices (plotter, computer, etc.) are switched off. If you disconnect devices, the devices should again be switched off.

### 2.4.1 Connecting the power supply unit

#### Connect the power supply unit

The PLOTMARK is designed for power grids from 100 to 240 V AC. **Only use the supplied wide range power supply unit.**

- Slide the Euro plug onto the power supply unit.
- Insert the power supply unit connection cable into the plotter socket.
- Connect the power supply unit to a socket.

### 2.4.2 Connecting to a computer via USB

**NOTE: Errors during operation due to insufficient or missing shielding**

Ensure that all the connection cables connected to the device are shielded.

A driver must be installed if a USB interface is to be used for connection. You will find the driver on the data carrier that is supplied within the scope of delivery or on the Internet at [phoenixcontact.net/qr/0804499](http://phoenixcontact.net/qr/0804499).

- Connect the computer and device with the supplied USB cable.
- Switch on the computer.
- Switch on the device.
- Insert the data carrier containing the driver software.
- Select the relevant device. A window is opened automatically in which you can select the language in the top right.
- Click on "Install".
- Follow the on-screen instructions.

Following successful installation, an icon for the PLOTMARK appears in the Windows "Devices and Printers" system folder.

- Open the CLIP PROJECT marking software.
- Open "File, Print setup" and under "Plotter, PLOTMARK", create a new device.
- Select "USB" as the interface.

You can find CLIP PROJECT marking instructions at [phoenixcontact.net/qr/5146040](http://phoenixcontact.net/qr/5146040).

- Set up the device in CLIP PROJECT marking.

### 2.4.3 Setting up the plotter in CLIP PROJECT

- Open “File, Print setup”.
- Via “Plotter, PLOTMARK”, create a new device or edit the ones that are already there.

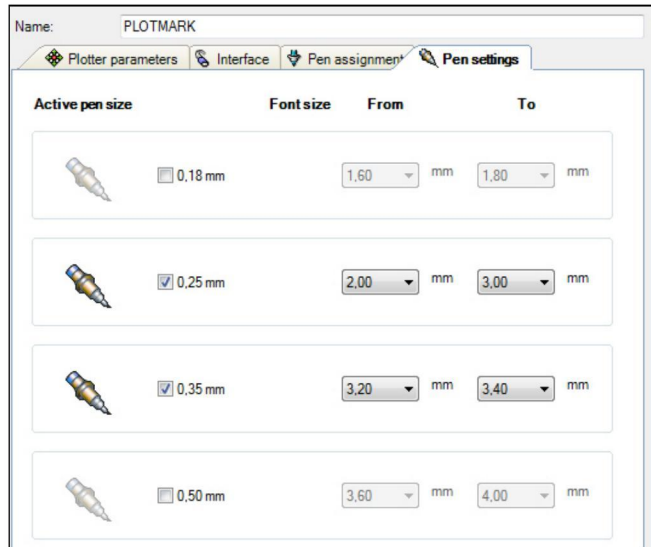


Figure 2-2 Pen settings tab

Table 2-2 File, Print setup, Plotter, PLOTMARK

TAB	Description
<b>Plotter parameters</b>	If the writing position moves, no change is required.
<b>Interface</b>	Select “USB” as the interface.
<b>Pen assignment</b>	Indicate where the marker pens are located in the pen magazine (Penstation). If you insert the marker pen directly into the pen holder on the writing arm, remove the check box for “Use pen magazine”.
<b>Pen settings</b>	Indicate which font size is executed with which pen.



## 3 Operating the plotter

### 3.1 Switching on the device

The writing arm moves immediately after being switched on. The writing arm travels to the top right corner of the device of the writing surface. The plotter calibrates itself.

- Ensure that the writing arm can move freely.
- Switch on the plotter via the “ON” button on the control panel.  
The corresponding green LED lights up. The device is ready to operate

### 3.2 Inserting marker pens

#### 3.2.1 Inserting marker pens in the pen magazine

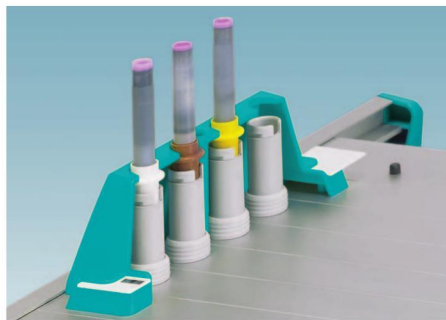


Figure 3-1 Inserting marker pens in the pen magazine (Penstation)

- Press the “Penstation open / close” button. Opening and closing the pen magazine is only possible if the writing arm is positioned in the right upper corner of the device.
- Insert the marker pens into the pen magazine.
- To close the pen magazine, press the “Penstation open / close” button again.



**NOTE:** Do not leave the pen magazine open for a long period of time. There is risk of the marker pens drying out.

If the seal inserts become dirty over the course of time, you can replace these (refer to “Replacing the seal insert on the pen magazine” on Page 19).

- At the end of the working day, remove the marker pens from the pen magazine. Close them with the supplied pen stations. Store the marker pens horizontally.



### 3.2.2 Inserting the marker pen into the pen holder on the writing arm



Figure 3-2 Pen holder (left: CMS-PEN..., right: P-PEN with adapter)

- Only for P-PEN, 0815211: insert the marking pen in the adapter in such a way (P-PEN ADAPTER, 0815224) that the tip of the pen protrudes below.
- Slide the marker pen with the adapter into the holder on the writing arm.



If you use the marker pen directly in the pen holder on the writing arm, remove the check box in CLIP PROJECT for “Use pen magazine”. This ensures that the marker pen is not stored in the pen magazine.

You can find “Use pen magazine” under “File, Print setup, Plotter, PLOTMARK, Pen assignment” (refer to Figure 3-3 on Page 13).

- Remove the marker pen from the holder after the marking process. To prevent it from drying out, close it with the supplied storage station.

### 3.3 Setting up the marker pens in CLIP PROJECT

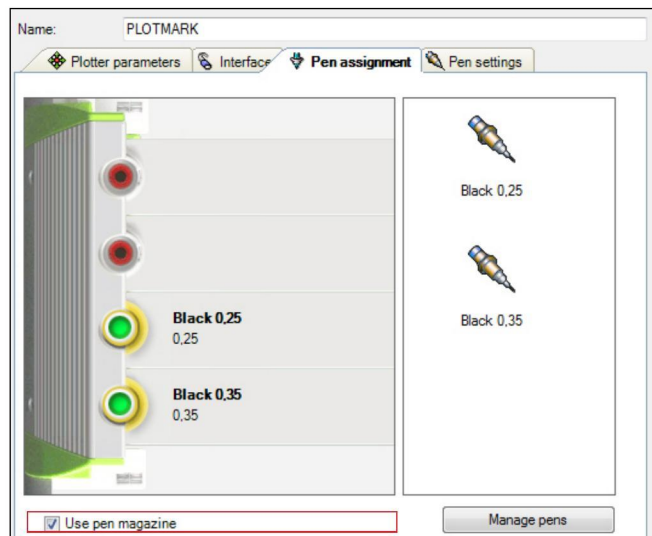


Figure 3-3 File, Print setup, Plotter, PLOTMARK, Pen assignment

- Via the “Manage pens” button, you can adjust new pens and parameters such as the plot speed.
- Indicate where the marker pens are located in the pen magazine (Penstation).
- Switch to the “Pen settings” tab. Indicate which font size is executed with which pen.
- If you use the marker pen directly in the pen holder on the writing arm, remove the check box for “Use pen magazine”.

### 3.4 Inserting the magazines

Eight catch pins are located on the plotter's writing surface. Up to four different magazines can be located on these catch pins. Depending on the size of the marking elements, different magazines are available. The magazines can occupy one, two or four segments on the writing surface.

When starting a print job, CLIP PROJECT indicates the position of the magazine on the writing surface. Always place the first magazine to the left of the writing surface

### 3.5 Creating print jobs

Create the print jobs using the CLIP PROJECT marking software.

CLIP PROJECT marking can be used to create markings on a computer, which are tailored to the Phoenix Contact marking material.

There, select the PLOTMARK as the output device. You will be provided with a list of materials that are suitable for this device.

The CLIP PROJECT marking software is supplied with the plotter. CLIP PROJECT marking can also be downloaded at [phoenixcontact.net/qr/5146053](http://phoenixcontact.net/qr/5146053).

During a print job, CLIP PROJECT marking indicates where the magazine with the material is expected. During a print job, you must confirm that you have inserted the corresponding magazine and material.

Before beginning each plotting process, the plotter carries out an auto-calibration.

### 3.6 Interrupting print jobs

If you press the “STOP” button during a current print job, this is interrupted.

The marker pens are stored in the pen magazine. The writing arm travels to the top right corner of the device. A red LED indicates the interruption. The “Clear Buffer” LED button lights up yellow. This indicates that data is available in the storage memory.

#### Canceling a print job

- You can delete the data by pressing the “Clear Buffer” button.

#### Continue print job

- If you press the “STOP” button again, the plotter calibrates itself and the print job continues. The red LED goes out.

### 3.7 Setting up the writing function

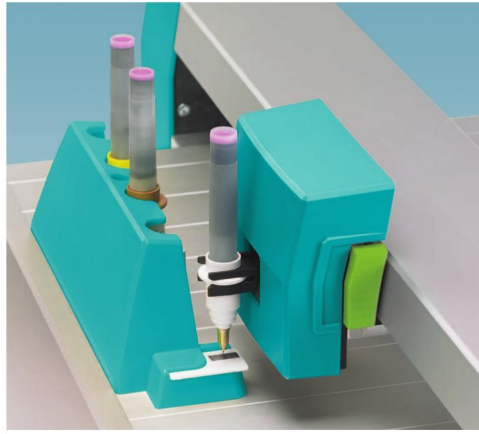


Figure 3-4 Writing function

As the first marker pen line can be thinner, the plotter has a writing function. The plotter first of all writes on a marking preparation plate. Then it begins to mark.

Only activate the writing function if a marking preparation plate is in the holder provided for this.

Replace the marking preparation plate regularly (CMS-P1-PREPLATES, 5145135). Strongly contaminated marking preparation plates can dirty the marker pen.

- Pull out the marking preparation plate from the side.
- Slide the new marking preparation plate to the back, until the marking preparation plate sits securely.

#### Activating or deactivating the writing function

- Press the "Off" key.
- Simultaneously press the "Penstation open / close" and "ON" buttons. After a short time, the "STOP" LED button lights up.
- Press the "Penstation open / close" button.
  - "Penstation open / close" LED = flashes → Writing function is activated
  - "Penstation open / close" LED = illuminates → Writing function is switched off
- To confirm the selection, press the "STOP" button.

If you switch off the plotter and then switch it back on again, the writing function is activated.

### 3.8 Blocking access to the pen magazine

If you insert the marker pens directly into the writing arm, they can deactivate access to the pen magazine. This prevents the marker pens from being stored in the pen magazine.

This function can be set up via the CLIP PROJECT marking software (refer to Page 10).



Access to the pen magazine must be activated in the plotter. Switch the function on and off via the CLIP PROJECT software.

If you have accidentally switched off the function via the control panel, you can reactivate it in this manner.

#### Blocking or unblocking access to the pen magazine

- Press the “Off” key.
- Press and hold the “Pen DOWN” button. Also press the “ON” button.  
It is indicated how access to the pen magazine is adjusted.

- “Penstation open / close” LED = flashes
- “Clear buffer” LED = flashes
- “STOP” LED = lights up

#### Access to the pen magazine is activated

- “Penstation open / close” LED = continuously illuminated
- “Clear Buffer” LED = continuously illuminated
- “STOP” LED = lights up

Access to the pen magazine is deactivated

- To alter the access to the pen magazine, press the “Pen DOWN” button.
- To confirm the selection, press the “STOP” button.

## 4 Maintenance and troubleshooting

### 4.1 Cleaning

- Cleaning the device**
- Protect the device from dust and other contaminants. If not being used, cover it.
  - Wipe down the device with a duster. The duster can either be dry or dampened with a mild cleaning agent.
- Cleaning the seal inserts**
- If the pen magazine seal inserts are badly contaminated (Penstation), replace these (refer to “Replacing the seal insert on the pen magazine” on Page 19).
- Cleaning the marker pens**
- Clean the marker pens with the cleaning set (CMS-R-SET-TR, 5146751).
  - Alternatively, you can carefully clean the tips of the pens with a lint-free cloth. Soak the cloth with special cleaning fluid (CMS-R-FLUID-TR, 5146750).



## 4.2 Troubleshooting

Table 4-1 Troubleshooting

Problem	Cause	Remedy	Page
The plotter will not switch on.	Insufficient power supply	Check whether the mains plug and connecting plug are inserted	-
		Check whether the socket used is working	-
	Power supply unit defective	If the green LED on the power supply unit is not lighting up, replace the power supply unit	-
The plotter is not reacting to data	Interface cable not correctly connected	Check the interface on the computer	-
		Replace the data cable	-
	Incorrect interface selected in CLIP PROJECT marking	Select "USB" interface (under "File, Print setup, Plotter, PLOTMARK, Interface")	10
	CLIP PROJECT is waiting for confirmation that the appropriate magazine and material has been inserted	Switch to the spooler. Acknowledge message	-
No marking, although a marker pen is inserted	Marker pen dried out	Replace the marker pen	11
		Replace the seal inserts	19
	No ink in the marker pen	Fill the marker pen	-
Poor typeface, line thickness uneven, glitches in marking	Pen tips contaminated	Clean the pen tips	17
		Replace the marker pen	-
		Replace the seal inserts	19
		Replace the marking preparation plate	15
	Ink is old	Check the date of expiry Replace out-of-date ink.	-
The marker pen is not stored in the pen magazine	Access to the pen magazine is blocked	In CLIP PROJECT, check the box under Use pen magazine (under File, Print setup, Plotter, PLOTMARK, Pen assignment)	10
		Block the pen magazine via the control panel	15

## 4.3 Repairs



**WARNING: Risk to operational reliability**

Incorrect operation or modifications to the device can endanger your safety or damage the device. Do not repair the product yourself. If the device is defective, please contact Phoenix Contact.



## 4.4 Replacing the seal insert on the pen magazine



Figure 4-1 Remove the seal insert

- Open the pen magazine by pressing on the “Penstation open / close” button.
- Insert the accompanying key on the seal insert.
- Carefully lever the seal insert out of the retaining tube.



Figure 4-2 Inserting and aligning the seal insert

- Insert the new seal insert (CMS-P1-PENDEPOT, 5144835) into the pen magazine.
- Carefully press the seal insert into the aluminum pipe until it hits the stop.
- Now use the key to align seal insert in such a way that the key is parallel to the writing surface. The lateral opening of the seal insert must be aligned in the center.

## 4.5 Transporting the device

- Package the device in the original packing for shipping.

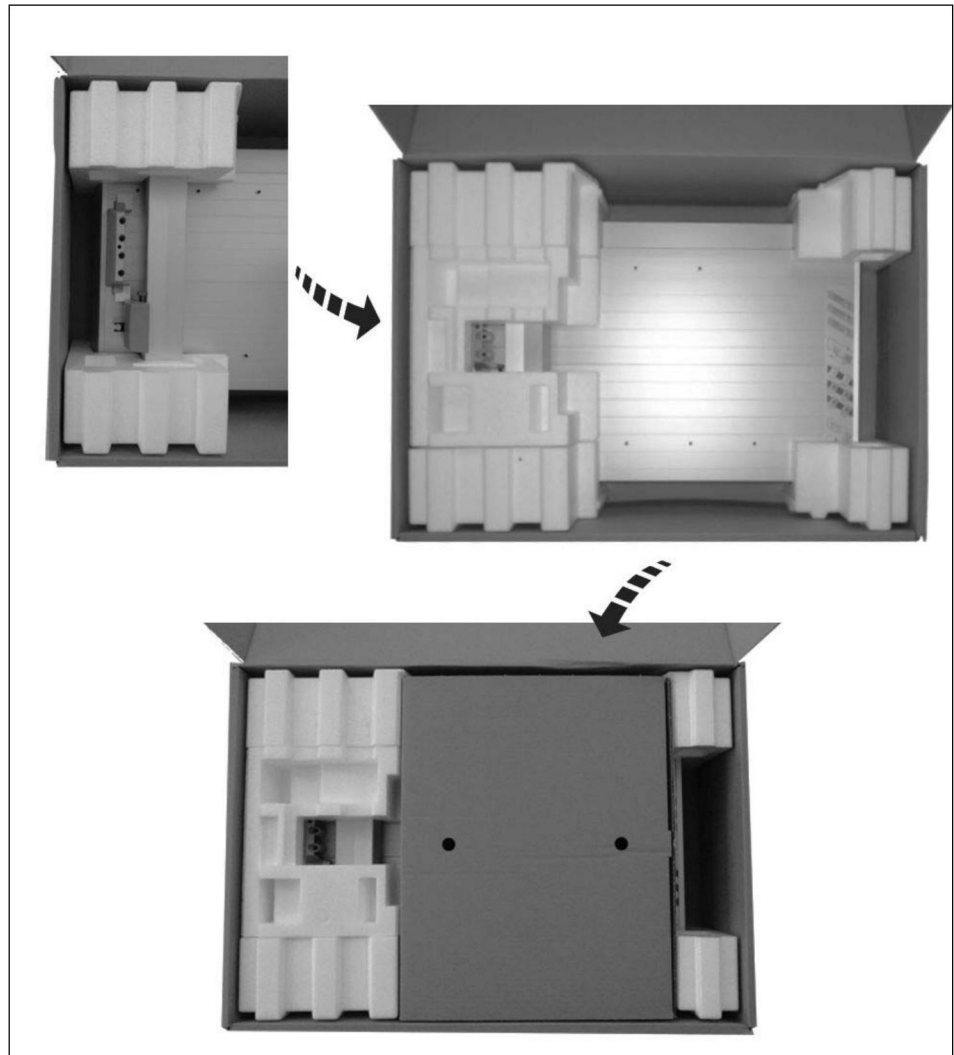


Figure 4-3 Packaging

## 4.6 Storage

- Only store the device in dry surroundings.
- Store the device in such a way as to avoid any potential damage.
- Store the device complete with individual parts and accessories. Otherwise, key components could be missing when restarting.
- At the end of the working day, remove the marker pens from the pen magazine. Close them with the supplied pen stations. Store the marker pens horizontally.

## 4.7 Disposal



Dispose of the item separately from other waste, i.e., via an appropriate collection site.

## 4.8 Firmware update

New firmware is available for download at [phoenixcontact.net/qr/0804499](http://phoenixcontact.net/qr/0804499).

- Connect the PLOTMARK to the computer.
- Switch on the PLOTMARK.
- Open the directory where you saved the new firmware.
- Launch “update\_PLOTMARK.bat” by double-clicking.
- A “Plotter Update Utility” window opens. Here the current firmware version of your device is displayed.
- Click on the “Send update” button.  
After approx. 15 seconds, all PLOTMARK LEDs briefly light up. An acoustic signal sounds. The PLOTMARK switches itself off automatically.
- Switch the PLOTMARK back on. The firmware is now downloaded.
- If you click on the “Refresh plotter info” button in the “Plotter Update Utility” window, the new firmware version is displayed.

A driver update may also be required (refer to Page 9).

## 5 Appendix

### 5.1 Ordering data

#### Plotters

Description	Type	Order No.	Pcs./Pkt.
<b>Plotter</b> , weight: 8 kg, width: 480 mm, height: 155 mm, color: silver-colored	PLOTMARK	0804499	1
<b>Replacement seals</b> , for the pen magazine (Penstation) and 10 marking preparation plates	CMS-P1-PENDEPOT	5144835	4
<b>Marking preparation plate</b> , for the pen magazine (Penstation)	CMS-P1-PREPLATES	5145135	50

#### Magazines

Description	Type	Order No.	Pcs./Pkt.
<b>Plastic magazines</b>			
For accommodating 3 flat zack marker sheets	CMS-P1-M/ZBFM	5144686	1
Replacement insert for CMS-P1-M/ZBFM, 9 self-adhesive inserts, sufficient for 3 magazines	CMS-P1-M/ZBFM-PAD	5144848	1
For accommodating 2 flat zack marker sheets	CMS-P1-M/ZBM	5144660	1
For accommodating 22 zack marker strips	CMS-P1-M/ZB	5144699	1
For accommodating 26 flat zack marker strips or ZBN strips	CMS-P1-M/ZBF	5144709	1
For accommodating 22 protective label zack marker strips	CMS-P1-M/SS-ZB	5144712	1
For accommodating 30 ZB-strip marker pins	CMS-P1-M/BN-ZB	5144725	1
For accommodating 4 to 6 PABA designation branches	CMS-P1-M/PAB	5144741	1
For accommodating 1 GPE label sheet	CMS-P1-M/GPE	5144754	1
For accommodating 1 Wago WMB sheet	CMS-P1-M/WAGO WMB	5144767	1
For accommodating 2 Wago WSB 5 sheets	CMS-P1-M/WAGO WSB 5	5144770	1
For accommodating 1 Weidmüller multcard sheet SF 4-6	CMS-P1-M/WEID MCSF 4-6	5144783	1
For accommodating 1 Weidmüller universal multcard sheet	CMS-P1-M/WEID MCU	5144796	1
3 replacement inserts for Weidmüller magazines	CMS-P1-M/WEID-PAD	5144851	1
For accommodating 2 Wago WSB mini sheets	CMS-P1-M/WAGO MINI WSB	5144864	1
For accommodating 2 Wago WSB 4 sheets	CMS-P1-M/WAGO WSB 4	5144877	1
For accommodating 3 Wieland sheets, type 50, 51, 60, 63, 67, 68, 69 or 80	CMS-P1-M/WIEL	5144929	1
For accommodating 2 Entrelec sheets, RC55-85, RC410-810, RTC610/810/1010	CMS-P1-M/ENTRELEC RC	5144932	1
For accommodating 2 Murrplastik sheets, KS 4/12, 4/18, 4/23, 4/30	CMS-P1-M/MURR 400	5144945	1

**Magazines**

Description	Type	Order No.	Pcs./Pkt.
For accommodating 2 Murrplastik sheets, KES, KLG, KMR, KPX, KSA, KSF, KSI, KSK, KS 15x17/27/49/67, KSO, KSS, KTE, KWI, SKS, WGO, KAB	CMS-P1-M/MURR 401	5144958	1
For accommodating UC-TM..., UC-TMN..., UC-WMC 3,1..., UC-WMTBA...	P1 UC-MAG 1	5146079	1
For accommodating UC-WMC 4,4...	P1 UC-MAG 2	5146082	1
For accommodating UC-WMC 7,5...	P1 UC-MAG 3	5146095	1
For accommodating UC-TMF..., UC1-TMF..., UC-WMT...	P1 UC-MAG 4	5146105	1
For accommodating UC1-TM..., UC1U-TM...	P1 UC-MAG 5	5146118	1
For accommodating UC-EMP..., UC-EMLP...	P1 UC-MAG 6	5146121	1
For accommodating: UC-WMCO...	P1 UC-MAG 7	5146568	1
<b>Magazine for accommodating sheet material</b> , self-adhesive sheet for fixing labels, sheets, and paper, sheet size maximum DIN A4	CMS-P1-PAD	5144819	1
<b>Replacement insert</b> , for CMS-P1-PAD, 1 insert in DIN-A4 format	CMS-P1-PAD/SPARE	5144893	1

**Consumables, disposable**

Description	Type	Order No.	Pcs./Pkt.
<b>Marker pen</b> , non-refillable, for manual marking, can also be used for plotter marking in combination with the P-PEN ADAPTER	P-PEN	0815211	10
<b>Aluminum adapter</b> , for affixing the P-PEN when plotter marking	P-PEN ADAPTER	0815224	1
Marker pen, non-refillable, stroke width 0.25 mm color: black	CMS-DISPOSABLE-PEN 0,25 TR	5146685	1
Marker pen, non-refillable, stroke width 0.35 mm color: black	CMS-DISPOSABLE-PEN 0,35 TR	5146686	1

**Consumables, multiple use**

Description	Type	Order No.	Pcs./Pkt.
<b>Marker pen</b> , incl. plotter adapter, ink tank and storage station, stroke width 0.25 mm	CMS-PEN 0,25	5067815	1
<b>Marker pen</b> , incl. plotter adapter, ink tank and storage station, stroke width 0.35 mm	CMS-PEN 0,35	5067828	1
<b>Marker pen</b> , incl. plotter adapter, ink tank and storage station, stroke width 0.50 mm	CMS-PEN 0,50	5067831	1
Ink cartridge, special black ink, 5 cartridges of 1 ml each, for high demands	CMS-INK-TR-C5	5146684	5

## PLOTMARK

---

### Cleaning the marker pens

Description	Type	Order No.	Pcs./Pkt.
Cleaning fluid, 30 ml cleaning fluid for CMS-INK-TR-C5	CMS-R-FLUID-TR	5146750	1
<b>Cleaning set</b> , cleaning set for marker pens, consisting of: 1 cleaning beaker, 2 cleaning cartridges each with 10 ml cleaning fluid and 2 replacement cover caps for the pen station	CMS-R-SET-TR	5146751	1
<b>Cleaning cartridges</b> , with replacement sealing caps, 2 cartridges for 10 ml each with cover cap for CMS-PEN...	CMS-R-FLUID-TR-C2	5146752	1

### Engraving unit

Description	Type	Order No.	Pcs./Pkt.
<b>Engraving unit</b> , by replacing the plotter head with the engraving unit, the PLOTMARK is converted into an engraving unit	ENGRAVING UNIT	0804500	1



## 5.2 Technical data

### Plotters

Plotter type	Flatbed plotter
Maximum plotter surface	422 mm x 305 mm
Plotter speed with marker pens	Up to 40 mm/s
Marker pens	Special marker pens with HP slot
Pen magazine	Up to four marker pens with double seal
Drive	2-phase step motor
Dimensions	690 mm x 480 mm x 155 mm
Weight	8.3 kg
Interface	USB level 2.0

### Electronics

Command language	Control from CLIP PROJECT marking, command language based on HP-GL 7475A
Mass storage	16 MB
Addressable resolution	0.025 mm
Repeat accuracy	0.05 mm

### Power supply

Power supply	via external power supply unit with replaceable adapters
Power supply unit input voltage	100 VAC ... 240 V AC / 50 Hz ... 60 Hz
Power supply unit input current	Maximum 0.7 A
Power supply unit output voltage	24 V DC
Power supply unit output current	Maximum 1.25 A

### Ambient conditions

Relative humidity	
Operation	35% ... 75%
Storage	10% ... 90%
Ambient temperature	
Operation	+10°C ... +35°C
Storage	-10°C ... +50°C





---

## Please observe the following notes

### **General terms and conditions of use for technical documentation**

Phoenix Contact reserves the right to alter, correct, and/or improve the technical documentation and the products described in the technical documentation at its own discretion and without giving prior notice, insofar as this is reasonable for the user. The same applies to any technical changes that serve the purpose of technical progress.

The receipt of technical documentation (in particular user documentation) does not constitute any further duty on the part of Phoenix Contact to furnish information on modifications to products and/or technical documentation. You are responsible to verify the suitability and intended use of the products in your specific application, in particular with regard to observing the applicable standards and regulations. All information made available in the technical data is supplied without any accompanying guarantee, whether expressly mentioned, implied or tacitly assumed.

In general, the provisions of the current standard Terms and Conditions of Phoenix Contact apply exclusively, in particular as concerns any warranty liability.

This manual, including all illustrations contained herein, is copyright protected. Any changes to the contents or the publication of extracts of this document is prohibited.

Phoenix Contact reserves the right to register its own intellectual property rights for the product identifications of Phoenix Contact products that are used here. Registration of such intellectual property rights by third parties is prohibited.

Other product identifications may be afforded legal protection, even where they may not be indicated as such.

---

## How to contact us

### Internet

Up-to-date information on Phoenix Contact products and our Terms and Conditions can be found on the Internet at:

[phoenixcontact.com](http://phoenixcontact.com)

Make sure you always use the latest documentation.

It can be downloaded at:

[phoenixcontact.net/products](http://phoenixcontact.net/products)

### Subsidiaries

If there are any problems that cannot be solved using the documentation, please contact your Phoenix Contact subsidiary.

Subsidiary contact information is available at [phoenixcontact.com](http://phoenixcontact.com).

### Published by

PHOENIX CONTACT GmbH & Co. KG

Flachmarktstraße 8

32825 Blomberg

GERMANY

Should you have any suggestions or recommendations for improvement of the contents and layout of our manuals, please send your comments to:

[tecdoc@phoenixcontact.com](mailto:tecdoc@phoenixcontact.com)