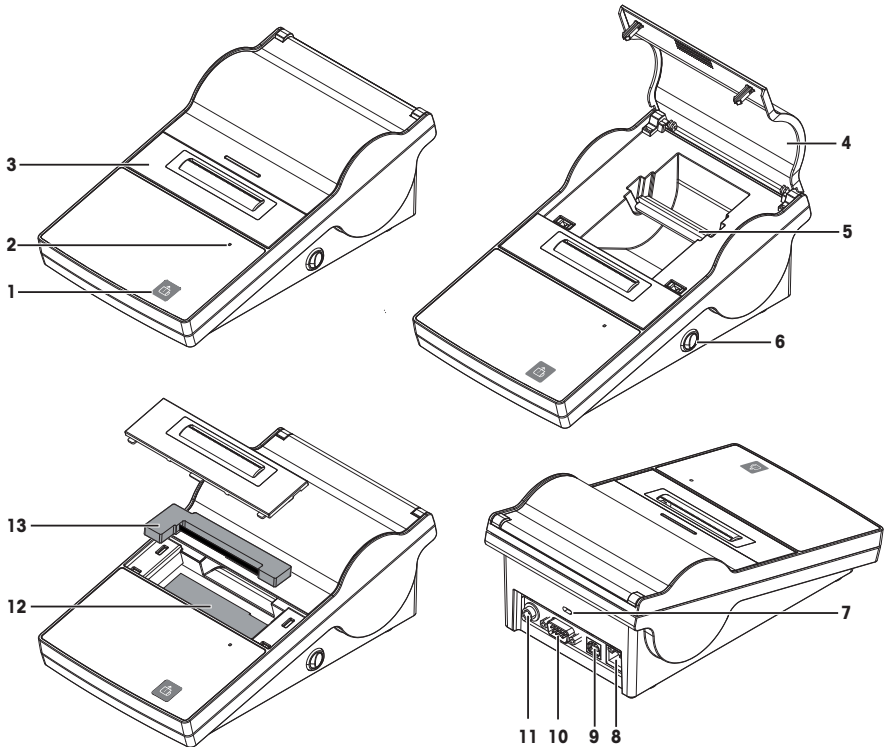




## Overview



## Overview Table

<b>1</b>	Paper feed button	<b>8</b>	Ethernet RJ45 connection
<b>2</b>	Status indicator	<b>9</b>	USB device connection
<b>3</b>	Paper cutter	<b>10</b>	RS232 connection
<b>4</b>	Paper cover	<b>11</b>	Socket for AC adapter
<b>5</b>	Paper rotary axis	<b>12</b>	Print head
<b>6</b>	Power switch	<b>13</b>	Ribbon cartridge
<b>7</b>	Anti-theft slot		

## 1 Introduction

The P-52RUE is an easy-to-handle dot matrix data writer for METTLER TOLEDO instruments. This high-value data writer guarantees long-term traceability.

The P-52RUE data writer can only be used with supported METTLER TOLEDO instruments. It is not working with other equipment (e.g. laptops) as no printer protocol is supported.

### Features

- Robust, high-value design
- Easy-to-use and fully compliant

- Long-term traceability due to dot matrix technology
- Versatile connectivity with USB, RS232 and Ethernet interface

### Software version

These instructions are based on the initial firmware (software) version 1.00.

## 1.1 Further documents and information

► [www.mt.com/lab-printers](http://www.mt.com/lab-printers)

This document is available in other languages online.

► [www.mt.com/P-52RUE-RM](http://www.mt.com/P-52RUE-RM)

Search for documents


► [www.mt.com/library](http://www.mt.com/library)

For further questions, please contact your authorized METTLER TOLEDO dealer or service representative.

► [www.mt.com/contact](http://www.mt.com/contact)

## 1.2 Explanation of conventions and symbols used

### Conventions and symbols

 **Note** For useful information about the product.

### Elements of instructions

In this manual, step-by-step instructions are presented as follows. The action steps are numbered and can contain prerequisites, intermediate results and results, as shown in the example. Sequences with less than two steps are not numbered.

- Prerequisites that must be fulfilled before the individual steps can be executed.
- 1 Step 1
  - ➔ Intermediate result
- 2 Step 2
  - ➔ Result

## 2 Safety Information

- This Reference Manual contains a full description of the accessory and its use.
- Keep the Reference Manual for future reference.
- Include the Reference Manual if you transfer the accessory to other parties.

Only use the accessory according to the Reference Manual. If you do not use the accessory according to the Reference Manual or if it is modified, the safety of the accessory may be impaired and Mettler-Toledo GmbH assumes no liability.

### 2.1 Definition of signal words and warning symbols

Safety notes contain important information on safety issues. Ignoring the safety notes may lead to personal injury, damage to the instrument, malfunctions and false results. Safety notes are marked with the following signal words and warning symbols:

#### Signal words

<b>DANGER</b>	A hazardous situation with high risk, resulting in death or severe injury if not avoided.
<b>WARNING</b>	A hazardous situation with medium risk, possibly resulting in death or severe injury if not avoided.
<b>CAUTION</b>	A hazardous situation with low risk, resulting in minor or moderate injury if not avoided.
<b>NOTICE</b>	A hazardous situation with low risk, resulting in damage to the instrument, other material damage, malfunctions and erroneous results, or loss of data.



General hazard



Notice

## 2.2 Product-specific safety information

### Intended use

This accessory is intended to be used by trained staff. The P-52RUE data writer is intended to be used only with METTLER TOLEDO instruments.

Any other type of use and operation beyond the limits of use stated by Mettler-Toledo GmbH without consent from Mettler-Toledo GmbH is considered as not intended.

### Responsibilities of the instrument owner

The instrument owner is the person holding the legal title to the accessory and who uses the accessory and the main instrument or authorizes any person to use them, or the person who is deemed by law to be the operator of the accessory and the main instrument. The instrument owner is responsible for the safety of all users of the accessory and third parties.

Mettler-Toledo GmbH assumes that the instrument owner trains users to safely use the accessory and the main instrument in their workplace and deal with potential hazards. Mettler-Toledo GmbH assumes that the instrument owner provides the necessary protective gear.



### NOTICE

#### Damage to the accessory or the main instrument due to the use of unsuitable parts

Using unsuitable parts with the accessory can damage the accessory or the main instrument or cause them to malfunction.

- Only use parts from METTLER TOLEDO that are intended to be used with your accessory.

## 3 Installation and Putting into Operation

### 3.1 Selecting the location

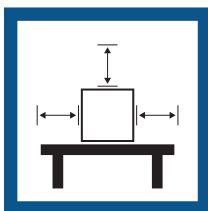
Optimal location ensures accurate and reliable operation of the accessory.

#### Requirements of the location

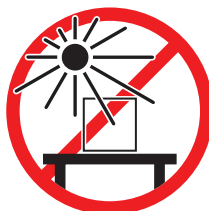
Place indoors on stable table



Ensure sufficient spacing



Avoid direct sunlight



Avoid temperature fluctuations



Sufficient distance: > 15 cm all around the accessory.

Take into account the environmental conditions. See "Technical Data".

#### Note

Do not place the accessory on the same working surface with instruments that are sensitive to vibrations.

### 3.2 Scope of delivery

The following accessories are part of the equipment:

- P-52RUE dot matrix data writer
- Paper rotary axis (already installed)

- 1 ribbon cartridge (already installed)
- 2 rolls of paper
- Universal AC adapter
- Country-specific power cable
- USB cable
- RS232 cable
- User Manual
- Declaration of conformity

Check the package, the packaging elements and the delivered components for damages. If any components are damaged, please contact your METTLER TOLEDO service representative.

### 3.3 Putting into operation

#### 3.3.1 Connecting the data writer to the power supply



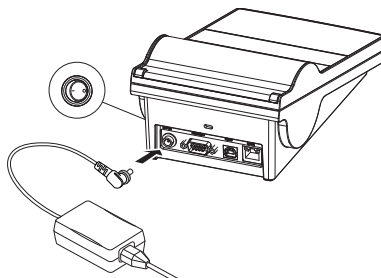
#### **⚠ WARNING**

##### **Death or serious injury due to electric shock**

Contact with parts that carry a live current can lead to death or injury.

- 1 Only use the METTLER TOLEDO power cable and AC/DC adapter designed for your instrument.
- 2 Connect the power cable to a grounded power outlet.
- 3 Keep all electrical cables and connections away from liquids and moisture.
- 4 Check the cables and the power plug for damage and replace them if damaged.

- The data writer must be switched off.
- 1 Connect the AC adapter to the connection socket on the back of the data writer.
  - 2 Lock the connector with the screw nut.
  - 3 Connect the 3-pin grounded power cable to the socket for the AC adapter.
  - 4 Connect the power cable to the mains.



#### **i Note**

The power plug must be accessible at all times.

### 3.4 Inserting the paper roll

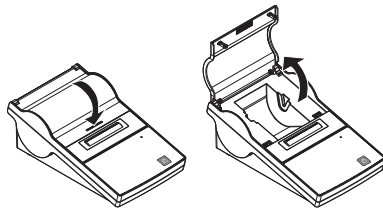
#### **i Note**

METTLER TOLEDO recommends to use only specified paper from METTLER TOLEDO (see at section Accessories and spare parts).

**Note**

The data writer has a push-to-open mechanism to open the paper cover. The paper cover must be pushed down in the middle at the mark.

- 1 Switch on the data writer.
- 2 Push down the paper cover.
- 3 Open the paper cover.
- 4 Remove the paper cutter.

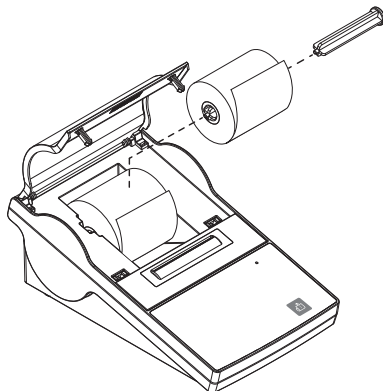




- 5 Remove the paper rotary axis from the data writer frame.
- 6 Insert the rotary axis into the paper roll.

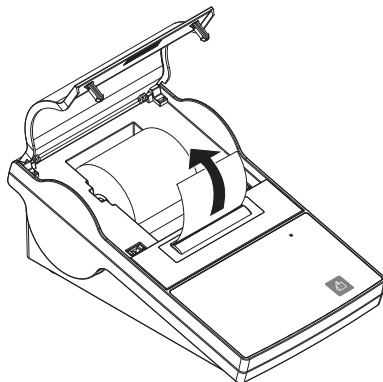
**Note**

The paper roll must unroll in the correct direction (see picture).

- 7 Place the paper roll into the data writer frame.
- 8 Unroll the paper and stick the paper end into the 5 mm slot between the print head and the metal plate.



- 9 Press .
- The print head pulls the paper in.
- 10 Press and hold  until some paper has been fed.
- 11 Close the paper cover.



### 3.5 Installation



#### NOTICE

METTLER TOLEDO recommends connecting the data writer to only one instrument at a time. If several instruments are connected to the data writer at the same time METTLER TOLEDO cannot assume the correct functionality of the data writer.

#### 3.5.1 Connecting the data writer via the RS232 connection

- 1 Connect the data writer to the power supply.

- 2 Use the RS232 cable to connect the data writer to the METTLER TOLEDO instrument.

**Note**

The RS232 connection settings of the data writer and of the instrument must be identical.

- 3 Switch on the data writer.

**Note**

The function **Auto connection** is switched off by default. It can be switched on if the data writer is connected with the RS232 connection and if the connection settings (**Baudrate**, **Bits / Parity**, **Handshake**) of the data writer differ from the settings of the balance. For more information about activating the function **Auto connection** see RS232.

#### System default settings

<b>Baudrate:</b>	<b>9600</b>	<b>Stop bits:</b>	<b>1 Bit</b>
<b>Bits / Parity:</b>	<b>8 / None</b>	<b>Handshake:</b>	<b>XOn/XOff</b>
<b>Auto Baudrate</b>	<b>Off</b>	<b>Char Set</b>	<b>UTF-8</b>

### 3.5.2 Connecting the data writer via the USB connection

Use the USB connection cable to connect the data writer to an instrument.

**Note**

The P-52RUE data writer will be automatically recognized by most of the instruments. Consult the Reference Manual of the main instrument for detailed instructions on how to connect the data writer to the main instrument.

### 3.5.3 Connecting the data writer via the Ethernet connection

Consult the Reference Manual of the main instrument for detailed instructions on how to connect the data writer to the main instrument.

## 3.6 Transporting the accessory



#### NOTICE

##### Risk of property damage due to improper transport

In the event of improper transport, the accessory may fall. This can cause major property damage.

- 1 Only transport the accessory when it is disconnected from the power supply.
- 2 If you would like to transport or ship your accessory over long distances, use the complete original packaging.
- 3 Always transport packages upright.
- 4 Always handle with care.

Remove the power cable and any interface cable from the accessory. Refer to the notes in section [Selecting the location ▶ Page 5] regarding the choice of an optimal location.

## 4 Maintenance



#### WARNING

##### Death or serious injury due to electric shock

Contact with parts carrying a live current can lead to injury and death.

- 1 Disconnect the data writer from the power supply prior to cleaning and maintenance.
- 2 Prevent liquid from entering the data writer or AC/DC adapter.





## NOTICE

### Risk of property damage due to opening the housing

Opening the housing of the data writer or the AC adapter can cause major property damage.

- Do not open the housing of the data writer or the AC adapter. They contain no components which can be cleaned, repaired or replaced by the user.

## 4.1 Maintenance tasks

Maintenance action	Recommended interval	Remarks
Replacing the ribbon cartridge	<ul style="list-style-type: none"><li>• When the printings start to fade</li></ul>	see [Replacing the ribbon cartridge ▶ Page 9]
Cleaning	<ul style="list-style-type: none"><li>• Depending on the degree of pollution</li></ul>	see [Cleaning the housing ▶ Page 10]

## 4.2 Replacing the ribbon cartridge

### Note

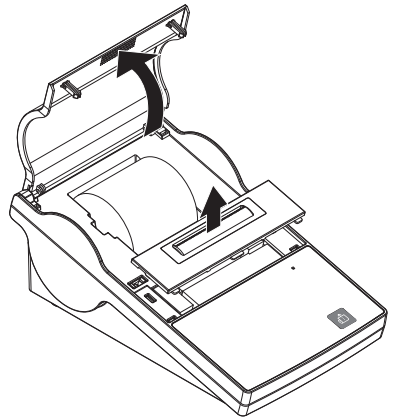
The ribbon cartridge must be changed when the printings start to fade.

### Note

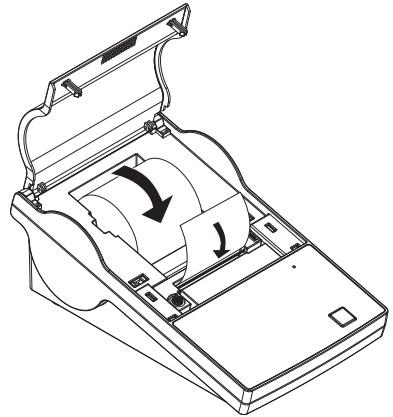
The ribbon cartridge can dry out when the data writer is not being used for some time. Ribbon cartridges that have been dried out cannot be used anymore and must be replaced.

- The data writer is switched off.

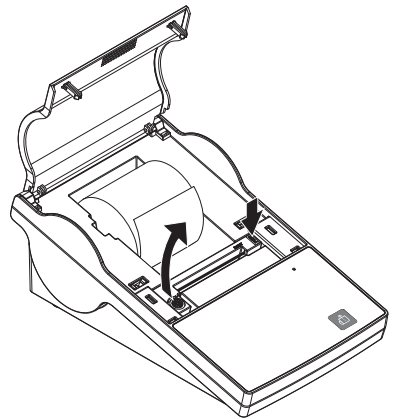
- 1 Open the paper cover.
- 2 Remove the paper cutter.



- 3 Remove the paper from the print head by pulling the paper back.



- 4 Press **PUSH** on the right side of the ribbon cartridge.  
➔ The ribbon cartridge can be removed.
- 5 Insert the new ribbon cartridge. Use the tension wheel for taking up slack.



### 4.3 Cleaning the housing

The data writer housing is made of top grade, resistant materials. Therefore, all commercially available mild cleaning agents can be used.

## 5 Technical Data

### 5.1 General technical data

#### Power Supply

AC/DC Adapter: Primary: 100 V - 240 V,  $\pm 10\%$ , 50/60 Hz, 1.6 A  
Secondary: 24 V DC, 2.5 A (with electronic overload protection)

Power supply to the data writer: 24 V DC, 2.5 A

#### Protection and Standards

Overvoltage category	II
Degree of pollution	2
Standards for safety and EMC	Declaration of Conformity (part of standard equipment)
Range of application	Indoor use only

### **Environmental Conditions**

Height above mean sea level	up to 4000 m
Ambient temperature range	Operation: 5°C ~ 40°C Storage: -25°C ~ 60°C
Relative air humidity	20% ~ 80% up to 31°C decreasing linearly to 50% at 40°C, non-condensing
Connections	<ul style="list-style-type: none"><li>• RS232 port (Male DB 9)</li><li>• USB device port (B-type)</li><li>• Ethernet 10/100base-TX port (RJ-45)</li></ul>

### **Data writer Features**

Print technology	Dot matrix
Printing unit	Dot matrix print head 5x7, 24-character line length
Printing speed	2.3 lines per second
Print quality	Light resistant and thermally stable printing (GLP, GMP, ISO 9001)

### **Materials**

Top housing	Die-cast zinc, chromed and plastics (PBT)
Bottom housing	Plastics (PBT)
Paper cutter	Plastics (PBT)
Paper cutter slot	Polycarbonate plastics (PC)

### **Dimension / Weight**

Length	220 mm
Height	88 mm
Width	130 mm
Net Weight	1.25 kg, without AC/DC adapter









# GWP®

Good Weighing Practice™

---

GWP® is the global weighing standard, ensuring consistent accuracy of weighing processes, applicable to all equipment from any manufacturer. It helps to:

- Choose the appropriate balance or scale
- Calibrate and operate your weighing equipment with security
- Comply with quality and compliance standards in laboratory and manufacturing

 [www.mt.com/GWP](http://www.mt.com/GWP)

[www.mt.com/lab-printers](http://www.mt.com/lab-printers)

For more information

**Mettler-Toledo GmbH**

Im Langacher 44  
8606 Greifensee, Switzerland  
[www.mt.com/contact](http://www.mt.com/contact)

Subject to technical changes.  
© 06/2022 METTLER TOLEDO. All rights reserved.  
30348454B en



30348454