804 Ti Stand

Manual

8.804.8001EN / 2019-09-26

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This documentation has been prepared with great care. However, errors can never be entirely ruled out. Please send comments regarding possible errors to the address above.

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1 Introduction

1.1 Instrument description

The 804 Ti Stand is a titration stand and controller for the propeller stirrer 802 Stirrer.

The titration stand is directly connected to an analysis device via an MSB connection cable.

1.2 About the documentation

CAUTION

Please read through this documentation carefully before putting the instrument into operation. The documentation contains information and warnings which the user must follow in order to ensure safe operation of the instrument.

1.2.1 Symbols and conventions

The following symbols and styles are used in this documentation:

*(5-**12**)*	**Cross-reference to figure legend** The first number refers to the figure number, the second to the instrument part in the figure.
1	**Instruction step** Carry out these steps in the sequence shown.
	**Warning** This symbol draws attention to a possible life hazard or risk of injury.
	**Warning** This symbol draws attention to a possible hazard due to electrical current.
	**Warning** This symbol draws attention to a possible hazard due to heat or hot instrument parts.

	**Warning** This symbol draws attention to a possible biological hazard.
	**Caution** This symbol draws attention to a possible damage of instruments or instrument parts.
	**Note** This symbol marks additional information and tips.

1.3 Safety instructions

1.3.1 General notes on safety

WARNING

Operate this instrument only according to the information contained in this documentation.

This instrument left the factory in a flawless state in terms of technical safety. To maintain this state and ensure non-hazardous operation of the instrument, the following instructions must be observed carefully.

1.3.2 Electrical safety

The electrical safety when working with the instrument is ensured as part of the international standard IEC 61010.

WARNING

Only personnel qualified by Metrohm are authorized to carry out service work on electronic components.

WARNING

Never open the housing of the instrument. The instrument could be damaged by this. There is also a risk of serious injury if live components are touched.

There are no parts inside the housing which can be serviced or replaced by the user.

Supply voltage

WARNING

An incorrect supply voltage can damage the instrument.

Only operate this instrument with a supply voltage specified for it (see rear panel of the instrument).

Protection against electrostatic charges

WARNING

Electronic components are sensitive to electrostatic charges and can be destroyed by discharges.

Do not fail to pull the power cord out of the power socket before you set up or disconnect electrical plug connections at the rear of the instrument.

1.3.3 Working with liquids

CAUTION

Periodically check all system connections for leaks. Observe the relevant regulations in respect to working with flammable and/or toxic fluids and their disposal.

1.3.4 Flammable solvents and chemicals

WARNING

All relevant safety measures are to be observed when working with flammable solvents and chemicals.

- Set up the instrument in a well-ventilated location (e.g. fume cupboard).
- Keep all sources of flame far from the workplace.
- Clean up spilled liquids and solids immediately.
- Follow the safety instructions of the chemical manufacturer.

1.3.5 Recycling and disposal

This product is covered by European Directive 2012/19/EU, WEEE – Waste Electrical and Electronic Equipment.

The correct disposal of your old instrument will help to prevent negative effects on the environment and public health.

More details about the disposal of your old instrument can be obtained from your local authorities, from waste disposal companies or from your local dealer.

2 Device overview

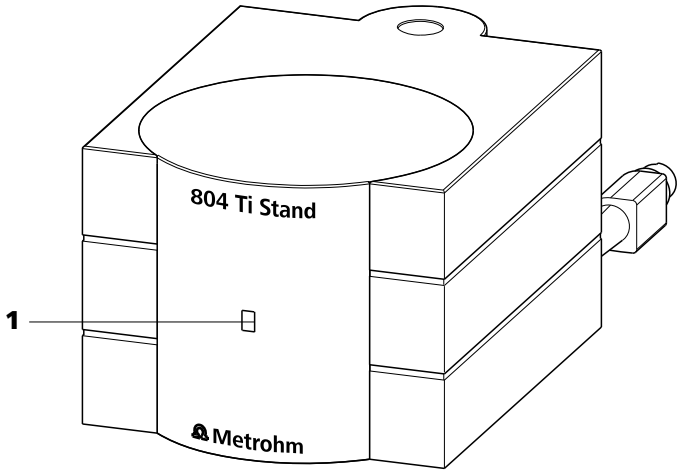


Figure 1 Front 804 Ti Stand

1 LED function display
Lights up, when the stirrer is switched on.

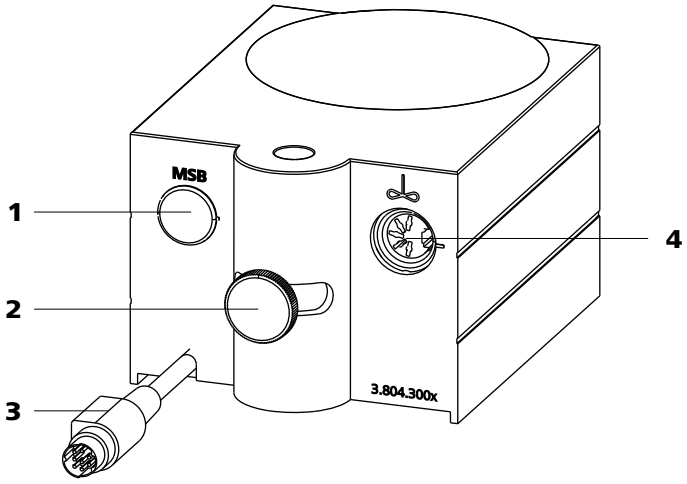


Figure 2 Rear 804 Ti Stand

1 MSB connector
Metrohm Serial Bus.
For connecting additional devices

2 Clamping screw
For fixing the positioning height or the swing position of the magnetic stirrer.

3 MSB connection cable
For connecting to a control device.

4 Propeller stirrer connector
For connecting the 802 Stirrer

3 Installation

3.1 Setting up the instrument

3.1.1 Packaging

The instrument is supplied in protective packaging together with the separately packed accessories. Keep this packaging, as only this ensures safe transportation of the instrument.

3.1.2 Checks

Immediately after receipt, check whether the shipment has arrived complete and without damage by comparing it with the delivery note.

3.1.3 Location

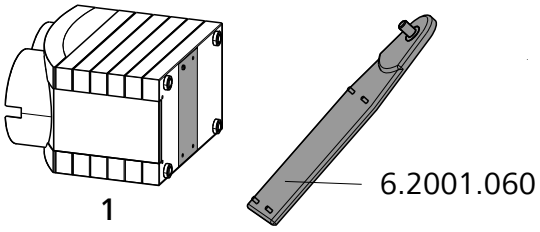
The instrument has been developed for operation indoors and may not be used in explosive environments.

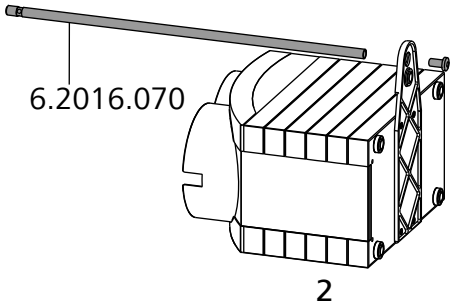
Place the instrument in a location of the laboratory which is suitable for operation and free of vibrations and which provides protection against corrosive atmosphere and contamination by chemicals.

The instrument should be protected against excessive temperature fluctuations and direct sunlight.

3.2 Mounting the 804 Ti Stand

Mounting the stand



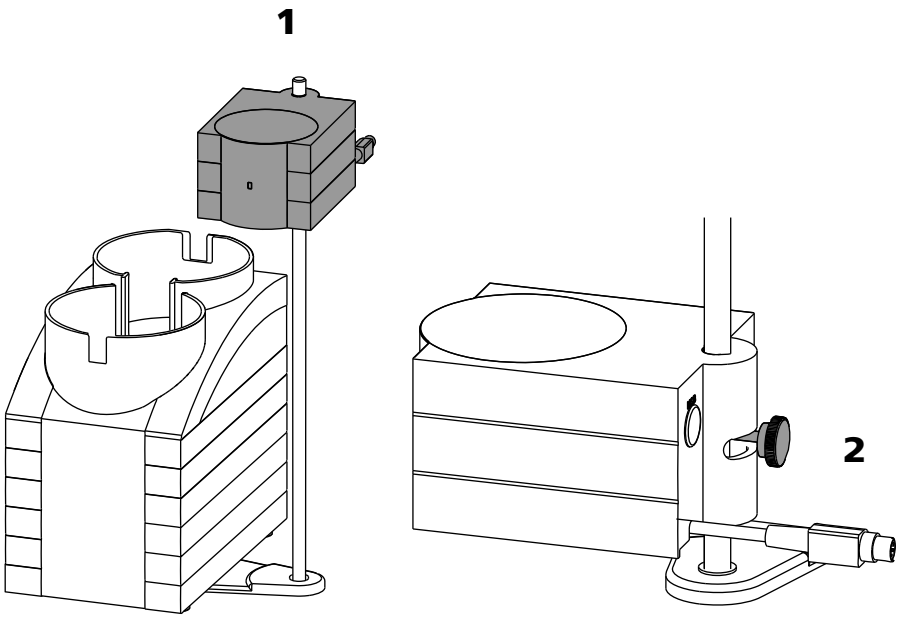


Mount the stand as follows:

1 Screw the 6.2001.060 stand plate with the accompanying four screws tightly to the bottom of the instrument.

2 Screw the 6.2016.070 stand plate with the hexagon screw (hexagon key supplied) firmly to the stand plate.

Fastening the titration stand

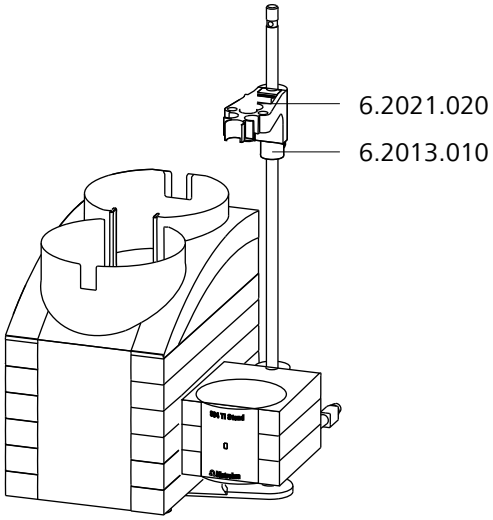


Fasten the titration stand as follows:

1 Attach the titration stand on the support rod and push it downwards.

2 With the clamping screw, fix the positioning height or the swing position of the titration stand.

Attaching the clamping ring and the electrode holder



Fasten the clamping ring and the electrode holder as follows:

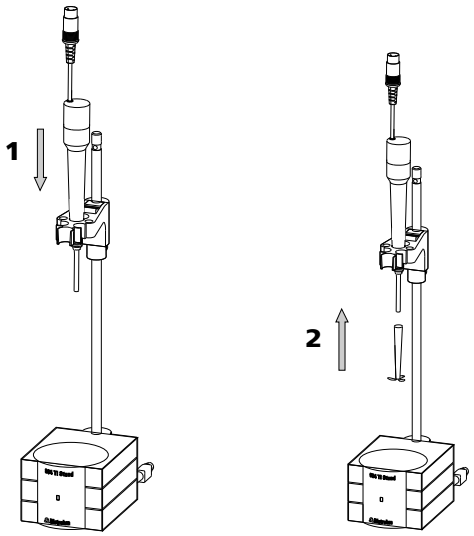
1 Push the 6.2013.010 clamping ring onto the support rod.

2 Attach the 6.2021.020 electrode holder on the support rod.

3 Keep the red button pressed down and push the electrode holder downwards to the required height.

4 Fix the position of the electrode holder with the aid of the clamping ring.

Mounting the propeller stirrer



Mounting the propeller stirrer as follows:

1 Insert the propeller stirrer 802 Stirrer without the stirring propeller from above into the center opening of the electrode holder.

2 Plug the stirring propeller from below to the propeller stirrer.

3.3 Connecting the 804 Ti Stand

Connect the titration stand as follows:

1 Exit the control software.

2 Connect the connection cable of the titration stand to one of the sockets marked with **MSB** on the rear of the control device.

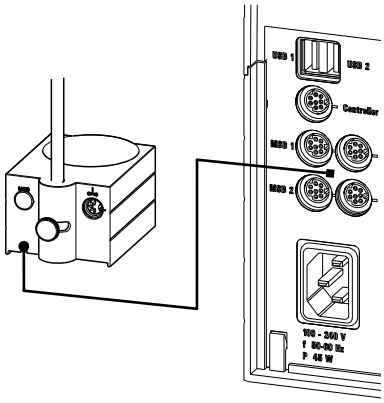


Figure 3 Connecting the 804 Ti Stand

3 Connecting an additional device (e.g. Dosimat or Dosino) to the MSB connector of the titration stand.

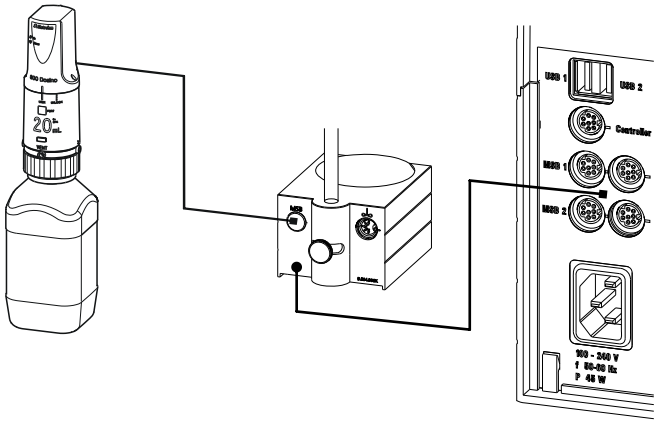


Figure 4 Connecting the Dosino to the 804 Ti Stand

4 Start the control software.

4 Technical specifications

4.1 Rotational speed 804 Ti Stand

Maximum rotational speed	±1700...1900 U/min
Setting of the rotational speed	±15 steps
Increase of rotational speed per step	±115...125 U/min

4.2 Power supply

Voltage	+12 V, -12 V, +5 V
Power consumption	4 W
Fuse	Electronic overload protection

4.3 Ambient temperature

Nominal function range	+5…+45 °C (at a maximum of 85% humidity)
Storage	–20…+60 °C
Transport	–40…+60 °C

4.4 Dimensions

Width	90 mm
Height (without stand)	70 mm
Height (with stand)	430 mm
Depth	140 mm
Weight	330 g

5 Accessories

Up-to-date information on the scope of delivery and optional accessories for your product can be found on the Internet. You can download this information using the article number as follows:

Downloading the accessories list

1. Enter *https://www.metrohm.com/* into your Internet browser.
2. Enter the article number (e.g. **804**) into the search field.
   The search result is displayed.
3. Click on the product.
   Detailed information regarding the product is shown on various tabs.
4. On the **Included parts** tab, click on **Download the PDF**.
   The PDF file with the accessories data is created.

NOTICE

Once you have received your new product, we recommend downloading the accessories list from the Internet, printing it out and keeping it together with the manual for reference purposes.