



# Fauser Light Analyser ZadPad Measuring Device Instruction Manual

[Home](#) » [Fauser](#) » Fauser Light Analyser ZadPad Measuring Device Instruction Manual 

## Contents

- [1 Fauser Light Analyser ZadPad Measuring Device](#)
- [2 Introduction](#)
- [3 Device description](#)
  - [3.1 Menu functions](#)
  - [3.2 Measurement](#)
- [4 Annex Technical information](#)
- [5 Documents / Resources](#)
- [6 Related Posts](#)

# Fauser

## Fauser Light Analyser ZadPad Measuring Device



## Introduction

ZadPad is a measuring device for different physical metrics, selectable via the attached probes. Fast and precise data acquisition and high-performance processing power offer extensive possibilities of data acquisition and analysis for a hand-held measuring device. Also, time and frequency domain analysis of the measurement signals are displayed as a chart. The measurement data can be saved on the internal USB drive (future firmware version).

## Device description

### Operating and indication elements



1. **On/Off** button
2. USB port (micro-B-USB) For connecting the ZadPad with a PC and for battery charging
3. Sensor connector For inserting the various measuring probes.
4. Control LEDs (Charging indicator LED red, Function LED tricolor)

#### Touch display functions:

5. Header info screen
  - Menu
  - Page info
  - Probe info
  - Y Scale
  - Recording level indicator
  - Battery voltage indicator
6. Main buttons:
  - << >> Page switch buttons
  - Save button
  - Settings button
  - Mode button
  - Run button
7. Measurement windows: Values <> Time graph <> Frequency graph

### Turn on/off

The ZadPad is turned on through the On/Off button ❶ and turned off by Menu→Off. If no software turns off is

possible, the On/Off button can be pressed for 5 seconds. If no key is pressed for the selected Auto-Power-Off time or the battery falls to minimum voltage ZadPad turns off automatically.

### **Charging the battery and battery indicator**

The ZadPad has a rechargeable Lithium-Ion battery. The operating time significantly depends on se and settings (e.g. backlight). Operation time is between 8 and 20 hours. The battery voltage level is shown in the Header info screen ⑤. Charging is done through the USB port ② with a power supply of 5 V/1500 mA. This corresponds to the standard charger for mobile devices. Never use other chargers; this may lead to damage to the ZadPad. Never charge in the vicinity of combustible material or gases. Never charge batteries unattended! Recharge device approximately every 6 months in case of prolonged non-usage. Charging is done once the charger is plugged in; this is visible through the light of the charging indicator- LED ④. The charging time is approximately two hours for a discharged battery. The charging indicator turns off after the completion of charging. When any fault condition occurs, the charging indicator LED blinks at 1 Hz.

### **Connecting the Sensor**

For flicker analyzing the VPL light flicker, probe has to be plugged into the Sensor connector ③. The measuring probe can also be connected to ZadPad via the 80 cm long connecting cable. The connected probe is shown in the Header info screen ⑤

### **Header info screen**

The Header info screen ⑤ shows the status information. Clicking the Menu opens the menu functions.

### **Menu functions**

Menu	→	Probe	→	Installed probes		
		Device	→	General	→	Date / Time (not used) Language  Password (not used)  Factory Reset
				Customize	→	Signal tone Colour scheme  Backlight brightness % Power Saving time Power Saving %  Auto Power Off time
				Graphics	→	FFT Scale  FFT AC Scale Mode Frequency Scale  Time Scale
				User	→	User Data
				About	→	Device Info
		Off				

### Main buttons

The Main buttons ⑥ functions:

Page switch buttons << >> select the different pages of the Measurement window ⑦.

**The save:** button is not supported in this firmware version.

**The settings:** button opens the quick menu for X Scale and Y Scale selection.

**The mode:** button opens the quick menu for Sample Time and Sample Mode selection.

**The run:** button starts the measurement.

### Measurement

### Preparation for measurement

Connect the VLP light flicker probe to the sensor connector. The influences of other light sources should be avoided if a single lamp is measured. Avoid any movement or vibration of the sensor during the measurement, especially if a 180-second PstLM measurement is in progress. It is strongly recommended to mount the probe on a holder or tripod.

### Proceeding flicker measurement

First, select the required sample time for the measurement with the Mode button quick menu:

- 1 sec for standard measurement
- 2 sec for ASSIST Mp measurement
- 180 sec for PstLM measurement

Press the Run button to start measurement.

When the measurement is finished the Measurement windows **7** open or refresh. The illumination level should be between 1000 lx and 10000 lx. So the Recording level indicator must be checked. For accurate results, the level should be in the green range. The Measurement windows show the light and flicker values. With the Page switch buttons << >> the different windows Values, Time graph, and Frequency graph can be selected.

### Flicker standard reference

EU Directive No 2019/2020: Ecodesign requirements for light sources and separate control gears IEC TR 61547-1: Objective light flicker meter and voltage fluctuation immunity test method IEC TR 63158: Objective test method for stroboscopic effects of lighting equipment

### Annex Technical information


- **Display:** 4,3 " TFT capacitive touch panel
- **Data conversion:** 16 Bit, 4 channel
- **Sampling rate:** up to 1.6 MHz
- **Data storage memory:** 32 GByte
- **The sensor detects:** Automatic sensor recognition
- **Power supply:** Lithium-ion battery
- **Dimensions:** 154 x 96 x 34 mm
- **Weight:** 350 g
- **Operating temperature:** 0..40 C
- **Humidity range:** 10..70 % (non-condensing)
- **Light measurement:**
- **Illuminance Flicker** mean, maximum, minimum fundamental frequency, percent of flicker, flicker index, modulation depth
- **Flicker (frequency weighted)** : PstLM , SVM, ASSIST Mp, IEEE 1789
- **Light flicker probe VLP:**
- **Spectral sensitivity:** 480...660 nm
- **Spectral approximation:** V( $\lambda$ )
- **Illuminance:** 1 lx...20,000 lx
- **Frequency range:** 50 Hz...400 kHz
- **Technical changes reserved.**

### Waste disposal

This product has the recycling symbol in accordance with EU Directive 2002/96/EC. This means the device must be returned to the manufacturer for recycling after its useful life. Waste disposal along with household waste is not done.

**Disposal address:** Fauser Elektrotechnik Ambacher Straße 4 D-81476 München  
The current version of the manual is available on the homepage [www.fauser.biz](http://www.fauser.biz). Technical changes reserved; we do not accept liability for any errors.

Documents / Resources

	<p><a href="#">Fauser Light Analyser ZadPad Measuring Device</a> [pdf] Instruction Manual Light Analyser ZadPad, Measuring Device, Light Analyser, ZadPad Measuring Device, Light Analyser ZadPad Measuring Device</p>
---	--