

R&S® EFW Flywheel

Manual setting of receiver parameters



75 Years of
Driving
Innovation

 **ROHDE & SCHWARZ**

R&S® EFW Flywheel

At a glance

The R&S® EFW flywheel adds the capability of manual parameter control by means of a rotary knob to receivers that are controlled from a PC via external software (e.g. the R&S® EM100, R&S® EM510 or R&S® EM550).

The R&S® EFW flywheel is used for manual parameter control mainly in situations where a computer mouse would not provide sufficiently high resolution. The flywheel is helpful, for example, when setting the frequency on receivers that do not have a front panel with a rotary knob. A typical example is a radiomonitoring receiver, where a rotary knob such as the R&S® EFW comes into its own as it allows frequency settings to be made with the required fine resolution.

Fine-tuning of the frequency or the beat frequency oscillator (BFO) is indispensable in particular when using single sideband (SSB) modulation or a CW mode in shortwave operation.

Depending on the software used, further parameters can be controlled using the flywheel.

Key facts

- ▀ Manual parameter control by means of a rotary knob
- ▀ Parameter setting with fine motor control
- ▀ Especially helpful in SSB and CW operation



R&S®EFW Flywheel

Benefits and key features

Parameter settings with higher resolution than with a PC mouse

The R&S®EFW simulates the scroll wheel of a PC mouse. It allows the required parameters to be adjusted at high speed while providing significantly higher resolution.

Connection to a PC via a USB interface

The flywheel connects to a PC via a USB interface. It has a USB 1.1 standard interface (USB 2.0 compatible).

No additional power supply required

Power is supplied via the USB interface.

Precision ball bearing – no friction-type bearing

The use of a precision ball bearing ensures particularly smooth rotation. Operation requires minimal physical effort.

Metal knob with high rotational mass

The large overdrive of the flywheel is advantageous for setting parameters quickly.

Non-slip surface

The surface of the rotary knob is grooved to provide a secure grip.

Plug & play

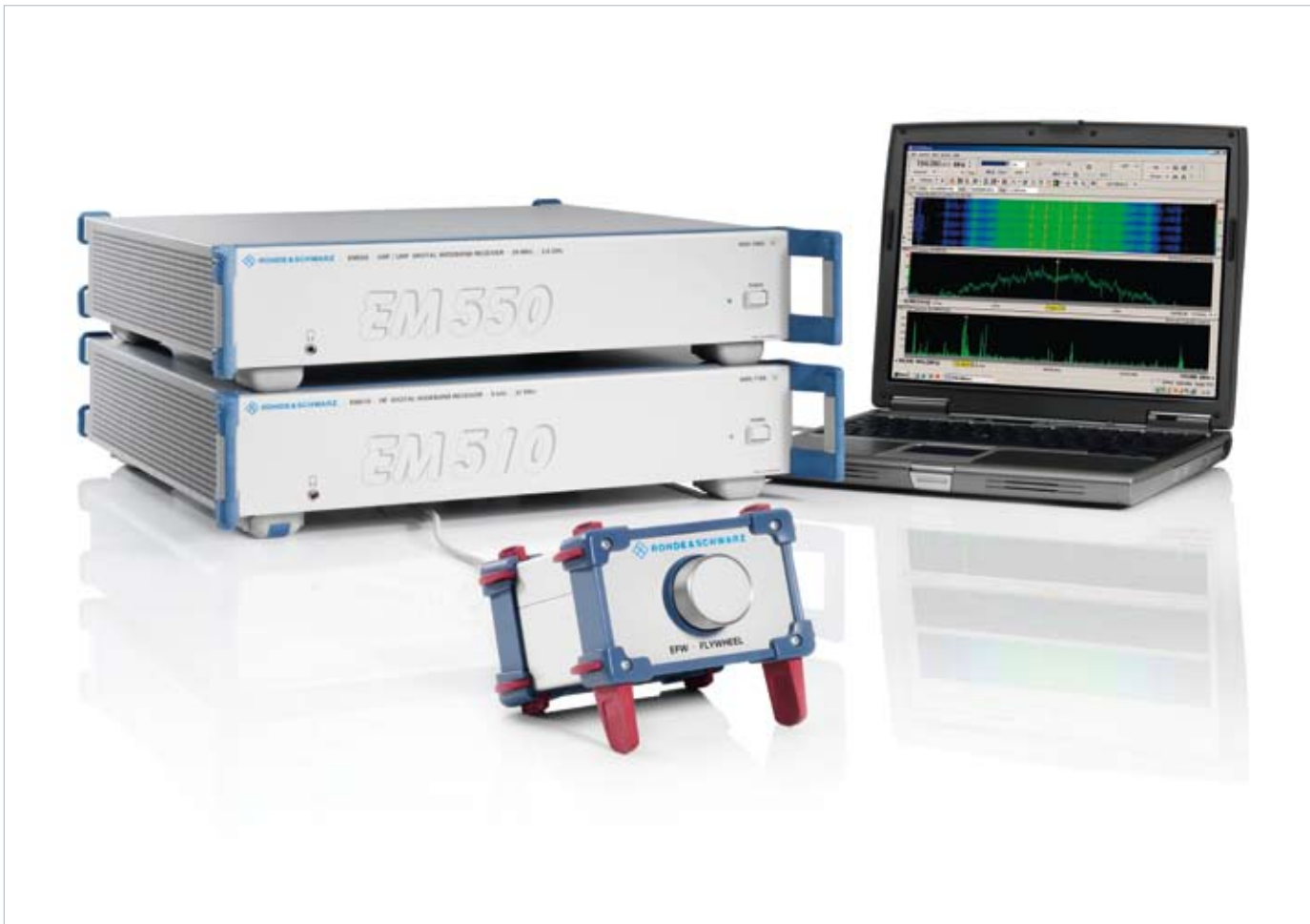
No special installation is required for operating the device.

Suitable for a wide variety of applications

The flywheel can be used with all monitoring receivers from Rohde & Schwarz that are controlled via external software. It can therefore also be used in system applications.

Example application

The R&S®EM100, R&S®EM510 and R&S®EM550 receivers are supplied with operating software as standard. This software is part of the comprehensive R&S®RAMON monitoring software and is used for the remote control of radiomonitoring and radiolocation receivers and the remote evaluation of the results delivered. The software is installed on a PC, and the receiver is operated via a keyboard and mouse. Many radiomonitoring applications, however, require frequency settings with very fine resolution that is not provided by a computer mouse. The R&S®EFW flywheel solves this problem, providing manual frequency control of the receiver with the required high resolution. The R&S®EFW flywheel can be used with any version of the R&S®RAMON user interface.



Specifications

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Interface		
Data interface		USB 1.1 (USB 2.0 compatible)
Standards		
EMC		
Electromagnetic interference (EMI)		EN 55022, class B (emissions)
Electromagnetic susceptibility (EMS)		EN 61000-4-2, EN 61000-4-3, EN 61000-4-8
Mechanical stress	vibration (sinusoidal)	EN 60068-2-6
	vibration (random)	IEC 60068-2-64, class B
	shock	40 g shock spectrum in line with MIL-STD-810F, method 516.4, IEC 60068-2-27
General data		
Operating temperature range		0°C to +50°C
Permissible temperature range		-10°C to +55°C (without condensation)
Storage temperature range		-40°C to +70°C
Humidity		max. 95%, cyclic test at +25/+40°C
MTBF	IEC 1709	4500000 h
Power supply		5 V (via USB interface)
Current drain		typ. 50 mA
Dimensions (height × width × depth)	without feet and rotary knob	approx. 75 mm × 115 mm × 115 mm (approx. 2.95 in × 4.53 in × 4.53 in)
	depth including rotary knob	130 mm (5.12 in)
Weight		approx. 650 g (approx. 1.43 lb)

Ordering information

Designation	Type	Order No.
Flywheel	R&S® EFW	4075.5505.02
Accessories supplied		
USB cable		

Service you can rely on

- | Worldwide
- | Local and personalized
- | Customized and flexible
- | Uncompromising quality
- | Long-term dependability

About Rohde & Schwarz

Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

Environmental commitment

- | Energy-efficient products
- | Continuous improvement in environmental sustainability
- | ISO 14001-certified environmental management system

Certified Quality System
ISO 9001

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