



Meinberg Radio Clocks

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UA509P: DCF77 Radio Clock Timer with LC Display

DCF77 Radio Clock Timer UA509P with two RS232 interfaces and 4 programmable relay outputs with 50 watt max. load each (changeover contacts).

Important Note

This product is no longer available and may have been replaced by a newer product. We will, of course, continue to provide support for units that have already been purchased and are still in use. Please contact our [1][Sales Department](#) for further details.

Key Features

- LC-display, 4 x 16 characters
- 2 RS-232 interfaces
- Reception status indicated by LED
- Buffered hardware clock
- 1024 switching times
- 4 relay outputs with 50 Watt safe load
- Buffered CMOS RAM
- Flash-EPROM with bootstrap loader

Description

DCF77 Radio Clock Timer UA509P with two serial RS232 interfaces and 4 programmable relay outputs (changeover contacts, 50 Watt max. load each). 8 different plans assigned to the days of the week (holidays included or not) with up to 1024 switching times can be edited by using the 4 keys and the LC-Display in the frontpanel. Alternative pulses can be programmed to the outputs instead of switching times. The UA509P generates pulses (TTL) to control slave clocks via an external slave line booster.

Characteristics

Receiver Type	Narrowband synchronous receiver with automatic gain control, Bandwidth: approx. 40Hz
Status Indicators	Modulation and field strength visualized by LEDs Free running state visualized by LED after switching to free running quartz clock mode
Display	LC Display, 4 x 16 characters
Synchronization Time	2
Accuracy free run	Accuracy of the quartz base after min. 24hrs of synchronized operation: $\pm 1 \cdot 10^{-6}$
Reception Monitoring	Incoming time string undergoes multiple checks Plausibility test using two full consecutive time strings
Pulse Outputs	slave clock pulses (TTL level)
Interface	Two independent serial RS232 interfaces, configurable by menu
Serial Time String Output	COM0: Baudrate: 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 baud Framing: 7E1, 7E2, 8E1, 8N1, 8N2 one active 20mA current loop output COM1: Baudrate: 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 baud Framing: 7E1, 7E2, 8E1, 8N1, 8N2 [2] Output string : 32 ASCII characters with date, time and status information
Relay Outputs	4 relay outputs, max. 50W load
Switch programs	8 different plans assigned to the days of the week (holidays included or not) with up to 1024 switching times can be edited by the 4 keys in the frontpanel. Alternative: Pulses can be programmed to the outputs
Dimensions of the front panel	22TE 3HE (111,4mm x 128,4mm)
Electrical Connectors	48-pin rear VG edge connector DIN 41612 SMB male connector

Backup Battery Type	In case of supply voltage failure the on-board RTC keeps the time based on XTAL for more than 100 hours (buffer capacitor) Optional: lithium backup battery (life time: 10 years)
Operating Voltage	+5 V DC
Current Draw	approx. 300 mA
Board type	Eurocard
Board Dimensions	160 mm x 100 mm, 1,5 mm Epoxy
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
Contents of Shipment	Scope of supply includes an active ferrite antenna [3] AI01 and 5m of RG174 coaxial cable with BNC connectors. Optional: [4] AW02 with RG58 and patch cord, other length of cable
RoHS Status of Product	This product is fully RoHS-compliant.
WEEE Status of Product	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

The English manual is available as a PDF file: [5][Download \(PDF\)](#)

Links:

[1] <mailto:sales@meinberg.de>

[2] <https://www.meinbergglobal.com/english/specs/timestr.htm>

[3] <https://www.meinbergglobal.com/english/products/dcf77-indoor-antenna.htm>

[4] <https://www.meinbergglobal.com/english/products/dcf77-outdoor-antenna.htm>

[5] <https://www.meinbergglobal.com/download/docs/manuals/english/ua509p.pdf>