


Data module

Hardware Option 236 034

Operating Instructions

Doc. Version: 9501-100-B

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Description

The DATA module is necessary for testing cellular radiotelephones. It simulates and decodes the FFSK, NRZ and RZ signaling that is exchanged between the base stations and mobiles of cellular-radio networks.

The DATA module is given the specific functions for the different cellular-radio networks by the system program (software option on MEMORY CARD). So cellular radiotelephones can only be tested if, in addition to the DATA module, the appropriate software option is available. The system software is automatically loaded by the generator and analyzer processor (DATA module) and by the HOST processor when the DATA mask is called up.

Installation of DATA module

1. Switch off the Communication Test Set and withdraw the power cable.
2. Unscrew the cover plate at location 8 on the back panel.
3. Slide the DATA module along the guide as far as it will go into the slot that is provided.
4. Screw the DATA module firmly to the chassis.
5. Reconnect the power cable.

Meaning of sockets

The data module is the hardware required for testing radio-data systems and cellular radiotelephones with the software options. It performs the generation and decoding of the system-specific signals.

- Socket 97 (Bu 97): Output for the "DATA" signaling of cellular radiotelephones. The signal is identical to the one fed internally to the FM modulator of the 4031 (1 V_p = 10 kHz deviation).
- Socket 98 (Bu 98): Conducts the synchronization signal "C-SYNC" for testing Network C radiotelephones.
- Socket 99 (Bu 99): Input for the demodulated "DATA" signaling of cellular radiotelephones (R_i = 100 k Ω). The DATA signal on Bu 99 can be decoded as an alternative to the TX DEMOD signal (see also "AF Signal Paths").
- S 101: Selector switch for the input voltage on Bu 99.
- Setting 0 V: ± 0.5 to $\pm 5 V_p$
- Setting TTL: Bu 99 as a TTL-compatible input

Operational check

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| <ol style="list-style-type: none">1. Perform a total reset.2. Check whether the display fields <code>CELL-GEN</code> and <code>CELL-ANA</code> in the status mask indicate the version numbers of the software. |
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