

Receiver RC390-02 24V

Technical description

The receiver consists of the RF-receive-part and the Telegramconverter and uses for the Conversion of a telegram with short impulse-width (300µs) into that standard 48-bit telegram.

receive-part:

The 390MHz receive-signal succeeded from a throw-antenna at the RF-early stage T201 and is reinforced there selectively. Simultaneously, the early stage is used for the absorption of the emitted pendulum-frequency over the antenna. In the following pendulum-step T202 takes place the Demodulation of the RF-Signals.

The Comparators IC201 serves to the manufacture of a TTL-suitable for signal for the following controller-circuit.

Converter:

The demodulate signal is felt after a recognized High-level after 460 µs at pin RBO of IC101. A wide impulse (700µs) corresponds to "1", the narrow impulse (300µs) "0". Became all 35Bit correctly receives, so is spent the 48Bit-Standardtelegram at RC4. The lacking bits become replenished with standard-assessing (function, M/E). Furthermore the CRC is formed over 40Bit and is adhered to the telegram. The Brown-out-detection existing from T102, R101, R102, R103, D101 and R104 holds the controller with voltage drop in the Reset. The transistor-step (T103, R110) guarantees the TTL-Level for the connected control.