

Wire Connected Monitoring Systems

Mains Connected digital Room Monitoring System – MGT RM2003D

Overview

The MGT RM2003D is a two-channel digital room monitoring system, which uses the 110/230 V mains supply as the receiving medium. It consists of 2 MGT-TX 2003D mains transmitters and one MGT-RX 2003D mains receiver.



A jamming-proof and audio-secure digital transmission method is employed for signal transmission. Thanks to the wide bandwidth of the transmission signal used, detection is strongly restricted, and decoding only possible with the special receiver MGT-RX 2003D. Different signal codes are available.

The receiver MGT-RX 2003D is designed to be highly selective and sensitive and thus the range attainable is greatly increased. It is possible to receive signals from two MGT-TX 2003D simultaneously (stereo). You can listen in on with headphones. It is possible to listen into the reception channels either separately (mono) or together (stereo). For recording on any recorder, a LF-amplifier output for each channel is available.

Due to its design, the MGT RM2003D can be problem-free installed into concealed installation sockets or similar.

It is powered by energy from the mains grid and emits its encrypted signal over a separate connection to the grid.

Therefore, two ways of switching are possible:

1. Feeding-in of the encrypted signal into the protective conductor.
This method of switching on permits a **phase independent** transmission of the encrypted signal and it guarantees attaining the maximum range of the system.
2. Feeding-in of the encrypted signal onto the grid phase.
This method of switching on is used if there is no way to a protective conductor or if reception should only be possible along the used grid phase.

The MGT RM2003D can receive the transmitter's signal in two different modes:

1. Through the receiver's direct connection to the mains grid using the provided mains connector (standard version)

2. Inductively with the provided antenna.

This method of reception is necessary when a direct access to the mains grid is not possible. Thus, it is for example possible to couple out the transmitter's encrypted signals inductively from the wiring or earthed metal conductors (guttering, lightning conductors, water pipes, heating, etc.) of the building in which the monitoring is to be carried out.

Technical Data

Transmitter MGT-TX 2003D

Channels:	2(320, 450kHz)
Modulation:	FM (with signal encryption)
Microphone:	internal
Power Supply:	110 to 240V AC
Power Consumption:	approx. 15 mA
Dimensions:	50 x 34 x 8 mm (in epaxy resin)

Receiver MGT-RX 2003D

Receiver:	2 separate reception tracts
RF Line In:	BNC (for connection of the wire antenna) using the mains connector
Lines Out:	2 parallel switched Stereo-Headphones-Outputs, 35 Ω 1 Stereo-Line-Output 2 Line-Outputs (700 mV) for connecting the recorder (1 per channel)
Power Supply:	10,8 – 13,2 V DC external via battery or PSU
Power Consumption:	Approx. 400 mA

Scope of Delivery: MGT-RX 2003D, BNC-cable, antenna, Stereo headphones, car connector cable, phase tester, 2 MGT-TX 2003D, system case, manual