



**Digital Audio Transmission System
DAS-4005RC 120 200 0053**

Miniature Transceiver Systems - Audio – 120



Digital Audio Transmission System – DAS-4005RC General

The DAS 4005RC, based on SMD technology, is a small audio transmission system designed for the UHF-BOS-band. A remote-controlled audio transmitter and an audio receiver with integrated remote control transmitter constitute the system. Transmission of digital data occurs on the basis of the transceiver principle. Range of audio data transmission is equal to the range of the remote control.

Within the transmitter audio signals are digitalized through a 10bit A/D converter and, afterwards, encrypted with a 56 bit code through the data protection system DES.

Transmission of digital audio data and reception of remote-controlled commands occurs via same antenna. Uninterrupted transmission of audio data packages enables, at the same time, reception of remote-controlled commands. All settings can be remote-controlled (On/Off, output power (PWR), power save (PS), internal/external microphone, VOX, channel, address).

Technical data

System parameters

Data rate	76.8 kbit/s
Sampling frequency	8.26 kHz
Audio resolution	
PS = Off	10 bit
PS = On	8 bit (logarithmic conversion 9 to 8 bit)
Audio band width	0.1 kHz – 3.8 kHz
Audio compression	
PS = Off	DPCM 5:4
PS = On	DPCM 2:1
Delay of audio signal	
PS = Off	180 ms
PS = On	270 ms
Encryption	single DES, 56 bit code
Addressing of remote control	16 bit address, 4 bit switch able from receiver

Power supply	3.6 V – 9 V DC
Power consumption	
PWR = High, PS = Off	140 mA
PWR = Low, PS = Off	65 mA
PWR = High, PS = On	75 mA
PWR = Low, PS = On	45 mA
Tx Off, Vox Off	235 µA
Tx Off, Vox On	1 mA
Output power	
PWR = High	150 mW
PWR = Low	50 mW
Frequency range	10 channels, 441 – 450 MHz
Receiver sensitivity	-100 dBm (BER = 10³)
Remote control frequency	444.9756 MHz
Audio input	internal or external microphone, switch able
Emergency call	external button, 10 s alarm signal
Vox	
Response time	1 s
Follow-up time	10 s
Antenna	Wire antenna
Dimensions	27 x 8 x 35 mm

Digital audio receiver DAS-RX 4005 RC (Model No: 120 200 0055)

Power supply	3.6 V – 12 V DC
Power consumption	
Reception	42 mA
Transmission	140 mA
Output power	150 mW
Remote control frequency	444.9756 MHz
Receiver sensitivity	-100 dBm (BER = 10³)
Frequency range	10 channels, 441 – 450 MHz
Audio output	line out, headphones
Antenna	SMA
Dimensions	80 x 32 x 115 mm

Scope of delivery: DAS-TX 4305 RC, power supply cable,
DAS-RX 4005 RC, antenna, headphones, 2x 9 V battery block, transport
box, user's manual



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