

**Data sheet**  
**RATIO®-radio bus system**  
**Wall transmitter 4-channel WS-D-102**



Example: Wall transmitter light WS-D-102-L-rw including masking frame by Gira. Delivery without frame.

The Ratio® wall transmitter 4-channel WS-D-102 is a wireless and battery-free universal transmitter inset with two rockers centrally positioned and suitable for various switch programs of various german leading manufacturers. Due to its extremely flat design, the Ratio® radio transmitter is suitable for mounting on walls or even on glass.

The transmitter can also be combined with conventional devices, such as e.g. power sockets.

Suitable switch programs are::

- Berker S1, B1, B3, B7 Glas
- Jung A500, Aplus
- Gira Standard55, E2, Event, Esprit
- Merten M-Smart, M-Arc, M-Plan

Technical Data	Radio-transmitter 4-channel WS-D-102	Remarks
Operating data	Energy generation by means of electro-dynamic energy generator (induction principle), wireless and battery-free.	
Radio technology	Protocol EnOcean-PTM, Transmission power max. 10mW EIRP	Frequency 868,3MHz Modulation ASK
Radio module / Channels	PTM200 / 2 with 4 action states each (upper/lower pushbutton is pressed/released)	
Actuating force/operation stroke	1,8mm / ca. 7N by 25°C	
Switching cycles	50'000 manipulation according to EN60669/VDE 0632	
Range	Interior 30 to 100m, exterior up to 300m	
Dimensions	Rocker 50mm x 50mm, Inset frame 57mm x 57mm	Base plate 71mm x 71mm
Mechanical data	Casing: plastic ABS, Weight: 40g	
Mounting / Assembly	Finery on a flat underground	Adhesion or screws
Environmental conditions	Temperature when in operation Storage temperature Rel. humidity (non-condensing)	-25°C ... +65°C -40°C ... +85°C 0 ... 95%
Approbation	R&TTE guidelines 1999/5/EC and conforming to EU regulations. ROHS conforming according to 2002/95/EC.	

Telegram							
Byte	Symbol	Significance	Value	Byte	Symbol	Meaning	Value
0	SYNC1	Synchronization	A5h	1	SYNC2	Synchronization	5Ah
2	HEADER	Number of byte following	0Bh	3	ORG	Type of transmitter	05h
4	DATA3	Pair of keys A Key Off	30h	5	DATA2	always 0	00h
		Pair of keys A Key On	10h				
		Pair of keys B Key Off	70h				
		Pair of keys B Key On	50h				
		Pair of keys A&B Key Off	37h				
		Pair of keys A&B Key On	15h				
6	DATA1	always 0	00h	7	DATA0	always 0	00h
8	ID3	ID-Number part 1	xxh	9	ID2	ID-Number part 2	xxh
10	ID1	ID-Number part 3	xxh	11	ID0	ID-Number part 4	xxh
12	STATUS	Status byte	xxh	13	CHK	Check sum	xxh

Designation	Designation additive	Typ	Article number
Wall transmitter 4-channel with two rockers	Color clean-white	WS-D-102-rw	1271153
	Color anthracite	WS-D-102-a	1271150
	Color aluminum varnished	WS-D-102-sb	1271200
	Color clean-white light	WS-D-102-L-rw	1273153
	Color anthracite light	WS-D-102-L-a	1273150
	Color aluminium varnished light	WS-D-102-L-sb	1273200
	Color clean-white shade	WS-D-102-J-rw	1274153
	Color anthracite shade	WS-D-102-J-a	1274150
	Color aluminium varnished shade	WS-D-102-J-sb	1274200