

# SI 1015

## IR Audio Transmission Technology | Modulators/Radiators

Cat. No. 004252

### General Description

The SI 1015 wideband modulator uses the extremely reliable carrier frequencies 2.3 and 2.8 MHz and can be operated in single-channel, two-channel and stereo modes. The modulator is fitted with two balanced XLR-3 audio inputs and IR monitoring diodes. It can be used with SZI 1015 and SZI 1029 radiators, the signals for the radiators are available at two RF sockets, or, alternatively, at a barrier strip. (N.B.: The barrier strip – which also powers the connected radiators – can only be used with SZI 1015 and SZI 1029-24 radiators.)

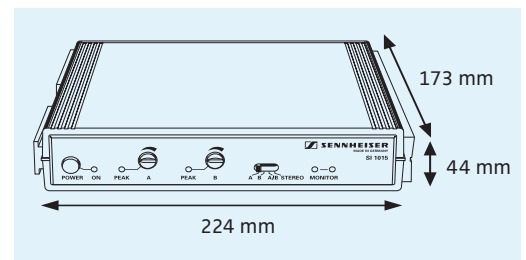


### Technical Data

|                             |  |
|-----------------------------|--|
| Modulation .....            | wideband FM  |
| Nominal/peak deviation..... | ±40 kHz/±56 kHz  |
| Carrier frequencies .....   | 2.3 and 2.8 MHz  |
| AF frequency response.....  | 50 – 15,000 Hz   |
| Audio inputs.....           | 2 x XLR-3, balanced  |
| Input impedance .....       | 600 Ω  |
| Input sensitivity.....      | 50 mV – 5 V (line),<br>optional: 1 mV – 100 mV (condenser<br>microphone, 12 V phantom powering)<br>0.4 mV – 40 mV (dynamic microphone) |
| RF outputs.....             | 2 x BNC socket, in parallel with barrier<br>strip, terminating impedance 50 Ω  |
| Operating voltage.....      | 24 – 30 V DC   |
| Current consumption .....   | < 140 mA   |
| Dimensions .....            | 1/2 19", 1 U (224 x 44 x 173 mm,<br>without rack-mount ears)   |
| Weight .....                | approx. 800 g  |

### Features

- Modulator for the carrier frequencies 2.3 and 2.8 MHz
- Single-channel, two-channel or stereo operation, features monitoring diodes and a separate barrier strip with RF and DC outputs for connecting radiators
- Delivery includes: SI 1015 modulator, two rack-mount ears



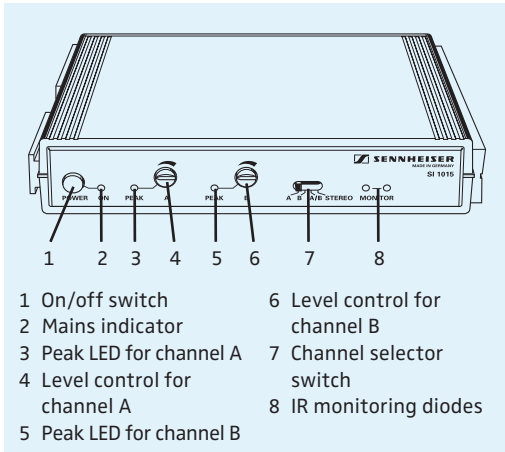
Dimensions of the SI 1015

### Recommended Accessories

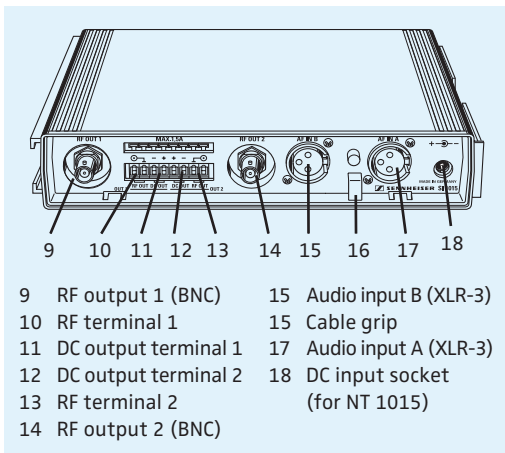
- |                             |                 |
|-----------------------------|-----------------|
| ■ Mains unit                |                 |
| NT 1015-EU European version | Cat. No. 004560 |
| NT 1015-120 USA version     | Cat. No. 004561 |
| ■ BNC-BNC co-axial cable    |                 |
| GZA 1019 A 1 (1 m)          | Cat. No. 002324 |
| GZA 1019 A 5 (5 m)          | Cat. No. 002325 |
| GZA 1019 A 10 (10 m)        | Cat. No. 002326 |
| ■ GZV 1019 A BNC coupler    | Cat. No. 002368 |
| ■ GA 1031 CC Blank module   | Cat. No. 004253 |

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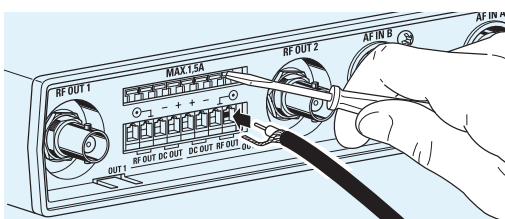
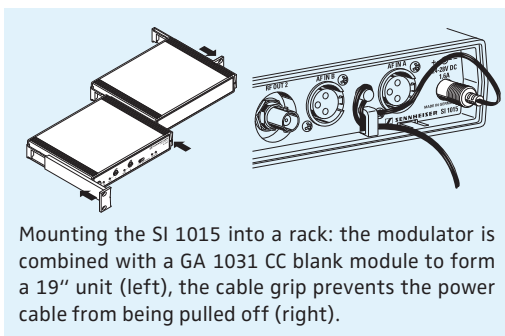
## IR Audio Transmission Technology | Modulators/Radiators



Front panel of the SI 1015



Back panel of the SI 1015



Connecting a radiator to the barrier strip of the SI 1015: Press down a lug with a screwdriver to open the corresponding terminal

The SI 1015 wideband modulator can be switched between operation on one channel, operation on two channels and stereo operation. It uses the carrier frequencies 2.3 and 2.8 MHz which ensure excellent transmission reliability. Together with a GA 1031 CC blank module, the compact SI 1015 can easily be mounted into a 19" rack.

The modulator's controls are shown in the drawing on the left: On the very left of the front panel is the on/off switch, and the LED next to it shows whether a DC voltage is present.

The AF levels of channels A and B can be adjusted with controls 4 and 6. The AF level should be adjusted in such a way that the peak LEDs occasionally light up at peak volumes. With the channel selector switch (7), the modulator can be switched between mono operation on channels A or B, two-channel dual mono (A/B) and stereo operation. In stereo operation the control amplifiers of the channels are coupled. The transmitted IR signal can be checked on the modulator, as the SI 1015 features two monitoring diodes (8). Please remember to use a receiver which operates on the carrier frequencies 2.3 and 2.8 MHz.

The back panel of the modulator features the DC input socket (see diagram on the left) where the modulator is connected to the mains via the NT 1015 mains unit. There is a cable grip for the power cable which should be used when rack-mounting the modulator as it prevents the connector from falling off or being pushed out of the socket. The audio signals are fed to the modulator via two electronically balanced XLR-3 input sockets (15 and 17, for channel B and A). The input sockets have line sensitivity but can optionally be fitted with microphone sensitivity for dynamic and condenser microphones (12 V phantom powering possible). The RF signal is available at two BNC sockets (9 and 14) to which you can connect SZI 1015, SZI 1029, SZI 1029-10 or SZI 1029-24 radiators.

Alternatively, the RF signal is available at the barrier strip: terminals 10 and 13 are in parallel with the two BNC sockets. For connection, part of the sheath of a co-axial cable must be removed, then about 1 cm of the neutral conductor must be stripped. The copper braiding is then twisted and inserted into the frame earth terminal and the neutral conductor into the terminal next to it (see drawing). When connecting the last radiator of your RF chain, do not forget to use a 50 Ω terminating impedance.

The modulator's DC supply voltage is also present at terminals 11 and 12. The SI 1015 can thus power up to two SZI 1015 radiators or a single SZI 1029-24 radiator via a two-core cable. You can also use co-axial cables with additional conductors for direct current, e.g. a CVS 50-275 cable from Cordial. Your local Sennheiser dealer will be delighted to supply you with more information on this easy installation method.

In general, the SI 1015 modulator can be used with the SZI 1015 radiator, all SZI 1029 variants, and the SZI 30 radiator. The earlier SZI 20 radiator cannot be used, as it cannot work with the frequencies 2.3 and 2.8 MHz. Other older radiator models such as the SZI 1219 A and SZI 1019 A series models are also not suitable.