

DRA HomePlug AV feeder GIRA

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Safety instructions

Read the safety instructions and operating instructions before starting up the device. Retain this document for future use.



Electrical devices may only be installed and mounted by a qualified electrician. Use the device only for installation in the sub-distribution unit (overvoltage category 3 or less – in compliance with VDE 0110-1).

Observe the following rules when installing the device:

- Operate at a dry location only.
- Slits and openings in the housing are for ventilation purposes and may not be covered.
- Do not insert any objects into the openings.
- Avoid direct sunlight.
- Ensure sufficient ventilation.
- Clean with a damp cloth only.

The device may only be operated in a supply network in accordance with the type plate. Contact customer service in case of damage. Damage has occurred

- if liquid has been poured onto the device,
- if objects have entered the device,
- if the device doesn't work although all of the operating instructions have been followed properly,
- if the housing of the device has been damaged.

Connections

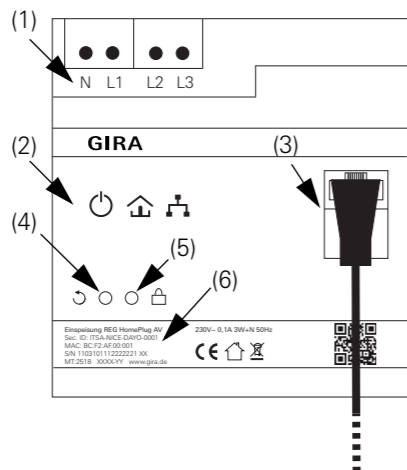


Fig. 1: Design
(1) Cable terminations N, L1, L2, L3 (230 ~ V)
(2) 3 LED (see table for explanation)
(3) Network socket outlet RJ45 (Ethernet)
(4) Reset button
(5) Encryption button
(6) Device sticker with security ID



The security ID is covered by the contact protection in the sub-distribution unit.

Cable terminations (1)

The screw terminals are marked N, L1, L2 and L3.

LED (2)

The LED below the symbols on the front can indicate the following states:

LED	Status	Meaning
	constantly illuminates green	ready for operation
	flashes green	the device is in Standby mode.
	constantly illuminates green	the connection is suitable for HD video streaming
	flashes green	data is being transferred
	constantly illuminates orange	the connection is suitable for SD video streaming and online gaming
	flashes orange	data is being transferred
	constantly illuminates red	the connection is suitable for simple data transfer and Internet access
	flashes red	data is being transferred
	constantly illuminates green	there is a connection to the ethernet network
Ethernet	flashes green	data is being transferred

Network socket outlet (ethernet RJ45) (3)

An RJ45 plug can be snapped into the device. In this way, the DRA HomePlug AV feeder can be connected e.g. to a DSL modem/DSL router and ultimately the Internet via a network cable.

Reset button (4)

When this button is pressed, the device is reset to the delivered state.

Encryption button (5)

The encryption button (padlock symbol) is to the right of the Reset button. When the encryption button is pressed, a random password which protects the network is generated.

Security ID-number (6)

The security ID-number and MAC address of the device are on the device sticker. The device is addressed in the network using these unique identifiers. This data is required to configure the network.

Note the security ID and MAC address of the DRA network connection and keep them in a safe place.

The security ID consists of 4 x 4 letters separated by hyphens (e.g. ANJR-KMOR-KSHT-QRUV).

Mounting and installing the DRA HomePlug AV feeder

The DRA HomePlug AV feeder is installed on a top-hat rail in the distribution box of the flat/house. Connect the device to a DSL modem/DSL router using the included network cable.

After the DRA HomePlug AV feeder has been connected to at least one other HomePlug AV device, the HomePlug AV network can be set up via the 230 V~ line.

Single-phase connection:

Neutral conductor and external conductor are connected to the terminals N and L1.

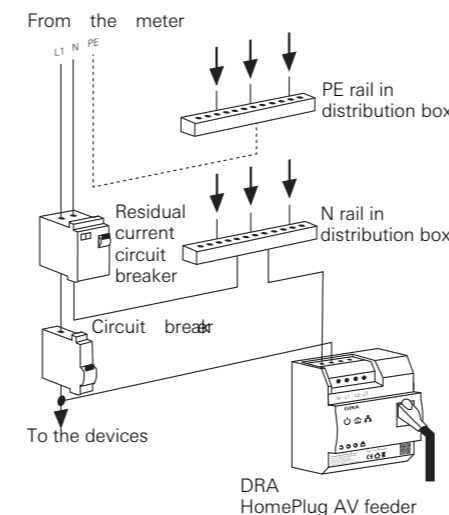


Fig. 2: Single-phase connection with residual current circuit breaker

Three-phase connection

Neutral conductor and one external conductor are connected to the terminals N and L1. Connecting the external conductors L2 and L3 is optional and optimises signal transmission. The device is supplied with power via the terminals N and L1.

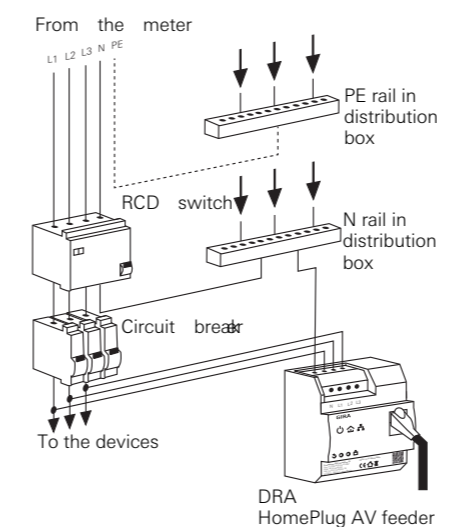


Fig. 3: Three-phase connection with residual current circuit breaker

Security in the network

The device is encrypted in the state of delivery, and data transfer is secured from the initial transmission. The powerful 128-bit AES encryption provides maximum data security. The standard password in the state of delivery is HomePlugAV.

To protect the network ideally, the standard password must be changed using the configuration software or by pressing the encryption button.

Configuration software

Configuration software
www.download.gira.de

The configuration software is available for download in the Gira download area.

Using this software:

- a network can be managed
- the transfer quality can be shown
- the data rate of the transfer can be shown
- the transferring device can be shown
- a setting can be changed
- device information can be called up
- tips for optimising the network can be shown
- a network can be encrypted with a personal password

Encryption button

After the DRA HomePlug AV feeder and another HomePlug AV device have been connected, within two minutes, press both encryption buttons for one second. By pressing the encryption button, (Fig. 4, (1)) the data traffic of the HomePlug AV network is secured using a randomly-generated code.

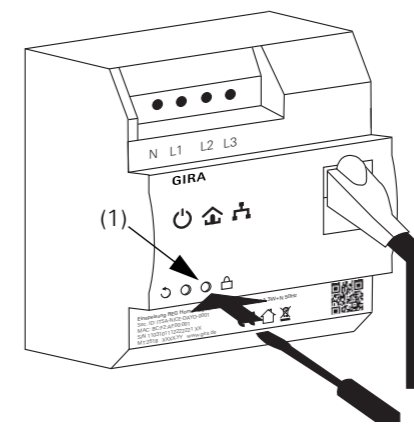


Fig. 4: Encryption button on the DRA HomePlug AV feeder

If the network should be expanded by an additional HomePlug AV device, any encryption button in the existing network must first be pressed. Within a period of 2 minutes, the encryption button of the new device must then also be pressed for 1 second.

This process should be repeated for any additional device to be added to the network.

Technical data

Standards	Ethernet specification IEEE 802.3, IEEE 802.3x, IEEE 802.3u, Auto MDI / X HomePlug AV
Protocols	CSMA/CA via 230 V mains
Transfer rate	200 Mbit/s
Transfer process	asynchronous
Modulation	OFDM - 1155 carrier, 1024/256/64-QAM, QPSK, BPSK
Data path	Ethernet <-> 230 V mains
Range	max. 300 m
Safety	128-bit AES encryption via 230 V mains (activated by pressing a button)
LED	<ul style="list-style-type: none"> Power HomePlugAV Ethernet
HomePlug AV connection	single-phase to 3-phase on a screw terminal
Wire cross section	0.18 - 6 mm ²
Device connection	Ethernet RJ45
Power consumption	Maximum 0.1 A with: <ul style="list-style-type: none"> Maximum 4.6 W Typical 3.6 W Standby 0.8 W
Power supply	AC 230 V 50/60Hz
Temperature	Storage -25°C to 70°C Operation 0°C to 40°C
Weight	178 g
Dimensions (H x W x D)	4 HP, 90 x 73 x 66 mm
Ambient conditions	10 - 90 % humidity (non-condensing)
Operating systems	including Windows® XP 32-bit, Windows® Vista 32/64-bit, Linux®, Mac OS® X and all TCP/IP operating systems

Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/specialist electrical trade).

They will forward the devices to the Gira Service Center.