

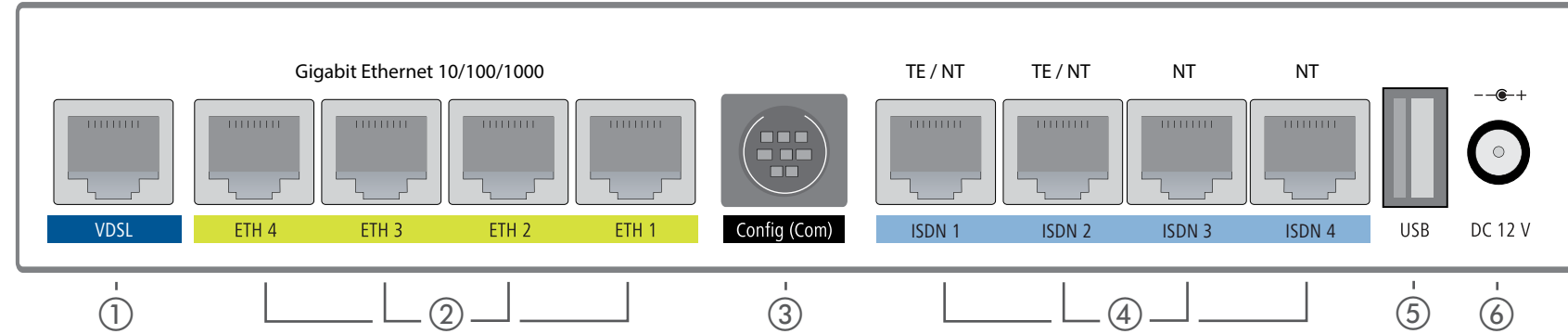
LANCOM 884 VoIP

Quick Reference Guide



LANCOM
Systems

SECURE. NETWORKS.



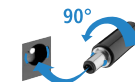
- VDSL interface**
Use the supplied DSL cable for the IP-based line to connect the VDSL interface and the provider's telephone socket. For more information, please contact your Internet service provider.
- Ethernet interfaces**
Connect one of the interfaces ETH 1 to ETH 4 to your PC or a LAN switch.
- Serial interface**
Configuring the device via the serial interface requires a serial configuration cable (available as an accessory).



- ISDN interfaces**
ISDN 1 + 2
Internal (NT) or external (TE) ISDN-S₀ bus. This feature is controlled by LCOS.
 - ISDN 3 + 4**
Internal (NT) ISDN-S₀ bus.
- A 100-Ohm resistor for line termination is switchable in LCOS.



- USB interface**
You can use the USB interface to connect a USB printer or a USB drive.
- Power**
After connecting the cable to the device, turn the connector 90° clockwise to prevent it from accidental unplugging. Use only the supplied power adapter.

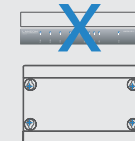


To prevent the device from overvoltage damage, an overvoltage-protected power supply is strongly recommended.



Please observe the following when setting up the device

- > Do not rest any objects on top of the device
- > For devices to be operated on the desktop, please attach the adhesive rubber footpads
- > In case of wall mounting, use the drilling template as supplied

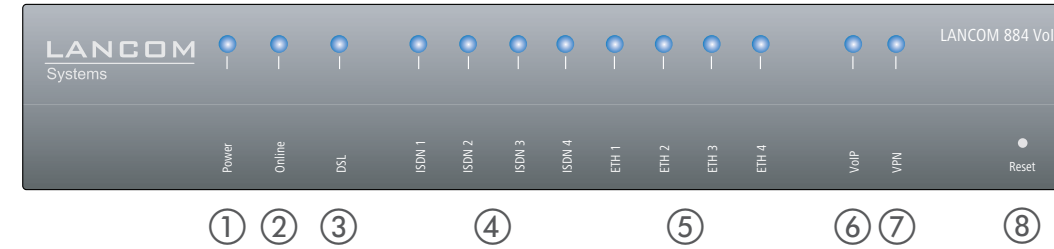


- > Keep the ventilation slots on the side of the device clear of obstruction
- > Rack installation with the optional LANCOM Rack Mount (separately available)



Before initial startup, please make sure to take notice of the information regarding the intended use in the enclosed installation guide!
Operate the device only with a professionally installed power supply at a nearby power socket that is freely accessible at all times.

MOUNTING AND CONNECTING THE DEVICE



1 Power

Off	Device switched off
Green, permanently*	Device operational, resp. device paired / claimed and LANCOM Management Cloud (LMC) accessible
Green / red, blinking	No password set. Without a password the configuration data in the device is unprotected.
Red, blinking	Charge or time limit reached
1x green inverse blinking*	Connection to the LMC active, pairing OK, claiming error
2x green inverse blinking*	Pairing error, resp. LMC activation code / PSK not available
3x green inverse blinking*	LMC not accessible, resp. communication error

2 Online

Off	WAN connection inactive
Green, permanently	WAN connection active
Red, permanently	WAN connection error

3 DSL

Off	Interface deactivated
Green, permanently	DSL connection active
Green, flickering	DSL data transfer
Red, flickering	DSL transfer error
Red / orange, blinking	DSL hardware error
Orange, blinking	DSL training
Orange, permanently	DSL sync
Green, blinking	DSL connecting

4 ISDN

Off	Interface deactivated
Green, permanently	D-channel active
Green, blinking	ISDN connected
Red, flickering	ISDN transfer error
Red / orange, blinking	ISDN hardware error
Red, permanently	ISDN connection not enabled
Orange, blinking	ISDN connecting

5 ETH

Off	No networking device attached
Green, permanently	Connection to network device operational, no data traffic
Green, flickering	Data transmission

6 VoIP

Off	No SIP accounts defined or VCM is off
Green, permanently	All defined and active SIP accounts (outgoing) were successfully registered
Red, permanently	Not all of the defined and active SIP accounts were registered (possibly still in process)
Red or green, inverse flashing	Number of currently used lines (connecting or connected)

7 VPN

Off	VPN connection inactive
Green, permanently	VPN connection active
Green, blinking	VPN connecting

8 Reset

Reset button	Operated e.g. with a paper clip > short press: restart the device > long press: reset the device
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*) The additional power LED statuses are displayed in 5-seconds rotation if the device is configured to be managed by the LANCOM Management Cloud.

Hardware	
Power supply	12 V DC, external power adapter (230 V); bayonet connector to secure against disconnection
Power consumption	Max. ca. 14 W
Environment	Temperature range 0–40 °C; humidity 0–95 %; non-condensing
Housing	Robust synthetic housing, rear connectors, ready for wall mounting, Kensington lock; measures 210 x 45 x 140 mm (W x H x D)
Number of fans	None; fanless design, no rotating parts, high MTBF

Interfaces	
WAN: VDSL2	> VDSL2 as per ITU G.993.2; profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a > Compatible to VDSL2 from Deutsche Telekom > ADSL conformity according to: ADSL2+ over ISDN as per ITU G.992.5 Annex B/J with DPBO, ADSL2 over ISDN as per ITU G.992.3 Annex B, ADSL over ISDN as per ITU G.992.1 Annex B. > Supports one virtual connection at a time in ATM (VPI-VCI pair)
ETH	4 individual ports, 10 / 100 / 1000 Mbps Gigabit Ethernet, by default set to switch mode. Up to 3 ports can be operated as additional WAN ports. Ethernet ports can be electrically disabled in the LCOS configuration.
USB	USB 2.0 hi-speed host port for connecting USB printers (USB print server), serial devices (COM-port server) or USB drives (FAT file system).
ISDN 1 / ISDN 2 ISDN 3 / ISDN 4	ISDN 1+2: Internal (NT) or external (TE) ISDN bus. This feature is controlled by LCOS. ISDN 3+4: Internal (NT) ISDN bus.
Config (Com) / V.24	Serial configuration interface / COM-port (8-pin mini-DIN): 9,600–115,200 baud, suitable for optional connection of analog / GPRS modems. Supports internal COM-port server and provides transparent asynchronous serial-data transfer via TCP.

WAN protocols	
VDSL, ADSL, Ethernet	PPPoE, PPPoA, IPoA, Multi-PPPoE, ML-PPP, PPTP (PAC or PNS) and IPoE (with or without DHCP), RIP-1, RIP-2, VLAN
ISDN	DSS1 (Euro-ISDN), PPP, X75, HDLC, ML-PPP, V.110 / GSM / HSCSD

Declaration of Conformity
Hereby, LANCOM Systems GmbH | Adenauerstrasse 20/B2 | D-52146 Wuersele, declares that this device is in compliance with Directives 2014/30/EU, 2014/53/EU, 2014/35/EU, 2011/65/EU, and Regulation (EC) No. 1907/2006. The full text of the EU Declaration of Conformity is available at the following Internet address:
www.lancom-systems.com/doc

Package content	
Manual	Quick Reference Guide (DE/EN), Installation Guide (DE/EN)
Cable	1 DSL cable for the IP-based line, 4.25m
Power adapter	External power supply adapter (230V), 12 V / 1.5 A DC/S; barrel connector 2.1 / 5.5 mm bayonet; LANCOM item no. 111301

This product contains separate open-source software components which are subject to their own licenses, in particular the General Public License (GPL). The license information for the device firmware (LCOS) is available on the device's WEBconfig interface under "Extras > License information". If the respective license demands, the source files for the corresponding software components will be made available on a download server upon request.

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TECHNICAL DETAILS