LANCOM 1793VA-4G
Quick Reference Guide


Cloud-ready

LANCOM
Systems
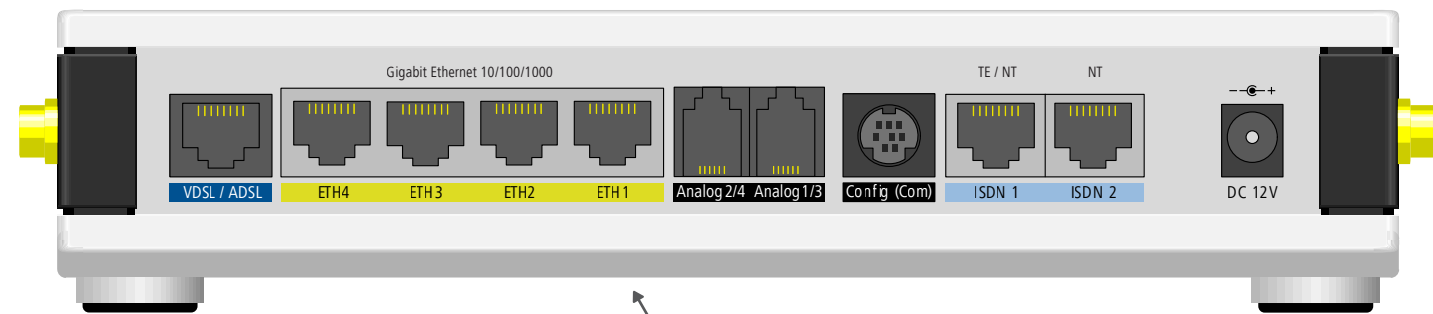
① **LTE / 4G antennas**
Connect the two supplied cellular antennas to the connectors Ant 1 and Ant 2.

② **VDSL / ADSL 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.

③ **Ethernet interfaces**
Use an Ethernet cable to connect one of the interfaces ETH 1 to ETH 4 to your PC or a LAN switch.

④ **Analog interfaces**
Connect analog terminal devices to the analog interfaces either directly via RJ11, or with the help of the enclosed TAE adapters. Further adapters are optionally available.

⑤ **Configuration interface**
Use a serial configuration cable to connect the serial interface (COM) to the serial interface of the device you want to use for configuring / monitoring (separately available).

⑥ **ISDN interfaces**
ISDN 1:
Internal (NT) or external (TE) ISDN bus.
This feature is controlled by LCOS.
ISDN 2:
Internal (NT) ISDN bus.

A 100-Ohm resistor for line termination is switchable in LCOS.

⑦ **Power**
After connecting the cable to the device, turn the bayonet connector 90° clockwise until it clicks into place.
Use only the supplied power adapter.

⑧ **SIM card slot (bottom side of the device)**
Release the SIM-card holder and lever it upwards. Slide the SIM card into the guide slot of the SIM-card holder. Press the holder down until it clicks into place.
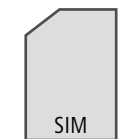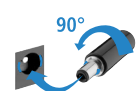
Please observe the following when setting up the device
> Do not rest any objects on top of the device
> For devices to be operated on the desktop, please attach the adhesive rubber footpads
> In case of wall mounting, use the drilling template as supplied

> 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
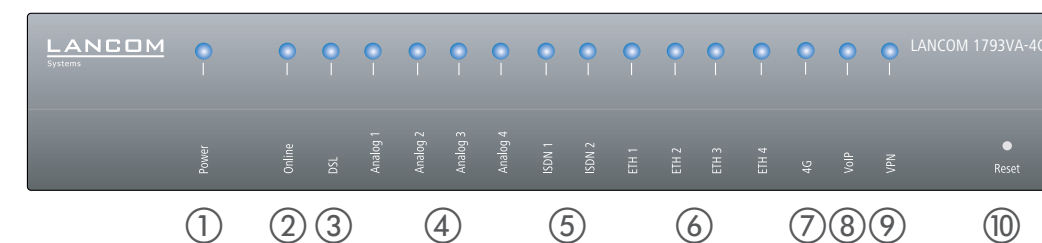
① Power

Off	Device switched off
Green, permanently*	Device operational, resp. device paired / claimed and LANCOM Management Cloud (LMC) accessible
Red / green blinking	Configuration password not set. Without a configuration 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, device not claimed
2x green inverse blinking*	Pairing error, resp. LMC activation code 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 Analog

Off	Interface deactivated
Green, permanently	Interface activated
Orange, blinking	Incoming call
Green, blinking	Connection active

⑤ ISDN

Off	Interface deactivated
Green, permanently	D-channel active
Green, flickering	ISDN data transfer
Red, flickering	ISDN transfer error
Red / orange, blinking	ISDN hardware error

⑥ ETH

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

⑦ 4G

Off	Cellular interface disabled
Green, permanently	Connection to cellular network active
Green, flickering	Cellular data transfer
Orange, permanently	Logon to cellular network successful
Orange, blinking	Logging on to cellular network
Red, permanently	Hardware error/module unavailable
Red / green, blinking	SIM card error (PIN)
Red / orange, blinking	Uploading module firmware

⑧ 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 defined and active SIP accounts were registered (possibly still in process)
Red or green, inverse flashing	Number of currently used lines (connecting or connected)

⑨ VPN

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

⑩ Reset

Reset button	Operated e.g. with a paper clip
	> short press: Restart the device
	> long press: Reset the device

*) The additional power LED statuses are displayed in 5-seconds rotation if the device is configured to be managed by the LANCOM Management Cloud.

TECHNICAL DETAILS

Hardware

Power supply	12 V DC, external power adapter (230 V); bayonet connector to secure against disconnection
Power consumption	Max. ca. 18 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	1 quiet fan

Interfaces

WAN: VDSL2	> VDSL2 as per ITU G.993.2; profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a, 35b > VDSL Supervectoring as per ITU G.993.2 (Annex Q) > VDSL2 vectoring as per ITU G.993.5 (G.Vector) > Compatible to VDSL2 from Deutsche Telekom > Compatible to U-R2 from Deutsche Telekom (1TR112) > ADSL2+ over ISDN as per ITU G.992.5 Annex B/J with DPBO, ITU G.992.3, and ITU G.992.1 > ADSL2+ over POTS as per ITU G.992.5 Annex A/M with DPBO, ITU G.992.3, and ITU G.992.1 > Supports just 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.
4G: Ant 1, Ant 2	Two SMA connectors for the supplied dipole rod antennas (LTE, UMTS), compatible LANCOM AirLancer antennas for 4G or 3G, or from other manufacturers. Please respect the restrictions which apply in your country when setting up an antenna system (in particular the antenna gain and transmission power).
ISDN 1 / ISDN 2	ISDN 1: Internal (NT) or external (TE) ISDN bus. This feature is controlled by LCOS. According to the settings, connect an ISDN cable either to the NTBA or the ISDN terminal device. ISDN 2: Internal (NT) ISDN bus. Use an ISDN cable to connect the ISDN device to the ISDN interface.
Analog 1 / Analog 3 Analog 2 / Analog 4	Use the cable of your analog devices to connect them with the analog interfaces. If necessary use the adapters from the LANCOM Analog Adapter Set.
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

Package content

Manual	Quick Reference Guide (DE/EN); Installation Guide (DE/EN)
Cable	1 DSL cable for an IP-based line, 4.25 m
Adapters	2 TAE adapters (RJ11 – TAE)
Antennas	2 LTE / 4G antennas
Power adapter	External power supply adapter (230 V); NEST 12 V / 2 A DC/5; barrel / bayonet (EU), LANCOM item no. 111303 (not for WW devices)

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.