LANCOM 1681V

Hardware Quick Reference
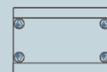
LANCOM Systems

Please observe the following when setting up the device

- For devices to be operated on the desktop, please attach the adhesive rubber footpads
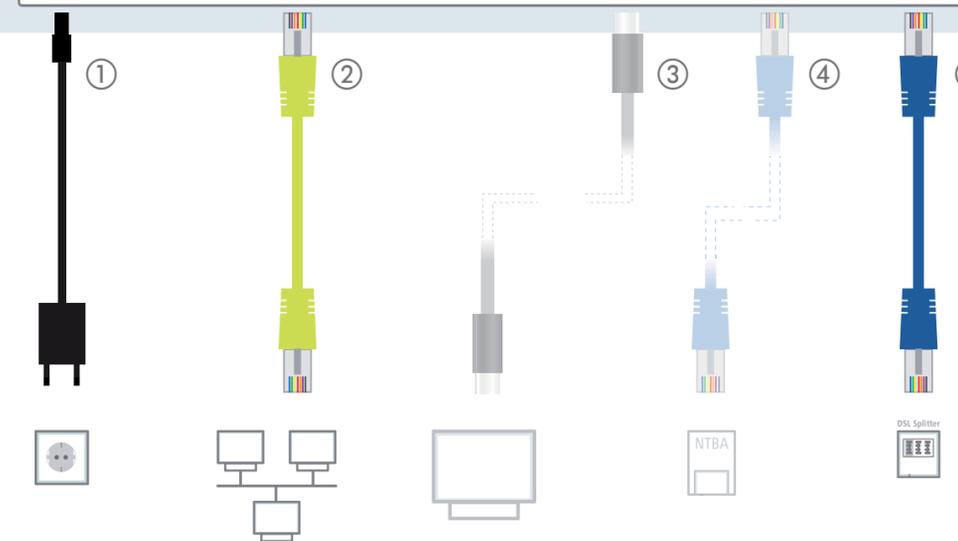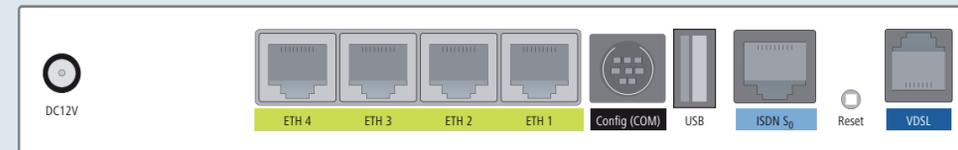- Do not rest any objects on top of the device
- Keep the ventilation slots on the side of the device clear of obstruction
- In case of wall mounting, use the drilling template as supplied
- Rack installation with the optional LANCOM Rack Mount (not supplied)

DC12V | ETH 4 | ETH 3 | ETH 2 | ETH 1 | Config (COM) | USB | ISDN S₀ | Reset | VDSL

① ② ③ ④ ⑤

① **Power cable with power adapter:**
When connecting the cable to the device, turn the bayonet connector 90° clockwise until it clicks into place.

Use only the supplied power adapter.

② **Network cable:**
Use the cable with the green-colored connectors to connect one of the interfaces ETH1 to ETH4 to your PC or a LAN switch.

③ **Optional: Serial configuration cable:**
Connect the device to a PC with a configuration cable (available as accessory).

④ **ISDN cable:**
Use the ISDN cable with the light-blue connectors to connect the ISDN interface to the NTBA if you wish to use ISDN additionally.

⑤ **VDSL/ADSL cable:**
Connect the cable with the dark-blue connectors to the DSL splitter from your provider. Please ensure that you carefully follow any instructions from your provider regarding the installation of the DSL splitter and NTBA (if applicable).

SETTING UP AND CONNECTING THE DEVICE

LANCOM Systems — LANCOM 1681V

① ② ③ ④ ⑤ ⑥

① Power

no	Device switched off
constant green	Device operational
green blinking	Configuration password not set. Without a configuration password, the configuration data in the device is unprotected..
red blinking	Time or charge limit on online connections has been reached

② Online

no	WAN connection not active
constant green	WAN connection active
constant red	Error establishing the WAN connection

③ VDSL

no	VDSL interface not active
constant green	VDSL connection operational
green flashing	VDSL data transmission
red flickering	VDSL transmission error
red/orange blinking	VDSL hardware error

④ ISDN

no	ISDN interface deactivated
constant green	D-channel operational
constant orange	B-channel operational
green flashing	ISDN data transmission
red flickering	ISDN transmission error
red/orange blinking	ISDN hardware error

⑥ VPN

no	VPN connection inactive
constant green	VPN connection active
green flashing	Establishing VPN connections

⑤ ETH

no	No networking device attached
constant green	Connection to network device operational, no data traffic
green flashing	Data traffic

TECHNICAL DATA

Hardware	
Power supply	12 V DC, external power adapter (230 V)
Power consumption	Max. ca.13,5 Watts
Environment	Temperature range 5 – 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	LANCOM 1618V over ISDN	LANCOM 1681V over POTS
WAN: VDSL2	■ VDSL2 as per ITU G.993.2, profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a ■ Compliant to: ADSL2+ over ISDN as per ITU G.992.5 Annex B; ADSL2 over ISDN as per ITU G.992.3 Annex B, ADSL over ISDN as per ITU G.992.1 Annex B ■ Supports just one virtual connection at a time in ATM (VPI-VCI pair)	■ VDSL2 as per ITU G.993.2, profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a ■ Compliant to: ADSL2+ over POTS as per ITU G.992.5 Annex A/Annex M, ADSL2 over POTS as per ITU G.992.3 Annex A/Annex M, ADSL over POTS as per ITU.G.992.1 Annex A ■ Supports just one virtual connection at a time in ATM (VPI-VCI pair)
Ethernet Ports	4 individual 10/100-Mbps Fast Ethernet ports; two can be switched as additional WAN ports. Ethernet ports can be electrically disabled within LCOS configuration	
USB 2.0 host port	USB 2.0 Hi-Speed host port for connecting USB printers (USB print server), serial devices (COM-port servers), USB data media (FAT file system); or supported UMTS USB modems	
ISDN	ISDN S₀ bus	
Serial interface	Serial configuration interface / COM port (8-pin Mini-DIN): 9,600 - 115,000 baud, suitable for optional connection of analog/GPRS modems. Supports internal COM-port server and transparent asynchronous serial-data transfer via TCP	

WAN protocols	
DSL, (Ethernet)	PPPoE, Multi-PPPoE, ML-PPP, PPTP (PAC or PNS) and plain Ethernet (with or without DHCP), RIP-1, RIP-2, VLAN For Business ADSL connectors with static IP and without padding from Deutsche Telekom, we recommend using an external ADSL modem.
ISDN	1TR6, DSS1 (Euro-ISDN), PPP, X75, HDLC, ML-PPP, V.110/GSM/HSCSD, CAPI 2.0 via LANCAPI, Stac data compression

Declaration of conformity	
CE	EN 55022, EN 55024, EN 60950

Package content	
Manual	Hardware Quick Reference (DE/EN) Installation Guide (DE/EN/FR/ES/IT/PT/NL)
CD/DVD	CD/DVD with firmware, management software (LANconfig, LANmonitor, LANCAPI) and documentation
Cable	1 Ethernet cable, 3 m
Cable	VDSL/ADSL cable, 3 m
Cable	ISDN cable, 3 m
Power adapter	External power adapter (230 V), NEST 12 V/1.5 A DC/S, coaxial power connector 2.1/5.5 mm bayonet, LANCOM item no. 110723 (EU), LANCOM item no 110829 (UK)

This product contains separate modem firmware with open-source software components. These are subject to their own licenses, in particular the General Public License (GPL). The license text for the modem firmware is available on the data medium supplied. If the respective license demands, the source files for the corresponding software components will be made available on a download server upon request. License information for the device firmware (LCOS) is available in the file LCOS-Licenses.txt on the data medium supplied.