



...connecting your business

LANCOM 1781EF

Quick Reference Guide

LANCOM
Systems

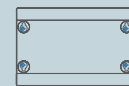


Please observe the following when setting up the device

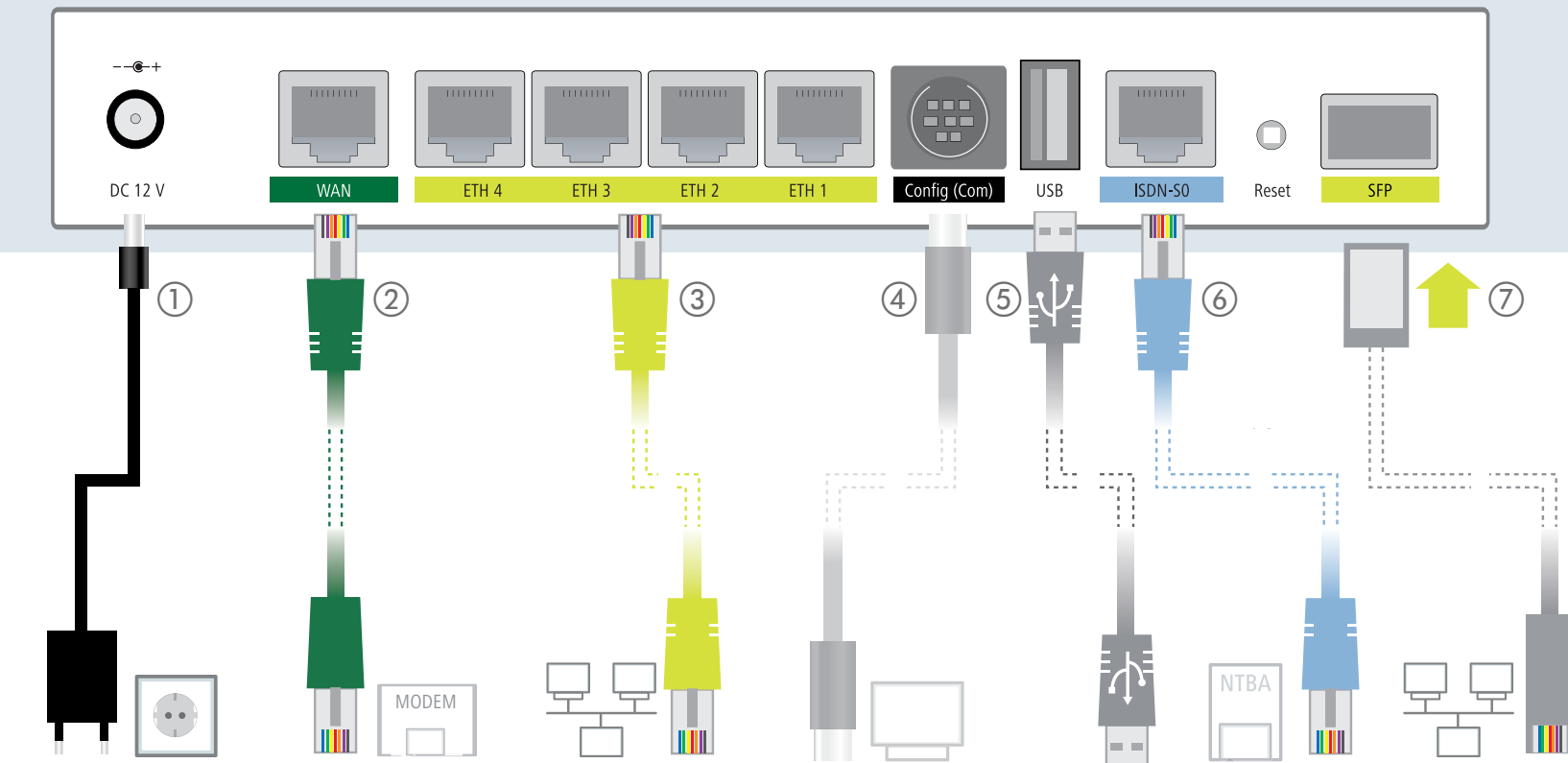
- For devices to be operated on the desktop, please attach the adhesive rubber footpads
- Do not rest any objects on top of the device



- Do not obstruct the side ventilation slots
- In case of wall mounting, use the drilling template as supplied

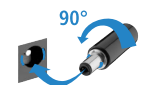


- Rack installation with the optional LANCOM Rack Mount (not supplied)



1 Power

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 WAN

Use the cable with the green connectors to connect the WAN interface to your WAN modem.

3 LAN

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

4 Optional: Serial configuration cable

Connects the device and a PC for carrying out the configuration (cable sold separately).

5 Optional: USB

Connect a USB data medium or a USB printer to the USB interface. USB cable not supplied

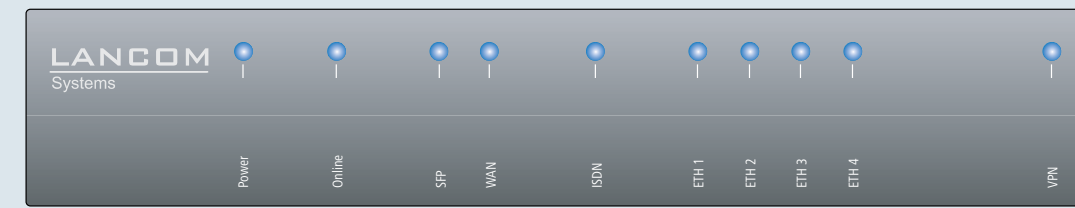
6 ISDN cable*

Use the ISDN cable with the light-blue connectors to connect the ISDN interface to the NTBA if you wish to use ISDN in addition.

7 Fiber-optic cable

Insert a suitable SFP module (e.g. 1000Base-SX or 1000Base-LX) into the socket. Choose the cable with the connectors that fit to the SFP module and connect it as described in the SFP module's documentation. The SFP module and the associated connector cable are not supplied.

MOUNTING AND CONNECTING THE DEVICE



1 Power

Off	Device switched off
Green on (permanently)	Device operational
Blinking red/green	Configuration password not set. Without a configuration password, the configuration data in the device is unprotected.
Blinking red	Hardware error
Slow blinking in red	Time or charge limit reached/error message occurred

2 Online

Off	WAN connection inactive
Green on (permanently)	WAN connection active
Red on (permanently)	WAN connection error

3 SFP

Off	SFP-1 deactivated in the configuration or SFP module present, no connection to network device
Red on (permanently)	SFP-1 enabled in the configuration but no SFP module present
Green on (permanently)	SFP module present, connection to network exists, no data transmission
Blinking green	Data transmission
Blinking red	SFP module present, hardware error

7 VPN

Off	No VPN connection active
Green on (permanently)	VPN connection active
Blinking green	Establishing VPN connection

6 ETH

Off	No link
Green on (permanently)	Network connection ready (link)
Flickering green	Data transmission

5 ISDN*

Off	Interface deactivated
Green on (permanently)	D channel active
Orange on (permanently)	B channel active
Flickering green	ISDN data transmission
Flickering red	ISDN communications error
Blinking red/orange	ISDN hardware error

4 WAN

Off	Interface deactivated
Blinking orange	Synchronization with the modem
Orange on (permanently)	Synchronization with the modem successful
Green on (permanently)	WAN connection established
Flickering green	WAN data transmission

Hardware	
Power supply	12 V DC, external power adapter (110 or 230 V) with bayonet connector to secure against disconnection
Power consumption	Max. ca. 7.5 W
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	
WAN	10/100/1000 Mbps Gigabit Ethernet
ETH	4 individual 10/100/1000-Mbps Fast Ethernet ports; operate as switch ex-factory. Up to 3 ports can be switched as additional WAN ports. Ethernet interfaces can be completely 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 servers), USB data media (FAT file system), or supported UMTS USB modems
ISDN*	ISDN-S ₀ bus
SFP	Socket for small form-factor pluggable Gigabit-Ethernet transceiver (mini-GBIC). Compatible with optional LANCOM SFP modules for optical connections over short distances (SX) or longer distances (LX). Set as a LAN port ex-factory, can be configured as a WAN port
Config (COM)	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 provides transparent asynchronous serial-data transmission via TCP

WAN protocols	
Ethernet	PPPoE, Multi-PPPoE, ML-PPP, PPTP (PAC or PNS) and IPoE (with or without DHCP), RIP-1, RIP-2, VLAN, IP

Declaration of conformity	
CE	EN 55022, EN 55024, EN 60950
FCC	FCC Class B Part 15

Package content	
Manual	Hardware Quick Reference (DE/EN), Installation Guide (DE/EN/FR/ES/IT/PT/NL), FCC Documentation (only US-Version)
CD/DVD	CD/DVD with firmware, management software (LANconfig, LANmonitor) and documentation
Cable	2 Ethernet cables, 3m (LAN: kiwi-colored connector; WAN: green connector)
Cable*	ISDN cable, 3 m

Power adapter	External power supply adapter, NEST 12 V/1.5A DC/S, barrel connector 2.1/5.5 mm bayonet, LANCOM item no. 110723 (EU, 230 V), LANCOM item no. 110829 (UK, 230 V), LANCOM item no. 111007 (US, 110 V)
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*) ISDN is not available in US version

License information for the device firmware (LCOS) is available in the file LCOS-Licenses.txt on the data medium supplied.

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TECHNICAL DETAILS