



DOS-Drive

Installation Manual

Liability remarks

This installation manual and other documents are part of the product and contain important information for its safe and efficient use. To maintain the high quality level the product is continuously being developed, which may result in the product's technical details changing at short notice. As a result, the contents of this documentation may differ from the technical specifications of the product. No claims against the manufacturer can therefore be derived from the contents of the product documentation.

CSM GmbH is not liable for technical or editorial errors or missing information.

CSM GmbH assumes no liability for damage resulting from improper use of the product and/or non-observance of the product documentation, in particular the safety instructions.

General instructions

NOTE!



The latest information concerning the status of the software can be found on the **CSM website**. Suitable ATA PC Cards can be purchased via CSM.

Please read this document carefully **before installing** the DOS-Drive CAN hardware and software and follow the operating instructions which it contains.

The equipment should not be used without prior familiarisation with the installation manual. The equipment should not be used beyond the limits which are specified in the technical data.

All hardware, software and documentation rights belong to CSM GmbH. It is allowed to create backup copies of the software.

Hardware installation

CAUTION!



- ▶ The host system should be switched off before doing the following steps. Only the cables and adapters which were shipped with the DOS-Drive may be used.
- ▶ Modifications to the connections should only be made with the system switched off.
- ▶ EMC hints have to be regarded, see chapter "EMC" later on.

CAUTION!



Before you start with the hardware installation take care that there is no static electrical discharge on the DOS-Drive or on any other system component. Discharge yourself by touching a grounded object before you remove the DOS-Drive from its package. Be always sure that you do not touch any component before you are well discharged.

How to open the device with snap lid:

The hinged cover of the device can be opened as follows:

- ☞ Press against the hinge lightly from below (see Fig. 1-1).
- ⇒ The lock is released, the hinged cover opens.
- ☞ Open the hinged cover fully as shown in Fig. 1-2.

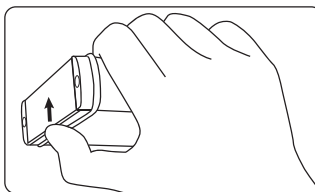


Fig. 1-1: Releasing the lock

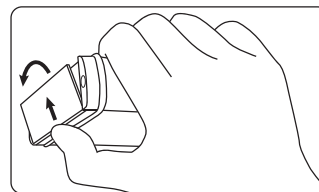


Fig. 1-2: Opening hinged cover

DOS-Drive external

1. The power supply to the DOS-Drive is provided using one of the supplied adapters (either USB or PS/2 connector).
2. Plug the round barrel connector into the socket provided on the rear of the DOS-Drive.
3. Connect the adapter between the PC and the keyboard. The adapter may also be connected to the mouse connector.

NOTE!



If the DOS-Drive is to be operated using an external power supply, a suitable power supply must be obtained.

4. Connect the serial interface of DOS-Drive (DSUB9) with your computer's serial interface.

DOS-Drive 3,5"

1. Switch off your computer and all external peripherals. Unplug your computer from its power source.
2. Remove your computer's cover. Follow the directions provided by your computer manufacturer.
3. Mount the DOS-Drive in a free 3,5" bay. Use only the screws delivered with the DOS-Drive.

NOTE!



If the DOS-Drive is used in a 5¼" bay, you can obtain a suitable mounting frame from CSM GmbH.

4. Plug one of the free power connectors from your computer's power supply into the DCIN plug of the DOSDrive.
5. Connect the serial interface of DOS-Drive with your computer's serial interface.
6. Close the cover.

DOS-Drive 19"

HINWEIS!

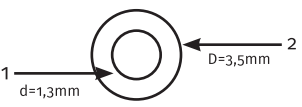


Follow the directions provided by your computer manufacturer.

BE CAREFUL while inserting and pulling out the DOS-Drive 19" 4TE Version in or from the bay, because the components are nearly as high as the front and may be damaged if handled careless.

Power Supply

DOS-Drive external - barrel connector

Picture	Pin	Name	Signal
	1 (inner)	+5 V	+5 V DC power supply
	2 (outer)	GND	ground

CAUTION!



Shield, signal GND and case GND are connected internally to GND of the power supply. Therefore it must be guaranteed that the inner contact of the barrel connector is sufficiently isolated to prevent a short circuit between +5 V and the case GND.

DOS-Drive external – version "Pg"

For this version, the serial interface connector is used also for the power supply.

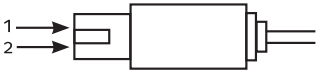
Pin	Name	Signal
5	GND	ground
9	+5 V	+5 V DC power supply

CAUTION!



- ▶ Be careful to use only a power supply cable which is specified for a current of 1 A.
- ▶ **Shield, GND and case GND** are connected internally. So, never connect these terminals to different electric potentials.

Power supply 8 to 32 V

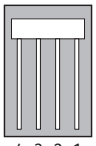
Picture	Pin	Name	Signal
	1	GND	ground
	2	8-32 V	8 bis 32 V DC power supply

CAUTION!



The power supply inputs are protected against reversed polarity. But shield, signal GND and case GND are connected internally. So, never connect these terminals to different electric potentials.

DOS-Drive 3,5", 19", PCB - floppy power connector

Bild	Pin	Name	Signal
 3,5" floppy connector	1	+5 V	+5 V DC power supply
	2	GND	ground
	3	GND	ground
	4	- / -	- / -

EMC



CSM GmbH explains, that the **DOS-Drive** is in compliance with the requirements of the European EMC-Directive **2014/30/EU**. See connection, installation and operation hints below.

Connection and installation hints:

- ▶ Shielded cables must be used for the signal line outside of a shielded cabinet.
- ▶ When leading your signal line into a shielded cabinet, make a electric contact with a large surface area from cable shield to the cabinet shield directly at the opening of the cabinet where you lead your cable in.
- ▶ DOS-Drive PCB, DOS-Drive 3,5" and DOS-Drive 19" should be installed in a EMI-shielded cabinet.
- ▶ While installing the device, make a electric contact with a large surface area from the cabinet shield to the case of DOS-Drive 3,5", to the front of DOS-Drive 19", to the fixing holes of the DOS-Drive PCB, respectively.

CAUTION!



Shield, case and fixing holes are connected directly to the negative line (GND) of power supply.

Operation hints

CAUTION!



Avoid electrostatic discharge at the PC-Card, while there is data access. Touch first the metallic case and afterwards the PC-Card.

Serial interface

CAUTION!



There are several variants of DOS-Drive with different interfaces. **See product label for identification.**

RS232

Pin	Name	Signal	Pin	Name	Signal
1			6		
2	TXD	transmit data (output of DOS-Drive)	7		
3	RXD	receive data (input of DOS-Drive)	8		
4			9		(Only for version "P9": +5 V DC power supply)
5	GND	signal ground			

RS422 (product label "RS422/RS485")

Pin	Name	Signal	Pin	Name	Signal
1	GND	signal ground	6		
2			7		
3			8	OUT+	transmit data (output of DOS-Drive)
4	IN+	receive data (input of DOS-Drive)	9	OUT-	transmit data (output of DOS-Drive)
5	IN-	receive data (input of DOS-Drive)			

RS485 (product label "RS422/RS485")

Pin	Name	Signal	Pin	Name	Signal
1	GND	signal ground	6		
2			7		
3			8	BUS+	bus signal (output of DOS-Drive)
4	BUS+	bus signal (input of DOS-Drive)	9	BUS-	bus signal (output of DOS-Drive)
5	BUS-	bus signal (input of DOS-Drive)			

CAUTION!



For RS485 bus operation, DOS-Drive requires two external connections:

Connect pin 4 and pin 8 (BUS+ signal)

Connect pin 5 and pin 9 (BUS- signal)

CSM GmbH
Computer-Systeme-Messtechnik

Raiffeisenstr. 36, 70794 Filderstadt, Germany

☎ +49 711-77 96 40 ✉ bucd@csm.de

www.csm.de

CSM GmbH Germany is certified.



ISO 9001, ISO 14001

Certified Integrated Quality
and Environmental
Management System

www.tuv-sud.com/ms-cert

All trademarks mentioned are property of their respective owners.
This document is subject to change without notice.

Copyright © 2023 CSM Computer-Systeme-Messtechnik GmbH

DOS-Drive_IM_0301_ENG

2023-01-12