Quick Guide to
Using USB Memory Sticks

in Link Terminals
and Bitbus Terminals used with TSM-CPU-A

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ANDRAS SYSTEM
Wir finden den Weg

General

The latest generation of Terminals, as well as suitably-modified older Terminals, are able to offer the facility to use USB memory sticks, as well as floppy disks, for data storage. The user can decide whether to access a floppy disk or a USB memory stick, although use of both simultaneously is not possible.

Selection between the floppy disk and the USB memory stick can be made from the drive configuration menu - reached via the S key/blind key on the front panel. Should the floppy disk be selected, all disk/data-storage functions will access the floppy disk; whereas should the USB memory stick be selected, all disk/data-storage functions will access the USB memory stick

Access to all the various directories and subdirectories on a USB memory stick is possible. However, the control system cannot create directories or subdirectories. Creation of new directories or subdirectories must be done on a PC. It is recommended that directory names are limited to the 8.3 DOS format, because the control system will convert longer names to that format for display.

| ⚠ !	**The built-in USB connector is only intended for USB memory sticks. No other USB devices are supported.**
⚠ !	**Following use, a USB memory stick must <u>not</u> simply be removed! It must first be logged off using the drive configuration menu..**
⚠ !	**When the terminal is first switched on, the floppy disk drive is selected!**
⚠ !	**Directories and subdirectories cannot be created by the control system! When creating new directories or subdirectories on a PC, as far as possible use only the 8.3 DOS format, and use no special characters (ä,ö,ü,ß etc.).**

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Selecting the USB memory stick

In order to switch the data storage functions to the USB memory stick, press the S key/blind key on the front panel. The following menu will appear:

```
         S U P E R V I S O R

         1   DIAGNOSTIK
         2   LAUFWERK-KONFIG




    ZURUECK
```
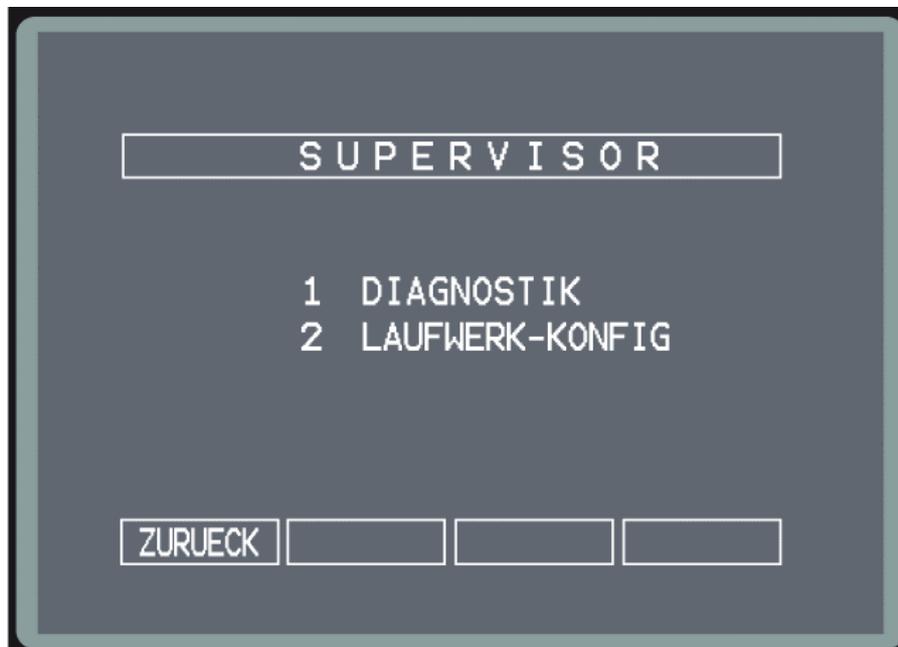
To change the disk drive, choose menu entry 2 „*Laufwerk-Konfig*":

```
      L A U F W E R K - K O N F I G
   Aktuelles Laufwerk = Floppy


         1   USB-Laufwerk selektieren




    ZURUECK
```

To switch the data storage functions to the USB memory stick, choose menu entry 1 „USB-Laufwerk selektieren":

The USB memory stick is now selected. This can also be seen in the „Aktuelles Laufwerk" status line at the top of the screen. As yet, there is no directory selected (visible in the panel in the lower part of the screen). To select a directory on the stick, choose menu entry 2 *„USB-Verzeichnis auswählen"*:
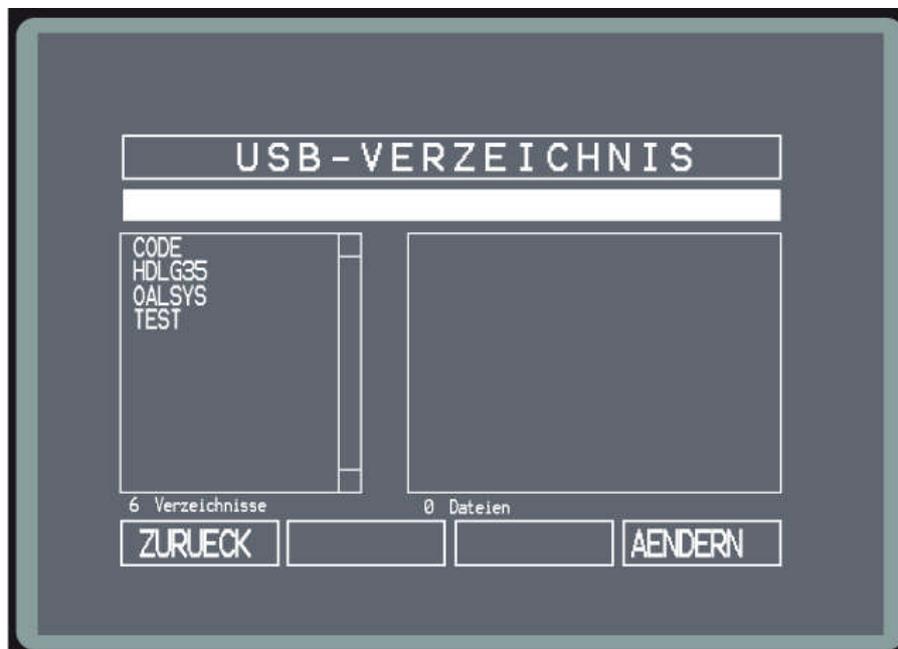
To access the list of directories, press Softkey 4 *„AENDERN"*.
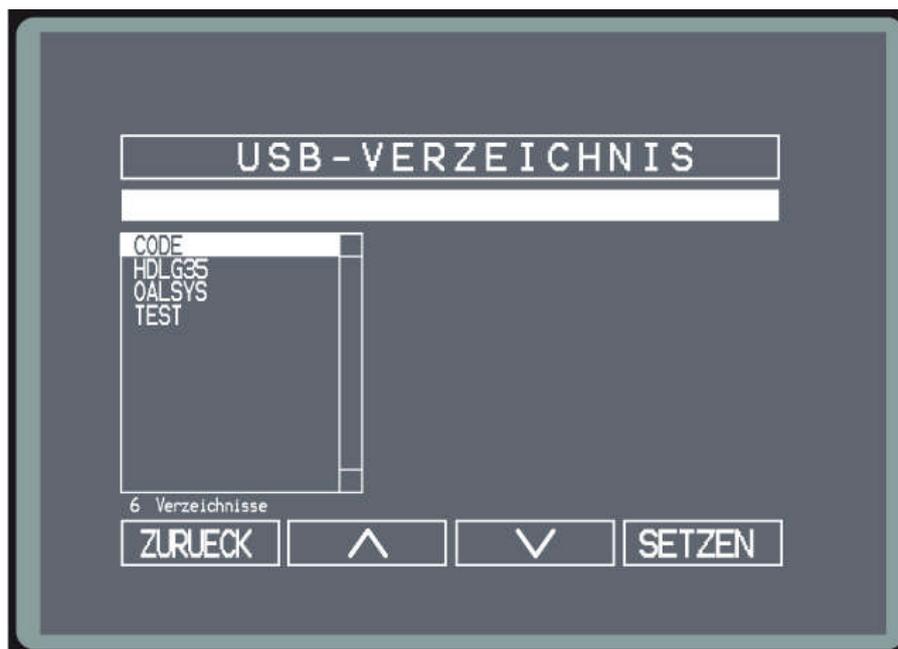
You can use either the terminal's cursor keys or Softkeys 2 and 3 to highlight the required directory in the list. To select the highlighted directory, press Softkey 4 „*SETZEN*":
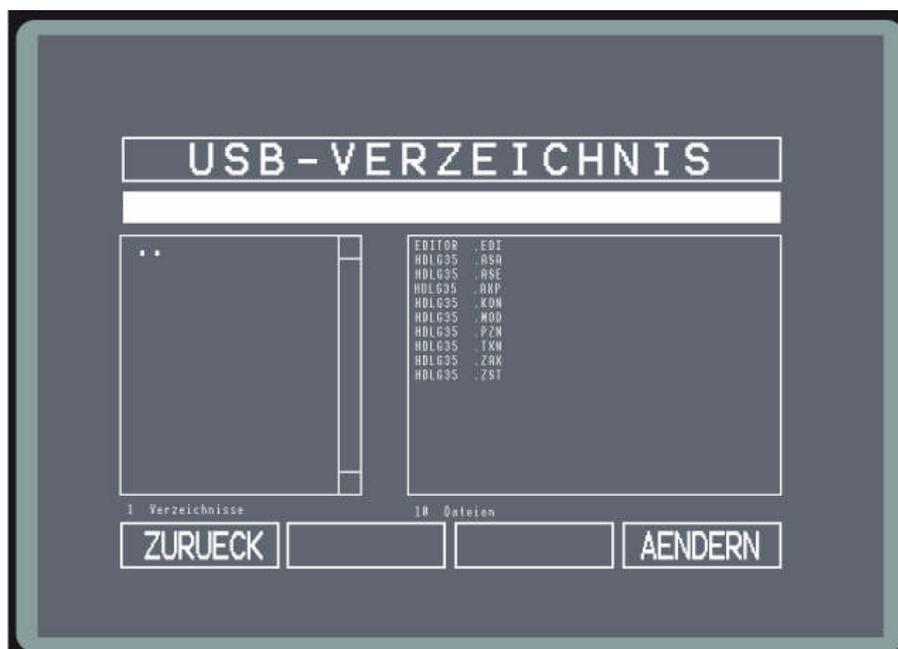
Following the selection, the files and subdirectories in the selected directory will be listed. You can select further subdirectories by the same method (*AENDERN* – highlight – *SETZEN*)

When you have reached and selected the required directory on the USB memory stick, you can quit the selection screen using either the Back key or Softkey 1 „*ZURUECK*". This will return you to the drive configuration menu:

```
┌─────────────────────────────────────────────┐
│                                               │
│    ┌─────────────────────────────────────┐   │
│    │   L A U F W E R K - K O N F I G     │   │
│    └─────────────────────────────────────┘   │
│    Aktuelles Laufwerk = USB                   │
│                                               │
│         1  Floppy-Laufwerk selektieren        │
│         2  USB-Verzeichnis waehlen            │
│         3  USB-Stick deaktivieren             │
│                                               │
│                                               │
│    ┌─────────────────────────────────────┐   │
│    │ \TEST                               │   │
│    ├──────────┬────────┬────────┬─────────┤   │
│    │ ZURUECK  │        │        │         │   │
│    └──────────┴────────┴────────┴─────────┘   │
│                                               │
└─────────────────────────────────────────────┘
```

The name of the selected directory will be displayed in the panel in the lower part of the screen. All subsequent data storage functions of the control system will use this directory on the USB memory stick. The Back key or Softkey 1 „*ZURUECK*" will return you to the control system screen.

Removing the USB memory stick

Just as under Windows® operating systems, a selected USB memory stick must not simply be removed. It must first be logged out. To do this, press the S key/blind key on the front panel of the terminal, and then choose menu entry 2 „*Laufwerk-Konfig*":

```
L A U F W E R K - K O N F I G
Aktuelles Laufwerk = USB


     1  Floppy-Laufwerk selektieren
     2  USB-Verzeichnis waehlen
     3  USB-Stick deaktivieren


  \TEST
  ZURUECK
```

To log the USB memory stick out, choose menu entry 3 „*USB-Stick deaktivieren*".

> **!** **Should a USB memory stick be removed without being first logged out, there is a risk of data-loss as it is not guaranteed that all data has been properly written to the stick.**

Changing back to the floppy disk drive

To change back to floppy disk operation when USB operation is selected, press the S key/blind key on the front panel of the terminal, and then select menu entry 2 „*Laufwerk-Konfig*":

Select menu entry 1 „*Floppy-Laufwerk selektieren*":

All data storage functions of the control system will now use the floppy disk once again. The Back key or Softkey 1 „*ZURUECK*" will return you to the control system screen.

Copying a floppy disk to USB

Since March 2009, all files on an ADOS-formatted floppy disk can be copied to a directory on a USB memory stick. With this feature, operating systems floppy disks can also be transferred to a USB memory stick.

This function is made available in the drive configuration screen if an empty USB directory is selected. The directory must be created on a PC.

When an **empty** directory is selected as described above, an additional function will be made available via Softkey 3 which will copy the entire contents of a floppy disk into the selected USB directory:

	The copy function is only enabled if an empty directory is available and selected on the USB memory stick.

	Before starting this function, the required floppy disk must be inserted in the drive.

When the function *Floppy -> USB* is started, all files on the floppy disk will be copied into the empty USB directory. During the copy process, the name of the file currently being copied will be displayed

```
┌─────────────────────────────────────────────┐
│  U S B - V E R Z E I C H N I S  │
└─────────────────────────────────────────────┘


         Kopiere PROGTSM.SYS >>>



   ┌──────┐ ┌──────┐ ┌──────┐ ┌──────┐
   └──────┘ └──────┘ └──────┘ └──────┘
```

⚠ !	This process can take several minutes. Once the copying is complete, the screen returns to the drive configuration screen.