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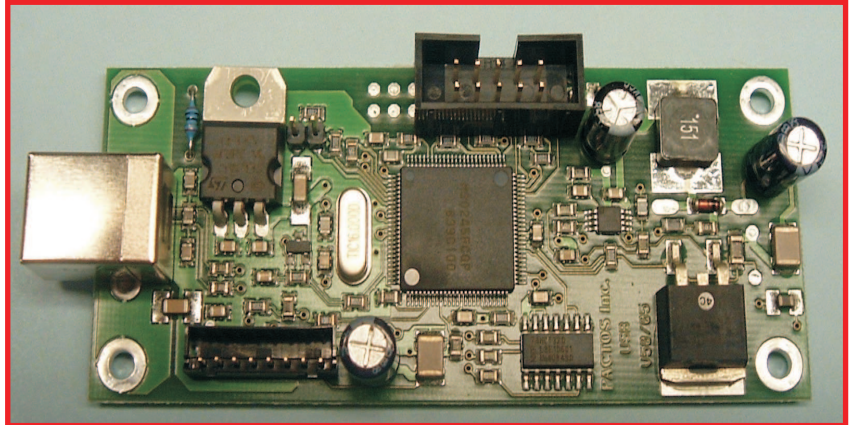## USB-Controller Installation

Driver

For interfacing the metec USB Metec Braillelines with the PC is a signed driver for 32 and 64 Bit architecture available. Please contact Metec via E-mail: contact@metec-ag.de
For the implementationwe deliver a zip-file with all necessary files

Description

metecBD.dll
The interface over the dll delivers access to the driver. The dll can also handle the old 32bit driver (metecUSB.sys) with the same functions.
The Set / GetLastError principle is used for error handling.
With the driver and dll package comes a small command line application in source which shows ho to handle the

dll functions:

BrdEnumDevice
enumerates all devices and deliver the devicestring of the attached devices. Returns the numder of found devices

BrdInitDevice
initiates a device identified by its number or name and delivers its type (BRD_TYPE_USB_LINE =1 for braille lines) . Returns its device number or -1 for error

BrdHighVoltage
set the high voltage on or off

BrdWriteData
writes date to the braille device specified by datapointer and length. The Bit- Pin ordering is defined by the type of braille modules used

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Description

C# sample

BrdReadData
reads 8 byte data from device containing the IAB position (0xff for no key pressed) and the bits for the connected keys (depending on the Hardware version (6key, 10 key...)

BrdSetNoOfModules
sets the numer of modules for braille line display. The USB controller reads the number of the connected modules if possible. In this case it is not needed to change it with this function

```
[DllImportAttribute(@"MetecBD.dll", EntryPoint =
"BrdEnumDevice")]
internal static extern int BrdEnumDevice(byte[] lpszDev,
int len);
[DllImportAttribute(@"MetecBD.dll", EntryPoint =
"BrdInitDevice")]
internal static extern int BrdInitDevice(byte[] lpszCriteria,
ref int pdevtype);
[DllImportAttribute(@"MetecBD.dll", EntryPoint =
"BrdWriteData")]
internal static extern bool BrdWriteData(int devnr, int len,
byte[] data);
[DllImportAttribute(@"MetecBD.dll", EntryPoint =
"BrdCommand")]
internal static extern bool BrdCommand(int devnr, byte[]
data);
[DllImportAttribute(@"MetecBD.dll", EntryPoint =
"BrdCloseDevice")]
internal static extern bool BrdCloseDevice(int devnr);
[DllImportAttribute(@"MetecBD.dll", EntryPoint =
"BrdReadData")]
internal static extern int BrdReadData(int devnr, int len,
byte[] buf);
```

USB1 G02-2