

USB 7-Segment Numeric Display
Manufactured by Delcom Engineering

Device Information

USB VENDOR_ID 0x0fc5

USB PRODUCT_ID 0x1227

Both the 6 character and 8 character displays have PRODUCT_ID,
and according to Delcom Engineering no queryable information
can be obtained from the device to tell them apart.

Device Modes

By default, the driver assumes the display is only 6 characters
The mode for 6 characters is:

MSB 0x06; LSB 0x3f

For the 8 character display:

MSB 0x08; LSB 0xff

The device can accept "text" either in raw, hex, or ascii textmode.
raw controls each segment manually,
hex expects a value between 0-15 per character,
ascii expects a value between '0'-'9' and 'A'-'F'.
The default is ascii.

Device Operation

1. Turn on the device:
echo 1 > /sys/bus/usb/.../powered
2. Set the device's mode:
echo \$mode_msb > /sys/bus/usb/.../mode_msb
echo \$mode_lsb > /sys/bus/usb/.../mode_lsb
3. Set the textmode:
echo \$textmode > /sys/bus/usb/.../textmode
4. set the text (for example):
echo "123ABC" > /sys/bus/usb/.../text (ascii)
echo "A1B2" > /sys/bus/usb/.../text (ascii)
echo -ne "\x01\x02\x03" > /sys/bus/usb/.../text (hex)
5. Set the decimal places.
The device has either 6 or 8 decimal points.
to set the nth decimal place calculate 10 ** n
and echo it in to /sys/bus/usb/.../decimals
To set multiple decimals points sum up each power.
For example, to set the 0th and 3rd decimal place
echo 1001 > /sys/bus/usb/.../decimals