

# 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`