

Printing positive from 2000 but negative from XP

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.development.device.drivers/2006-05/msg00662.html>

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-

Hi,

I have a custom thermal printer for which I tried to make a custom driver using unidrv technology.

The data that goes to the printer has to consist in a start block command which is CD AB 20 00 followed by 1728 bytes of data corresponding to the actual pixels that have to be printed (00 or FF) followed 2368 bytes of FF.

This structure is repeated over and over again till the end of the page.

The problem is however that the bytes values corresponding to pixels are reversed in Windows XP, in other words for white pixels the driver generates FFs while in Windows 2000 white pixels corresponds to 00. This turns into XP printing white on black (negative). That doesn't happen all the time though, for example printing from Notepad is always negative, Word sometimes negative and sometimes positive and Paint mostly positive.

I've been spending 2 weeks on this issue, my idea would be that the GPD is incomplete, some instructions/directives are missing.

Here is the inf gdp file and I must say any suggestion is appreciated.

```
*%
*% KEL USB Printer Minidriver
*% Part no. D409-04269
*%
*% Copyright (c) 2006 Knudsen Engineering Limited
*% All Rights Reserved.
*%

*% Root Attributes
*GPDSpecVersion: "1.0"
*GPDFileName: "ECHOPRNT.GPD"
*GPDFileVersion: "1.0"
*Include: "stdnames.gpd"

*ModelName: "KEL EchoPrinter"

*% 216 used because it is a factor of 1728
*MasterUnits: PAIR(216, 216)
*PrinterType: SERIAL
```

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*% Only one source of paper

*Feature: InputBin

```
{
*rcNameID: =PAPER_SOURCE_DISPLAY
*Option: AUTO
{
*Name: "Auto"
}
}
```

*% 216 pixels per inch; this is an uneducated guess which works for the moment

*Feature: Resolution

```
{
*rcNameID: =RESOLUTION_DISPLAY
*DefaultOption: Option1
*Option: Option1
{
*Name: "216 x 216 " =DOTS_PER_INCH
*DPI: PAIR(216, 216)
*TextDPI: PAIR(216, 216)
*SpotDiameter: 100
}
```

*% The driver always sends data blocks of size 4080 for some reason,

*% so the the rest needs to be padded in to fit

```
*Command: CmdEndBlockData {
*Cmd: "<FF><FF><FF><FF><FF><FF><FF><FF><FF><FF><FF><FF><F
..... string truncated....
F><FF><FF><FF><FF><FF><FF><FF><FF><FF><FF>"
}

}

}
```

*% 1728 pixels wide and however much long it takes

*% to make the right proportion

*Feature: PaperSize

```
{
*rcNameID: =PAPER_SIZE_DISPLAY
*DefaultOption: LETTER
*Option: LETTER
{
*rcNameID: =RCID_DMPAPER_SYSTEM_NAME
*PrintableArea: PAIR(1728, 2376)
*PrintableOrigin: PAIR(0, 0)
}
}
```

*% 8-bit colour mode

*Feature: ColorMode

```
{
```

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*rcNameID: =COLOR_PRINTING_MODE_DISPLAY

*DefaultOption: 32Levels

%% The following options are colour depth modes which

%% can be selected by the User in Printer Properties->

%% Printing Preferences-> Paper/Quality-> Advanced...->

%% Color Printing Mode.

*Option: 32Levels

{

*Name: "32 Levels"

*Color?: TRUE

*DevNumOfPlanes: 1

*DevBPP: 8

*DrvBPP: 8

*PaletteSize: 256

*PaletteProgrammable? : TRUE

*Command: CmdSendBlockData {

*Cmd: "<CD><AB><20><00>" }

*Command: CmdSelect

{

*Order: DOC_SETUP.16

*Cmd:""

}

}

}

*Feature: Orientation

{

*rcNameID: =ORIENTATION_DISPLAY

*DefaultOption: PORTRAIT

*Option: PORTRAIT

{

*rcNameID: =PORTRAIT_DISPLAY

*Command: CmdSelect

{

*Order: DOC_SETUP.60

*Cmd: =ORIENT_PORTRAIT_CMD

}

}

*Option: LANDSCAPE_CC270

{

*rcNameID: =LANDSCAPE_DISPLAY

*Command: CmdSelect

{

*Order: DOC_SETUP.60

*Cmd: =ORIENT_PORTRAIT_CMD

}

}

}

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```
*% General Attributes
*% Unidrv needs these defined to operate correctly
*RotateCoordinate?: FALSE
*RotateRaster?: FALSE
*RotateFont?: FALSE

*XMoveThreshold: 0
*YMoveThreshold: 0
*XMoveUnit: 8
*YMoveUnit: 8
*Command: CmdCR { *Cmd : ""
}

*Command: CmdLF { *Cmd : "<0A>" }
*Command: CmdFF { *Cmd : "<0C>" }
*Command: CmdDefinePaletteEntry { *Cmd: "" }
*Command: CmdSelectPaletteEntry { *Cmd: "" }
*Command: CmdBackSpace { *Cmd : "<08>" }
```