UPDATE FIRMWARE

This procedure is provided to enable the administrator to update the firmware inside the SM-nXm-DVI-LCD (VEEMUX) using the "RS232" port if needed. The updated code will be emailed to you in a zip file.   Unzip it to a location on your computer you will remember (perhaps the Desktop).

For the purposes of password recovery, the two files you should have are **veemux_dvi.fs**   and   **veemux_dvi.sys**. (If you are using a TFTP server, unzip these files to your server location.)   You will not need to update the bootloader described in this instruction.

To update the firmware, the user must first be cable-connected to the VEEMUX using a terminal as described in the manual. Configure the connection for 115200 bps.

Note: This procedure has been tested to work properly using Microsoft® HyperTerminal.   We cannot confirm whether other terminal programs will give satisfactory results.

1. Power-cycle the VEEMUX.
2. As the VEEMUX begins to reboot, press and hold the <Tab> key.

Note: To view available commands, at the prompt type <help> or <?> (as seen below) .

```
VEEMUX >help
yes
Available commands:

run update_system_tftp
 - update system via TFTP

run update_system_serial
 - update system via serial(kermit)

run update_bootloader_serial
 - update bootloader via serial(kermit)

reset
 - reset the system

help
 - view this help
```

To update the firmware, use one of the following procedures:

Serial connection method

If you are updating the bootloader, use the following procedure: (If you are just updating the firmware, skip to step 5) Unless otherwise directed to (for example in release notes), you will not need to update the bootloader.

Follow steps 1 and 2 above first.

3. At the prompt (VEEMUX >), type **run update_bootloader_serial** and press **<Enter>**.

4. Send the **veemux_dvi.boot** file: Go to **File** -> **Transfer** (use Kermit protocol) -> **Send**   and locate the **veemux_dvi.boot** file.

To update the firmware;

5. At the prompt (VEEMUX `>`), type `run update_system_serial` and press `<Enter>`.

6. Send the **veemux_dvi.sys** file: Go to **File** -> **Transfer** (use Kermit protocol) -> **Send**   and locate the **veemux_dvi.sys** file.

7. When the transfer is complete you will be prompted to send the **veemux_dvi.fs** file.   Locate it and send it.

The program will download the file, erase the previous version, and flash the new version automatically.

8. When finished the prompt will reappear.   At the prompt, type `reset` and press `<Enter>`.   The VEEMUX will reboot.

Press `<Enter>` to return to the login prompt, or close HyperTerminal.   The upgrade is complete.

TFTP Server connection method via Ethernet

If you are using a TFTP server, the following procedure will be quicker.   Perform steps 1 and 2 above using a serial connection, but be sure to **also** have an **Ethernet** connection to a TFTP server.

If you are updating the bootloader, use the following procedure: (If you are just updating the firmware, skip to step 5)   Unless otherwise directed to (for example in release notes), you will not need to update the bootloader.

Follow steps 1 and 2 above first.

3. At the HyperTerminal prompt (VEEMUX `>)`, type `run update_bootloader_tftp` and press `<Enter>`.

4. When prompted, enter the IP address for the TFTP server, and when prompted again enter an IP address to use for the VEEMUX for this transfer, and press `<Enter>`. The program will download the file, erase the previous version, and flash the new version automatically.

To just update the firmware;

5. At the HyperTerminal prompt (VEEMUX `>`, type `run update_system_tftp`   and press `<Enter>`.

6. When prompted, enter the IP address for the TFTP server, and when prompted again enter an IP address to use for the VEEMUX for this transfer, and press `<Enter>`. The program will download the files, erase the previous version, and flash the new version automatically.

7. When finished, at the prompt, type `reset` and press `<Enter>`.