Firmware Update Procedures

HS-1600T MARK II

This document provides procedures for updating the HS-1600T MARK II 4-Channel HD/SD HDBaseT Portable Video Streaming Studio.

Updating the HS-1600T MARK II Portable Video Streaming Studio Firmware(MB v1.78.1.08/KB v4.0/SP v.2.6)

What items you should prepare before updating the firmware

- The latest HS-1600T MARK II firmware update zip file x1
  The latest firmware zip file can be downloaded from the PTC-305 product page
  https://www.datavideo.com/product/HS-1600T+MARK+II of the Datavideo official website.

  After the downloaded firmware zip file is unzipped, you can see three firmware files
  ➢ **HS1600T.bin**
  ➢ **HS1600TM.bin**
  ➢ **HS1600TMP.bin**
- HS-1600T MARK II x 1
- USB 2.0 USB Flash Drive(with the FAT or the FAT32 file system) x 1
- 48V Power Adapter x 1
- Laptop x 1

This document describes how to perform firmware update on a **Windows** computer.
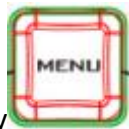
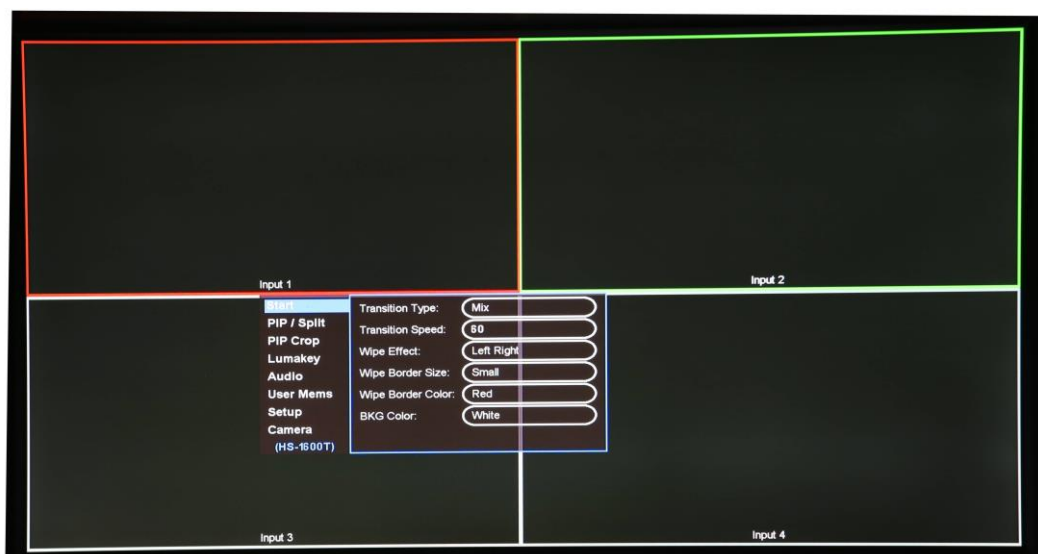# System Connection Diagram

HS-1600T MARK II

USB Flash Drive
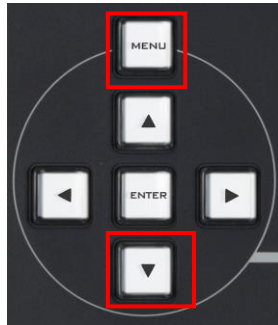
Power

Checking the Firmware Version

1. Please connect a DC 48V power adapter to the HS-1600T MARK II.

2. Please turn on the power of the HS-1600T MARK II.

3. Please press the [MENU] key that is located on the control panel of the HS-1600T MARK II.

4. After the [MENU] key   is pressed, the menu of the HS-1600T MARK II will be shown.

5. Please press the [up/down] arrow keys to move to the [Setup] option.

6. You can see that the current firmware version (MB, KB & SP) will be shown in the [Setup] option.

Updating the Firmware

● Keyboard firmware

1. Please save the unzipped HS-1600T MARK II firmware files into the root directory of your USB flash drive.

2. After those firmware files are copied successfully, please remove the USB flash drive from your laptop.

Remove the USB flash drive

3. Please connect your USB flash drive to the [F/W UPGRADE] port which is located on the rear panel of the HS-1600T MARK II.

HS-1600T MARK II

4. Please turn on the power of the HS-1600T MARK II.

5. Approximately after 5 seconds, the keyboard firmware will be updated, and the update status will be indicated by the LED color of the [PROGRAM] row buttons.

- ■ **The same version number is detected**: The firmware will NOT be updated, and all six buttons for the [PROGRAM] row will be illuminated red. The following diagram is the schematic diagram only.

All six buttons will be illuminated in red.

- ■ **If a different version number is detected**: The BLK button flashes red twice and the firmware will be updated. All six program row buttons will be illuminated red while the firmware is being updated. The following diagram is the schematic diagram only.

All six buttons will be illuminated in red while the firmware is being updated.
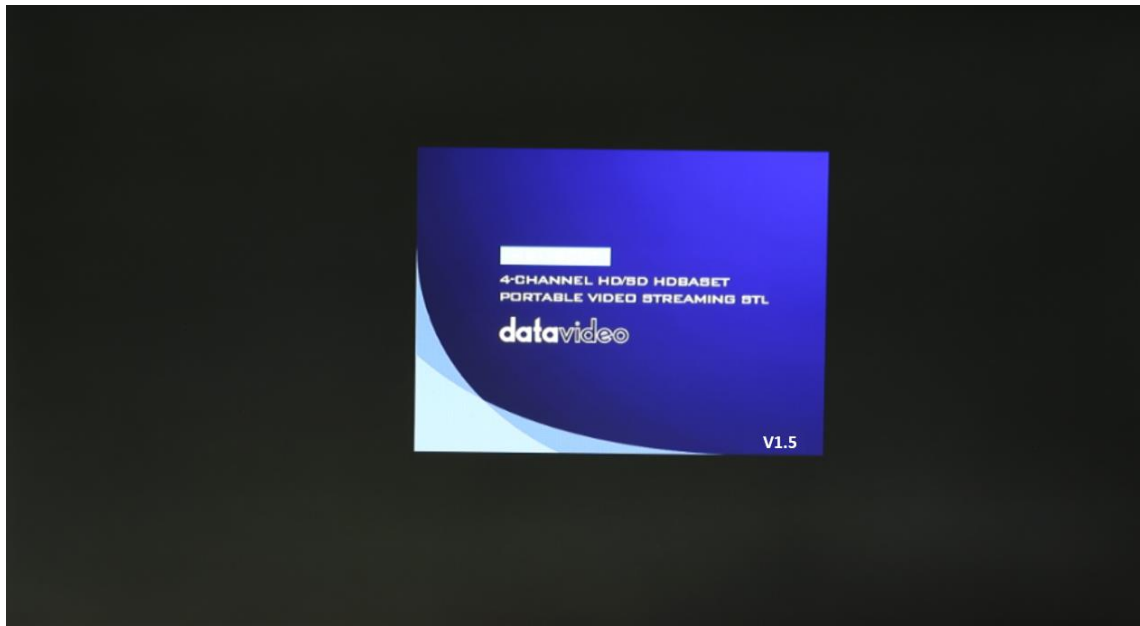

6. As soon as the [PROGRAM] row buttons are turned off and then turned back on (red) again, the firmware update is complete.

7. The HS-1600T MARK II automatically reboots itself after the keyboard firmware is updated.

● Mainboard firmware

1. The Mainboard firmware is automatically updated after the **Step 7 for the keyboard firmware update** is executed and the update status will be indicated by the LED color (green) of the [PREVIEW] row buttons. The following diagram is the schematic diagram only.

The update status will be indicated by the LED color (green) of the [PREVIEW] row buttons.

2. Approximately 5 seconds after the HS-1600T MARK II is rebooted, you will see a startup screen on the monitor with the old mainboard version displayed at the bottom right corner, for instance V1.5.
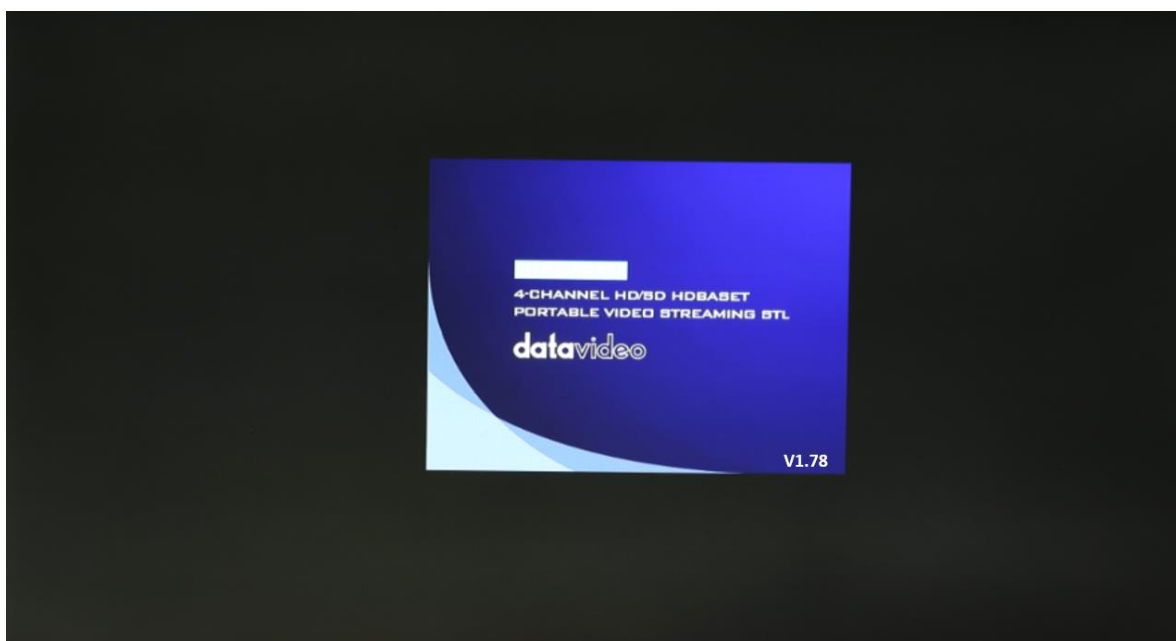
3. At this point, the [BLK] button will start flashing green. The mainboard firmware update will start approximately 10 seconds after the mainboard finishes booting.

4. The startup screen on the monitor disappears and the firmware update will be in progress as the preview row buttons are turned on one at a time from left to right until all buttons are illuminated constant green after approximately ONE minute.

5. At this point, the firmware update is complete and the mainboard will reboot itself. After the HS-1600T MARK II finishes booting, the new version number (vx.x) will be displayed at the bottom right corner of the HS-1600T MARK II startup screen.

● **OSD font Update**

1. The OSD fonts will be automatically updated after the **Step 5 for the mainboard firmware update** is executed and the update status will be indicated by the LED color (green) of the preview row buttons. The following diagram is the schematic diagram only.

The update status will be indicated by the LED color (green) of the [PREVIEW] row buttons.

2. The machine reboots itself after the mainboard is updated, and the BLK button will start flashing green after the reboot.

3. The OSD fonts update will start approximately 10 seconds after the mainboard finishes booting.

4. The startup screen on the monitor disappears and the firmware update will be in progress as the preview row buttons are turned on one at a time from left to right until all buttons are illuminated constant green after approximately six minutes.

5. At this point, the monitor will display a four-quadrant Multiview display and this indicates that the OSD fonts update is complete.

6. The update is finished when all six buttons of the program and preview rows are illuminated constant red and green respectively.

7. Remove the USB thumb drive and reboot the HS-1600T MARK II.

1. Remove the USB flash drive

**2. Reboot the
HS-1600T MARK II**

8. After the machine finishes booting and as soon as you see the Multiview screen, press the MENU button to open the OSD menu to check the MB, OSD and KB versions:

Use the Up/Down arrow buttons to move to the Setup option and check if the firmware is successfully updated:

➢ MB v1.78.1.08/KB v4.0/SP v.2.6

- Note 1: The device will not be damaged if the USB cable or power is accidentally disconnected while the firmware is being updated; plug the USB thumb drive back in and reboot the device to continue the update process.
- Note 2: The USB disk drive system supports FAT / FAT32 formats.
- Note 3: There is no guarantee that the HS-1600T MARK II supports all USB disks. When you see all buttons of the program and preview rows are illuminated pink or greenish pink, this indicates the disk file read error. When this occurs, please try using USB thumb drives made by other manufacturers.