

Firmware Update Procedures

PTR-10 MARK II & PTR-10T MARK II

This document provides procedures for updating the PTR-10 MARK II Robotic Pan Tilt Head & PTR-10T MARK II HDBaseT Robotic Pan Tilt Head

Updating the PTR-10 MARK II/PTR-10T MARK II Robotic Pan Tilt Head

Firmware (v1.83)

What items you should prepare before updating the firmware

- The latest PTR-10 MARK II/PTR-10T MARK II firmware update zip file x1.
The latest firmware zip file can be downloaded from the PTR-10 MARK II or PTR-10T MARK II product page of the Datavideo official website
 - PTR-10 MARK II: <https://www.datavideo.com/global/product/PTR-10+MARK+II>
 - PTR-10T MARK II: <https://www.datavideo.com/global/product/PTR-10T+MARK+II>

After the downloaded firmware zip file is unzipped, you can see two firmware files.

- **pr10mcpu.bin**
- **PR10MCTL.BIN**
- PTR-10 MARK II or PTR-10T MARK II x 1
- 12V power adapter x 1
- Laptop or PC x 1
- USB drive x 1

This document describes how to perform firmware update on a **Windows** computer.

System Connection Diagram

PTR-10 MARK II



PTR-10T MARK II



[Checking the Firmware Version](#)

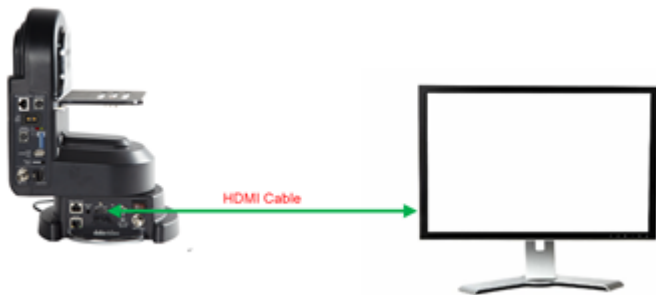
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Checking the Firmware Version

1. Please connect a DC 12V power adapter to the PTR-10 MARK II or PTR-10T MARK II.
2. Please use an HDMI cable to connect from the HDMI OUT interface which is located on the rear panel of the PTR-10 MARK II or the PTR-10T MARK II to the HDMI interface of your external monitor.



3. After the HDMI cable is connected, please turn on the power of your external monitor and your PTR-10 MARK II or PTR-10T MARK II.

4. Please press the "MENU" button  from the remote controller of your PTR-10 MARK II or PTR-10T MARK II, and then the OSD menu of the PTR-10 MARK II or the PTR-10T MARK II will be shown on your external display.

[MAIN MANU] >

1: SET CAMERA >

2: SET MOTOR >

3: MEMORY >


4: VIDEO MODE >


5: REMOTE CONTROL >


6: SYSTEM >

7: RESET Pan/Tilt >

8: ESCAPE >

5. Please press the down-arrow key  of your remote controller to select the “6:SYSTEM” option.

After that, please press the “ENTER” button .




[MAIN MANU]
1: SET CAMERA
2: SET MOTOR
3: MEMORY
4: VIDEO MODE
5: REMOTE CONTROL
6: **SYSTEM**
7: RESET Pan/Tilt
8: ESCAPE

6. After pressing the “ENTER” button, you can see the “SYSTEM” OSD menu which is shown in the following diagram.



[SYSTEM]
1: **TALLY LIGHT** : RED/GREEN
2: MODEL No. : 0010
3: POWER-OUT VOLT. : 12V
4: DISPLAY
5: RESET ALL
6: UPDATE SOFTWARE
7: ESCAPE


7. Please press the down-arrow key  of the remote controller to select the “6: UPDATE SOFTWARE” option. After that, please press the “ENTER” button  from the remote controller.



[SYSTEM]

- 1: TALLY LIGHT : RED/GREEN
- 2: MODEL No. : 0010
- 3: POWER-OUT VOLT. : 12V
- 4: DISPLAY
- 5: RESET ALL
- 6: UPDATE SOFTWARE
- 7: ESCAPE


8. After the “ENTER” button is pressed, you can see the “UPDATE SOFTWARE” OSD Menu which is shown in the following diagram. You can see the current firmware version from “2: MB CPU:” and “3: MCTL CPU:”. From the example which is shown in the following diagram, you can see that the MB CPU version is “V1.24” and the MCTL CPU version is “V0.63”.



[UPDATE SOFTWARE]


- 1: SW VERSION
- 2: MB CPU : V01.24c
- 3: MCTL CPU: V00.63
- 4: UPDATE ALL
- 5: ESCAPE


Updating the Firmware


1. Please make sure that the 12V DC power cable is connected to the PTR-10 MARK II or the PTR-10T MARK II.
2. Please make sure that the latest downloaded firmware is unzipped. Moreover, please make sure the unzipped firmware files “**pr10mcpu.bin**” and “**PR10MCTL.BIN**” are saved in the root directory of your USB flash drive.
3. Please insert your USB flash drive with the latest firmware files into the F/W UPGRADE interface which is located on the rear panel of the PTR-10 MARK II or the PTR-10T MARK II.
4. Please connect an HDMI cable from the HDMI OUT interface of your PTR-10 MARK II or PTR-10T MARK II to the HDMI interface of your external monitor.
5. Please turn on the power of your PTR-10 MARK II or PTR-10T MARK II and your external monitor.
6. Please press the “MENU” button  from your PTR-10 MARK II/PTR-10T MARK II remote controller to open the PTR-10 MARK II/PTR-10T MARK II OSD menu.




[MAIN MANU]
1: SET CAMERA
2: SET MOTOR
3: MEMORY
4: VIDEO MODE
5: REMOTE CONTROL
6: SYSTEM
7: RESET Pan/Tilt
8: ESCAPE

7. Please press the down-arrow key  of your remote controller to select the “6:SYSTEM” option.

After that, please press the “ENTER” button .





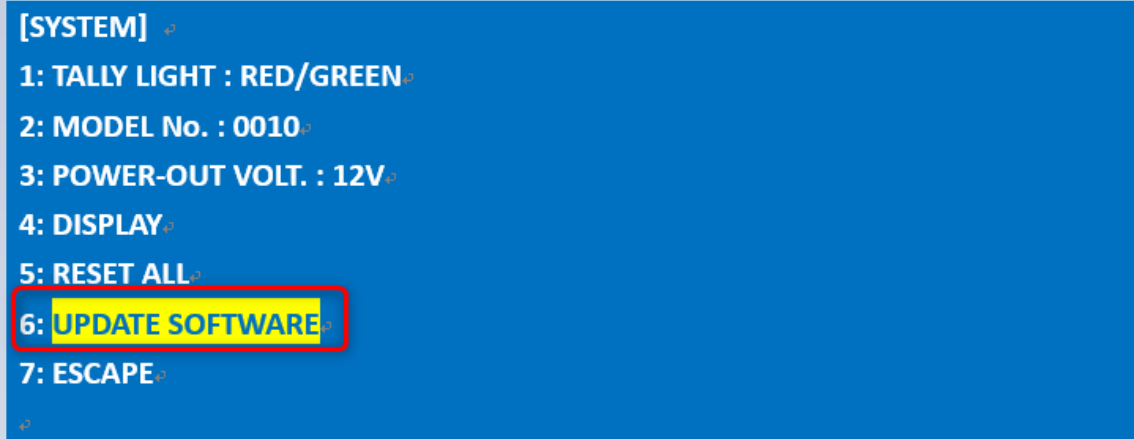
[MAIN MANU]
1: SET CAMERA
2: SET MOTOR
3: MEMORY
4: VIDEO MODE
5: REMOTE CONTROL
6: **SYSTEM**
7: RESET Pan/Tilt
8: ESCAPE

8. After pressing the “ENTER” button , you can see the “SYSTEM” OSD menu which is shown in the following diagram.





[SYSTEM]
1: **TALLY LIGHT** : RED/GREEN
2: MODEL No. : 0010
3: POWER-OUT VOLT. : 12V
4: DISPLAY
5: RESET ALL
6: UPDATE SOFTWARE
7: ESCAPE

9. Please press the down-arrow key  of the remote controller to select the “6: UPDATE SOFTWARE” option. After that, please press the “ENTER” button  from the remote controller.





[SYSTEM] ↵
1: TALLY LIGHT : RED/GREEN ↵
2: MODEL No. : 0010 ↵
3: POWER-OUT VOLT. : 12V ↵
4: DISPLAY ↵
5: RESET ALL ↵
6: UPDATE SOFTWARE ↵
7: ESCAPE ↵

10. After the “ENTER” button  is pressed, you can see the “UPDATE SOFTWARE” OSD Menu which is shown in the following diagram.




[UPDATE SOFTWARE]
1: SW VERSION
2: MB CPU : V01.24c
3: MCTL CPU: V00.63
4: UPDATE ALL
5: ESCAPE


11. Please press the down-arrow key  from the remote controller to select the “4: UPDATE ALL” option.

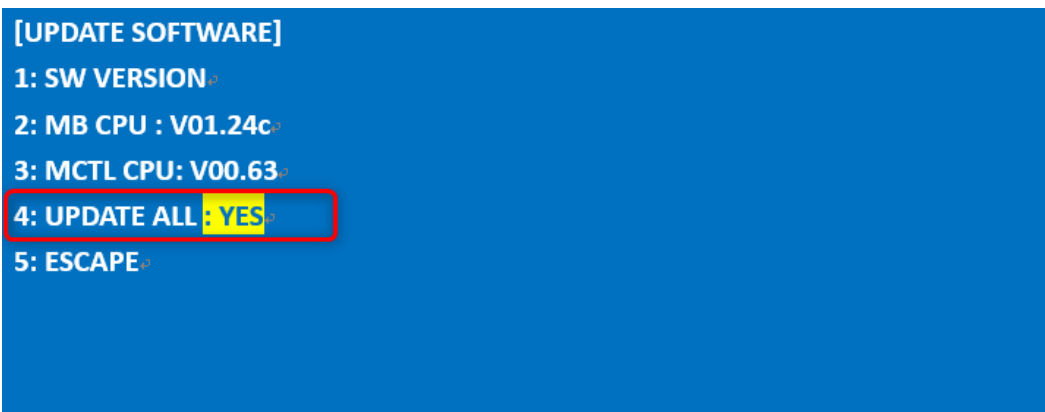



[UPDATE SOFTWARE] ↵
1: SW VERSION ↵
2: MB CPU : V01.24c ↵
3: MCTL CPU: V00.63 ↵
4: UPDATE ALL ↵
5: ESCAPE ↵

12. After the "UPDATE ALL" option is selected, please press the "ENTER" button  from the remote controller and then you will see the screen which is shown in the following diagram.



13. Please press the up-arrow button  from the remote controller and then the "4: UPDATE ALL: NO" will become "4: UPDATE ALL: YES" which is shown in the following diagram.



14. Please press the "ENTER" button  from the remote controller and then the firmware update procedure for the PTR-10 MARK II or PTR-10T MARK II will be started automatically.

15. After the firmware update procedure is started automatically, please wait for about 5 minutes.

16. Please wait until the messages "Updated MCTL CPU=>OK" and "MCTL ready for re-start" are displayed which is shown in the following diagram.

Open MCTL CPU flash OK.

Erass CTL CPU ..

E_BLK-69

Erase-OK.

W2040K

Write-OK

Pdated MCTL CPU=> OK

MCTL ready for re-start.

17. Please wait until the message “Motor CTL FW: V 00.70 H2” & “MB CPU FW: PTR10MA_V01.57c Updated” are shown on the screen. After that, please turn **OFF** and then turn **ON** the power of your PTR-10 MARK II or PTR-10T MARK II. After the PTR-10 MARK II or PTR-10T MARK II is rebooted successfully, the latest firmware is updated successfully.

Motor CTL FW: V00. 70 H2

MB CPU FW: PTR10MA_V01.57c

Updated.