

# Section 6 - Appendix

The Appendix lists changes and important information about the units, between major releases.

You'll find all needed information for accessories or internal update processes. It is regularly updated, as soon as a new product change is passed into production.

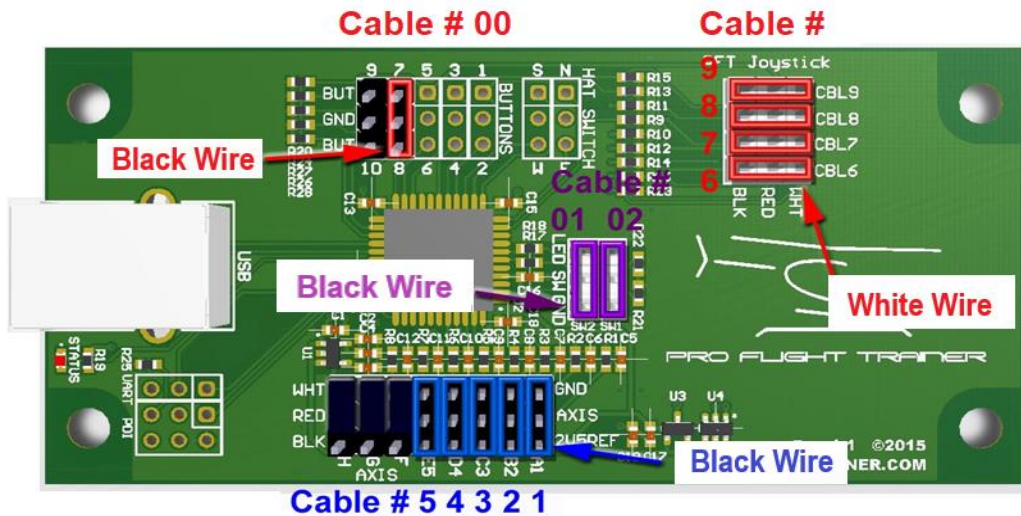
## Contents

6.1 Updated PCB – published 08.03.16.....	2
6.2 Ajustable Pedal Base - published 08.03.16 .....	4
6.3 Curved Cyclic Shaft - published 08.03.16 .....	5
6.4 Added shunts to PCB - published 08.03.16 .....	6
6.5 Chair Support Bar - published 08.03.16 .....	7

### 6.1 Updated PCB – published 08.03.16

Pro Flight Trainers has introduced a completely new USB control board with an updated microcontroller. The new control board has expandability for future upgrades, along with improved performance capabilities and electrical noise reduction.

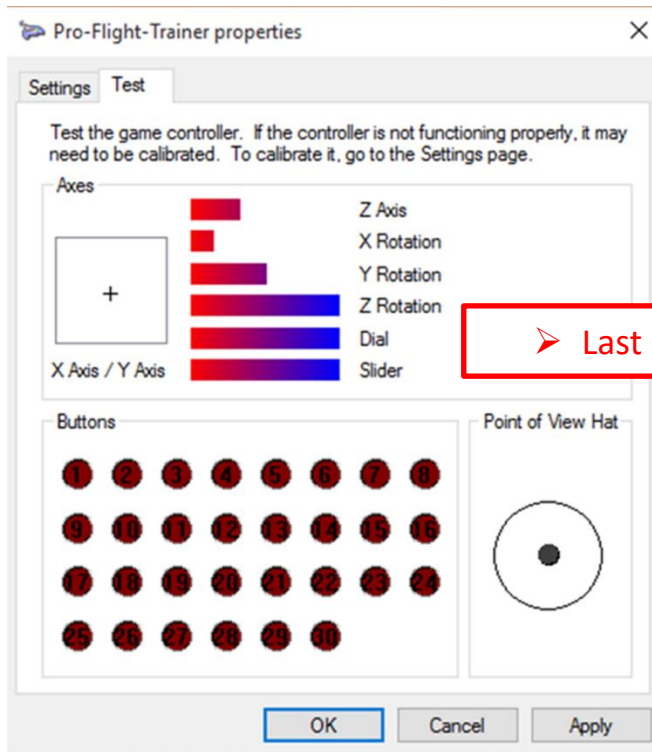
A blue LED will illuminate when the control board has established communication with the computer. The following picture shows how the cables are to be plugged in:



[This diagram replaces the USB Board wiring diagram under Section 5.2.6](#)

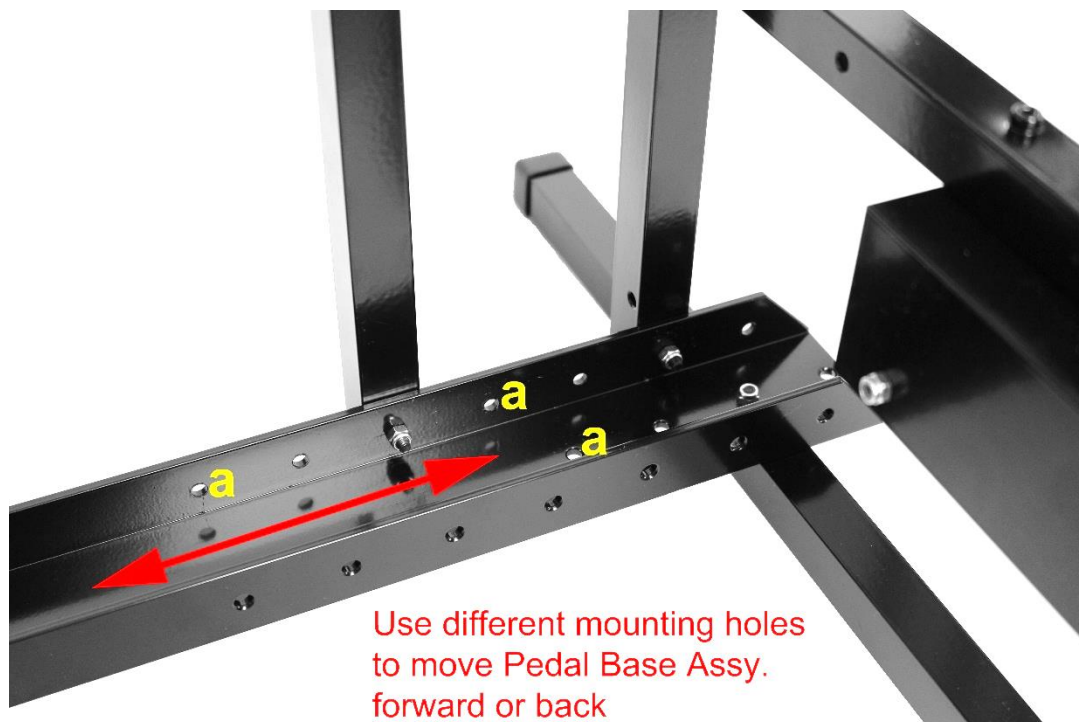
Cable #	Location	Description
1	Cyclic Axis	X Axis
2	Cyclic Axis	Y Axis
3	Collective Axis	Z Axis
4	Pedal Axis	X Rotation
5	Collective Throttle Axis	Y Rotation
6	Cyclic Buttons/Hat Switch	Button # 1 & 3, Hat Switch East
7	Cyclic Buttons/Hat Switch	Hat Switch North & West, Ground Wire
8	Cyclic Buttons/Hat Switch	Button # 2 & 4, Hat Switch South
9	Buttons (red) Collective	Momentary Button #5 Left, #6 Right
11	Left Toggle Switch Collective	Button # 7 or 8 (Always on switch)
01	Right Toggle Switch Collective	Mode 2 (buttons change to #11-20)
02	Right Toggle Switch Collective	Mode 3 (buttons change to #21-30)

During the calibration procedure the final 3 axis are not used (Z Rotation, Dial and Slider). These positions are for three additional axis.



## 6.2 Adjustable Pedal Base - published 08.03.16

A new Pedal Base bar has been implemented allowing the pedal position to be adjusted forward or back 95mm (3.75"). The Pedal bars overall length has been increased 2" to accommodate taller pilots.



An example would be using mounting holes "a" in the diagram. The pedals would now be closer to the pilot.

### 6.3 Curved Cyclic Shaft - published 08.03.16

For added ergonomic and visual enhancement, Pro Flight Trainer has introduced an updated curved cyclic. The following picture shows how the curved cyclic is installed.

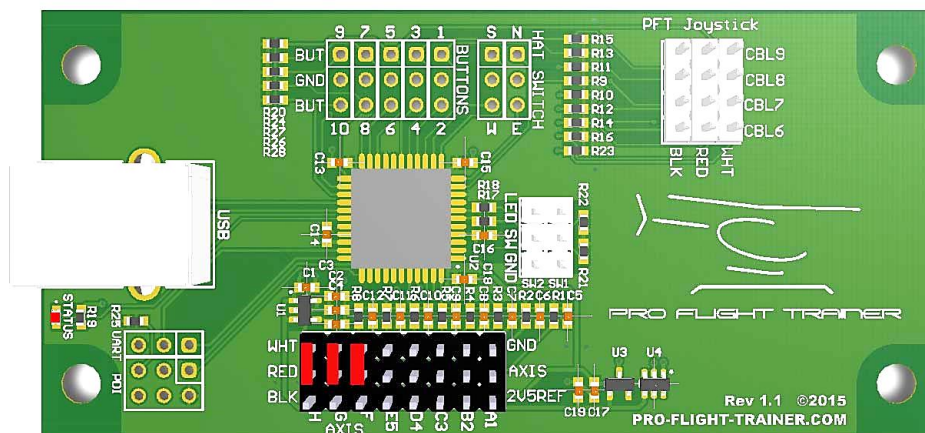


[This diagram replaces the Step 9 diagram under Section 2.1.1 Assembling the frame](#)

## 6.4 Added shunts to PCB - published 08.03.16

Some computers can have higher levels of noise from the USB ports (especially front ports on desktop computers). We recommend using the rear USB port (mother board) if able to do so.

The last 3 rotating axis are extra and not used during calibration and can be skipped: Z Rotation, Dial, Slider (labeled F, G, H on the PC board). These 3 spare axis have been disabled by installing shunts on the unused axis pins, causing these axis to show as 0 during calibration – turning off these axis.



[This Diagram shows the shunt location in RED on the PC board](#)

## 6.5 Chair Support Bar - published 08.03.16

A new adjustable support bar has been added to prevent the unit from moving forward when the pedals are pushed.

