Appendices to Dreamflyer Assembly Manual

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MANUAL CORRECTIONS

Step 7) The brass bushings and long bolts shown in the manual are not used. Instead, use a long bolt, a washer, and a nut from the bag marked **"OTHER"** to fasten each Roll Frame Pivot Bearing. Insert the bolt the opposite direction shown in the diagram. The bolt should be inserted from inside the frame going outwards. After the bolt has been inserted put on the washer and then the nut. The end of the bolt should protrude a few millimetres from the end of the nut once it has been screwed on. If it does not protrude, un-screw the bolt and ensure that there is no foreign matter in any of the holes. Re-assemble and check again.

Step 11) The eyebolts can be found in the bag containing the elastic bands.

Step 13) Similarly to the change for **Step 7**, the long bolts and brass bushings are replaced by the long bolts, washers and nuts from the bag marked **"OTHER."** The brass washers do not need to be placed as they are already attached to the seat hangars. The long bolt should be inserted the same direction as the bolt shown in the diagram. Once the bolt it through the seat hangar and the frame the washer can be attached and the nut can be screwed on. The end of the bolt will protrude from the nut several millimetres father than in **Step 7**.

Step 17) Instead of using screws and nuts, use screws and lock-washers to attach the plastic piece of the Joystick Assembly to the Rudder/Monitor Mount Assembly. Insert the screws with lock-washers attached from the bottom of the Rudder/Monitor Mount Assembly and into the plastic piece of the Joystick Assembly. The diagram in the manual incorrectly shows screws entering the plastic piece from the top.

Trim (balance) Your Dreamflyer: The cuffs used to secure the counter weights can be found in the large box containing the Dreamflyer Seat. The set-screws used to secure these cuffs can be found in the fastener bag containing the elastics.

TRIPLE MONITOR ASSEMBLY CORRECTION

Step 6) Screws to attach the 2 additional monitors can be found in the fastener bag containing the elastic bands.

DREAMFLYER CABLING

The purpose of this document is to provide a description of the proper setup and layout of cables used with the Dreamflyer. This includes cable for the monitor, rudder pedals, joystick and throttle.

Monitor(s)

Each monitor will have two cables attached to it, both coming off of the Dreamflyer unit. One is the power cable, attached to a power outlet, and the other will either be a VGA or DVI cable, depending on the monitor used. For a Single Monitor Dreamflyer the monitor cable will run from the monitor to the video card at the back of the computer. On a Three Monitor Dreamflyer the monitor cables from each monitor will be either be plugged into a Matrox TripleHead2Go or they will be plugged into video cards on the back of the computer.

Rudder Pedals

The rudder pedals have one USB running from the bottom of the Monitor Mount Assembly which will be plugged into a USB port on the computer tower.

Joystick and Throttle

The joystick handle attached to the end of the joystick post has a white VGA cable running out of it. This VGA cable attaches to the other white VGA cable running out of the joystick base under the seat. There is a black PS2 cable included with the Dreamflyer electronics. This PS2 cable should be plugged into the joystick base under the seat and the front of the throttle. The USB cable running from the throttle can then be plugged into the computer. This USB cable from the throttle to the computer is the only cable running from the joystick/throttle to the computer.

After assembly has been completed there should be 4 cables in total running from the Dreamflyer unit: 2 from the monitor, 1 from the rudder pedals, and 1 from the throttle.

DOWNLOADING MOST CURRENT SAITEK DRIVERS

Here is the webpage from which you can download the latest Saitek Drivers:
http://www.saitek.com/uk/down/drivers.php

On this page you will be asked to enter the product type you wish to use. Enter: **Joystick**
Note: Even though you are selecting ``joystick``, - once you have downloaded these files – you will also be able to test the throttle and Rudder pedals

You will also be asked to enter the product range you wish to use. Enter: **X52**

Next you will be asked to enter the operating system that you are using. Enter: whatever is running on the computer you are using to test the devices. Once you have done that, two buttons will appear: one labelled **DOWNLOAD DRIVERS** and the other labelled **DOWNLOAD SOFTWARE**.
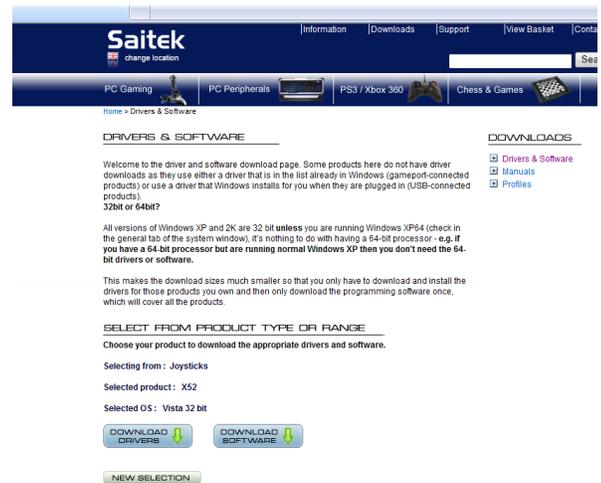
Your screen should look now like this:
(unless you are using an operating system other than Vista 32 bit)

The testing program is embedded in the DRIVERS. The software referred to on the **DOWNLOAD SOFTWARE** button, is used to program the buttons and switches on the controllers, which you will not need to do. Nevertheless, this software needs to be installed in order for the test program to recognize of the buttons and switches on the controllers.

Download the software first, then the drivers. Each download should take a few minutes; when this is completed, run the executable setup files for each.

Once the programs are installed on your computer you will notice a *new* icon added to the bottom right corner your desktop, which looks like a small joystick. When you click on it a menu of options comes up. Including (4th from the top): Control Panel – click on that.

Your screen should look now like this:
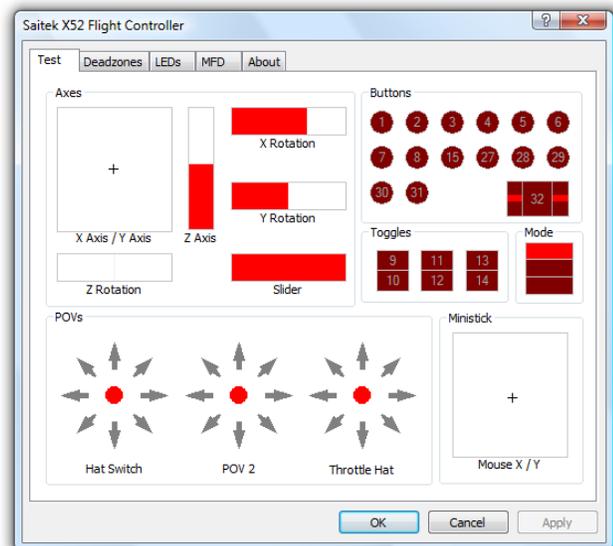
TESTING PROCEDURES:

1.   **Ensure every light on the joystick, throttle and rudder pedals are lit up.**

Push or slide or switch each button, slider, circular switch on each device: for each one you should see a corresponding light on the test screen light up. Bear in mind that some switches on the controllers do not have lights, yet when pushed or turned they should also activate lights on the screen.

On the joystick, such switches include the following:
- the index/trigger finger switch;
- the baby finger switch; the black switch (shaped like a chopped off triangle) on the left of the joystick handle between 2 circular switches; and,
- the dial on the right side of the joystick handle (when you turn it, a light under the word ``mode`` should change colour from green, to pink, to red).

On the Throttle, such switches include:
- the function, start/stop, and reset buttons;
- the silver slider on right of the handgrip;
- the small silver button next to the mouse-pointing device (looks like an eraser off a pencil);
- the grey dial on the front of handgrip; and,
- the silver & black rotating switch next to that dial.

2.   **Test the functioning of the Axes and Magic Mouse-pointing device**

When you slide the rudder pedals forward and backward, you should see the Z rotation square fill with red in either direction.

When you push down on the front of the pedals (toe-brakes), you should the see X and Y rotation square similarly.

When you move the throttle forward and backward you should see the Z axis respond similarly.

To test the X/Y axis function of the joystick you will have to move the post on the square joystick base. You should see the crosshair in the X/Y axis square move around also. You should be able to reach every side and corner of the square by moving the joystick accordingly. You must be able to reach every side and corner of the X/Y axis square with the crosshair, by moving the post around accordingly. When the square joystick base is untouched and the post is simply pointing straight up, the crosshair should be in the center of the square, - this is very important. If it is not in the center, try unplugging the PS2 cable from the throttle, centering the joystick, - and then plugging it back in again.

When you move the mouse-pointing device, you should also be able to reach every side and corner of the Mouse X/Y square.

BUTTONS FOR OPERATION OF FLIGHT CONTROLLERS

Landing Gear

Knee Board

Mouse X/Y

Pause   Spoilers   Tail Hook

View Selector

Flaps Down

Trim Down

Trim Up

Scan Hat Switch

Brakes

Flaps Up