VELOCITYONE™ FLIGHTDECK

UNIVERSAL SIMULATION HOTAS SYSTEM | SYSTÈME HOTAS DE SIMULATION UNIVERSELLE

PRODUCT GUIDE

IMPORTANT: READ BEFORE FLIGHT

PLATFORM COMPATIBILITY

■ Windows 10/11

CONTENTS & PRODUCT TOUR
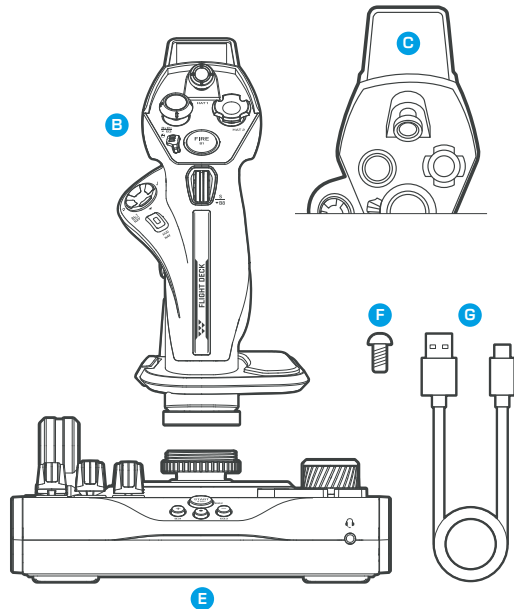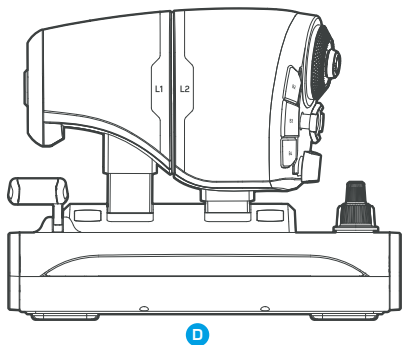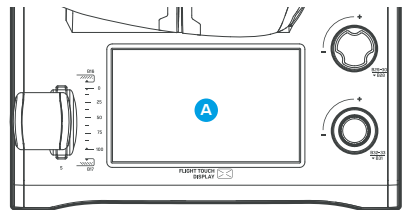
A   Flight Touch Display

B   Stick Handle

C   Head Up Display (HUD)

D   Throttle Module

E   Stick Base

F   M5 hard-mounting screws x3

G   2m USB-C to USB-A cables x2

CONTROL DESCRIPTION – THROTTLE
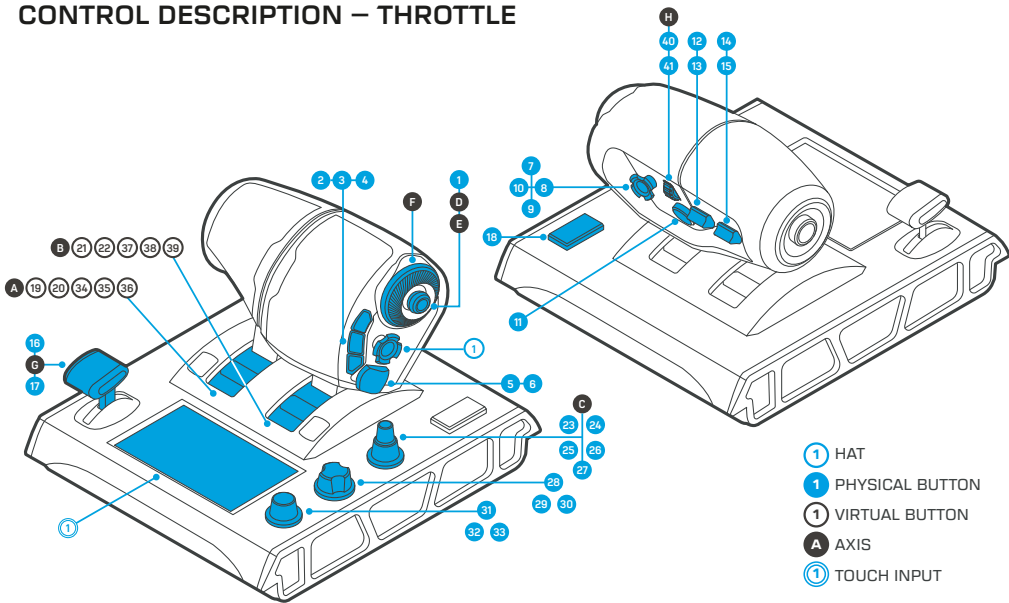
Type		Function
1	HAT 1	8-WAY HAT SWITCH
A	AXIS L1	LEFT THROTTLE FORWARD/BACK
B	AXIS L2	RIGHT THROTTLE FORWARD/BACK
C	AXIS	ALT KNOB (OUTER DIAL)
D	AXIS POV 1 L/R	ANALOGUE POV 1 LEFT/RIGHT
E	AXIS POV 1 U/D	ANALOGUE POV 1 UP/DOWN
F	AXIS	THROTTLE THUMB WHEEL
G	AXIS	FLAP LEVER UP/DOWN
H	AXIS	THROTTLE FINGER WHEEL
1	PHYSICAL BUTTON	ANALOGUE POV CLICK

Type		Function
2	PHYSICAL BUTTON	BUTTON 2
3	PHYSICAL BUTTON	BUTTON 3
4	PHYSICAL BUTTON	BUTTON 4
5	PHYSICAL BUTTON	BUTTON 5 BACKWARD
6	PHYSICAL BUTTON	BUTTON 6 FORWARD
7	PHYSICAL BUTTON	BUTTON 7 NORTH
8	PHYSICAL BUTTON	BUTTON 8 EAST
9	PHYSICAL BUTTON	BUTTON 9 SOUTH
10	PHYSICAL BUTTON	BUTTON 10 WEST
11	PHYSICAL BUTTON	BUTTON 11

Legend:
- 1 HAT
- 1 PHYSICAL BUTTON
- 1 VIRTUAL BUTTON
- A AXIS
- 1 TOUCH INPUT

CONTROL DESCRIPTION — THROTTLE

	Type	Function
12	PHYSICAL BUTTON	BUTTON 12 UP
13	PHYSICAL BUTTON	BUTTON 13 DOWN
14	PHYSICAL BUTTON	BUTTON 14 UP
15	PHYSICAL BUTTON	BUTTON 15 DOWN
16	PHYSICAL BUTTON	BUTTON 16 FORWARD
17	PHYSICAL BUTTON	BUTTON 17 BACK
18	PHYSICAL BUTTON	BUTTON 18
19	VIRTUAL BUTTON LH	BUTTON 19 MAX. VIRTUAL DETENT
20	VIRTUAL BUTTON LH	BUTTON 20 MIN. VIRTUAL DETENT

	Type	Function
21	VIRTUAL BUTTON RH	BUTTON 21 MAX. VIRTUAL DETENT
22	VIRTUAL BUTTON RH	BUTTON 22 MIN. VIRTUAL DETENT
23	PHYSICAL BUTTON	BUTTON 23 ALT
24	PHYSICAL BUTTON	BUTTON 24 UPPER, OUTER, LEFT
25	PHYSICAL BUTTON	BUTTON 25 UPPER, OUTER, RIGHT
26	PHYSICAL BUTTON	BUTTON 26 UPPER, INNER, LEFT
27	PHYSICAL BUTTON	BUTTON 27 UPPER, INNER, RIGHT

	Type	Function
28	PHYSICAL BUTTON	BUTTON 28 HDG, PRESS
29	PHYSICAL BUTTON	BUTTON 29 MID, LEFT
30	PHYSICAL BUTTON	BUTTON 30 MID, RIGHT
31	PHYSICAL BUTTON	BUTTON 31 SPD, PRESS
32	PHYSICAL BUTTON	BUTTON 32 LOWER, LEFT
33	PHYSICAL BUTTON	BUTTON 33 LOWER, RIGHT
34	VIRTUAL BUTTON	BUTTON 34 FORWARD VIRTUAL DETENT
35	VIRTUAL BUTTON	BUTTON 35 MIDDLE VIRTUAL DETENT
36	VIRTUAL BUTTON	BUTTON 36 BACK VIRTUAL DETENT

	Type	Function
37	VIRTUAL BUTTON	BUTTON 37 FORWARD VIRTUAL DETENT
38	VIRTUAL BUTTON	BUTTON 38 MIDDLE VIRTUAL DETENT
39	VIRTUAL BUTTON	BUTTON 39 BACK VIRTUAL DETENT
40	PHYSICAL BUTTON	BUTTON 40 WHEEL UP
41	PHYSICAL BUTTON	BUTTON 41 WHEEL DOWN
1	TOUCH INPUT	FLIGHT TOUCH DISPLAY

CONTROL DESCRIPTION – STICK
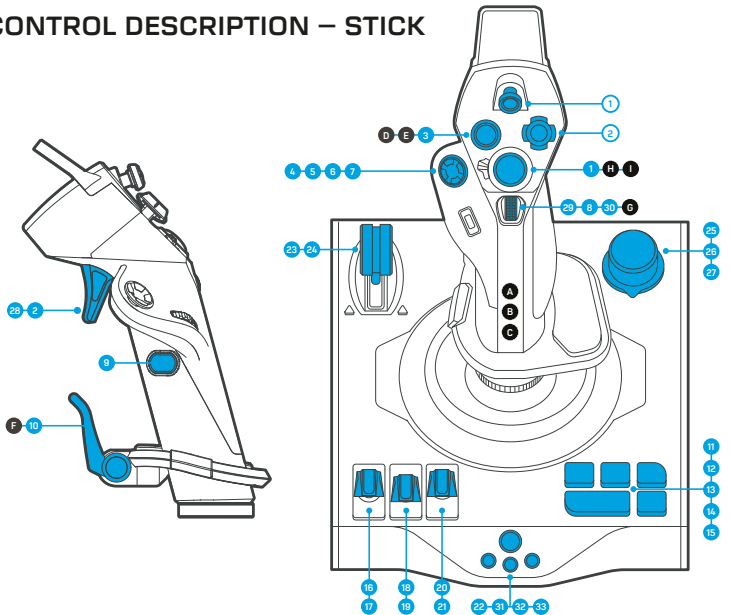
Type		Function
1	HAT	8-WAY HAT SWITCH
2	HAT	8-WAY HAT SWITCH
A	AXIS	MAIN STICK X AXIS
B	AXIS	MAIN STICK Y AXIS
C	AXIS	MAIN STICK Z AXIS
D	AXIS	POV L/R AXIS (Rx)
E	AXIS	POV U/D AXIS (Ry)
F	AXIS	PADDLE AXIS (Rz)
G	AXIS	THUMB WHEEL AXIS (SLIDER)
H	AXIS	MOUSE X AXIS

Type		Function
I	AXIS	MOUSE Y AXIS
1	PHYSICAL BUTTON	PUSH BUTTON / MOUSE LEFT CLICK
2	PHYSICAL BUTTON	2nd STAGE TRIGGER
3	PHYSICAL BUTTON	ANALOGUE POV CLICK
4	PHYSICAL BUTTON	D-PAD EAST
5	PHYSICAL BUTTON	D-PAD SOUTH
6	PHYSICAL BUTTON	D-PAD WEST
7	PHYSICAL BUTTON	D-PAD NORTH
8	PHYSICAL BUTTON	THUMB WHEEL CLICK
9	PHYSICAL BUTTON	SHAFT BUTTON

Legend:
- 1 HAT
- 1 PHYSICAL BUTTON
- 1 VIRTUAL BUTTON
- A AXIS
- 1 TOUCH INPUT

CONTROL DESCRIPTION – STICK

Type		Function
10	PHYSICAL BUTTON	PINKIE LEVER
11	PHYSICAL BUTTON	BUTTON 11
12	PHYSICAL BUTTON	BUTTON 12
13	PHYSICAL BUTTON	BUTTON 13
14	PHYSICAL BUTTON	BUTTON 14
15	PHYSICAL BUTTON	BUTTON 15
16	PHYSICAL BUTTON	BUTTON 16 FORWARD
17	PHYSICAL BUTTON	BUTTON 17 BACK
18	PHYSICAL BUTTON	BUTTON 18 FORWARD

Type		Function
19	PHYSICAL BUTTON	BUTTON 19 BACK
20	PHYSICAL BUTTON	BUTTON 20 FORWARD
21	PHYSICAL BUTTON	BUTTON 21 BACK
22	PHYSICAL BUTTON	BUTTON 22
23	PHYSICAL BUTTON	GEAR LEVER FORWARD
24	PHYSICAL BUTTON	GEAR LEVER BACKWARD
25	PHYSICAL BUTTON	3-WAY ROTARY KNOB LEFT
26	PHYSICAL BUTTON	3-WAY ROTARY KNOB RIGHT
27	PHYSICAL BUTTON	3-WAY ROTARY KNOB DOWN

Type		Function
28	PHYSICAL BUTTON	TRIGGER STAGE 1
29	PHYSICAL BUTTON	STICK THUMB WHEEL UP
30	PHYSICAL BUTTON	STICK THUMB WHEEL DOWN

Type		Function
31	PHYSICAL BUTTON	BUTTON 31
32	PHYSICAL BUTTON	BUTTON 32
33	PHYSICAL BUTTON	BUTTON 33

To avoid mistakenly binding inputs when customizing/configuring controls in certain games and sims, move the **Landing Gear Lever** 23 24 and **3-Way Rotary Knob** 25 26 27 to the middle zone between two buttons while customising.
This is necessary because in the normal state, one of the buttons registers as 'depressed' or 'active' unless the dial and lever is set in between two inputs.
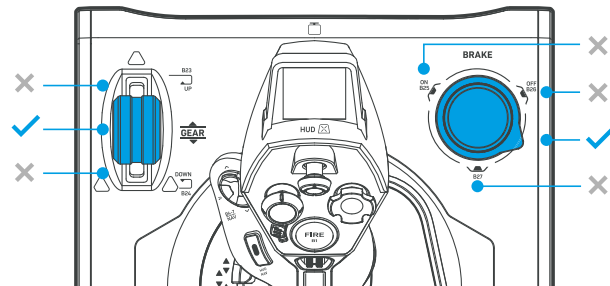
SYSTEM SETUP - ATTACH STICK MODULE TO STICK BASE
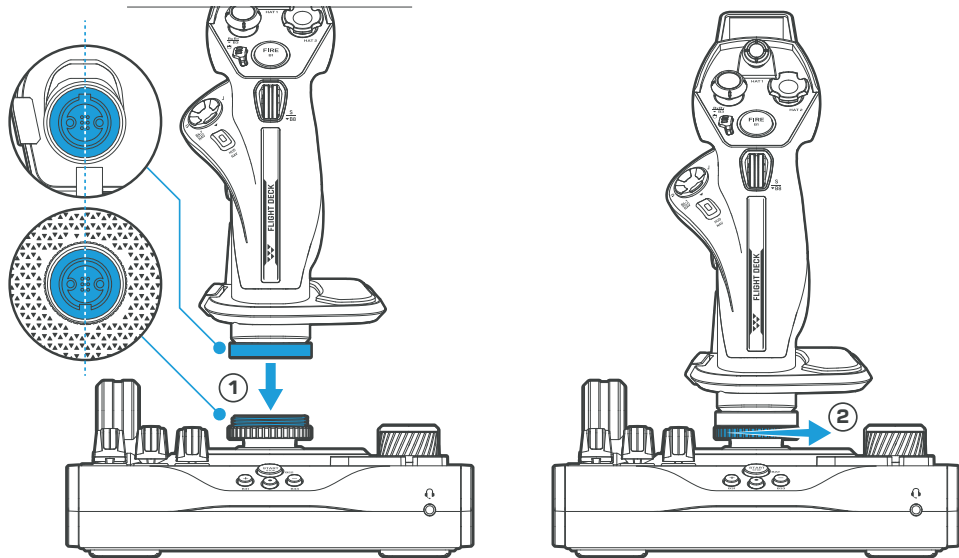
DO NOT ROTATE THE STICK HANDLE DURING THIS PROCESS. This may damage the device.

1. Look at the gold contacts on the bottom of the stick handle, and rest them onto the matching slots on the base. Hold the stick handle in place with the right hand.

2. Using the left hand, slowly rotate the stick base's threaded ring anticlockwise (depicted in the diagram in blue) to attach the stick base and handle together, ensuring the threads are lined up and not crossed. **Do not over-tighten.**

SYSTEM SETUP - CONNECT TO PC
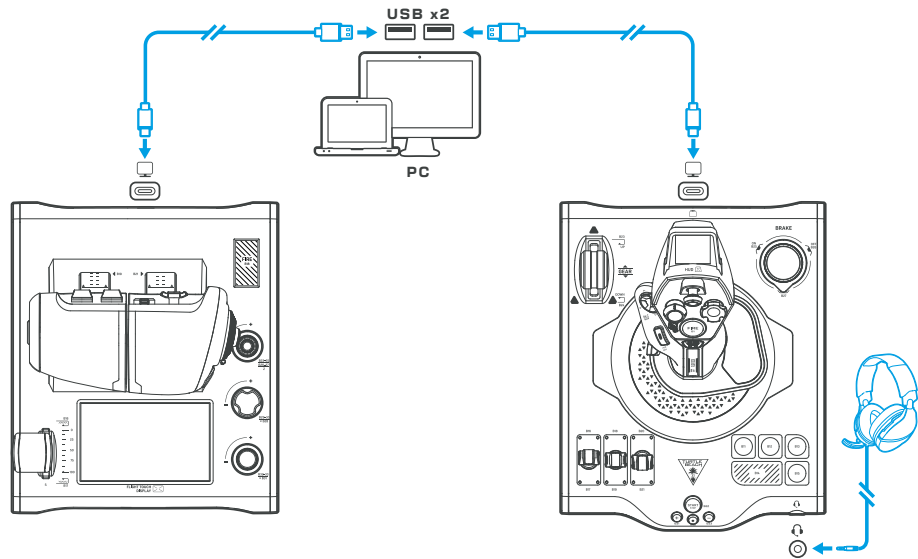
Connect VelocityOne Flightdeck to **2x USB ports** on PC by attaching the supplied USB cables as shown. If you have a headset with a standard 3.5mm connection, you can connect it to the Stick Base.

Flightdeck connects as two separate devices and can be used independently of each other as well as a complete HOTAS flight system.

SYSTEM SETUP - ADJUST STICK HEIGHT
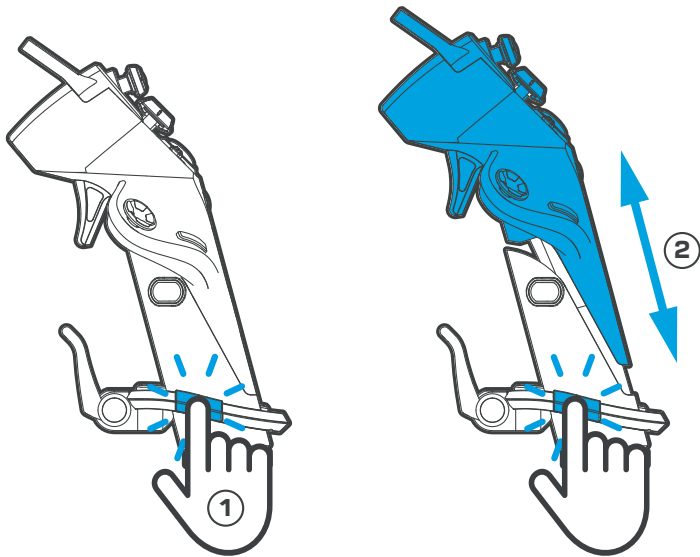
To Adjust Stick height, push and hold the **height adjust button** inwards to release the lock. The stick handle can slide up or down to accommodate different sized hands.

FLIGHT TOUCH DISPLAY - OVERVIEW

B16

0
25
50
75
100

S   **B17**

B29-30
▼ **B28**

B32-33
▼ **B31**

Key Bindings

Haptic Detents

Rear Scroll Wheel Mode

Autopilot Dials

Lighting

FLIGHT TOUCH DISPLAY
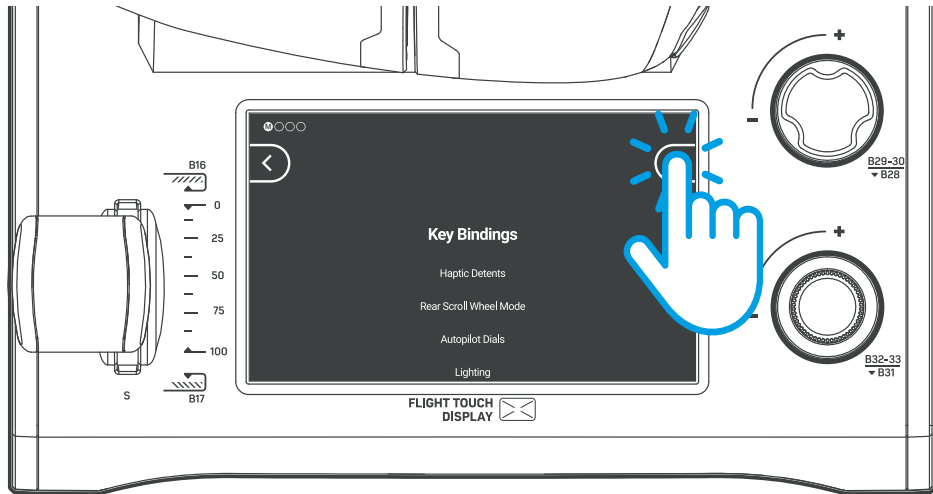
Located on the throttle module, the **Flight Touch Display (FTD)** combines real-time sim status indication* with advanced customization with up to 39 extra button functions set to your configuration.

Navigation is by touch input and swipe gestures.

Default state of the screen is the settings page and a panel in combat style.

Settings available are:

- Navigation
- Home Screen defaults
- Settings
- Customisation

Customisation options using just the FTD are limited. For full customisation, use the VelocityOne Flight Hangar desktop software.

*Some features implemented post-launch

FLIGHT TOUCH DISPLAY - PANELS
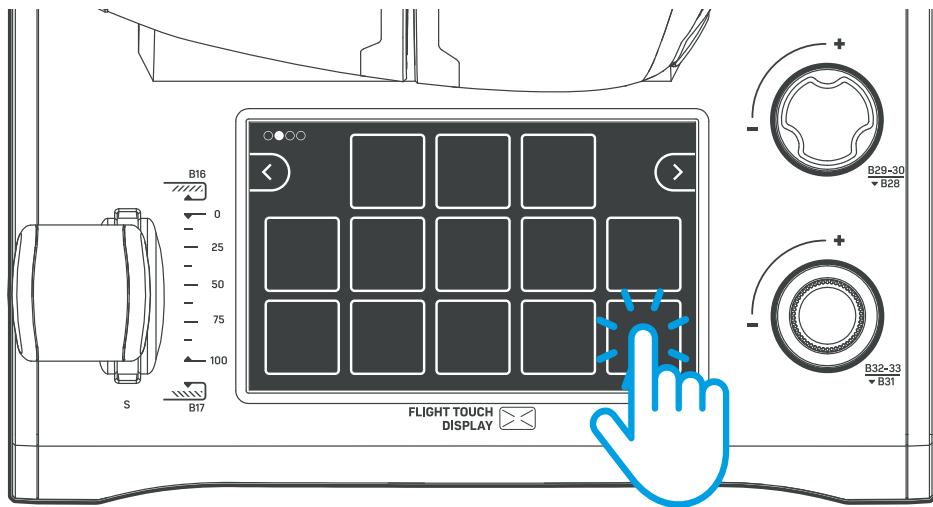
Flight Touch Display (FTD) gives access to an array of virtual buttons, switches and wheels. Using the VelocityOne Flight Hangar desktop software it is possible to customize the theming of the panels and touch inputs, as well as assign different key bindings. Navigate between panels using the left and right arrows, and activate inputs with touch.

Available themes include:

- Combat (default)
- Space
- Commercial

The FTD can display up to 3 panels, each consisting of a set of virtual buttons, switches or wheels. These touch inputs are assigned to keyboard inputs **Q W E R T Y** etc. These can be displayed using an overlay in the settings page of the FTD ('**Key Bindings**') to determine which touch button is assigned to each virtual keyboard key.

FLIGHT TOUCH DISPLAY - SETTINGS - KEY BINDINGS
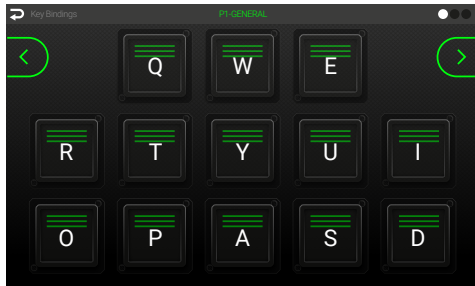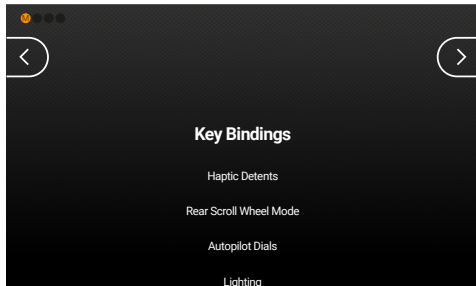
Press the left on-screen arrow to access Flightdeck onboard settings, then select **Key Bindings** from the menu to access an overview of the system key bindings associated with each virtual button. Use the right and left on-screen arrows to view each panel and it's bindings.

FLIGHT TOUCH DISPLAY - SETTINGS - HAPTIC DETENTS
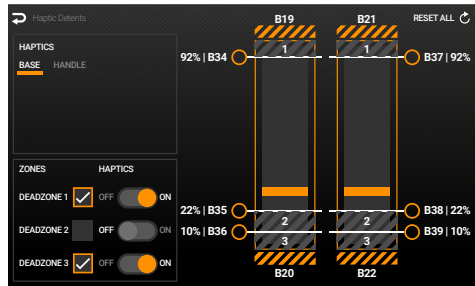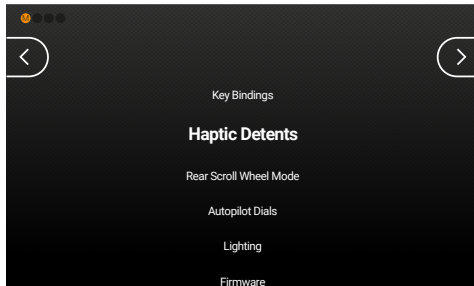
The VelocityOne Flightdeck throttle features optional virtual detent and deadzone control. A maximum of 5 detent zones can be enabled, with haptic feedback either through the throttle base or handles. 3 of these detent zones can be moved to any point along the travel of the throttle levers by dragging the sliders to the desired positions. When the throttle control passes through a set slider position, the corresponding button press will be momentarily activated.

Deadzones and haptic feedback can be quickly toggled on and off.

FLIGHT TOUCH DISPLAY - SETTINGS - REAR SCROLL WHEEL MODE
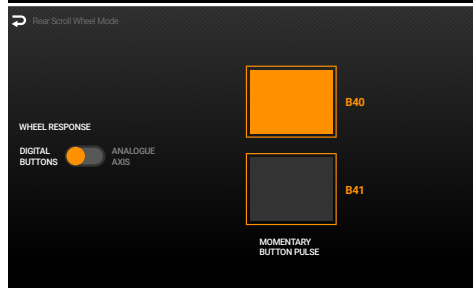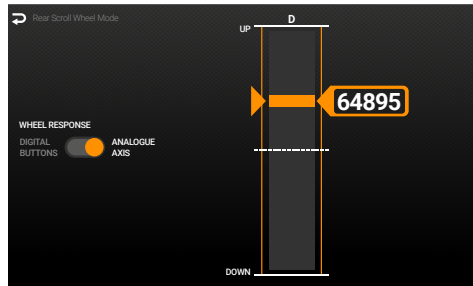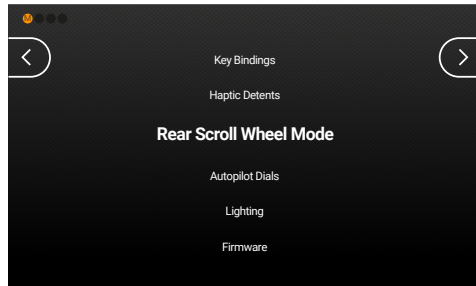
The Throttle Module rear scroll wheel response can be set to output as digital buttons or an analogue axis (**D B40-41**). When in digital mode, the button inputs will activate as a momentary pulse as the wheel is turned.

FLIGHT TOUCH DISPLAY - SETTINGS - AUTOPILOT DIALS
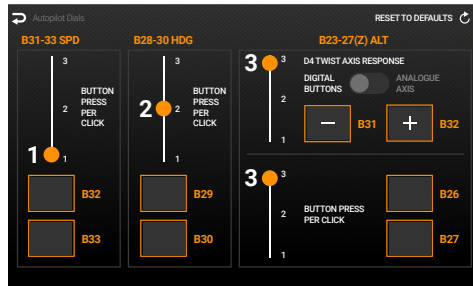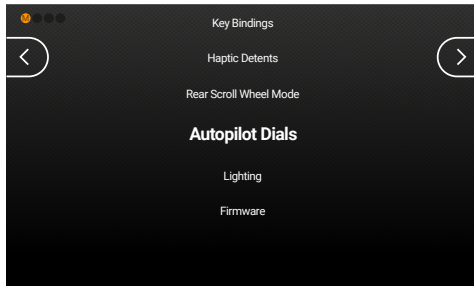
D4 Twist Axis Response can be set to either a digital or analogue axis output.
The autopilot dials can be configured to have multiple button presses, ranging from 1 to 3 outputs per click.

FLIGHT TOUCH DISPLAY - SETTINGS - LIGHTING

Haptic Detents

Rear Scroll Wheel Mode

Autopilot Dials

Lighting

Firmware

Lighting

LIGHTING PRESETS

Fighter	✓
Space	
Night	
Mono	
Cyber	
Danger	
Aqua	
Nova	
Laser	
Neon	
Custom	
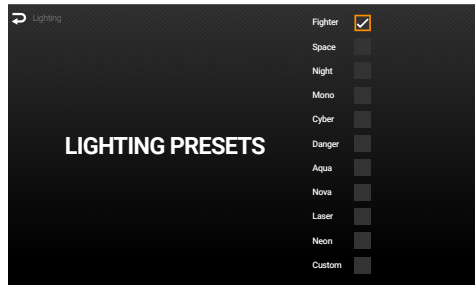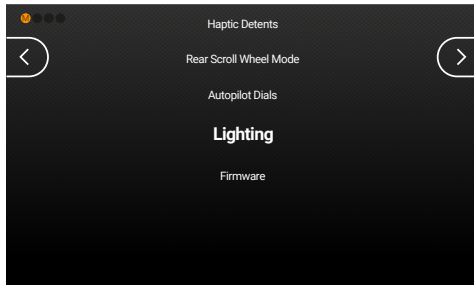
Choose from preset lighting themes to be applied across both the throttle and stick. Create custom lighting settings in the VelocityOne Hangar Desktop App.

FLIGHT TOUCH DISPLAY - SETTINGS - FIRMWARE
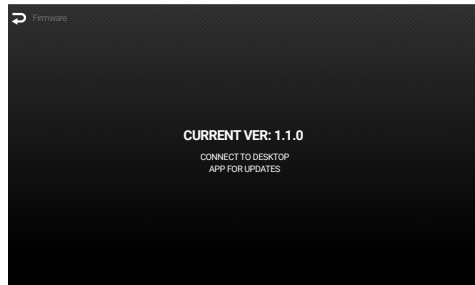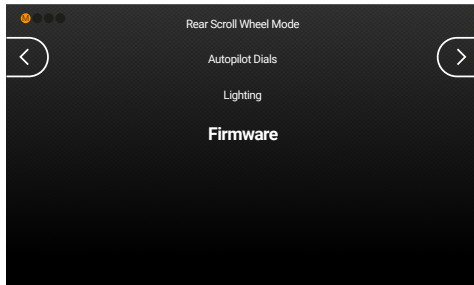
Rear Scroll Wheel Mode

Autopilot Dials

Lighting

Firmware

Firmware

CURRENT VER: 1.1.0

CONNECT TO DESKTOP
APP FOR UPDATES

Check the current installed firmware version. Firmware updates are performed through the Hangar Desktop App.

HEAD UP DISPLAY (HUD) - OVERVIEW
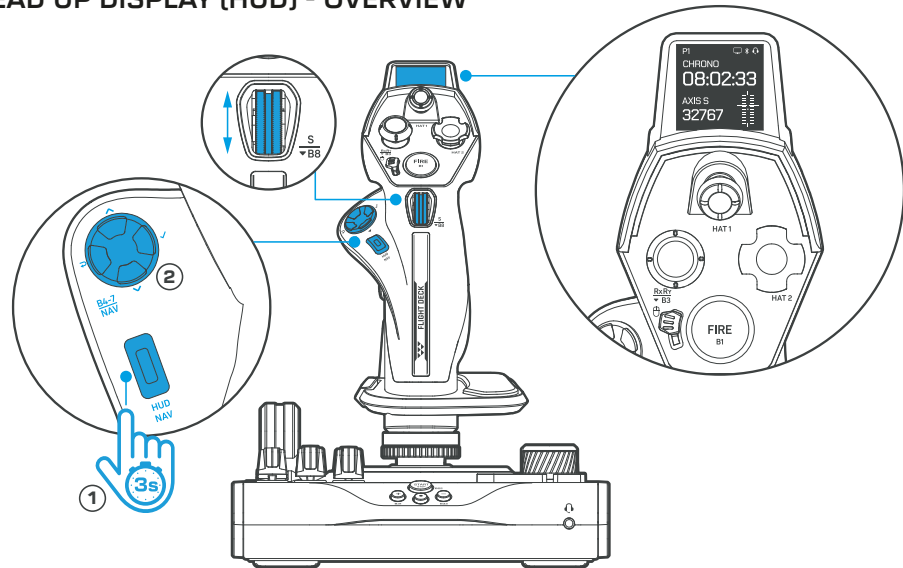
Located on the stick module, the full-color customizable **Head Up Display (HUD)** provides access to 2 chosen aircraft parameters, allowing you to effortlessly see key information on-the-fly.

By default the HUD displays Chrono timing and axis output information. The axis can be adjusted in real time using the thumb wheel '**S**' located under the '**B1 FIRE**' button. The Chrono function can be started, stopped and reset from within the main menu under '**CHRONO**'.

To access the HUD menu

Press and hold the '**HUD NAV**' button ① for 3 seconds, then use the D-PAD directions ② to navigate the menu.

D-PAD controls are:

- ⌃ Up
- ⌄ Down
- ✓ Confirm
- ↩ Back

Settings available are:

- Chrono
- Touchpad
- Pro Aim
- Rudder Lock
- Audio

- Thumb Wheel
- Haptics
- Performance
- Lighting
- Firmware

Press and hold the '**HUD NAV**' button ① for 3 seconds to exit the menu.

The theme of the HUD can also be changed using the VelocityOne Hangar desktop software. The available themes are:

- Combat (default)
- Space
- Commercial

HEAD UP DISPLAY (HUD) - SETTINGS - CHRONO

CHRONO ✓
TOUCHPAD
PRO AIM
RUDDER LOCK
AUDIO
THUMB WHEEL
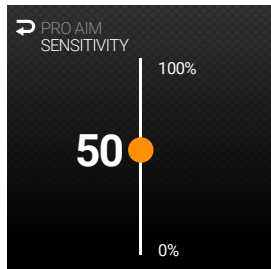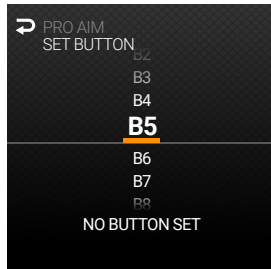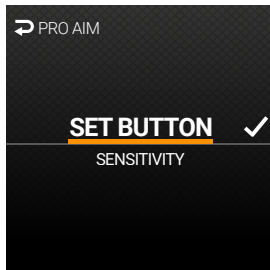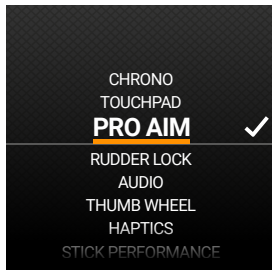
↩ TOUCHPAD

00:00:00
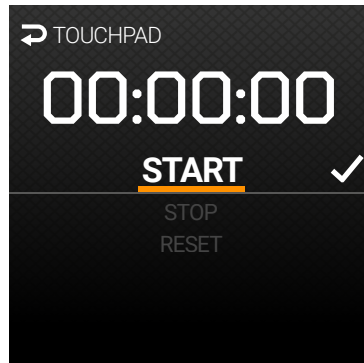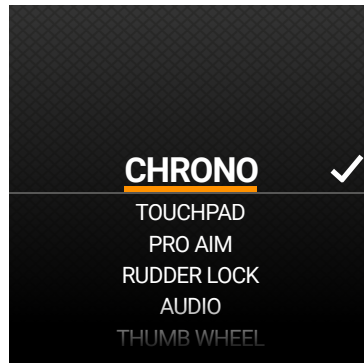
START ✓
STOP
RESET

Set flight time information with the Chrono feature. Once started, exiting the menu by holding the **HUD NAV** button for 3 seconds will display the active chrono timer on the home screen as long as the Chrono panel has been applied to the HUD via the VelocityOne Flight Hangar desktop software. To stop or reset the chrono, re-enter the menu and use the on-screen controls.

HEAD UP DISPLAY (HUD) - SETTINGS - TOUCHPAD

CHRONO
TOUCHPAD ✓
PRO AIM
RUDDER LOCK
AUDIO
THUMB WHEEL
HAPTICS

↩ TOUCHPAD
SENSITIVITY

10

5

0
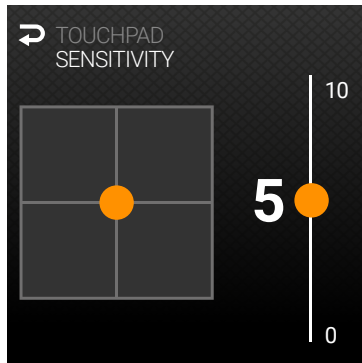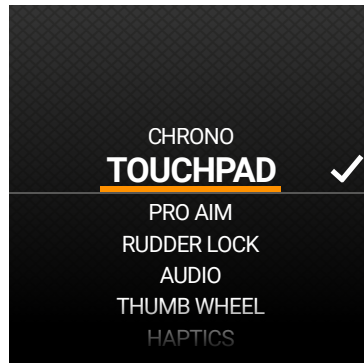
Adjust touchpad (**FIRE B1**) sensitivity values from 0 to 10. Touchpad functionality can be changed to button functionality by flipping the **orange mouse lock switch** next to the touchpad. Clicking the touchpad will replicate the left-click of a mouse, and B2 Trigger will replicate the right-click of a mouse.
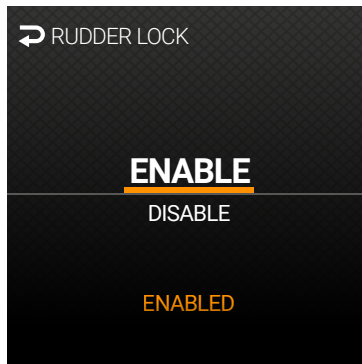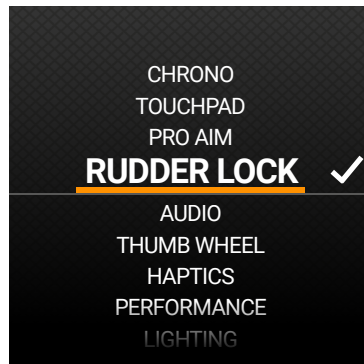
HEAD UP DISPLAY (HUD) - SETTINGS - PRO AIM

CHRONO
TOUCHPAD
PRO AIM ✓
RUDDER LOCK
AUDIO
THUMB WHEEL
HAPTICS
STICK PERFORMANCE

↩ PRO AIM

SET BUTTON ✓

SENSITIVITY

↩ PRO AIM
SET BUTTON
B2
B3
B4
B5
B6
B7
B8
NO BUTTON SET

↩ PRO AIM
SENSITIVITY
100%

50 ●

0%

Integrated from our range of console controllers, the **Pro Aim** feature helps to temporarily reduce the sensitivity of the main stick axes. This is useful for making critical in-flight adjustments or honing your aim on an enemy fighter.

The '**Set Button**' option enables any of the listed programmable buttons to be set to initiate the Pro Aim feature. The assigned button must be pressed and held. Note that any previously assigned functions to the button will also be output at the same time as Pro Aim.
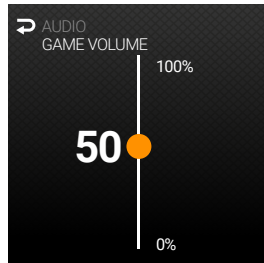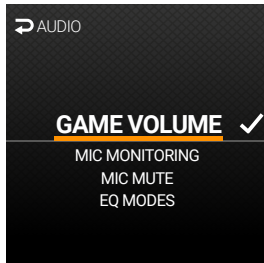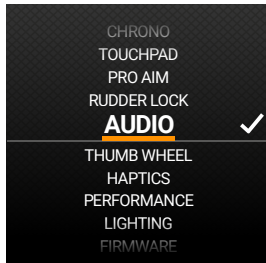
The '**Set Level**' option tunes the total reduction in sensitivity, when the assigned Pro Aim button is pressed. The higher the setting the larger the reduction in sensitivity across all axes.

HEAD UP DISPLAY (HUD) - SETTINGS - RUDDER LOCK

CHRONO
TOUCHPAD
PRO AIM
RUDDER LOCK ✓
AUDIO
THUMB WHEEL
HAPTICS
PERFORMANCE
LIGHTING

⮌ RUDDER LOCK

ENABLE

DISABLE

ENABLED

Rudder lock blocks the input from the twist action of the stick. This can be used in situations where yaw control is not required, or if the stick is being used in conjunction with a set of Rudder Pedals.

HEAD UP DISPLAY (HUD) - SETTINGS - AUDIO

CHRONO
TOUCHPAD
PRO AIM
RUDDER LOCK
AUDIO ✓
THUMB WHEEL
HAPTICS
PERFORMANCE
LIGHTING
FIRMWARE

⇄ AUDIO

GAME VOLUME ✓
MIC MONITORING
MIC MUTE
EQ MODES

⇄ AUDIO
GAME VOLUME

100%

50 ●

0%

⇄ AUDIO
MIC MONITORING

HIGH

5 ●

LOW

⇄ AUDIO
MIC MUTE

MUTE
UNMUTE

MIC MUTED

⇄ AUDIO
EQ MODES

SIGNATURE SOUND
SUPERHUMAN HEARING
BASS BOOST
BASS / TREBLE BOOST
VOICE BOOST
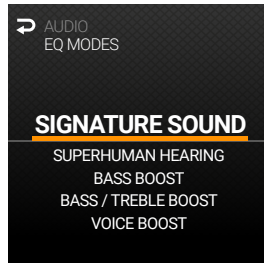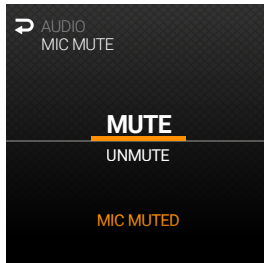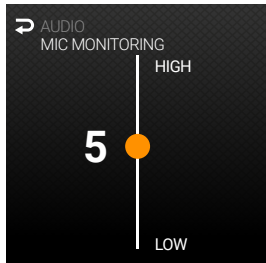
Adjust Game Volume, Mic Monitoring and Mic Status without pausing your flight. Enhance your experience by choosing one of 5 Turtle Beach Audio presets, including Superhuman Hearing.

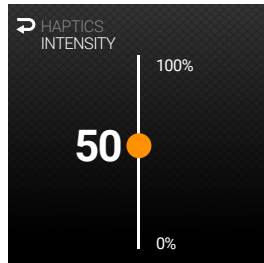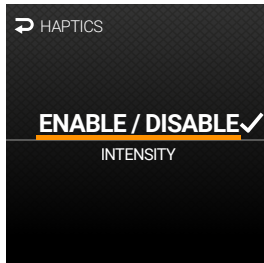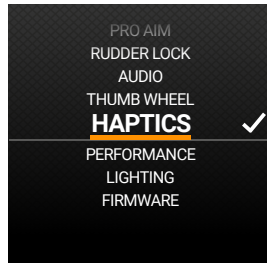## HEAD UP DISPLAY (HUD) - SETTINGS - THUMB WHEEL
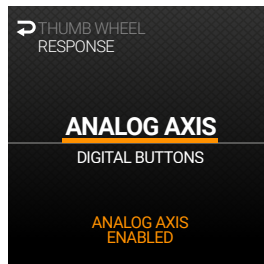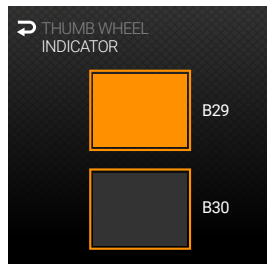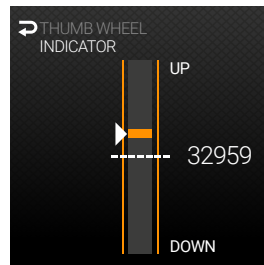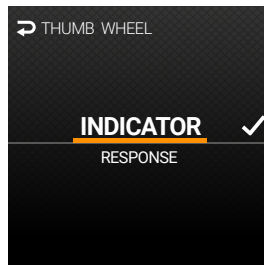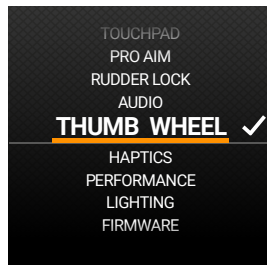
This feature gives you the ability get live feedback from the Thumb Wheel via the **Indicator** option and input preference via the **Response** option.

The Thumb Wheel comes in two versions:

- **ANALOG AXIS** — Gives precision control for aircraft that use wheel based trim controls.
- **DIGITAL BUTTONS** — The wheel will output a button pulse depending on what direction it is moved in. Ideal for aircraft that use button based trim controls, or for swapping between weapons and mining tools in space sims.
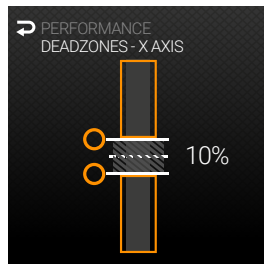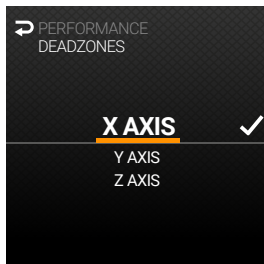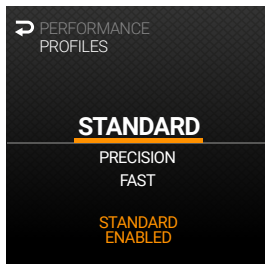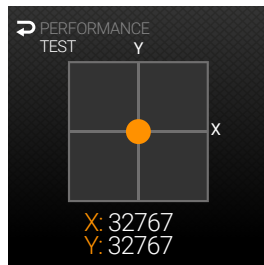
HEAD UP DISPLAY (HUD) - SETTINGS - HAPTICS

PRO AIM
RUDDER LOCK
AUDIO
THUMB WHEEL
HAPTICS ✓
PERFORMANCE
LIGHTING
FIRMWARE

⮐ HAPTICS

ENABLE / DISABLE ✓

INTENSITY

⮐ HAPTICS
INTENSITY

100%

50 ●

0%

Enable/disable and adjust the intensity of haptic feedback through the stick handle.
Intensity ranges from 0% to 100%

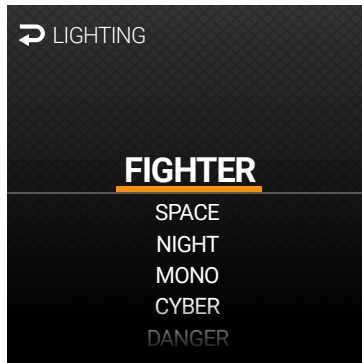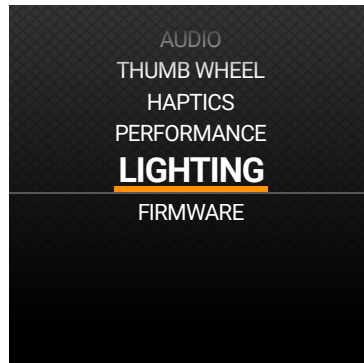# HEAD UP DISPLAY (HUD) - SETTINGS - PERFORMANCE
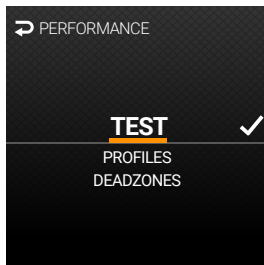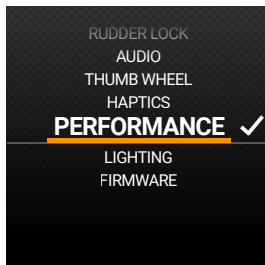
Performance gives you the ability get live feedback from the stick via the **Test** option, adjust axis response curves via the **Profile** option and set Axis deadzones via the **Deadzones** option.

Profiles come in three versions:

- **STANDARD** — Unaltered input data for true 1:1 control.
- **PRECISION** — Make fine adjustments with larger movements ideal for tense landings.
- **FAST** — Quick snappy movement ideal for arcade style control.

Deadzones can be individually set for the X, Y and Z axis.

HEAD UP DISPLAY (HUD) - SETTINGS - LIGHTING

AUDIO
THUMB WHEEL
HAPTICS
PERFORMANCE
LIGHTING
FIRMWARE

⮐ LIGHTING

FIGHTER
SPACE
NIGHT
MONO
CYBER
DANGER

Customize the look of the product by selecting from a range of colour themes. Create custom lighting settings in the VelocityOne Flight Hangar Desktop App.

HEAD UP DISPLAY (HUD) - SETTINGS - FIRMWARE
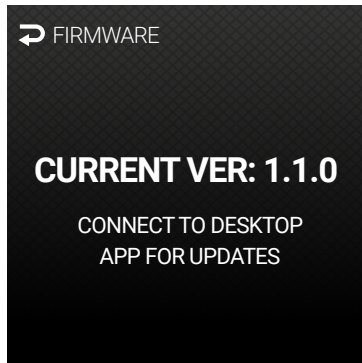
FIRMWARE

⮂ FIRMWARE

CURRENT VER: 1.1.0

CONNECT TO DESKTOP
APP FOR UPDATES

Check the current installed firmware version. Firmware updates are performed through the VelocityOne Flight Hangar Desktop App.

SYSTEM SETUP - VELOCITYONE FLIGHT HANGAR DESKTOP APP
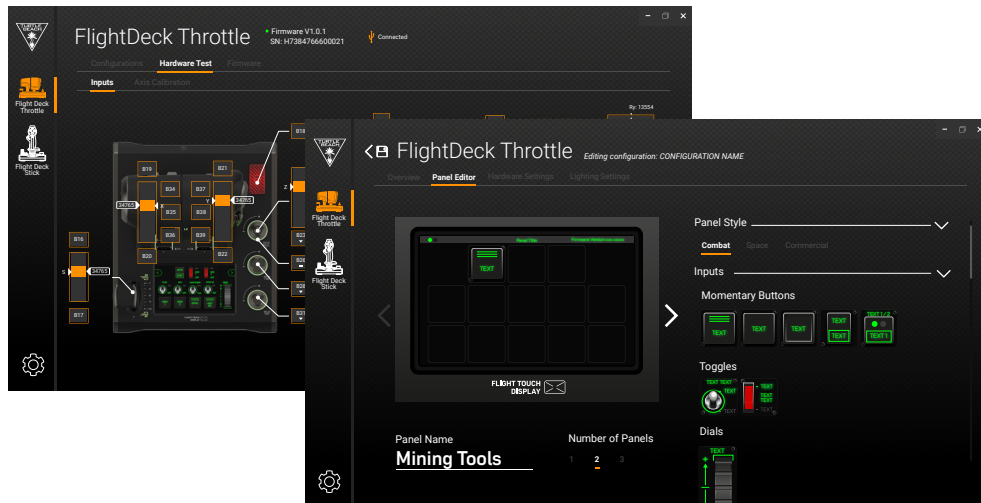
Access the full feature set of VelocityOne Flightdeck with the Flight Hangar desktop software. Available on the Microsoft Store, Hangar allows you to customize, update and change settings on the Flightdeck, such as:

- Create and swap configurations
- Customize, edit and create Flight Touch Display and HUD control panel layouts
- Adjust axis sensitivity and performance
- Assign Pro Aim functions
- Change lighting settings
- Input testing
- System calibration
- Manage firmware updates

These settings may also be accessed directly using the HUD menu on the Stick unit, and the Flight Touch Display on the Throttle unit. Firmware updates can only be performed through VelocityOne Flight Hangar Desktop Software.

Any questions? Des questions? For setup videos and more, visit **www.turtlebeach.com/support** and look for **VelocityOne Flightdeck** in the **Simulation** category.

Warranty information

For warranty information and service,
please visit **www.turtlebeach.com/international-distributors** .

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. For complete details please visit **www.turtlebeach.com/international-distributors** . To make a warranty claim in Australia during the Warranty Period, Purchaser should contact the VTB repair centre: **Tecworks International Pty Ltd, 13 Distribution Place, Seven Hills NSW 2147, Tel: 1300 074 512**