



★ KEY FEATURES

➤ Feels like a real followspot

At the heart of Falconer is a genuine broadcast fluid head, chosen to give the smooth, weighted movement of a traditional followspot. Adjustable pan and tilt drag lets each operator set exactly the resistance they prefer. Every movement reaches the fixture with very low latency, so the beam responds as naturally as a light in the hand. Experienced followspot operators feel at home from the very first cue.

➤ One operator, many lights

In a Multi-Spot setup, a single operator can drive several fixtures at once, all following the same performer. Patch an unlimited number of fixtures and choose which ones follow the action, with up to 36 active fixtures recommended at a time. User-definable groups make it quick to switch between front light, back light or the whole rig. One base station can light a performer from every angle at once.

➤ Every control at your fingertips

Two mirrored handles each carry a motorised fader, eight RGB-backlit preset buttons, a clickable encoder and two multifunctional buttons. Their geometry is modelled on broadcast camera handles and game controllers, so every control is within reach without letting go. Each preset button lights in its stored colour, so the right look can be found at a glance. Faders, encoders and buttons can be mapped to the functions each operator uses most.

Falconer is a remote followspot control system based on a camera remote fluid head (broadcast-style). It is designed to feel like a real followspot, fully ergonomic with a natural, tactile feel, while giving an operator low-latency, direct control of one or more moving-light fixtures from a single base station.

Traditional followspotting relies on an operator physically holding a light and following performers by hand, often from difficult or dangerous rig positions for long periods. Falconer moves that control off the truss: a camera, mounted on an EagleStrike or on the new standalone Horus camera fixture, feeds video back to an operator who can be anywhere, including out of sight of the stage entirely, and who can assign moving lights to follow what the camera sees. The name follows Ayrton's EagleStrike naming family: a falconer is the handler who directs a bird of prey, which fits neatly with the "Eagle" lineage. Horus continues that theme, named after the Egyptian god traditionally depicted as a falcon.

➤ Precise 3D calibration

Falconer calibrates every fixture in real 3D space using just four reference points marked on the stage. Once calibrated, two or more fixtures track the same point together, so every beam lands exactly where the operator is aiming. For larger rigs, fixtures can be calibrated simultaneously from the lighting console. Calibration is stored in the show file, so moving to a new venue is simply a matter of loading a different show.

➤ Rig your fixtures anywhere

Because Falconer calibrates in true 3D space, fixtures can be rigged in any position and at any angle to the stage. Hang them on a circular truss for a show in the round, at 90° or 45° to the stage, or on a diagonal truss that runs high at one end and low at the other. Each fixture's real position and orientation is calculated during calibration, so every light finds the same target wherever it hangs. The lighting designer keeps complete freedom over the rig, and Falconer adapts to it.

➤ A clear view in any conditions

The 18.5" Full HD touchscreen runs at very high brightness, so the image stays clear even in daylight at outdoor festivals. A freely adjustable mount and an included sunshade suit both standing and seated operation. Infrared mode switches the camera to black and white for blackouts and very low-light scenes. Whatever happens on stage, the operator never loses sight of the performer.

To use the Falconer system, each Falconer base station must have at least one compatible camera device patched into the system: either an Ayrton fixture with an integrated camera, such as EagleStrike, or an Ayrton Horus camera.

HARDWARE SPECIFICATIONS

BASE STATION	
Fluid Head	- Damped, balanced movement using a pan/tilt encoder with adjustable drag and detachable arms - A genuine broadcast remote-camera fluid head, giving smooth, responsive movement close to the feel of a traditional followspot.
Touchscreen Monitor	- For settings and UI 18.5" Full HD screen at very high brightness for outdoor/festival use 1 freely adjustable mount for standing or seated operation 1 sun shade accessory included with every unit
Handles	2 units, each with: 1 motorised fader, 8 RGB backlit preset recall buttons, 1 clickable encoder, and 2 multifunctional buttons - Handle geometry, including fader angle, button spacing and distance to palm, is deliberately modelled on broadcast camera operator handles and game controllers, so an operator can reach every control without letting go.
Mounting Points	2 × 10 mm (M10) mounting points (compatible with common grip accessories such as magic arms)
Handle Details	Coded left and right handles, recognised on either port. The 5-pin XLR is wired so a fixture cannot be damaged if connected by mistake. Handle firmware updates automatically at boot.

PROCESSING UNIT	
Housing	The processing unit is housed in a square rear enclosure.
Connectors	- All connectors are located on the underside of the unit. - Clearly labelled for fast, error-free connection by any member of the crew.
Processing	Designed to support 36 active fixtures, with additional processing capacity in reserve.

CAMERA / VIDEO INPUT	
Standard	NDI
Compatible Cameras	- Enclosure with Camera Assembly: 042845 - Horus: 029410
Resolution	Supports all standard resolutions up to 3840 × 2160
Frame Rate	Up to 60 fps
Latency	~40 ms (one frame when using 25 fps)

POSITION	
Fixtures	Patch an unlimited number of fixtures and choose which ones follow the action. We recommend up to 36 active fixtures at a time, but Falconer sets no fixed limit.
Universe	Unlimited universe count (sACN / PSN).

CONNECTIONS	
AC Power Input	AC 100–240V~, 50/60 Hz powerCON TRUE1 input and output
User Interface Monitor	HDMI
USB Touchscreen Out	USB-A (A-to-B cable)
USB-A	1 separate rear USB (USB-A) port is used for backup/data access. - USB-A port for software updates and saving show files
Left Handle Interface	5-pin XLR connector (data and 12 V DC, handles only)
Right Handle Interface	5-pin XLR connector (data and 12 V DC, handles only)
Monitor Power	3-pin XLR, 12 V (locking 5 mm input on monitor)
NDI Video (Camera) In	1× etherCON socket (100/1000 Mbit)
Ethernet Port (sACN, PSN)	1× etherCON socket (100/1000 Mbit)
Front Charging Port	USB-C, 65 W, charge-only
USB-C	1 front-mounted charging port rated at 65 W. The port is charge-only, so connected devices such as phones, tablets or monitors cannot interfere with the system.

ELECTRICAL	
AC Power	100–240 V AC nominal, 50/60 Hz
Power Supply Unit	Auto-ranging electronic switch mode with active PFC
Maximum Power Consumption	100 W
Typical Power Consumption	50 W

THERMAL	
Max Ambient Temperature (Ta Max)	45°C (113°F)
Min Ambient Temperature (Ta Min)	0°C (32°F)

HARDWARE SPECIFICATIONS

CAMERA	
Camera Route	▪ Mount a camera on an existing EagleStrike ▪ Or use Horus, a standalone Ayrton camera fixture (see Horus Spec Sheet)
Supported products	▪ Enclosure with Camera Assembly (042845) ▪ Horus (029410)

CONSTRUCTION	
Colour	Black (carbon)
Materials	▪ Skeleton made of steel metal plates ▪ Moulded covers in self-extinguishing fire retardant ABS PC (VO class)
Protection Rating	IP20

ENVIRONMENTAL	
IP Rating	IP20
Estimated embodied carbon including: ▪ A1 – Raw materials of fixture and packaging ▪ A3 – Product manufacturing	TBA
Recycling options	Packaging widely recyclable. Cardboard is made of recycled pulp*.

Our Environmental Commitment



* Up to 92%

COMPLIANCE	
EU (EMC & LVD)	▪ EMC Directive 2014/30/EU ▪ LVD Directive 2014/35/EU
US (Safety & EMC)	▪ UL 1573 ▪ FCC Part 15, Subpart B: 2024
Substance Regulations	▪ RoHS ▪ REACH ▪ CP65
Declarations	Scan the QR code page 4

WARRANTY	
Falconer	2 years

From date of invoice

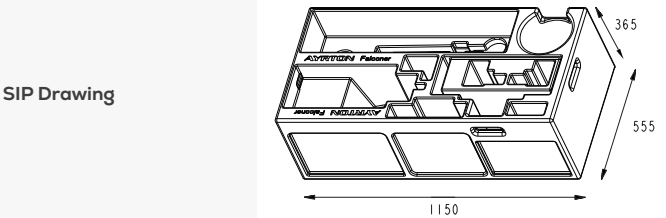
PHYSICAL	
Falconer Base Station	
Length	740 mm (29.13 in)
Height	1465 mm (57.67 in)
Depth	598 mm (23.54 in)
Weight	21.8 kg (48.06 lb)

The system ships on a standard camera tripod. The head/monitor assembly attaches with a single screw, so it breaks down into three main parts (tripod, head unit, monitor) for transport. It can also be mounted on any standard camera support fitted with a 100 mm half-ball receptacle.

Each unit includes a sun shade accessory and a foam/sip insert.

A flight case is not included.

Shipping Dimensions	
Length	1165 mm (45.86 in)
Height	450 mm (17.72 in)
Depth	570 mm (22.44 in)
Weight (excl fixture)	67 kg (147.71 lb)
In SIP Dimensions	
Length	1150 mm (45.27 in)
Height	365 mm (14.37 in)
Depth	555 mm (21.85 in)
Weight (excl fixture)	45 kg (99.20 lb)



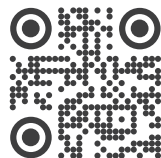
PRODUCT CODES	
Falconer	029420
Enclosure with Camera Assembly	042845
Horus	029410

SOFTWARE SPECIFICATIONS

PLATFORM	
Operating System	Runs on Linux, with fast boot and custom Ayrton software.
User Interface	- Navigation menu on the left (tap the Ayrton logo to open it), parameter controls on the right. - Crosshair display shows where the fixture is pointing, including x/y position, dimmer and other live data. - Sensitivity settings adapt control response to different throw distances. - On-screen keyboard for labelling, and a preset system covering colour, zoom, iris and other parameters. - A dedicated settings page controls menu opacity and general look-and-feel, and shows every fader/button assignment together in one place. - The operator can choose whether each parameter is controlled by the console or the base station. - Access control: the touchscreen can be locked with a User PIN, and Operator Mode switches to a restricted control set; returning to full System mode requires the User PIN.

SUPPORTING DOCUMENTS

Manual
Quick Guide: One-to-One
Quick Guide: One-to-Multi-Spot
GDTF Profile
DMX Chart
Software
Warranty



SYSTEM MENU	
System Settings	The first step in the on-screen menu is System, which covers two things: - Show files: save and load all settings for a given setup. - Network/IP settings for both the sACN control data and the NDI camera feed.
Show Files	- Calibration data is stored in the show file, so switching between stages or venues only requires loading a different show file. - A ready-made Sample Show is included. It cannot be overwritten, but can be copied as a starting point. - Quick start guides are available for One-to-One and Multi-Spot setups.

FIXTURE MENU	
Base Station	- Can control fixture parameters autonomously - Or combine control with a lighting console via a dedicated control universe per fixture (set to "-1" to disable console control entirely)
Control Fixture	One per attached fixture: 5 channels reserved, 2 in use (control mode and Z-Offset).
GDTF	- GDTF import is supported for fixture data. Profile accuracy depends on the GDTF file supplied by the fixture manufacturer. - Controllable parameters based on the GDTF file definition: cyan, magenta, yellow, CTO, colour wheel 1, colour wheel 2, tint, dimmer, iris, zoom, focus, gobos, frost and framing
Brand compatibility	Works with any GDTF fixture, provided the camera fixture is an Ayrton fixture or Horus, so Falconer can be added to an existing rig without replacing any lights.
Control Modes	Four control modes per fixture, switchable from the console via the control-fixture channel: - Base Station (full control) - Pan/Tilt Only - Pan/Tilt + Mapped - Full Console Control.
sACN Universe	Falconer reads all 512 channels of the console's sACN universe and resends them at priority 110 (above the sACN default of 100), merging console and base-station data according to each fixture's control mode. Priority is set per universe, not per channel, for compatibility with nodes and fixtures.
Console Handoff	Can be split per parameter, for example with the operator keeping pan/tilt only while colour and gobo are driven from the console ("mapped mode"), or any other custom split of fader-mapped parameters.
Safety Behaviour	If the operator loses control of the primary fixture to the console, the system automatically dims and locks pan/tilt on all connected fixtures, shown by a "light off / no pan-tilt" icon, as the operator no longer has a visual reference. The dimming time is adjustable in Settings.

SOFTWARE SPECIFICATIONS

CAMERA MENU	
Zoom and Focus	Including autofocus
Exposure	Including an auto-exposure option
Infrared (IR) mode	Switches the camera to black-and-white infrared for blackout/very low-light situations, common on large stages and in theatre
White balance, and image flip	To match how the camera is physically mounted/oriented.
Camera control	Runs over NDI and VISCA-over-IP

PRESET & GROUPS MENUS	
Presets	▪ User-definable presets for colour and beam parameters, for recall of looks and/or positions, including a colour picker with reusable "favourites" swatches. ▪ Presets can be assigned to preset buttons on the handles and on the touchscreen; assigned buttons are RGB backlit to match the programmed colour, so an operator can find the right preset at a glance. ▪ Presets can include fade-in and fade-out times, and can be set to Hold, Fade Out or Snap to Zero when deactivated
Groups	User-definable groups containing a fixture or combination of fixtures, for easy recall of different fixtures or fixture combinations.

SYSTEM MODES	
Two levels of complexity	
One-to-One	1 base station → 1 Ayrton primary fixture. Quick, simple setup.
Multi-Spot	1 base station → multiple fixtures (e.g. one from front, one from back)

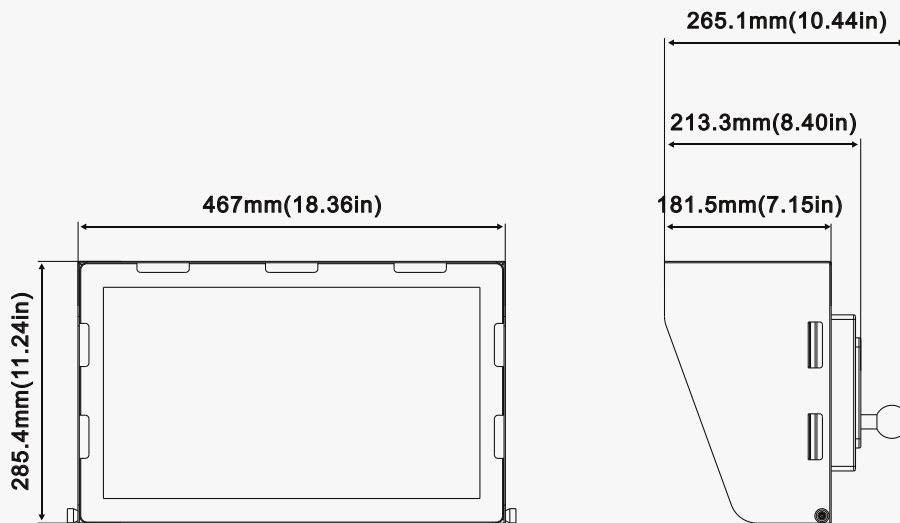
CALIBRATION MENU	
Method	▪ Four reference points, at least 2m apart, around a freely chosen origin. Distances in metres or feet. ▪ For each fixture, zoom and iris are set to their tightest values for accuracy, then the fixture is aimed at each point in turn and its position recorded, in any order. Falconer then calculates the fixture's real 3D position and orientation. ▪ Best results with a fixture tilt of 25–30° or more. Two or more calibrated fixtures track the same point together.
Calibrate with Console	For larger rigs, an alternative "calibrate with console" workflow lets multiple fixtures be pointed at the same four points simultaneously from the lighting console, which is much faster than calibrating one by one from the base station.
Z-Height & Z-Offset	▪ A user-definable Z-Height (on the Z-axis) lets the spot target head height or scenery rather than the floor, and can be mapped to a fader. ▪ Additionally, each fixture can be fine-tuned by ± 2.5 m from the Z-Height, from Falconer or from the console. ▪ With an operator in control, there is no need for detailed 3D data for every riser height: the operator compensates in real time, in addition to any fixed Z-Height.

ADVANCED MENU	
sACN	▪ Autonomous output of full fixture controls via sACN. ▪ Combined output with lighting console controls via sACN
PSN	▪ PosiStageNet (PSN) input and output for interoperability with third-party control/tracking systems ▪ PSN input, e.g. to track moving trusses/rigging and keep calibration live
Universe	Unlimited universe count (sACN / PSN)

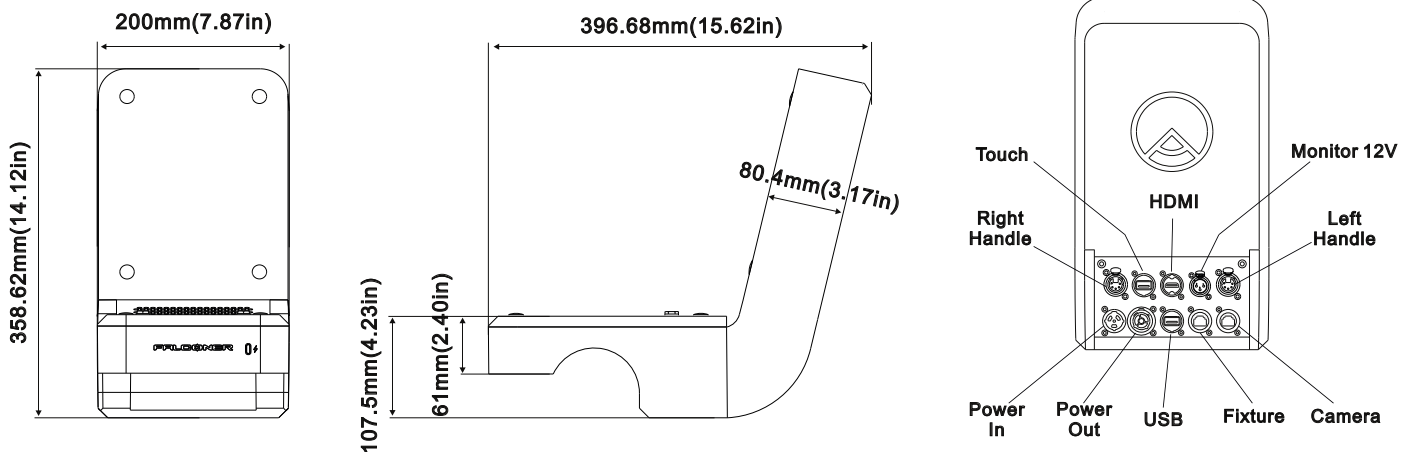
FIXTURE LIBRARY	
Fixture Data	Import GDTF for fixture data
Library	Fixture libraries are built from each manufacturer's GDTF files

TECHNICAL DRAWINGS

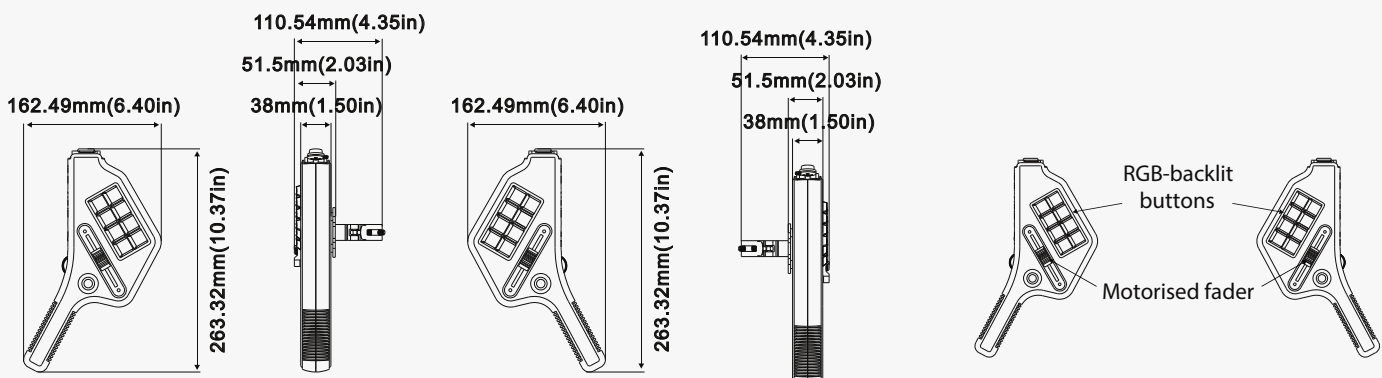
TOUCH SCREEN DISPLAY DIMENSION



FALCONER DIMENSION



RIGHT/LEFT HANDLE DIMENSION



⚠️ DISCLAIMER

Errors and omissions for all information given in this specification sheet are possible. All information is subject to change without prior notice.