

Agito – Modular Dolly System



AGITO

MODULAR DOLLY SYSTEM

INTRODUCTION TO AGITO

AGITO IS THE WORLD'S FIRST MODULAR DOLLY SYSTEM.

AGITO offers multiple configurations to suit your filming needs, it's the Swiss Army knife for film-makers. As a free-roaming remote dolly system, the AGITO can create smooth camera movements up to two metres in height. This single radio controlled camera system can achieve the same movements as most of the equipment on the market, including rickshaws, jibs, dollies, sliders and tracking vehicles. It puts them all into one compact package that is easy to set up and operate. The AGITO is fast, accurate and repeatable, by using precise encoded motors that have smooth and accurate control at any speed. The simplicity of the system helps reduce production costs making the AGITO camera dolly the most affordable way to capture high-end cinematic movement.

No two jobs are the same, so AGITO was built to be able to tackle many different or unusual scenarios. It is application-specific, adjustable and flexible enough to handle the users creative requirements and has been developed to be a fully modular dolly system capable of working both on track and free-roaming.

By separating the drive ends from the main chassis it allows them to be swapped out depending on use, expanding the AGITO's potential. The modules take seconds to swap out and can easily perform the same tasks as various track and jib equipment without an excessive setup time.



Commonwealth Games 2022, Birmingham

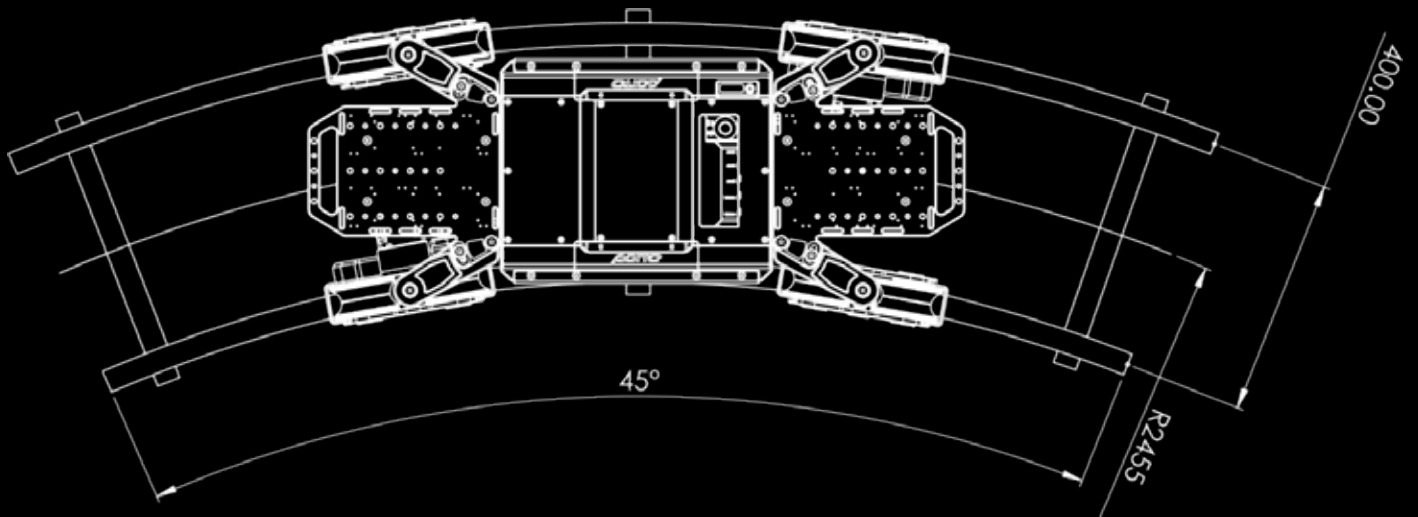
TRACK OR FREE – YOUR CHOICE

Thanks to the AGITO's unique modular design, you can swap out the drive ends with ease, without needing to modify any other part of the setup. That means you could be shooting on a track based system one minute, to being completely free-roaming the next. There's no need to strip down the system and rebuild it on another rig, saving crucial time and effort on set.

HIGH OR LOW – YOUR CHOICE

There is also the ability to customise the mounting options for the AGITO so you have the ability to vary shots, endlessly. With capabilities for any height between ground level, up to 2m or even higher...

The AGITO provides a solid platform to build any kind of camera rig. Whether you want to raise the camera up high, or if you want to get it super low, the options are all there to help you get smooth and solid footage. Please ask us for further info on how we can help you achieve your specific requirements.



MODULAR RF

The RF on the AGITO is robust, however, we know that RF can often work in mysterious ways, so we have you covered. The AGITO features a removable RF module, so you can easily swap between frequencies or even use hard-wire or your own RF solution.

The modules available are:

- 869Mhz (EU, JP)
- 900Mhz (US, CAN)
- 2.4Ghz (Included as standard)
- RF Passthrough
- Other frequencies available on request

GENERAL SPECIFICATIONS

Model	AGITO CORE V1.1 (DIODE BOARD ENABLED)
System Voltage	48v DC
Current (AGITO Sports)	20A (typical) at 20Kg payload (40A Peak)
Run-time	30-240+ mins, depending upon operation.
Charging Time	45 mins approx.
Data Type / Baud Rate	RS-232 / 115200
Sound Level	Less than 70dba
Table	AGITO MASTER V1.0
Power Range	12-30v DC
Run-time	8+ hrs, depending upon operational settings and batteries used
Data Type / Baud Rate	RS-232 / 115200
Model	BATTERY V1.0
Chemistry	Lithium-Ion
Voltage / Capacity	48v DC / 99.9Wh
Charging Voltage	50.4v DC
Operational Ambient Temp. Range	0 - +50 °C
Storage Temperature Range	-20 - +50 °C (Ideal 22-28 °C)
Model	BATTERY V1.0
Chemistry	Lithium-Ion
Voltage / Capacity	48v DC / 99.9Wh
Charging Voltage	50.4v DC
Operational Ambient Temp. Range	0 - +50 °C
Storage Temperature Range	-20 - +50 °C (Ideal 22-28 °C)
Model	AGITO TOWER V1.0
Power Range	12-24v DC
Model	AGITO RF MODULE ENCLOSURE V1.0
Power Range	12v DC
Model	AGITO HUBBOX V1.0
Power Range	7-9v DC
Model	AGITO MAINS PSU V2.0
Input Voltage	110 - 264Vac (47-63Hz)
Primary Output Voltage	48Vdc
Secondary Output Voltages	12Vdc and 24Vdc
Efficiency	95%
Setup Rise Time	1800ms, 60ms at full load
Output Hold up Time	10ms (typical) at full load
Internal Fan - activation temp	30 °C
Inrush Current	60A @ 230Vac (typical cold start)

Module specific specifications are located in the relevant sections of this manual. Details quoted are for the most recent variant of the module, E&OE.

System Overview: Mounting Options



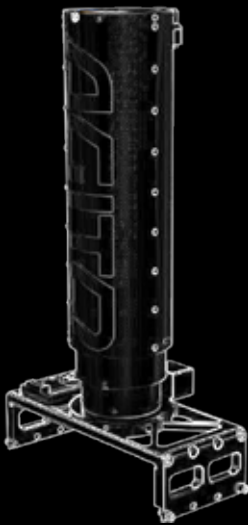
V-CON PRO

V-Con Pro is our low-level isolation mount, with a combination of vertical dampening and vibration isolation. V-Con Pro keeps the camera low to the ground and is ideal for high speed, dynamic moves when a low lens height and low centre of gravity are important.

KEY FEATURES

Designed for camera/gimbal packages of up to 32Kg (70.5lbs).

TOWER



AGITO Tower is our remote pedestal column, which enables on-shot height adjustment.

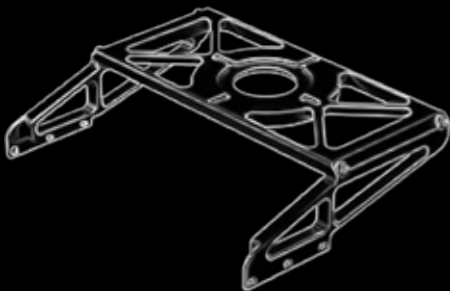
A Quick Release plate is included with the Tower which has mounting points for all major remote heads (ARRI SRH-3, Shotover G1, Newton, Freefly Movi, DJI Ronin)

The device is powered via a V-lock battery plate located on the base plate. It is also possible to operate AGITO Tower as a stand-alone unit, when paired with the AGITO Hub using an optional upgrade.

KEY FEATURES

The pedestal column has 700mm (27.5 inches) of travel from a starting height of approximately 750mm (29.5 inches) subject to Drive-end (see "Specifications" on page 76). It has been designed for camera/gimbal packages of up to 22Kg (48.5lbs).

MITCHELL MOUNT

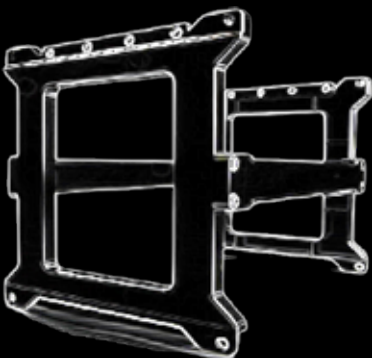


Provided as part of the Trax bundle, Tower package or available as an optional extra the Mitchell Mount is a non-isolated fixture.

KEY FEATURES

Designed for camera/gimbal packages of up to 40Kg (88lbs).

STACKING RISERS



Provided in two versions, 6 & 12" (150 & 300mm) these risers are compatible with all AGITO mounting options.

E-STOP

INTRODUCTION TO E-STOP

As a safety precaution AGITO is equipped with an Electronic Stop function, known as E-Stop. This is different to the main power switch (emergency stop) that is present on the AGITO Core. There are several methods of applying the E-Stop:

- Switching the “Function Switch” on the MASTER Controller (when enabled)
- Pressing the HUB E-Stop button when using Pedals
- Using an external input device connected to MASTER Aux 2 port (see pin-outs)

THE E-STOP FUNCTION IS PROGRAMMED TO APPLY BRAKING AS QUICKLY AND SAFELY AS POSSIBLE WITH A HEAVY PAYLOAD ATTACHED WITHOUT A DANGEROUS LOSS OF CONTROL THAT COULD RESULT IN MORE UNPREDICTABLE RESULTS

Generally braking is activated whenever the throttle is applied in the opposite direction to your direction of movement. Alternatively using the DEC rate control dial, you can also adjust the behaviour of how the AGITO drifts to a stop when the throttle is released entirely.

IT IS CRITICAL THAT ALL OPERATORS UNDERSTAND THE BRAKING DYNAMICS OF AGITO. ALWAYS TEST HOW CHANGES TO MODE SETTINGS AFFECT THESE DYNAMICS AND ALWAYS ENSURE THAT AGITO IS OPERATED IN A CONTROLLED ENVIRONMENT

E-STOP: MASTER CONTROLLER FUNCTION SWITCH

Using the Drive Control menu, it is possible to assign E-Stop to the MASTER Controller “Function Switch”. When in Sports mode this feature is displayed, when assigned, on the main screen.

Activation of the E-Stop function is then made by moving the switch either up or down, see “Control Mapping” on page 20.



E-STOP: EXTERNAL BUTTON VIA HUB-BOX

When using the AGITO Hub, the E-Stop button must always be connected. Activation of this button will activate E-Stop no matter how the Function Switch menu has been set within the MASTER Controller.



E-STOP: EXTERNAL INPUT VIA 3RD PARTY DEVICES

If required, it is possible to create your own switch. A simple closed circuit between pins 7 & 10 of the MASTER Controller AUX 2 port will activate E-Stop. See the pin-out diagrams for full details and “Control Mapping” on page 20 for correct configuration.

ALWAYS TEST THE FUNCTION OF THE E-STOP PRIOR TO OPERATION

GENERAL SAFETY FEATURES

- Powering off the Master results in the chassis coming to a controlled stop on level ground.
- Loss of RF signal results in chassis coming to a controlled stop on level ground.
- Entering the MENU will also stop the chassis and lock its movement until exiting.

Operator Modes

STANDARD OPERATOR MODE (SOM)

All users of the AGITO system can access Standard Operator Mode, also referred to as “SOM”. Basic operational training is supplied when a system is purchased or by attending an AGITO Academy certified course. In this mode, the advanced features of the AGITO system are restricted in the interests of safety.

The System is limited to the following speeds:

Set-up	RPM Limit	MPH Limit	Km/h Limit	M/s Limit
Sports	1400	12.1	19.5	5.4
Sports + Monster Wheels	1400	14.8	23.8	6.6
Sports + Tower	800	6.9	11.2	3.1
Sports + Tower + Monster Wheels	800	8.4	13.6	3.8
Trax* + Tower	1400	7.0	11.3	3.1

* Speeds quoted for Trax drive-ends version v1.1

ADVANCED OPERATOR MODE (AOM)

THE USE OF ADVANCED OPERATOR MODE IS RESERVED FOR EXPERIENCED OPERATORS WHO HAVE UNDERGONE ADDITIONAL TRAINING

Only users who have attended advanced training can access Advanced Operator Mode, also referred to as “AOM”, using their own individual PIN code. The purpose of this training is to give operators a greater understanding of the system and to ensure they have received a controlled introduction to the high speed operation of the AGITO system.

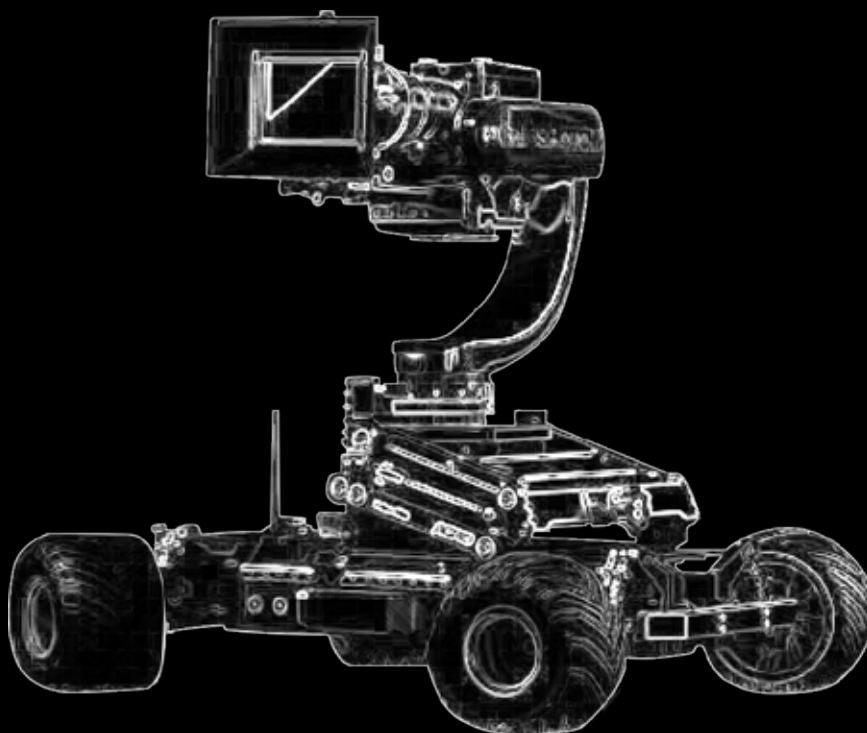
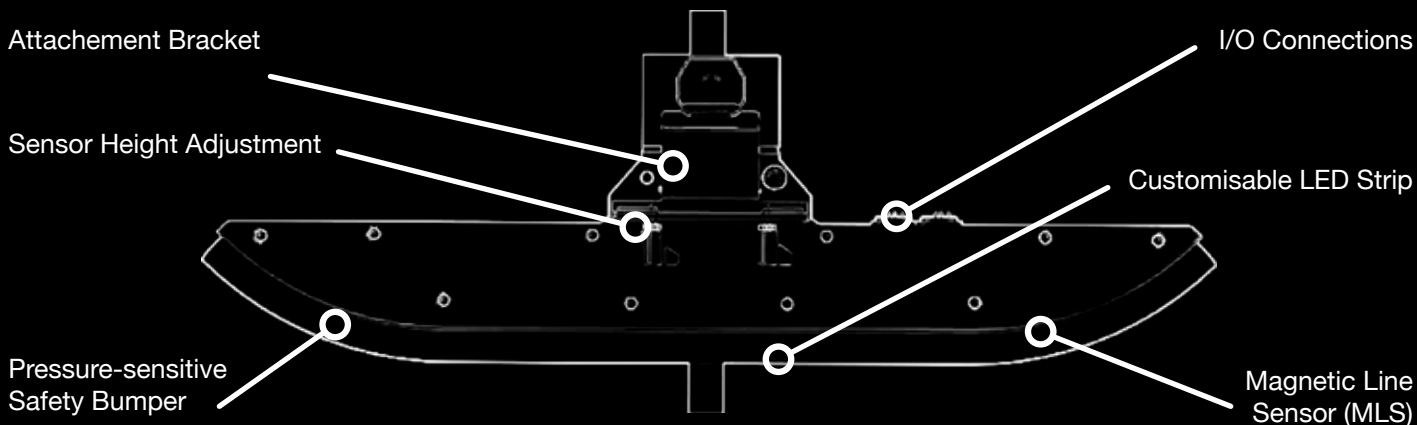
Enhanced operational training is available by attending an AGITO Academy certified course. In this mode, the full features of the AGITO system are available. The System no longer limited, allowing the operator to achieve the following speeds:

Set-up	RPM Limit	MPH Limit	Km/h Limit	M/s Limit
Sports	2500	21.7	34.9	5.4
Sports + Monster Wheels	2500	26.4	42.4	6.6
Sports + Tower	800 (Default)	6.9 (Default)	11.2 (Default)	3.1 (Default)
Sports + Tower + Monster Wheels	800 (Default)	8.4 (Default)	13.6 (Default)	3.8 (Default)
Trax + Tower	1400	7.0	11.3	3.1

MAGTRAX SENSOR BARS

AGITO MagTrax is a revolutionary new way to move cameras along a fixed path, these sensors attach directly to the AGITO Sports Drive ends and allow the system to reliably follow a magnetic strip that can be quickly and discreetly layed in a variety of different shapes. Please ask us for more details.

KEY FEATURES





Luna Remote Systems

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