



MÖVI

A STABILIZED GIMBAL BORN IN THE SKY REIMAGINED FOR THE GROUND.

Introducing a family of 3-axis digital stabilized camera gimbals, so advanced, they redefine the possibilities for camera movement. The heart of the gimbal is Freefly's proprietary high performance IMU and brushless direct drive system. The gimbal is 100% custom designed in-house by our engineering team. No compromises were made to accommodate off-the-shelf brushless motors, motor drives or IMUs. Creating the gimbal from scratch allowed Freefly to precisely execute our vision for the next generation of stabilized camera gimbals. In creating this camera gimbal, we aim to empower a new era of stabilized cinematography. Freefly MöVi - "The New Moving Picture."

Design & Performance – Lightweight, agile, rigid - these are the words you hear day in and day out at the Freefly research and development lab. Freefly began its business building aerospace and UAV products where every gram counts. We have carried this design ethos into our cinema products. In an industry where weight was once considered an advantage, we instead built one of the lightest, highest performance, cinema ready 3-axis gimbals the industry has ever seen. This allows the operator to run faster, move freely and capture more compelling footage than ever before.

SPECIFICATIONS

- HIGH PERFORMANCE IMU WITH BAROMETER, COMPASS AND GPS
- SILENT MOTOR DRIVE TECHNOLOGY
- DIRECT DRIVE BRUSHLESS MOTORS OPTIMIZED FOR MAX TORQUE DENSITY AND LOW WEIGHT

GENERAL	
SYSTEM TYPE	3-AXIS DIGITAL GYRO-STABILIZED
PAN RANGE	360° CONTINUOUS
TILT RANGE	+/- 180°
ROLL RANGE	+/- 180° (LIMITED BY MECHANICS ON CERTAIN GIMBALS)
SLEW RATES	0-150°/SEC
INTERFACE	BLUETOOTH CONNECTION TO WINDOWS ANDROID GUI

CONTROL MODES	
MAJESTIC MODE	STABILIZED WITH OPERATOR CONTROL VIA GIMBAL BASE
STABILIZED	STABILIZED IMAGE WITH NO OPERATOR INPUT
STABILIZED SLEW	STABILIZED WITH REMOTE OPERATOR
OFF	KILLS DRIVE TO GIMBAL AXES

ELECTRICAL & MECHANICAL	
WEIGHT	3.4LBS / 1.5KG
INPUT VOLTAGE	9-18V (3S OR 4S LIPO)
CONSTRUCTION	ALUMINUM / CARBON FIBER / STAINLESS STEEL
CAMERA TRAY DIMENSIONS	200MM(W) X 140MM(L) X 200MM(H)

FEATURES

MAJESTIC MODE

Majestic Mode allows for a single operator to intuitively control the pointing of the gimbal by moving the handles without compromising the stabilization of the image. The gimbal takes the operator's movements and intelligently converts them into stabilized pan and tilt movements. This allows for very low profile single operator setup and accurate framing in tight situations.

DRIFT FREE HORIZON

The proprietary control algorithms developed for the MōVI utilize a very high accuracy GPS. This GPS allows for acceleration correction when the gimbal is used outdoors and has a GPS signal. This feature is useful when used on cars and helicopters where sustained extreme accelerational forces can cause non-GPS aided systems to drift.

REMOTE FIRMWARE UPDATABLE

The MōVI stabilized camera system is remote firmware updatable. When Freefly adds a new feature on Friday night, you can be shooting with it on Saturday morning. As the system is used in varying cinema applications, Freefly is constantly inventing new solutions for the rigors operators face in using the system to execute demanding shots.

SHOT RECORDER

The system has the ability to record the exact camera position, height, camera pan, tilt and roll angle to assist the VFX team in post-production.

CUSTOM DIRECT DRIVE MOTORS

High torque and lightweight are two attributes that don't usually go together. When we started to design the MōVI system, we knew that no off-the-shelf motor could deliver the performance needed, while keeping the weight low enough to allow the system to be mobile, portable and agile. Drawing on years of brushless motor design experience, Freefly was able to create a remarkably lightweight motor that still has enough torque to handle larger camera packages.

LIVE WIRELESS TUNING & GRAPHING

A next generation stabilized gimbal deserves a fast, intuitive and user friendly GUI (graphical user interface). The MōVI features a real-time bluetooth connection to the gimbal, which outputs all pertinent performance data and allows for live adjustment of any of the gimbal parameters.

SILENT DRIVE

Capturing on-camera audio is no problem with the MōVI, as the system is virtually silent. Because the entire motor / drive system was designed in-house, we were able to reduce the noise frequency signature of the gimbal to a virtually inaudible level.

TRANSLATION COMPENSATION

The system features patent pending translation compensation, whereby the system will automatically adjust the camera angle to maintain a consistent frame. This is useful in situations where the camera will be moving so fast that no human operator could possibly keep up. The MōVI can accurately adjust the frame hundreds of times per second to keep the subject in frame as the camera translates.

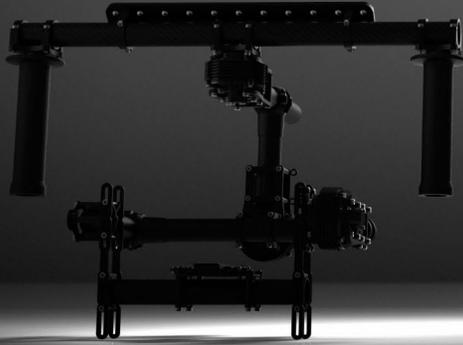
ADVANCED CINEMA FUNCTIONS

The MōVI has a host of advanced features designed to assist cinema professionals in executing complex shots.

USER ADJUSTABLE SHAKEY CAM

In some instances, camera movement / shake is a desirable aesthetic choice. The difficult part is quantifying the amount and type of 'shake' to effectively convey the emotion of the scene. The MōVI overcomes this limitation by allowing the user to define variable noise filters that mimic the user's movements. Being able to control the level of 'noise' is highly useful, as it can be difficult for a human operator to accurately maintain a consistent level of camera movement, especially while keeping a compelling frame. With the patent pending MōVI noise filter, the camera operator can focus on framing and the MōVI takes care of the rest consistently and repeatably.

MōVI M10



MōVI MR



FAQ

(frequently asked questions)

When will the MōVI M10, MōVI MR, MōVI M5 ship?

The MōVI M10 and MR ships next day and the MōVI M5 will begin shipping in the end of the first quarter of 2014.

What is the price of the MōVI M10 and MōVI MR?

Each of the MōVI M10 and MōVI MR is priced at \$14,995.

What are the differences between the MōVI M10 and MōVI MR?

The MōVI M10 or MōVI MR are similar with minor structural differences. The MōVI MR is optimized for use on a CineStar multi-rotor and is slightly lighter weight. The MōVI M10 has some features on the gimbal to make handheld operation easier. The MōVI MR can be used as a handheld gimbal and will include the accessories to convert it to a handheld gimbal. Additionally, the MōVI M10 can be used on a multi-rotor with the purchase of some optional mounting brackets.

What items come with the MōVI M10 package?

The MōVI M10 package comes with the following items: (1) MōVI M10; (2) Transmitter for dual operator use; (3) Batteries; (4) Battery charger; and (5) MōVI stand.

What items come with the MōVI MR package?

The MōVI MR package comes with the following items: (1) MōVI MR; (2) Batteries; (3) MōVI stand; and (4) Conversion kit for handheld use.

Should I purchase the MōVI M10 or MōVI MR?

It depends. If you think you will primarily be using the MōVI for aerial filming with some handheld use, we recommend purchasing the MōVI MR. If you will be using the MōVI for handheld use and will not be using it on a multi-rotor, we recommend purchasing the MōVI M10.

If I purchase the MōVI MR, can it also be used handheld?

Yes. The MōVI MR will include the accessories to convert it for handheld use.

If I purchase the MōVI M10, can I later use it on a multi-rotor?

Yes. The accessories to convert the MōVI M10 for use on a multi-rotor will be available as an optional add-on.

What does MR stand for?

MR refers to multi-rotor.

How much weight can the MōVI M10 and MōVI MR carry?

Each of the MōVI M10 and MōVI MR can carry up to 10 pounds of weight. Each of the MōVI M10 and MōVI MR can carry up to 12 pounds of weight.

What cameras have you tested on the MōVI M10 and MōVI MR?

We have tested the RED EPIC, RED Scarlet, Canon C500, Canon C300, Panasonic GH3, Black Magic Cinema Camera, Canon 1DC, Canon 5D Mark II, Canon 5D Mark III, and Sony FS100.

What is the biggest camera the MōVI M10 and MōVI MR can support?

We designed the MōVI M10 and MōVI MR to target a 10 pound payload. We have tested them with a RED EPIC with Canon Cine Primes and Compact Primes with great results.

What is the longest lens the MōVI M10 or MōVI MR can use?

We have tested the MōVI M10 and MōVI MR with up to 120mm focal lengths with very nice results. We believe an even longer lens is possible, but can become problematic to fit in the gimbal.

Can a single operator run the MōVI M10 or MōVI MR in handheld use?

Yes. There are several single operator modes. The primary one is called "Majestic Mode," which allows the user to pan and tilt the gimbal by moving the handles.

How do you configure the MōVI?

We have a wireless Bluetooth GUI that can operate on both Windows and Android, which allows you to easily and quickly configure all the parameters on the MōVI. The GUI also graphs all pertinent data from the MōVI, so you can monitor the performance real-time.

Can the MōVI be mounted to an Easyrig?

Yes. We have tested this and it works well.

Can the MōVI record the camera movement for the VFX team?

Yes. The MōVI can record the following parameters:

- Pan, Tilt and Roll Angle
- Height
- GPS Position
- Velocity (both vertical and topographical)
- Acceleration
- Temperature

Can the MōVI be mounted to a Steadicam?

Yes. A well set-up Steadicam arm does a great job of mitigating translational movement, while the MōVI does a great job of correcting angular error. They complement each other nicely.

What else can the MōVI be mounted to?

The MōVI is highly flexible and can be mounted to cars, boats, helicopters, planes, remote helicopters, bicycles, remote cars...almost anything. We find it is often easiest and quickest to just handhold the MōVI while riding in any of these vehicles.

How do you control focus, iris and zoom?

A remote wireless focus, iris, zoom device currently must be utilized. It is imperative that the inner gimbal is not touched during operation or it will disturb the stabilization.

How much do the MōVI M10 and MōVI MR weigh?

Each of the MōVI M10 and MōVI MR weighs a little more than 3 pounds.

How is the 12 pound weight capacity for the MōVI M10 and MōVI MR calculated?

The 12 pound weight capacity relates to the camera, lens and any accessories mounted to the inner gimbal. Additional accessories in excess of the 12 pound capacity can be mounted to the handles and outer frame.

How long will the MōVI batteries last?

The MōVI will come with enough batteries to power the system for an entire day of shooting. Each battery lasts for approximately 3-4 hours.

Is it difficult to balance the camera on the MōVI?

Balancing the gimbal requires a good understanding of the principals behind the gimbal's operation. Once the operator understands these concepts, balancing the gimbal is a straightforward process. Freefly will be releasing extensive instructional content to assist in teaching end users. Additionally, we have a user forum where information will be available.

Are there any distributors for the MōVI M10?

At this time, Freefly will be handling direct sales and support for the MōVI M10.

Are there any distributors for the MōVI MR?

The MōVI MR can be purchased directly from Freefly or through any of our multi-rotor distributors. A list of our multi-rotor distributors can be found at www.freeflysystems.com.

Where can I purchase the Freefly line of CineStar multi-rotors and accessories?

If you are interested in purchasing any of our CineStar multi-rotor products or accessories, please contact one of our multi-rotor distributors. A list of our multi-rotor distributors can be found at www.freeflysystems.com.

Can the MōVI MR be used on a multi-rotor other than the CineStar?

We have not tested the MōVI MR on a multi-rotor other than the CineStar. The CineStar is an integrated system optimized for aerial filming with the MōVI MR.

Where can the MōVI M10 and MōVI MR be shipped?

The MōVI M10 and MōVI MR can be shipped worldwide.

What is the MōVI M5?

The MōVI M5 is our smaller gimbal designed for DSLR sized cameras up to 5 pounds.

What is the price of the MōVI M5?

We anticipate that the MōVI M5 will be priced around \$5,000.

When will the MōVI M5 be released?

We will be releasing updated information on the MōVI M5 as soon as we have a firm release date. Our priority right now is delivering the MōVI M10 as quickly as possible. Subscribe to our MōVI email list through our website to receive the most up-to-date information on the MōVI M5.

What is the MōVI M20?

The MōVI M20 is our largest gimbal designed for cinema cameras up to 20 pounds.

What is the price and release date of the MōVI M20?

The price and release date of the MōVI M20 have not been set. Subscribe to our MōVI email list through our website to receive the most up-to-date information on the MōVI M20.

Will you be offering any MōVI demo days?

Yes. We plan to offer a few MōVI demo days around the USA. Subscribe to our MōVI email list through our website to receive information on demo days and locations.

How do I become a MōVI reseller?

If you are interested in becoming a reseller, please email support@freeflysystems.com.

Who should I contact for a press inquiry?

For press inquiries, email support@freeflysystems.com



For MōVI related questions and inquiries, please email: support@freeflysystems.com
For all other inquiries, please email: info@freeflysystems.com

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