

Multi Slider



User Manual

Version 0.1 draft

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1. Introduction



The Multi Slider is the world's first bendable camera slider. Developed by professional cameramen, the Multi Slider enables linear and curved camera tracks with one device. Within seconds the Multi Slider can be changed from a linear to a curved slider at any desired radius. This innovative camera slider can be controlled manually or by mobile app, which makes it a perfect fit for cinematographers and photographers using time lapse effects. Patent pending for the system.

Waterbird systems develops and produces innovative and lightweight camera equipment with the objective of finding easy and affordable solutions for filmmakers.



2. The Multi Slider

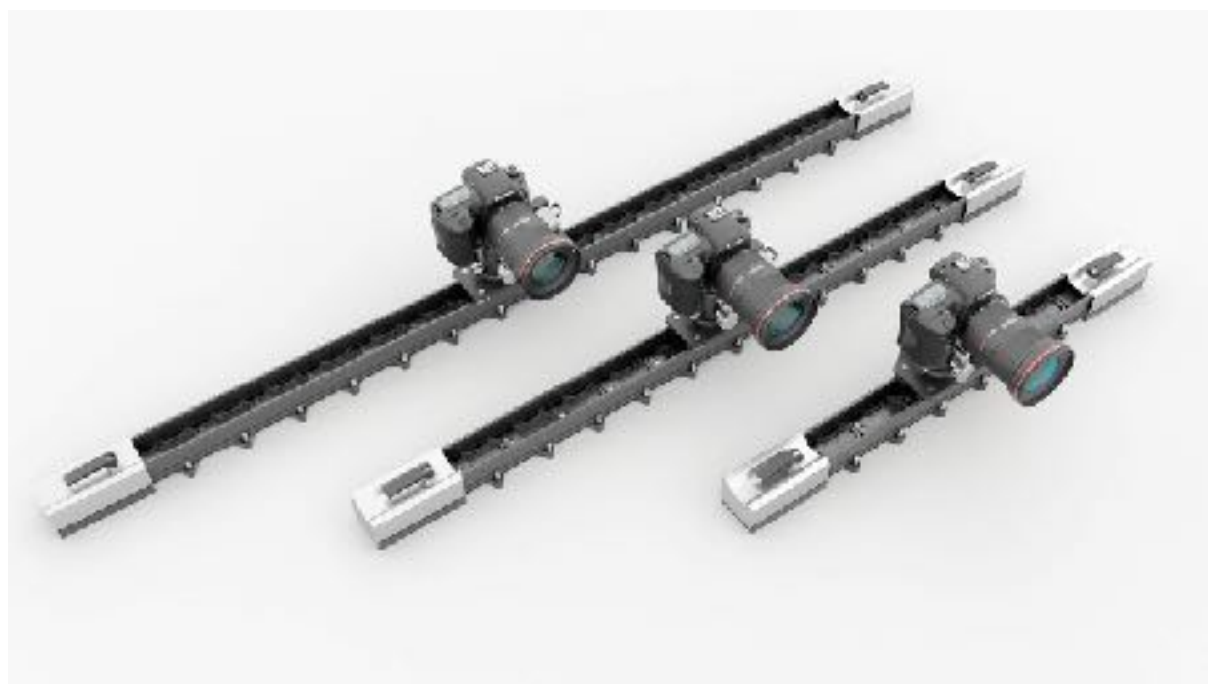
2.1. Technical Data

	Length	E f f e c t i v e Lenght	Weight
MS 150	150 cm 49 inches	120 cm 47 inches	3,200 g
MS 120	120 cm 47 inches	90 cm 35.5 inches	2,900 g
MS 80	80 cm 31.5 inches	50 cm 20 inches	1,500 g
MS 150 PRO	150 cm 49 inches	120 cm 47 inches	4,500 g
MS 120 PRO	120 cm 47 inches	90 cm 35.5 inches	3,800 g
MS 80 PRO	80 cm 31.5 inches	50 cm 20 inches	2,400 g

Temperature Range:	- 20° C to +50° C (-4° F to 122° F)
Maximum Relative Humidity:	90%, noncondensing
Width of all sliders:	70 mm
Height of all sliders:	65 mm
Payload Horizontally:	up to 8 kg
Payload Vertically:	up to 2.5 kg
Payload Upside down:	up to 2.3 kg
Speed:	20 sec. /meter
Max. radius for filming:	50 cm diameter, 25 cm radius



2.2. System Overview and Components



The Multi Slider is a flexible system with multiple components and segments that can be ordered in any length.

All Multi Slider systems include

- Rails, segments and brake cover: special composite plastic
- carriage: aluminum
- Threads for tripod mounting on the underside of each segment: UNC ¼ inch
- Screw for mounting a head or quick release plate on the slide: UNC ¼ inch

Only included with the Multi Slider Pro version, incl. control unit, camera cable, mobile app (no mobile phone included), motor, belt, timing belt pulley:

- Stepper motor: Nema 17
- Timing belt pulley: HTD 3M 11 mm, 16 cogs
- Timing belt: HTD 3M 6mm
- Control unit (see Control Unit User Manual)
- Mobile app: Android or iOS (see Control Unit User Manual)
- Available camera cables: Canon E3 (3/32" TRS), Canon N3, Nikon 10-pin/DC0, Nikon 3N/DC2, Nikon DC1, Olympus UC1, Panasonic 4-Pole/L1, Sony Alpha S, Sony Alpha S2

Optional:

- Battery pack: Built in rechargeable lithium-ion battery



2.3. Handling

Multi Slider Standard Series

The Multi Slider Standard Series is controlled manually. The camera needs to be moved by hand.

Multi Slider PRO Series

The Multi Slider PRO Series is motorized and is controlled by an app (Android or iOS). See Control Unit User Manual for details.

Radius Adjustment

CAUTION: Before adjusting the radius / bending the slider in any way, always release the brakes of the Multi Slider at both ends. Only bend with brakes opened. After bending to the desired radius or to a straight slider, fix the system by closing the brakes.



Break open



Break closed

The radius of any Multi Slider can be adjusted to a minimum of 25 cm for filming/ photographs. Don't bend the slider while the slide is being moved. For transport, the Multi Slider can be bent further to achieve a smaller pack size.





For a linear track, open both brakes of the Multi Slider and move the ends of the slider as far apart as possible, then close the brakes to fix the system.



Tracking shots with a transition from linear tracks into curved tracks are also possible. Open the brakes, adjust the Multi Slider as desired and close the brakes for fixation.



Each screw between the single segments of the Multi Slider can be fixed with an Allen key for additional fixation if needed. In general, closing the two brakes is enough to fix the system for filming / photographs.



Mounting

The space for mounting a camera head onto the slide is 8 cm x 10 cm. We recommend using the Multi Slider with a quick release plate offered by Waterbird systems.

The slider can easily be mounted on tripods. Each segment of the Multi Slider has a thread on the underside. Depending on the weight of the camera and the head used for filming, more tripods may be necessary. Always make sure that the balance point of the camera and head mounted on the slide is centered.





Vertical Operation

For vertical operation, keep in mind that the motor is able to lift a maximum of 2.5 kg (5.5 lbs). When mounting the Multi Slider on a wall, the camera head must be on the upper end of the slide, the motor on the lower end of the slide.



Outdoor Operation

Take care of the system when using outdoors. Don't use the Multi Slider underwater. Make sure there are no leaves or twigs, etc. between the belt and the rails, or in between the segments. Keep the Multi Slider clean. On uneven surfaces, use camera legs and tripods to balance the slider.



Individual Slider Length

The Multi Slider can be ordered in any length. Please contact info@waterbird.at if an individual length is required.



2.4. Cleaning and Maintenance

For cleaning use a cloth. For maintenance, apply a little grease to the brakes and axes of the segments from time to time.

2.5. Safety Instructions

- When carrying the slider, always grab the whole system. Never put fingers between the rails and the single segments. Fingers must be outside the rails to avoid getting pinched.
- Always lock the Multi Slider while transporting it. Give it a fixed shape and make sure that the shape isn't changed during transport.
- When moving the carriage, make sure you are not touching the rails, and that there are no other objects on the rails, segments or anywhere else on the system.
- Always initialize the home / end position after setting the radius.
- The system must not be operated by children.
- Do not use the Multi Slider in the water or during rain.
- Do not expose the system to unnecessary heat (sun, hotplate, open flame...)
- The system (UP TO MS 150cm) must be secured (mounted) at at least 2 points, for curves 3 points.



- Waterbird systems assumes no liability for broken camera equipment
- Do not hit the brake with the carriage as this will destroy the motor.
- Do not load more than the specified maximum weight.
- if the control unit is switched on and the motor is connected, the carriage must not be moved by hand.
- For manual use, the non pro version is suitable.
- When using the slider upside down, the maximum weight is 1.5 kg (3.3 lbs)
- When using the slider upside down, make sure no person is below it.
- When using the slider vertically, the maximum weight is 2.5 kg (5.5 lbs)
- Never use the system if you see any damage on the Slider or especially on the battery pack. If the battery pack is damaged do not try to use or charge it (risk of fire). Dispose at the nearest recycling center.

2.6. Troubleshooting

If you should encounter problems, please send us an e-mail at info@waterbird.at.