Lightweight Matte Box
LMB 4x5

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Imprint

For further assistance

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Scope

This User Manual applies to the following product: KK.0015177 LMB 4x5 Pro Set

Risk levels and alert symbols

Safety warnings, safety alert symbols, and signal words in these instructions indicate different risk levels:

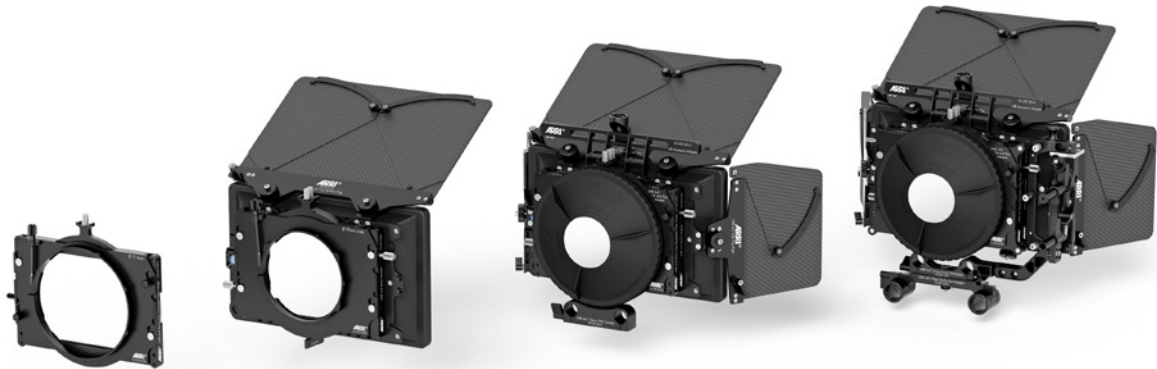| ⚠ CAUTION! |
|---|
| CAUTION indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. |

NOTICE
NOTICE banners indicate non-hazardous additional information and do not require safety alert symbols.

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1   Introduction

The modular matte box LMB 4x5 expands on the feature set and creative possibilities of ARRI's mechanical accessories line. Suited for a wide range of applications in just one product, this robust but lightweight matte box allows for an unprecedented level of flexibility. From a single-filter configuration for gimbals, drones, or Steadicams to clamp-on versions up to rod-mounted solutions (using either 15 mm lightweight, 15 or 19 mm studio rods), the LMB 4x5 makes short work of challenging situations. Altering the various applications does not necessitate any supplementary tools, making set-ups quick and easy. The matte box is also highly compatible to legacy accessories; all clamp adapters and filter frames from the former models LMB-5, LMB-15, and LMB-25 are compatible.
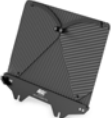
Main Features

- One product covering a wide range of applications
- Offers quick and easy set up without tools
- Compatable with 4" x 5.65" and 4" x 4" filter sizes

2   LMB 4 x 5 Overview
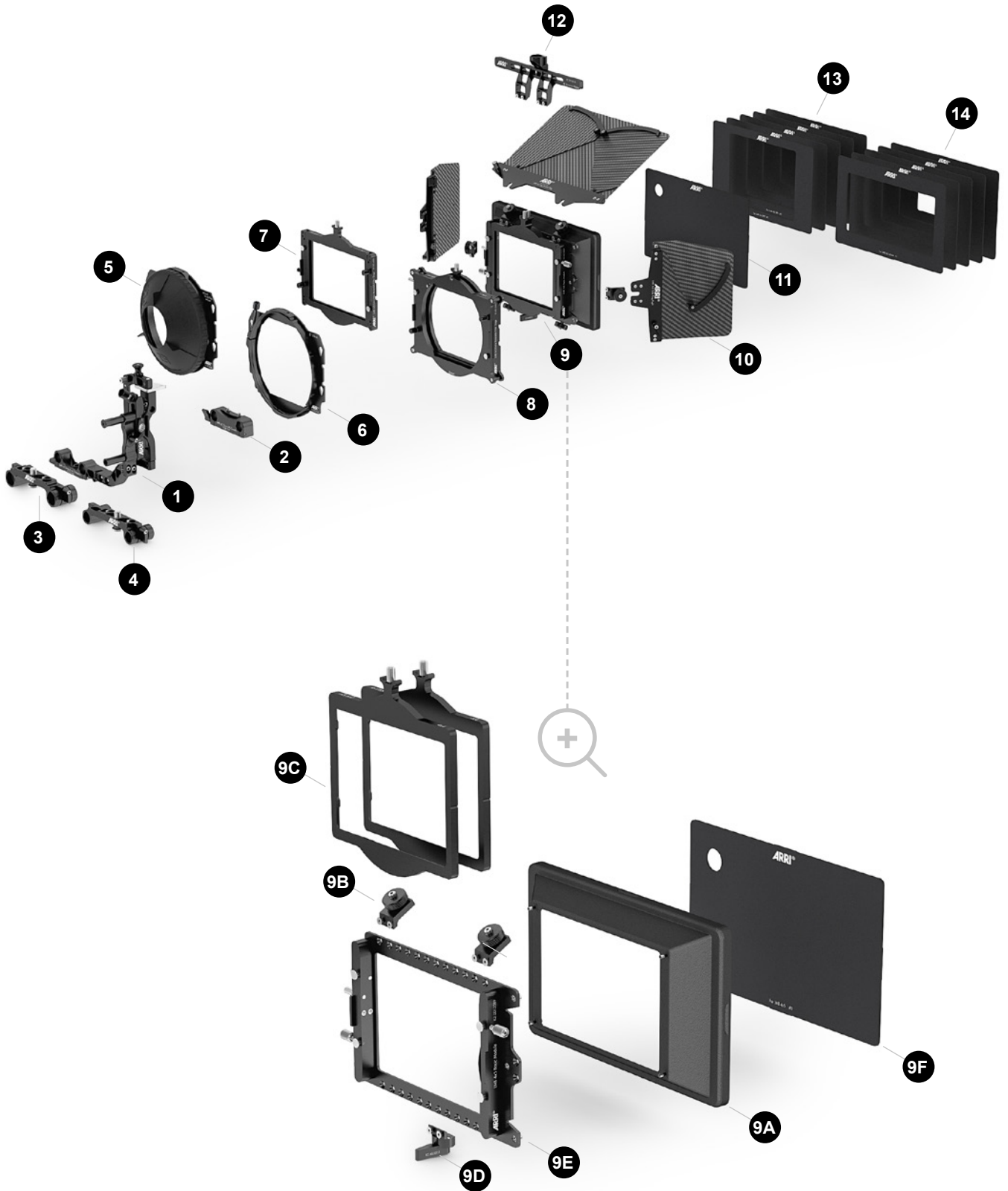
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3   Instructions

3.1   Fit Clamp Adapter

The LMB 4x5 matte box adapts to various lens diameters via a series of interchangeable clamp adapters and the tilt and flex adapter.

To fit a clamp adapter:

- Open the metallic screws at the left and the right side to unlock the clamp device (Fig.1).

- Position the clamp adapter through the locking thumbscrews so it sits flush with the filter stage (Fig.2).

- Slide the clamp adapter upwards (Fig.3).

- 2-stage version: Lock the clamp adapter using the two metallic thumbscrews positioned sideways at the filter stages (Fig.4).
  3- stage version: Lock the clamp adapter using the two black locking thumbscrews positioned at the rear of the filter stage (Fig.5).

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

3.2   LMB 4x5 Clamp Adapter 143 mm

The 143 mm clamp adapter works with ARRI R2 rings in combination with the 15 mm LWS console or with ARRI R11 clamp-on rings (Fig.1).

Fig. 1

NOTICE
The 15 mm LWS console can be mounted either on top or at the bottom of the clamp adapter (please see description 3.7)

3.3   LMB 4x5 Tilt and Flex Adapter

The flexible rubber donut adapter can be used for a variety of lenses with small to large diameters and can be used with the LMB 4x5 swing away tilt module or with lenses containing elements that extend.

To attach the tilt and flex adapter to the LMB 4x5:

- Open the metallic screws at the left and the right side to unlock the clamp device (Fig.1).

- Position the tilt and flex adapter through the locking thumbscrews so it sits flush with the filter stage (Fig.2).

- Slide the clamp adapter upwards (Fig.3).

- 2-stage version: Lock the clamp adapter using the two metallic locking thumbscrews positioned sideways at the filter stages (Fig.4).
  3- stage version: Lock the clamp adapter using the two black locking thumbscrews positioned at the rear of the filter stage (Fig.5).

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

To connect the tilt and flex adapter to the lens:

- Expand the rubber manually as far as necessary to insert the lens making sure the rubber is taught all the way around the lens.

NOTICE

The tilt and flex adapter expands to fit lenses with diameters between 62 mm and 143 mm.

Be sure that the adapter fits perfectly around the lens.

Please take care that no pointed or sharp objects come into contact with the LMB 4x5 tilt and flex adapter.

3.4 LMB 4x5 Extra Non-Rotatable Filter Stage

To attach the LMB 4x5 extra non-rotatable filter stage

- Before fitting the filter stage remove the rear clamp adapter.

- Open the metallic screws at the left and the right side to unlock the clamp device (Fig.1).

- Turn the tray catcher to position 1 or 2 (please see description 3.10).

- Thread the extra non-rotatable filter stage through the locking knobs (Fig.2).

- Slide the filter stage upwards.

- Tighten the metallic thumbscrews on both sides of the filter guides (Fig.3).

- Turn the tray catcher to position 3 to cover all filter trays (please see description 3.10).

Fig. 1

Fig. 2

Fig. 3

NOTICE

If the filter stage won't slide into the clamp device, loosen the black screws at the left side of the filter stage.

The 4 threads for the Sunshade from the LMB 4x5 are integrated at the front of the non-rotatable filter stage in order to use the filter stage independent with a clamp adapter at the back.

3.5   LMB 4x5 Extra Rotatable Filter Stage

Mounting the extra rotatable filter stage

- Before fitting the filter stage remove the rear clamp adapter.

- Open the metallic screws at the left and the right side to unlock the clamp device (Fig. 1).

- Turn the tray catcher to position 1 or 2 (please see description 3.10).

- Thread the third filter stage through the locking knobs.

- Slide the filter stage upwards.

- Lock the filter stage using the thumbscrews on both sides of the filter guides.

- The word "Top" is written on the rotatable filter stage to signify the right positioning. (Fig. 4)

Fig. 1

Fig. 2
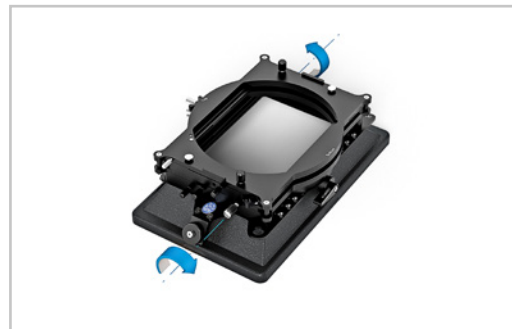
Fig. 3

Fig. 4

NOTICE

If the filter stage won't slide into the clamp device, loosen the black screws at the left side of the filter stage.

How to use

- Insert a filter frame from the top of the matte box into the filter stage (Fig. 1).

- Rotate the filter stage to the required angle (Fig. 2).

Fig. 1

Fig. 2

NOTICE

It is not possible to turn the LMB tray catcher into position 3. Please use the LMB tray catcher in position 2 (please see description 3.10). The extra rotatable filter stage comes with its own tray catcher.

The tray catchers secure filter frames during intense filming. It is designed to secure the filter trays for situations when safety is paramount.
How to use
- Slide the tray catcher downwards to lock the filter frame.
- For filter movement (e.g. graduated filter), unlock the tray catcher upward.

NOTICE

The filter stage features an anti-friction coating and should not be additionally lubricated.

3.6 Filter Frame 4" x 5.65" / 4" x 4"

- Two filter frames are typically inserted from the top of the matte box with the clamp adapter fitted.

- If a third filter frame is needed, add a LMB 4x5 Extra Non-Rotatable Filter Stage (please see description 3.4) or a LMB 4x5 Extra Rotatable Filter Stage (please see description 3.5).

- Unlock the black screws at the left side of the filter-stage guides (Fig. 1).

- Slide the filter frames from the top downwards (Fig.2).

- Lock the filter frame with the black screws at the left side of the stage guides.

- To protect the filters from falling out, close the tray catcher (please see description 3.10.).

Fig. 1

Fig. 2

NOTICE
Filter frames can be inserted from the bottom of the matte box if needed.

3.7 LMB 4x5 15 mm LWS Console

- ARRI logo should face to the front

- At the top and at the bottom of the 143 mm clamp adapter and the tilt and flex adapter are attachments for the 15 mm lightweight support (Fig. 1 & 2).

- Follow the guide rail and use a 3 mm hex driver to mount the lightweight support at the adapter (Fig. 3).

Fig. 1

Fig. 2

Fig. 3

NOTICE

The 15 mm lightweight support can only be mounted on the 143 mm clamp adapter and the tilt and flex adapter at the bottom and at the top.

3.8   LMB 4x5 19 mm Studio Rod Adapter

- The LMB 4x5 19 mm studio rod adapter can be mounted directly under the lightweight support or the tilt and flex module.

- Secure the studio support without tools by using the thumbscrew.

- If necessary, use a screwdriver to tighten the studio support.

3.9   LMB 4x5 15 mm Studio Rod Adapter

- The LMB 4x5 15 mm studio rod adapter can be mounted directly under the lightweight support or the tilt and flex module.

- Secure the studio support tool less with the thumbscrew.

- If necessary, use a screwdriver to tighten the studio support.

3.10   Tray Catcher

Mounting the tray catcher
The bottom tray catcher is designed to secure the filter trays for situations when safety is paramount (e.g. when travelling above a crowd).

- Usa a Hex driver 2 to mount the tray catcher with two screws at the bottom of the basic module.

How to use

- The tray catcher clicks into position (both ways).

- Position 1:   0°   The tray catcher can be permanently mounted and clicked into place when required (Fig. 1).

- Position 2:   45°   Covers two filter trays (Fig. 2).

- Position 3:   90°   Covers three filter trays (Fig. 3).

Fig. 1   *Fig.2*   *Fig.3*

NOTICE
Position 3 is not possible in combination with LMB 4x5 extra rotatable filter stage.

3.11   LMB 4x5 Swing Away Tilt Module

The module offers a comfortable swing away with extension for easier lens changes as well as an integrated tilt module for 10° up and down rotation.

- Secure the swing away tilt module tool with the three metallic screws at the right side of the basic module (Fig. 1).

- For better security, use a 3 mm hex screwdriver to tighten the screws.
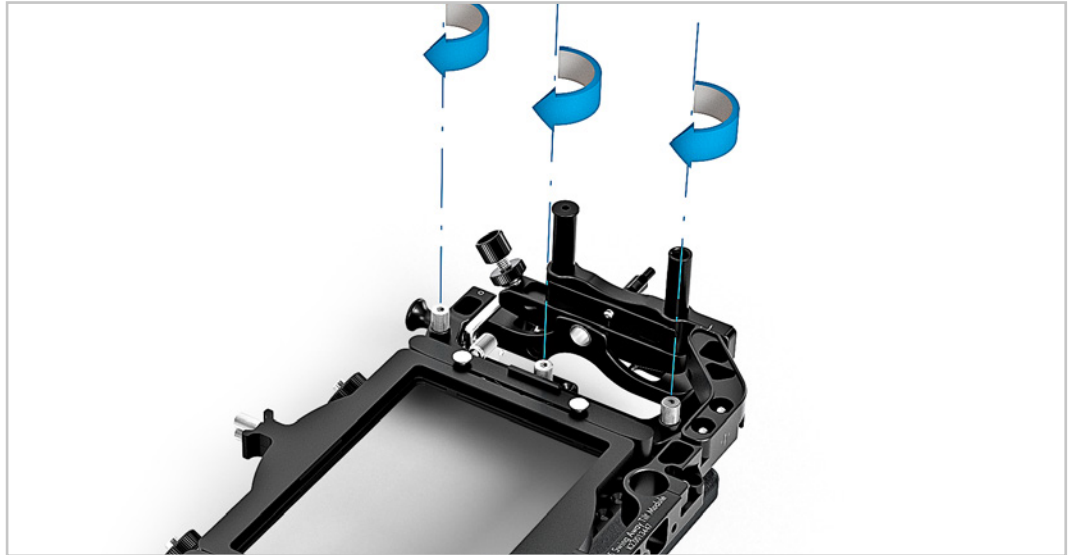

Fig. 1

Fitting the matte box on rods

- Unlock the 15 mm or 19 mm support by turning the butterfly nut counter-clockwise.

- Slide the matte box onto the rods.

- Lock both rods and the matte box by turning the butterfly nut clockwise.

Horizontal adjustment

- Unlock the two 3 mm screws at the right side of the tilt module (Fig 1).

- Adjust the matte box into the desired positioning (Fig. 2).

- Mark the position with the two screws.

- Use the marker if you want to go back to the original position.

Fig. 1   *Fig. 2*

Vertical adjustment

- Unlock the two 3 mm hex screws at the front of the tilt module.

- Adjust the matte box into the desired positioning.

- Mark the position with the two screws.

- Use the marker if you want to go back to the original position.

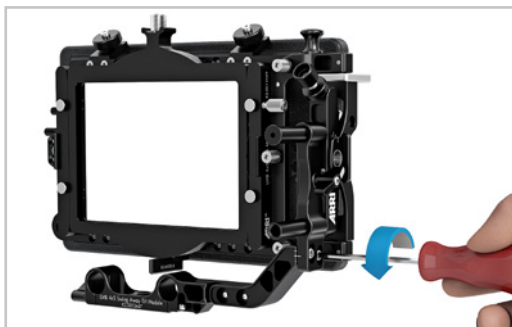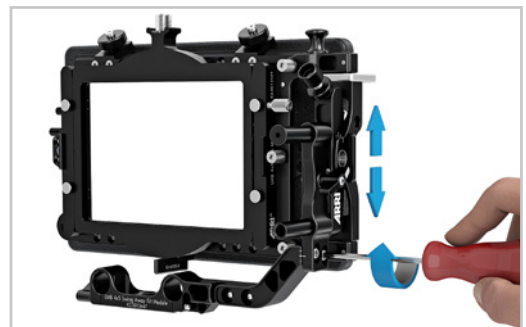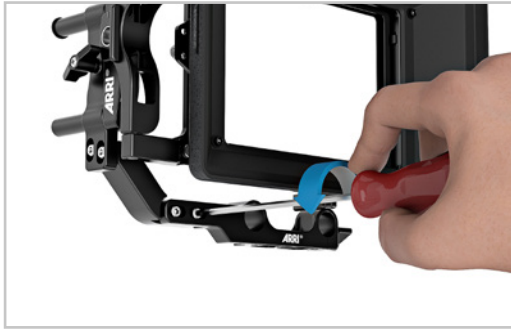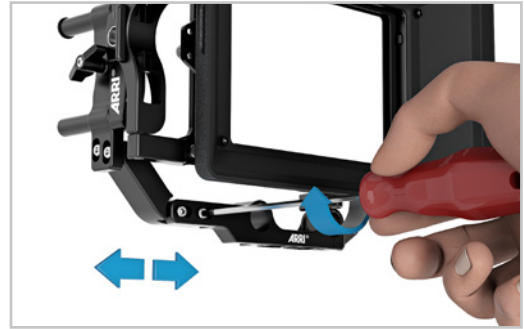*Fig. 1*

Fig. 2

NOTICE

Before fitting the matte box, install all rod-related accessories. Please ensure that fitting the matte box is the last step.

Extension

- Open the black butterfly nut at the mini rods to slide the matte box forwards or backwards (Fig. 1+ 2).

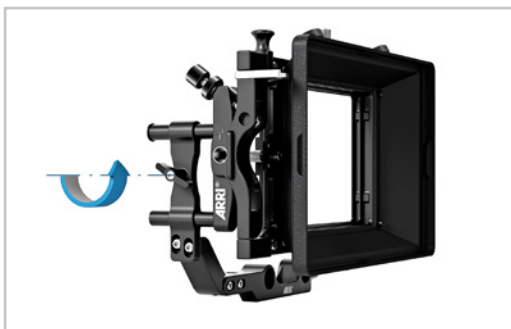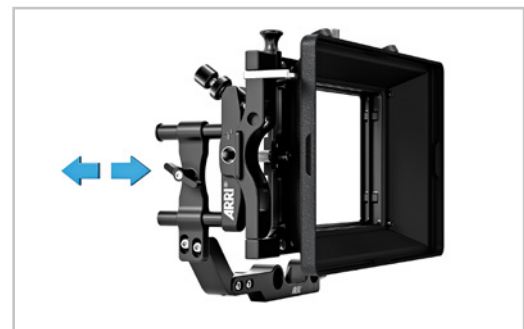- Tighten the butterfly nut once the matte box is in the desired position.

Fig. 1

Fig. 2

Swing Away

- Loosen the tilt and flex adapter or remove the lens rubber ring from the lens. Alternatively, extend the matte box with the extension module.

- Pull the release plunger while opening the matte box to the right of the camera until it locks automatically (Fig. 1+2).

- Pull the release plunger and swing the matte box back onto the lens until it locks automatically.

- Adjust the matte box extension if necessary.

Fig. 1

Fig. 2

Tilt Module

- Turn the tilt control counter-clockwise for tilting up to 5° and clockwise for tilting down up to 10° (Fig 1).

- When the desired position is achieved, lock the tilt module with the locking nut (Fig. 2).
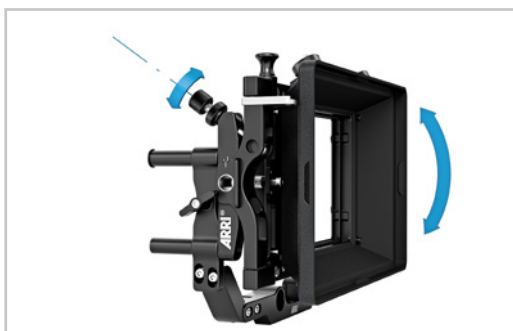
Fig. 1
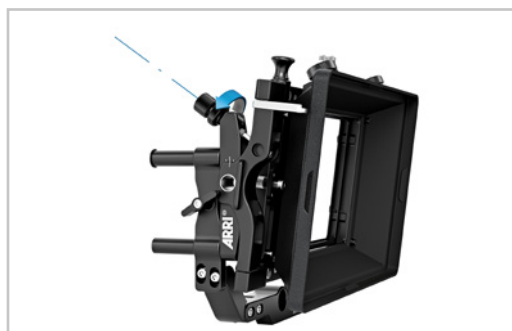
Fig. 2

NOTICE

The swing away tilt module works perfectly in combination with the tilt and flex adapter

3.12   LMB Accessory Adapter

For 3/8" accessories, such as ultrasonic devices, with an additional sliding capability for perfect positioning.

Mounting the accessory adapter

• Remove all filter frames (Fig. 1).

• Place the accessory adapter on top of the matte box (Fig. 2).

• Use a hex driver 2 to mount the accessory adapter to the back plate (Fig. 3)

Fig. 1

Fig. 2

Fig. 3

NOTICE

The accessory adapter can also be mounted to the bottom of the matte box.
Only the tray catcher is in position 3 (please see description 3.10)

How to use

- Unlock the 3/8" mount lock (Fig 1).

- Slide the mount to the desired position (Fig 2).

- Lock the 3/8" mount lock (Fig 3).

Fig. 1

Fig. 2

Fig. 3
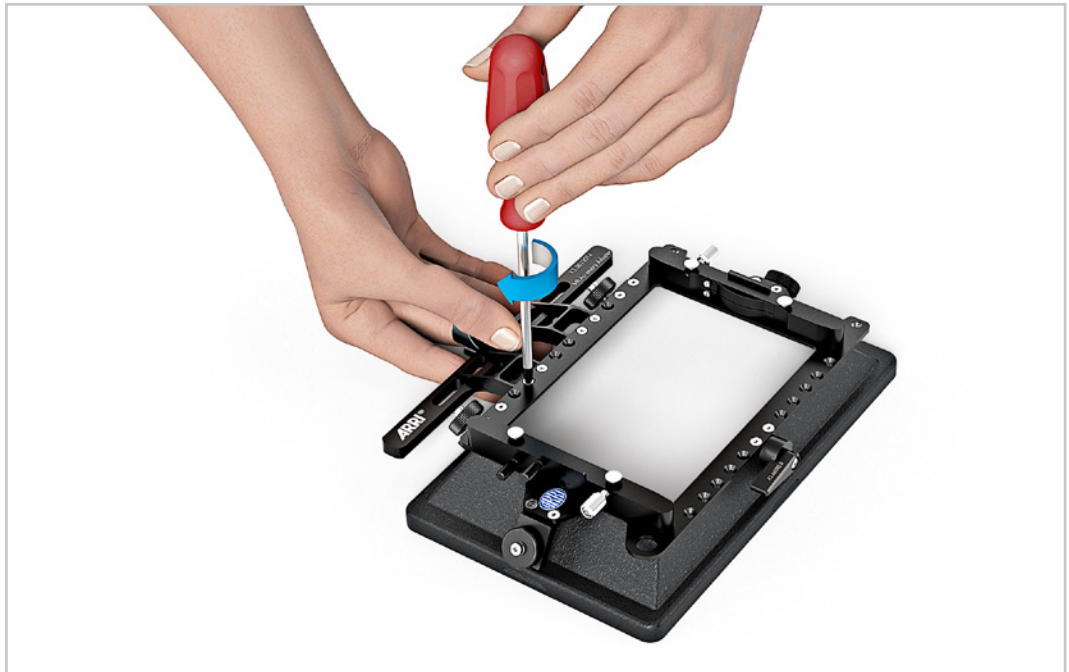
NOTICE

The LMB accessory adapter is not designed to mount heavy or load bearing accessories.

3.13   LMB 4x5 Top (Bottom) Flag

Carbon fiber flag with two extensions which can be mounted at the top or the bottom of the LMB 4x5.

Mounting the top (bottom) flag

- Open the two flag holders slightly until a gap of around 4 mm is visible.

- Connect the top flag cut-outs to the flag holder.

- To mount: Lock the top flag in place by fastening the flag holder nut.

- To remove: Open the two flag holder nuts slightly and pull the top flag out.

How to use

- Unlock the top flag extensions by turning the locking knob counter-clockwise (Fig. 1).

- Bring the top flag into the right position (Fig. 2).

- Lock the top flag extensions by turning the locking knob clockwise.
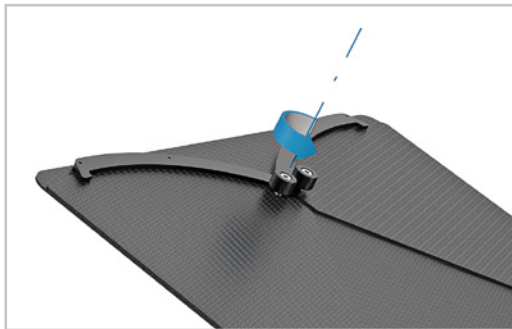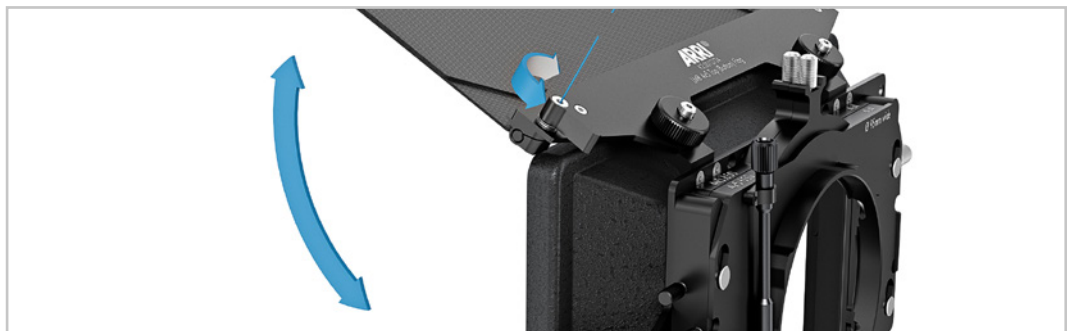

Fig. 1

Fig. 2

Adjust Flag Friction

Top/bottom flag friction adjustment can be set using the flag friction knob. The flag can be locked into position using the same knob.

3.14   LMB 4x5 Side Flags

Mounting the side flags

- Open the flag holders slightly until a gap of around 4 mm is visible.

- Connect the side flag cut-outs to the flag holder.

- To mount: Lock the side flag in place by fastening the flag holder nut.

- To remove: Open the flag holder nut slightly and pull the side flag out.

How to use

- Unlock the side flags extensions by turning the locking knob counter-clockwise (Fig 1).

- Bring the side flags in the right position (Fig.2).

- Lock the side flags extensions by turning the locking knob clockwise.
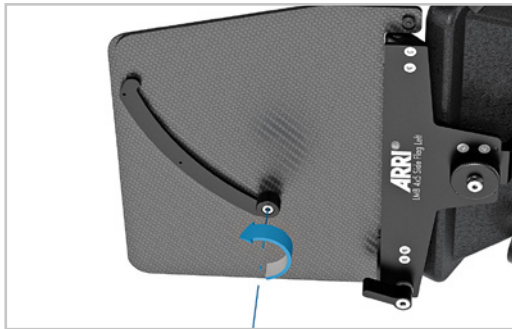

Fig. 1

Fig. 2

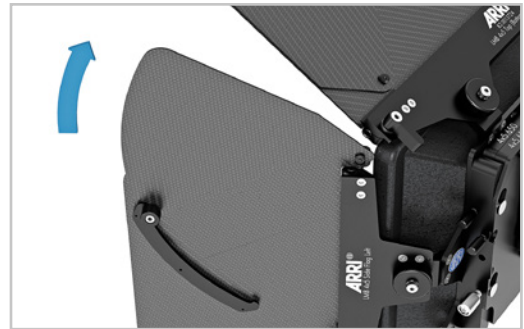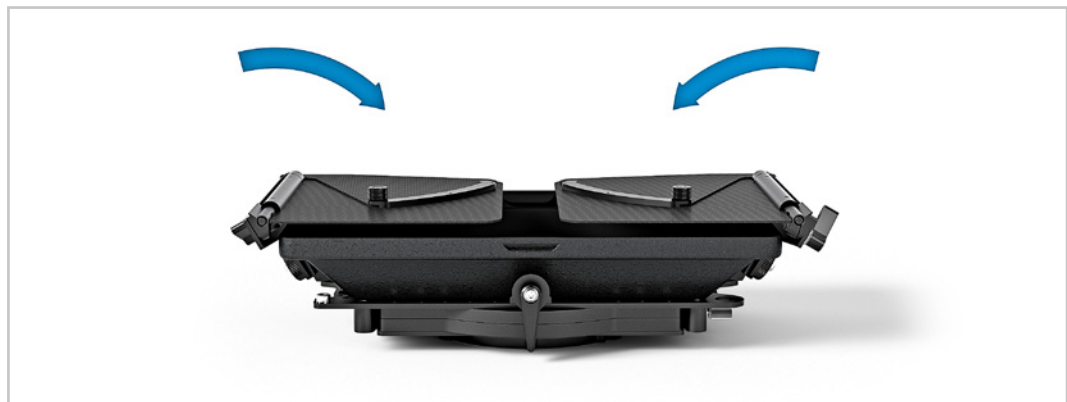**Adjust Flag Friction**

Top/bottom flag friction can be adjusted using the flag friction knob. The flag can be locked into position using the same knob.

<div style="background:#1ba1e2;color:white;text-align:center">

NOTICE

</div>

To fold the flags as flat as possible and not damaging the interior of the top flag, close the top flag first.

3.15   Adding Optional Bottom Flag Holders

- If a bottom flag is needed, the top/bottom flag can be fitted to the bottom of the matte box using two optional flag holders.

- Usa a hex driver 3 to mount each of the bottom flag holders to the bottom of the basic module using two screws.

NOTICE

To fit the top/bottom flag at the bottom position, you should use the optional flag holders (pair) (Ident No.: K2.0013825)

3.16   Insert Mattes

- Mattes come as a set of five different pieces and can be secured to the front of the matte box by simply pressing on the hood`s four securing tabs.

- Place the matte of your choice at the front of the sunshade. The labelling of the matte must face away from the matte box with the ARRI logo on top.

- Engage the matte by pressing on the four catches around the sunshade until they audibly lock.

- To remove: Ease the matte off the four catches and pull it away from the sunshade.

NOTICE

Due to the variety of sensor sizes and lens properties, you are advised to test mattes numbered from 1 to 5 and lens coverage with your own equipment.

3.17   Backplate with Filter Guides

The backplate is fitted with a 10 mm eyelet at the bottom left hand corner of the camera, allowing it to be secured when shooting on a crane (e.g. using a carabiner).
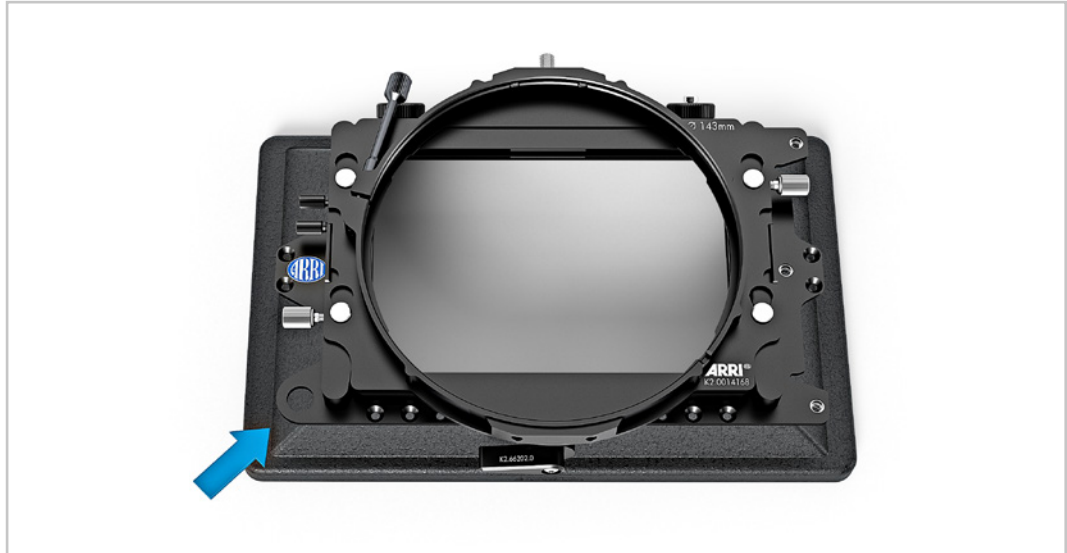
3.18   Sunshade

The sunshade can be removed easily on set for special applications such as gimbal, macro work, helicopter shots, or when a specific effect is desired.

- Turn the module face up and loosen the four screws securing the front hood to the main plate.

- Remove the front hood.

- The sunshade contains captive screws.

4. Configurations

4.1 Filter Configurations

1-Filter Stage
Ultra-lightweight configuration for gimbals, drones, and stabilizer by using the rotatable or non-rotatable filter stage with a clamp adapter

2-Filter Stage Basic

3-Filter Stage Rotatable

3-Filter Stage Non-Rotatable

4.2 Mounting Configurations

Clamp On
2-or 3 stage, Compatible with all clamp adapter

15 mm Lightweight
Top or bottom

15 mm Studio

19 mm Studio

Swing Away Tilt Module

5.   Buy Sets & Parts

5.1   Basic

LMB 4x5 Basic Module		**K2.0013589**
The basic module is the starting point for the modular LMB 4x5 matte box. By just adding a clamp adapter, it offers a clip-on version which can be extended by adding other LMB 4x5 parts.		
LMB Sunshade		K4.66251.0
LMB 4x5 Backplate with Filter Guides		
LMB Filter Frame 4x4,56 / 4x4 (pair)		K4.0014896
LMB 4x5 Flag Holder (pair)		K2.0013825
Tray Catcher		K2.66202.0

5.2   Sets

LMB 4x5 Clamp-On Set 3-stage		**KK.0015175**
The LMB 4x5 set for clamp-on use with an additional non-rotating filter stage, a carbon fiber top flag, and a tray catcher.		
LMB 4x5 Basic Module		K2.0013589
LMB 4x5 Extra Non-Rotatable Filter Stage		K2.0014006
LMB 4x5 Top Bottom Flag		K2.0013724

LMB 4x5 15 mm LWS Set 3-stage		**KK.0015176**
The LMB 4x5 set for 15 mm lightweight support and a universal flexible adapter to fit almost all lens diameters, including a non-rotating filter stage, a carbon fiber top flag, and a tray catcher. Note: 19 mm and 15 mm studio rod adapters must be ordered separately.		
LMB 4x5 Basic Module		K2.0013589
LMB 4x5 Extra Non-Rotatable Filter Stage		K2.0014006
LMB 4x5 Top Bottom Flag		K2.0013724
LMB 4x5 Tilt and Flex Adapter		K2.0014206
LMB 4x5 15 mm LWS Console		K2.0013427

LMB 4x5 Pro Set   **KK.0015177**

The LMB 4x5 set to fulfil all needs with the most
modular matte box – from single stage, to three
stage, to bottom and top lightweight mounted,
to the full-blown version with swing-away tilt module,
all carbon fiber flags (top and side) and both extra
filter stages (rotatable and non-rotatable).

**Note: 19 mm and 15 mm studio rod adapters
must be ordered separately.**

|	
LMB 4x5 Basic Module	K2.0013589
LMB 4x5 Extra Non-Rotatable Filter Stage	K2.0014006
LMB 4x5 Extra Rotatable Filter Stage	K2.0013460
LMB 4x5 Swing Away Tilt Module	K2.0013447
LMB 4x5 Top Bottom Flag	K2.0013724
LMB 4x5 Side Flags	K2.0013750
LMB 4x5 Flag Holders	K2.0013825
LMB 4x5 Tilt and Flex Adapter	K2.0014206
LMB 4x5 15 mm LWS Console	K2.0013427
LMB Accessory Adapter	K2.0013014
LMB Set of Mattes (spherical)	K2.0000069
LMB Set of Mattes (anamorphic)	K2.0007992

LMB 4x5 Clamp Adapter Set   **KK.0015133**

This set includes 13 different clamp adapters
to use with the LMB 4x5.

LMB Clamp Adapter 162 mm	K2.0015075
LMB Clamp Adapter 143 mm	K2.0014168
LMB Clamp Adapter 136 mm	K2.0014348
LMB Clamp Adapter 134 mm	K2.0014359
LMB Clamp Adapter 125 mm	K2.0014377
LMB Clamp Adapter 114 mm	K2.0014396
LMB Clamp Adapter 110 mm	K2.0014409
LMB Clamp Adapter 104 mm	K2.0014422
LMB Clamp Adapter 100 mm	K2.0015103
LMB Clamp Adapter 95 mm	K2.0014439
LMB Clamp Adapter 87 mm	K2.0014227
LMB Clamp Adapter 85 mm	K2.0015065
LMB Clamp Adapter 80 mm	K2.0014376

5.3 Upgrade Sets

Upgrade Set LMB-25 to LMB 4x5 basic   **KK.0015178**

To upgrade the LMB-25 on the platform
of the new LMB 4x5.

LMB 4x5 Backplate with Filter Guides

LMB 4x5 Flag Holders   K2.0013825

Upgrade Set LMB-25 to LMB 4x5 Pro   **KK.0015181**

To upgrade the LMB-25 to the full pro set
of the new LMB 4x5.

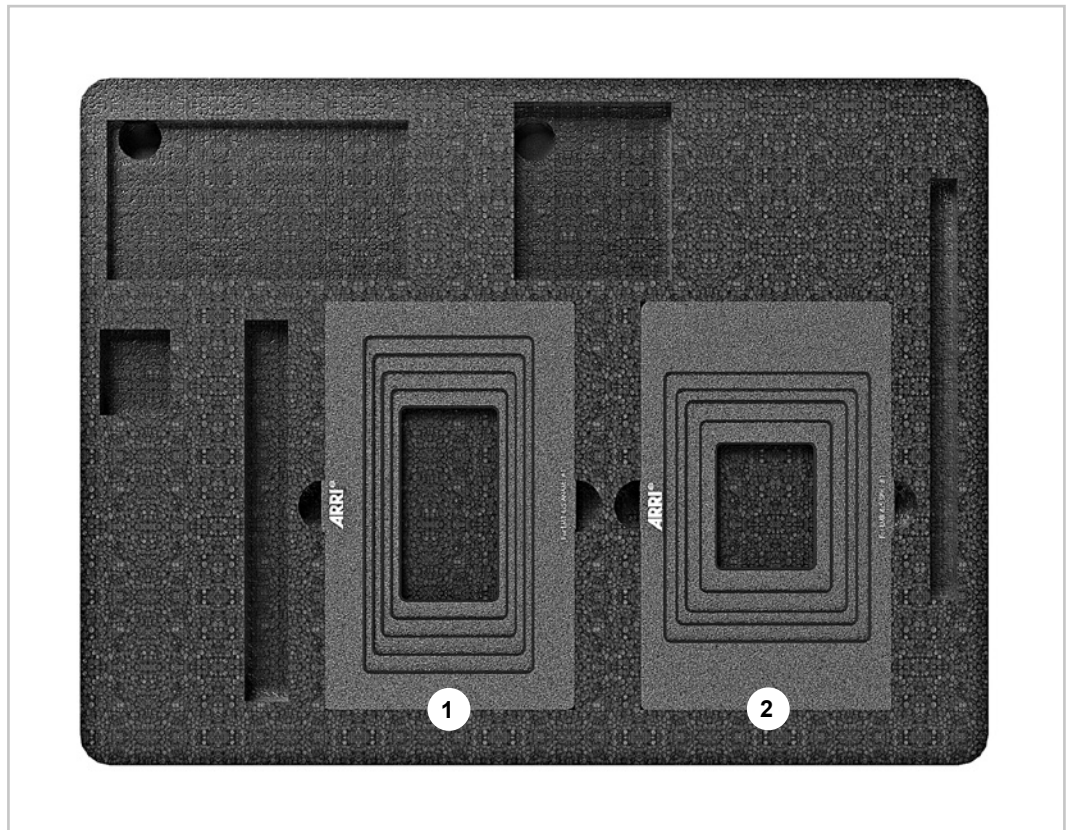|	
LMB 4x5 Extra Non-Rotatable Filter Stage	K2.0014006
LMB 4x5 Extra Rotatable Filter Stage	K2.0013460
LMB 4x5 Swing Away Tilt Module	K2.0013447
LMB 4x5 Top Bottom Flag	K2.0013724
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LMB 4x5 15 mm LWS Console	K2.0013427
LMB Accessory Adapter	K2.0013014
LMB 4x5 Backplate with Filter Guides	

6 Inlay for Peli Case 1560

> **NOTICE**
>
> The foam insert fits perfectly into any kind of Peli Case 1560.

6.1 Bottom
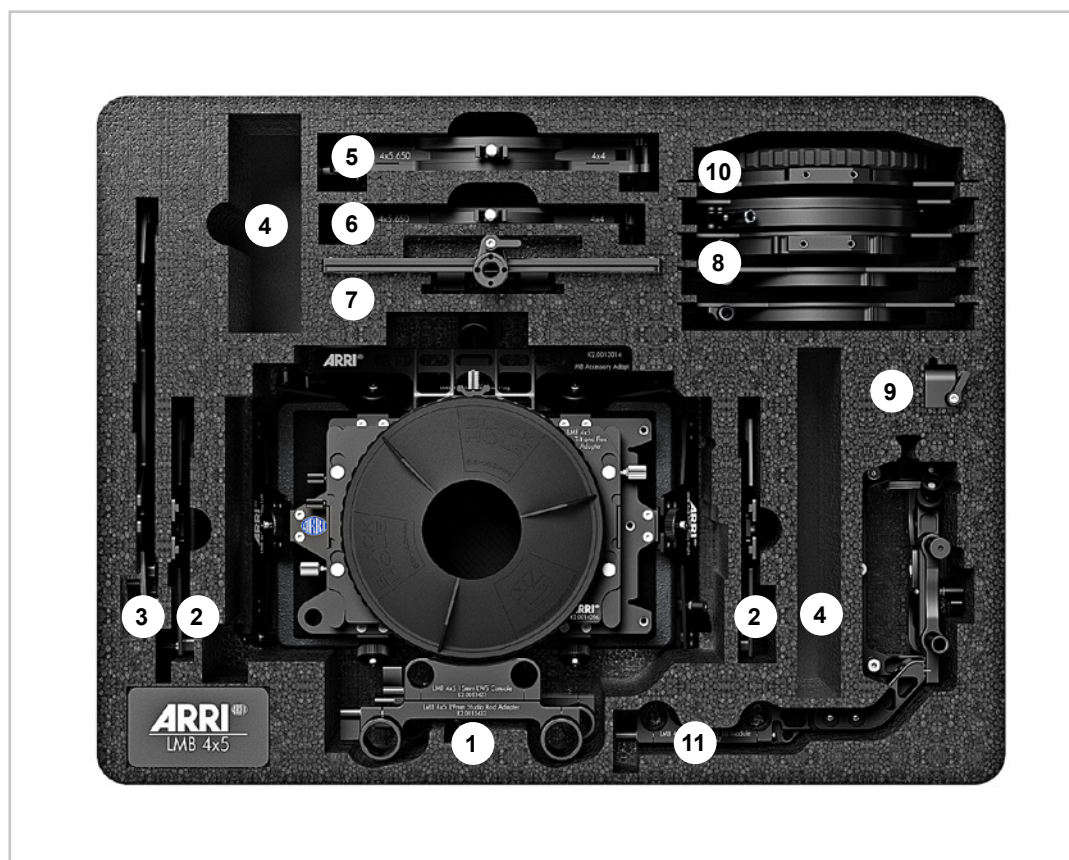
1. LMB 4x5 in any modification
2. LMB 4x5 Side Flags
3. LMB 4x5 Top Bottom Flag
4. Free space for 4x5.65 filters
5. LMB 4x5 Extra Rotatable Filter Stage
6. LMB 4x5 Extra Non-Rotatable Filter Stage
7. LMB Accessory Adapter
8. Clamp Adapters
9. LMB 4x5 15 mm LWS Console
10. Free Space for ARRI Rota Pola Frame K2.0009434
11. LMB 4x5 Swing Away Tilt Module

6.2   Top

1.   Set of anamorphic Mattes

2.   Set of spherical Mattes

7.   Disclaimer

8.   Service contacts

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