

ZMU-4

Zoom Main Unit

Operating Manual

May 2023 (1.0, English)



Disclaimer

Before using the products, be sure to read and understand all respective instructions.

The products are available for commercial customers only.

For product specification changes since this manual was published, refer to the latest publications of ARRI data sheets or data books, etc., for the most up-to-date specifications. Not all products and/or types are available in every country. Please check with an ARRI sales representative for availability and additional information.

ARRI assumes no responsibility for any errors that may appear in this document. The information is subject to change without notice.

While ARRI endeavors to enhance the quality, reliability and safety of their products, customers agree and acknowledge that the possibility of defects thereof cannot be eliminated entirely. To minimize risk of damage to property or injury (including death) to persons arising from defects in the products, customers must incorporate sufficient safety measures in their work with the system and have to heed the stated canonic use.

ARRI or its subsidiaries expressly exclude any liability, warranty, demand or other obligation for any claim, representation, or cause, or action, or whatsoever, express or implied, whether in contract or tort, including negligence, or incorporated in terms and conditions, whether by statute, law or otherwise. In no event shall ARRI or its subsidiaries be liable for or have a remedy for recovery of any special, direct, indirect, incidental, or consequential damages, including, but not limited to lost profits, lost savings, lost revenues or economic loss of any kind or for any claim by third party, downtime, good will, damage to or replacement of equipment or property, any cost or recovering of any material or goods associated with the assembly or use of our products, or any other damages or injury of the persons and so on or under any other legal theory.

Neither ARRI nor its subsidiaries assume any liability for infringement of patents, copyrights or other intellectual property rights of third parties by or arising from the use of ARRI products or any other liability arising from the use of such products. No license, express, implied or otherwise, is granted under any patents, copyrights or other intellectual property right of ARRI or others.

ARRI or its subsidiaries do not assume any responsibility for incurred losses due to improper handling or configuration of the camera or other system components, due to sensor contamination, occurrence of dead or defective pixels, defective signal connections or incompatibilities with third party recording devices.

In the case one or all of the foregoing clauses are not allowed by applicable law, the fullest extent permissible clauses by applicable law are validated.

Imprint

© 2023 Arnold & Richter Cine Technik GmbH & Co. Betriebs KG. All rights reserved.

The system contains proprietary information of Arnold & Richter Cine Technik GmbH & Co. Betriebs KG; it is provided under a license agreement containing restrictions on use and disclosure and protected by copyright law. Reverse engineering of the software is prohibited.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of Arnold & Richter Cine Technik GmbH & Co. Betriebs KG.

Due to continued product development the information in this document may change without notice. The information and intellectual property contained herein is confidential between ARRI and the client and remains the exclusive property of ARRI. If you find any problems in the documentation, please report them to us in writing. ARRI does not warrant that this document is flawless.

ARRI, ZMU-4, ALEXA, AMIRA, RF-EMIP, OCU-1 and LBUS are trademarks or registered trademarks of Arnold & Richter Cine Technik GmbH & Co. Betriebs KG. All other brands or products mentioned are trademarks or registered trademarks of their respective holders and should be treated as such.

Original version.

For Further Assistance

Arnold & Richter Cine Technik GmbH & Co. Betriebs KG
Herbert-Bayer-Straße 10
80807 Munich
Germany

E-mail: service@arri.com

Website: www.arri.com

Table of Contents

1	About this Document.....	5
2	About this Product.....	7
2.1	Introduction.....	7
2.2	Intended Use.....	7
2.3	Identification.....	7
2.4	Environmental Conditions.....	8
2.5	Technical Data.....	8
2.6	Dimensional Drawings.....	9
2.7	Pinouts.....	9
2.8	Scope of Delivery and Warranty.....	10
2.9	Certifications and Safety Standards.....	11
3	Safety Instructions.....	13
3.1	Safety Conventions and Product Labels.....	13
3.2	General Safety Instructions.....	14
4	ZMU-4 Overview.....	17
4.1	Layout.....	17
5	Mounting and Assembly.....	20
5.1	Attachment of Accessories.....	20
5.2	Power Supply.....	21
6	Basic Operation.....	22
6.1	Switching On and Off.....	22
6.2	Menu Operation.....	23
7	Cleaning and Repair.....	24
7.1	Cleaning Instructions.....	24
7.2	Repair.....	25
8	Transportation, Storage and Disposal.....	26
8.1	Transportation and Storage.....	26
8.2	Disposal.....	26
9	ARRI Service Contacts.....	27

1 About this Document

This operating manual is aimed at everyone involved in using the system and provides directions on how to operate it safely and as intended. To ensure safe and correct use, all users must read the operating manual before using the system for the first time.

This operating manual is an essential part of this product and must be easily accessible and in close proximity to the equipment so that users can use it as a reference anytime.

The separate ZMU-4 user manual contains more detailed information about the features and functionalities of the device. Please visit the website www.arri.com to download the ZMU-4 user manual and much more information.

Keep the operating manual, the user manual and all other operating and assembly instructions belonging to the system in a safe place for future reference and possible subsequent owners.

Additional Information

For useful information in addition to this user manual please have a look at the [ARRI Learn & Help](#) section on the ARRI website.

Strengthen Your Knowledge and Get Trained

The ARRI Academy courses provide unrivalled insights into the full possibilities of working with ARRI camera systems, lenses, lights and accessories.

Our advanced service training courses are designed to transfer detailed knowledge about how to service and repair all types of ARRI products and give you permanent access to detailed Service instructions, special tools and spare-parts. To learn more, please visit [ARRI Academy](#) or contact academy@arri.de.

Further Details

For further details, refer to the ARRI website at <https://www.arri.com/zmu-4>



For Tech Tips, refer to the ARRI website at <https://youtube.com/user/arrichannel>



Document Revision History

Document ID: D45 10006805

Version	Release	Date	Description
1.0	F07875	March 2023	Initial Release
1.01	W01883	May 2023	Scope of delivery changed

2 About this Product

2.1 Introduction

The ARRI Zoom Main Unit ZMU-4 is a modern version of the classic and ubiquitous zoom demand. Rugged, weather-resistant, and ergonomically designed, the ZMU-4 seamlessly transitions between wired and wireless configurations. Its unprecedented connectivity enables versatile, clutter-free camera builds and faster on-set workflows.

- Easy switch between wired and wireless operation
- Camera and lens motor control combined in one unit
- Exchangeable radio modules for challenging environments
- Wireless expansion for other devices
- Easily readable status display with lens data
- Robust, weather-proof, ergonomic design

2.2 Intended Use

ATTENTION

The ZMU-4 is a wired or wireless controller for various camera functions.

All versions of the product are intended exclusively for professional use. It must be used only by skilled personnel.

Read and understand the operating manual and the user manual before use.

Use the product only for the purpose described in this document.

Always follow the instructions and system requirements for all equipment involved.

ARRI assumes no liability for damages or changes that are caused by improper use.

The entire product must not be changed or converted.

2.3 Identification

Product Label

The ZMU-4 serial number is located on the product label on the left side of the Zoom Main Unit.



The product number on the label consists of the product ident number (K2.0039926) followed by the serial number (in this case 1234).

2.4 Environmental Conditions

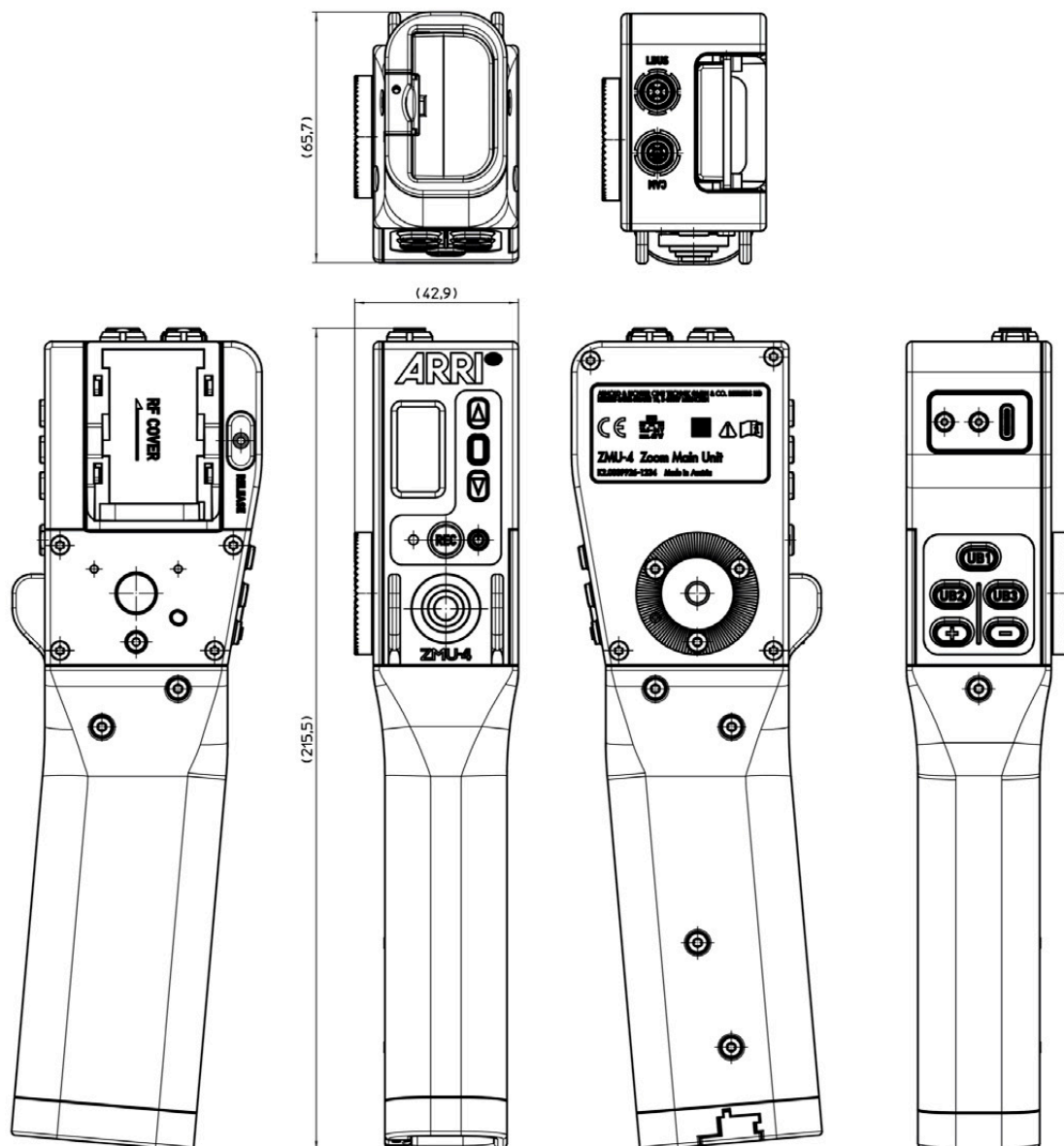
The ZMU-4 should only be used and stored under certain environmental conditions. Check the following conditions before startup and operation:

Electrical Requirements	Supply voltage: 10.5 – 34 V DC
Operating Temperature	-20° C to +50° C / -4° F to +122° F
Storage Temperature	-30° C to +50° C / -4° F to +158° F
Humidity	0-95% RH from -20° C to +45° C / -4° F to +113° F

2.5 Technical Data

Weight	360 g / 0.79 lbs (ZMU-4 body) 476 g / 1.05 lbs (ZMU-4 body with battery) 526 g / 1.16 lbs (ZMU-4 body with battery and RF-EMIP or RF-2400) 556 g / 1.23 lbs (ZMU-4 body with battery and RF-900)
Interfaces	1x LBUS (LEMO 4-pin) for lens motors, daisy chainable; supports LBUS protocol, LCS protocol (for ALEXA cameras) and EXT protocol (for AMIRA cameras) 1x CAM (LEMO 7-pin) for camera control 1x USB-C for software updates 1x ARRI Radio Module Interface 1x Battery Interface 2x Mounting Point for ARRI Rosette
External Power Supply	10.5 – 34 V DC
Power Consumption Typ (W)	1 W (ZMU-4 body) 1.4 W (ZMU-4 body with RF-EMIP) 2.3 W (ZMU-4 body with RF-2400) 3 W (ZMU-4 body with RF-900)
Measurements (L x W x H)	66 x 43 x 215 mm / 2.6 x 1.69 x 8.46" (ZMU-4 body) 66 x 45 x 277 mm / 2.6 x 1.77 x 10.91" (ZMU-4 body with RF-EMIP or RF-2400) 66 x 45 x 414 mm / 2.6 x 1.77 x 16.3" (ZMU-4 body with RF-900)

2.6 Dimensional Drawings

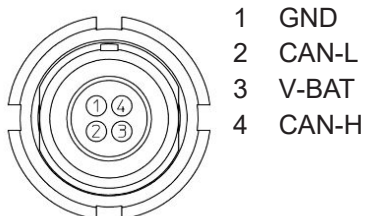


ZMU-4 body without radio module. All dimensions in mm.

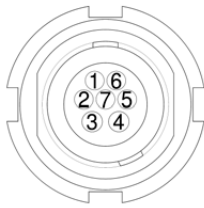
2.7 Pinouts

The ZMU-4 contains one LBUS connector (Lemo 4 pin), one CAM connector (Lemo 7 pin) and one USB-C connector.

LBUS Connector



CAM Connector



- 1 CAM If1 (CAN RS232 RX)
- 2 CAM If2 (CAN1-L)
- 3 GND
- 4 +V-Bat
- 5 CAM If3 (CAN RS232 TX)
- 6 CAM If4 (CAN1-H)
- 7 Cable ID

USB-C Connector

ADVICE

Improper Handling of USB-C Device

Risk of overloading the ZMU-4.

- ▶ Keep the USB-C device as empty as possible besides your update file.
- ▶ Place the update files either in the root folder or under "ARRI/ECS/...".
- ▶ The USB-C device formatting must be FAT32.

2.8 Scope of Delivery and Warranty

ATTENTION

The packaging consists of recyclable materials. For the sake of the environment, dispose the packaging material at a suitable disposal site. Always store, ship and dispose according to local regulations. ARRI is not liable for consequences from inadequate storage, shipment or disposal.

On delivery, please check if package and content are intact. Never accept a damaged/incomplete delivery.

K2.0039926 Zoom Main Unit ZMU-4 Body

A complete delivery includes:

- 1x K2.0039926 Zoom Main Unit ZMU-4 Body incl. RF-Cover

KK.0043770 Zoom Main Unit ZMU-4 Basic Set

A complete delivery includes:

- 1x K2.0039926 Zoom Main Unit ZMU-4 Body incl. RF-Cover
- 1x K2.0041744 Rosette Adapter RA-7
- 1x K2.0044203 Rosette Adapter RA-8
- 1x K2.0044543 ZMU-4 ARRI Rosette
- 1x K2.0033702 RF-EMIP Radio Module 2400 MHz DSSS

Warranty

For scope of warranty, please ask your local ARRI Service Partner. ARRI is not liable for consequences from inadequate shipment, improper use or use of third-party products.

2.9 Certifications and Safety Standards

Approval Information

The ARRI Zoom Main Unit ZMU-4 is approved for use in many countries, including European Union, USA, UK, Canada, China, Japan, Australia, New Zealand, and Thailand.

The import and use in other countries may be subject to legal, official or regulatory requirements and regulations. It is the importer's or the user's responsibility, prior to importation or use, to inform themselves of the applicable legal, regulatory and administrative requirements and regulations and to ensure compliance with these requirements and regulations. This includes the applying for and obtaining of all necessary approvals or registrations.

As far as reasonable and legally possible, ARRI will support requests in relation to such applications by providing technical documents or declarations. As an importer or user, you confirm that you are familiar and comply with the legal, regulatory, and administrative requirements and regulations that apply in the countries to which you ship or use the products. You further confirm that you will arrange for any necessary registrations, enrollments, or authorizations that are required in such countries.

You release ARRI from all obligations resulting from any legislative, regulatory, or administrative requirements regarding import or use of the products, except in countries where ARRI has obtained a registration or certification. You agree to indemnify, defend, and hold ARRI harmless from any and all claims, damages, losses, liabilities, costs, and expenses (including reasonable fees of attorneys and other professionals) that may arise out of a demand on ARRI in connection with your obligations mentioned above.

EU-Declaration of Conformity



Brand Name:

ARRI

Product Description:

Hand Unit and RF-Interface (without RF module)
ZMU-4

The designated product conforms to the specifications of the following European directives:

- Directive 2014/30/EU of the European Parliament and the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.
- Directive 2014/35/EU of the European Parliament and the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.
- The object of the declaration described above complies with the provisions of Directive 2011/65/EU of the European Parliament and the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment and the Commission Delegated Directive (EU) 2015/863 of March 31, 2015.

The compliance with the requirements of the European Directives was proved by the application of the following standards:

- EN 55032:2015; EN 55035:2017
- EN IEC 62368-1:2020 + A11:2020

The manufacturer bears sole responsibility for issuing this declaration of conformity.

UK Declaration of Conformity



Brand Name:

ARRI

Product Description:

Hand Unit and RF-Interface (without RF module)
ZMU-4

The designated product conforms to the specifications of the following United Kingdom regulations:

- The Electrical Equipment (Safety) Regulations 2016
- The Electromagnetic Compatibility Regulations 2016
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

The compliance with the requirements of the United Kingdom regulations was proved by the application of the following standards:

- IEC 62368-1:2018
- EN 55032:2015; EN 55035:2017
- EN IEC 63000:2018

The manufacturer bears sole responsibility for issuing this declaration of conformity.

FCC Class A Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution: changes or modifications to the product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada Compliance Statement

CAN ICES-003(A)/NMB-003(A)

Australia & New Zealand



ZMU-4

3 Safety Instructions

This safety information is in addition to the product specific operating instructions in general and must be strictly observed for safety reasons. Read and understand all safety and operating instructions before you operate or install the system. Retain all safety and operating instructions for future reference. Always follow the instructions in this and all documents supplied with the device to avoid injury to yourself or others and damage to the system or other objects.

Assembly and operation should only be carried out by trained staff familiar with the system. Only use the tools, materials and procedures recommended in this document. For the correct use of other equipment, see the manufacturer's instructions.

3.1 Safety Conventions and Product Labels

Structure of Safety and Warning Messages

These instructions use safety instructions, warning symbols and signal words to draw your attention to different levels of risk:

⚠ WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.

- ▶ Always follow the recommended measures to avoid this hazardous situation.

⚠ CAUTION

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

- ▶ Always follow the recommended measures to avoid this hazardous situation.

ADVICE

ADVICE signifies a potentially hazardous situation which can result in damage to property.

- ▶ Always follow the recommended measures to avoid this hazardous situation.

ATTENTION

Not relevant to safety, **ATTENTION** provides additional information to clarify or simplify a procedure.

Warning Symbols and Product Labels



General warning sign



Warning of electrical voltage



Warning of hot surfaces



Warning of hand injuries



Warning of the risk of crushing



Warning of obstacles on the ground



Please read all instructions carefully before using the product for the first time.



Direct Current symbol found on electronics requiring or producing DC power

3.2 General Safety Instructions

WARNING



Operation of the Electronic Control System in Case of Obvious Damage

Risk of electric shock and fire hazard caused by short circuit.

- ▶ Do not use the system if cables or the housing are visibly damaged.
- ▶ Operate the system using only the type of power supply indicated in the manual.
- ▶ Unplug the cable by gripping the power plug, not the cable.
- ▶ Do not operate the system in areas with humidity above operating levels and don't expose it to water or moisture.
- ▶ Do not get the system wet.
- ▶ Do not lay cables over sharp edges (e.g. sheet metal, profile or other cut edges). Damaged cables can cause electric shock, short circuit or fire.
- ▶ Do not remove or deactivate any safety measures from the system (incl. warning stickers or paint marked screws).
- ▶ Repairs may only be carried out by authorized ARRI service partners.

WARNING



Tripping over longer LBUS/CAM Cables

Improper laying of LBUS/CAM cables can cause serious injuries and damage to the system or property from slipping, stumbling, and falling.

- ▶ Installation and operation may only be carried out by trained personnel who are familiar with the system. Observe accident prevention regulations.
- ▶ Always use the shortest possible cables.
- ▶ Secure the system against the risk of stumbling by laying the connecting cable correctly. Observe the general and local safety regulations.

WARNING



Falling System Parts

If the system is inadequately assembled, it can fall down and cause serious injuries and damage to the system or property.

- ▶ Installation and operation may only be carried out by trained personnel who are familiar with the system. Observe accident prevention regulations.
- ▶ Do not place the electronic control system on an unstable trolley or hand truck, stand, tripod, bracket, table or any other unstable support device.
- ▶ Always place the system on dedicated support devices.
- ▶ Secure the system against falling and tipping over. Observe the general and local safety regulations.

⚠ CAUTION

Using the System in a Humid Environment and with Condensation



When moving the system from a cool to a warm location or when the system is used in a damp environment, condensation may form inside the system and on internal or external electrical connections. Operating the system while condensation is present bears risk of electric shock and/or fire caused by a short circuit.

- ▶ Never operate the device when condensation occurs.
- ▶ After moving the device from a cool to a warm environment, wait until the system is warmed up.
- ▶ To reduce the risk of condensation, find a warmer storage location.

ADVICE



Part Loosening Caused by External Vibration

Risk of damage to the ZMU-4.

- ▶ Do not store in places where the system will be subject to vibration.

ADVICE



Danger from high-frequency radiation

Risk of damage to the ZMU-4.

- ▶ Do not store in places where the system will be exposed to strong magnetic fields.

ADVICE



Use of Unauthorized Accessories and Spare Parts

Risk of damage to the ZMU-4.

- ▶ Do not use any accessories and spare parts that are not recommended by ARRI, as they may damage any connected products and invalidate the warranty.

ADVICE

**Dropping the device due to incorrect assembly on recommended third-party accessories (such as pan bar arm)**

Risk of damage to the ZMU-4.

- ▶ Installation and operation may only be carried out by trained personnel who are familiar with the system.
- ▶ Before mounting recommended third-party accessories (such as pan bar arm) read the operating instructions provided by the manufacturer.
- ▶ Always use the tools specified by the manufacturer for mounting.

ADVICE

**Water damage**

Risk of damage to the ZMU-4.

- ▶ Only use the system in a dry environment.

4 ZMU-4 Overview

4.1 Layout



- 1 Display
- 2 *REC* button
- 3 Camera status LED
- 4 *MENU* button
- 5 *NAVIGATION* buttons (*UP* and *DOWN* button)
- 6 *POWER* button
- 7 Force-sensitive joystick



- 8 *RELEASE* button
- 9 Radio module interface (here with RF-Cover)
- 10 ARRI Rosette mount



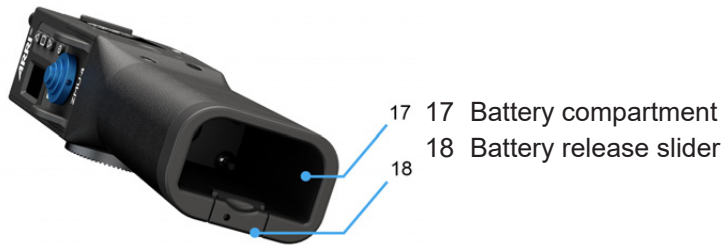
11 ARRI Rosette



12 USB-C interface
13 *USER* buttons 1-3
14 *SPEED CONTROL* buttons



15 CAM interface
16 LBUS interface



5 Mounting and Assembly

5.1 Attachment of Accessories

⚠ CAUTION



Improper Mounting of Accessories

Mounting the ZMU-4 on the pan bar arm of a tripod or other support equipment and attachment of accessories such as electronic and mechanical accessories poses a crushing hazard for fingers and/or hands.

- ▶ Before mounting the ZMU-4 on the pan bar arm of a tripod or other support equipment and attaching accessories such as electronic and mechanical accessories read the operating instructions provided by the manufacturer.
- ▶ Always use the tools specified by the manufacturer for mounting.

Side Attachment Points



The ZMU-4 comes with an ARRI Rosette (K2.0044543) equipped on the left side. The ARRI Rosette can be mounted on the left and on the right side of the ZUM-4 body.

The ARRI Rosette is available as an accessory part:

- ARRI Rosette (K2.0044543)


Use a Torx key TX8 to attach the ARRI Rosette.

Attaching a Radio Module

1. Press and hold the radio module *RELEASE* button.
 2. Remove the RF-Cover or an attached radio module by sliding it upwards.
 3. Insert a radio module by fitting it into the radio module slot.
 4. Slide the radio module downwards until it snaps securely in place.
- ▶ The radio module is attached and ready for use.

5.2 Power Supply


⚠ WARNING



Manipulations of Power Supplies or Cables
Risk of serious injury and/or damage to any connected products.

- ▶ Use only cables and power supply solutions recommended by ARRI. A list of supported cables can be found in the ZMU-4 User Manual and on the ARRI website.
- ▶ Do not supply power outside the specified voltage range.

ADVICE



Improper Handling of Cables
Risk of damage to the ZMU-4.

- ▶ Operate the system using only the type of power supply indicated in this document. Do not supply power outside the specified voltage range.
- ▶ Always unplug the power cable by gripping the power plug, not the cable.
- ▶ Always keep the connectors accessible so that the cable can be unplugged quickly in case of emergency.
- ▶ Always properly secure cables connected to the camera to avoid pinching or tripping.
- ▶ Do not use any accessories, cables or attachments that are not recommended by ARRI, as they may damage any connected products and invalidate the warranty.

ATTENTION

Supplying the ZMU-4 via the internal battery is not sufficient to control cforce motors connected via LBUS. The ZMU-4 requires an external supply voltage of at least 12 V to control cforce motors.

Any electronic device connected to the ZMU-4 will increase the total power draw.

If the ZMU-4 is supplied by the camera, it is recommended to add an additional power supply (e.g. via DTap) if three or more electronic devices are connected to the ZMU-4

We recommend using ARRI's LBP-3500 Li-Ion batteries for the ZMU-4. The LBP-3500 batteries have a capacity of 3.500 mAh.

The ZMU-4 hand unit is compatible to the L-Series battery interface and works with respective 3rd-party batteries such as NP-F550 type batteries.

ZMU-4 Power Supply

- Supply Voltage LBUS or CAM interface: 10.5 - 34.0 V DC
- Battery 7.4 V

Recommended Battery

- K2.0036022 Li-Ion Battery Pack LBP-3500

6 Basic Operation

6.1 Switching On and Off



The *POWER* button is located on the front side of the ZMU-4. The button's background light is illuminated when the supplied voltage is in the valid range.

Switch On the ZMU-4

- ▶ Attach a suitable battery or connect the ZMU-4 to a power source.
- ▶ Press the *POWER* button.

The ZMU-4 starts booting.

Switch Off the ZMU-4

- ▶ Press and hold the *POWER* button until the ZMU-4 has switched off.

6.2 Menu Operation




- ▶ Press the *MENU* button on the ZMU-4 to access the menu.
- ▶ Press the *UP* or *DOWN* button to scroll up or down through the menu.
- ▶ Press the *MENU* button to select a certain menu entry.
- ▶ Select "... " to return to the previous menu level or to leave the menu. *

* Some submenus require, that a certain menu entry is selected. In such cases, no "... " is available and one option must be selected to return to the previous menu level or press one of the three *USER* buttons until you reach the main screen.

7 Cleaning and Repair

7.1 Cleaning Instructions

ADVICE



Improper Cleaning Procedure
Risk of damage of surfaces.

- ▶ Only use the cleaning agents specified in this section.
- ▶ Do not use any strong or aggressive cleaning detergents like Methanol, Acetone, Benzine or acids. These chemicals may dissolve the paint on the ZMU-4 body and damage highly polished surfaces.
- ▶ Do not moisten connectors when cleaning the ZMU-4.
- ▶ During cleaning of the ZMU-4, always make sure that the protective RF-Cover is on the radio module interface.
- ▶ Avoid touching radio module interface connectors.
- ▶ Avoid wiping dry radio module interface connectors with a dry cloth, especially if the surface is not clean.
- ▶ Avoid wiping radio module interface connectors without air blow dusting first. If particles or radio module interface connectors are electrostatically charged, it may improve dusting efficiency to use deionized air.
- ▶ Compressed air should not be used on the ZMU-4 body.

Recommended Cleaning Agents

- Water
- Isopropyl Alcohol

Cleaning Information

Area	Cleaning Procedure
ZMU-4 body	Clean the ZMU-4 body with a soft, lint free cleaning cloth and some water. Only when really necessary isopropyl alcohol should be used.
Narrow spaces, gaps, connectors	Use a manual air blower, cotton swabs or a soft brush to remove dust particles from narrow spaces, gaps or connectors.

7.2 Repair

⚠ WARNING



Repairs carried out by Untrained Personnel


Risk of electric shock and fire caused by short circuit.

- ▶ Do not try to repair the device yourself. Repairs may only be carried out by authorized ARRI service partners.

For repairs and maintenance work on the camera system, please contact service@arri.com.

8 Transportation, Storage and Disposal

8.1 Transportation and Storage

ADVICE	
	Improper Packing and Transportation of the ZMU-4 Risk of damage to the ZMU-4.
	<ul style="list-style-type: none">▶ Follow the specified environmental conditions.▶ Only transport the ZMU-4 in suitable cases.▶ Follow the instructions for transport and storage in this chapter.

The ZMU-4 and its accessories can be damaged if not transported and stored properly. Please take note of the following guidelines.

Transportation Guidelines:

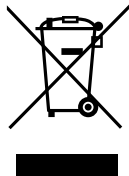
- Remove the radio module from the ZMU-4.
- Always attach the protective RF-Cover to the radio module interface when no radio module is installed on the ZMU-4.
- Always transport the ZMU-4 in a suitable case.
- Do not subject the system to severe shocks.

Storage Guidelines:

- Remove the radio module and attach the protective RF-cover.
- Disconnect all cables and power sources from the ZMU-4.
- Always store the ZMU-4 in a suitable case.
- Do not store the ZMU-4 outside of the specified ambient temperature range.
- Do not store the ZMU-4 in places where it may be subject to extreme temperatures, direct sunlight, high humidity, severe vibration, dust, or strong magnetic fields.

8.2 Disposal

ATTENTION
The product can be returned to the manufacturer. When disposing of accessories, please observe the relevant manufacturer's instructions.



This product falls within the scope of Directive 2012/19 / EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of June 4, 2012 on waste electrical and electronic equipment (WEEE II).

Accordingly, this product must not be disposed of with household waste. There are the respective country-specific disposal rules that must be observed.

9 ARRI Service Contacts

Please see the current list of service partners at [Service contacts](#)



Arnold & Richter Cine Technik GmbH & Co. Betriebs KG
Herbert-Bayer-Str. 10
80807 Munich
Germany
+49 89 3809 2121
Business hours:
Mo. - Fr. 09:00 - 17:00 (CET)
service@arri.de

ARRI CT Limited / London
2 Highbridge, Oxford Road
UB8 1LX Uxbridge
United Kingdom
+44 1895 457 000
Business hours:
Mo. - Thu. 09:00 - 17:30
service@arri-ct.com

ARRI Inc. / West Coast
3700 Vanowen Street
CA 91505 Burbank
USA
+1 818 841 7070
Business hours:
Mo. - Fr. 09:00 am - 05:00 pm (PT)
service@arri.com

ARRI Canada Limited
1200 Aerowood Drive, Unit 29
ON L4W 2S7 Mississauga
Canada
+1 416 255 3335
Business hours:
Mo. - Fr. 08:30 am - 05:00 pm (EDT)
service@arri.com

ARRI Cine + Video Geräte Ges. m. b. H.
Pottendorferstraße 23-25/3/1
1120 Vienna
Austria
+43 1 8920107 30
Business hours:
Mo. - Fr. 09:00 - 17:00 (CET)
service@arri.at

ARRI Inc. / East Coast
617 Route 303
NY 10913 Blauvelt
USA
+1 845 353 1400
Business hours:
Mo. - Fr. 08:00 am - 05:30 pm (EST)
service@arri.com

ARRI Australia Pty Ltd
Suite 2, 12B Julius Ave
NSW 2113 North Ryde
Australia
+61 2 9855 4305
Business hours:
Mo. - Fr. 08:00 am - 05:00 pm (AEST)
service@arri.com.au

ARRI Asia Pte. Ltd.
164 Kallang Way, #03-01
349248 Singapore
Singapore
+65 6230 9488
Business hours:
Mo. - Fr. 9:00 - 18:00 (CST)
service@arri.asia

ARRI China (Beijing) Co. Ltd.

Chaowai SOHO Tower C, 6/F, 0628/0656
Chaowai Dajie Yi 6
Beijing
China
+86 10 5900 9680
Business hours:
Mo. - Fr. 09:00 am - 06:00 pm (CST)
service@arri.cn

ARRI Japan Kabushiki Kaisha

Service
Haneda Innovation City Zone K210, 1-1-4
Hanedakuko, Ota-Ku
144-0011 Tokyo
Japan
+81 3 6635 3750
Business hours:
Mo. - Fri. 10:00 - 18:00 (JST)
info@arri.jp

ARRI Brasil Ltda

Avenida Ibirapuera 2907 – Cj. 421, Indianópolis
04029-200 São Paulo
Brazil
+55 1150419450
Business hours:
Mo. - Fr. 09:00 am - 05:30 pm (BRT)
arribrasil@arri.com

CINEOM Broadcast DMCC.

Unit No. 2109, Jumeirah Bay Tower X2 Cluster X
Jumeirah Lakes Towers
P.O Box 414659
Dubai, UAE
+971 (0) 45570477
Business hours:
Sa. - Th. 10:00 am- 06:00 pm
arriservice.me@cineom.com

ARRI Hong Kong Limited

41/F One Kowloon, 1 Wang
Yuen Street Kowloon Bay
Hong Kong
P. R. China
+852 2537 4266
Business hours:
Mo. - Fr. 09:00 am - 06:00 pm (HKT)
service@arri.asia

ARRI Korea Limited

Kolon Digital Tower 1(#1505-06), 25
Seongsuil-ro 4 gil, Seongdong-gu
04781 Seoul
Korea
+82 (0)70 4419 6401
Business hours:
Mo. - Fr. 9:00 - 18:00 (KST)
service@arri.kr

LINKA İthalat İhracat ve Dış Tic.

Distributor
Halide Edip Adivar Mah. Darülaceze Cad.
No:3 Akın Plaza Kat:5 95-96
34381 Şişli, İstanbul
Turkey
+90 2123584520
Business hours:
Mo. - Fr. 09:00 - 18:00 (EET)
service@linkgroup.com.tr

CINEOM Broadcast India Pvt. Ltd.

C-4, Goldline Business Centre
Link Rd. Malad West
400 064 Mumbai
India
+91 (0)22 42 10 9000
Business hours:
Mo. - Sat. 10:00 am - 06:00 pm (IST)
arrisupportindia@cineom.com