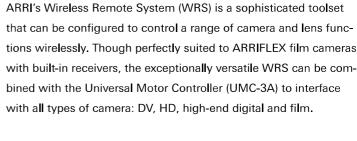




# **Remote Control Options**

# for all Types of Film and Digital Cameras



The system is modular and designed to be assembled according to the user's needs. Dependable ARRI quality is evident in every component, from the ultra-compact WCU-3, which facilitates light-weight remote control of camera on/off, focus and aperture, to the WRC-2, which accommodates speed ramps and iris compensation. Compatible with the ARRI Lens Data System, the WRS incorporates a wealth of other tools, including the Zoom Main Unit (ZMU-3A) for remote zoom control.







## The Most Versatile Remote Control

Compatible with all new generation ARRIFLEX and ARRICAM cameras, as well with the SONY F35, the WRC-2 combines the functions of previous units such as the RCU-1 and WRC-1 with a number of entirely new features. The WRC-2's range of functions automatically adapts to the camera it is being used with, while the touchscreen user interface makes remote-controlling that camera faster and easier than ever before. Since its functionality is software-based and therefore expandable, the WRC-2 can be described as the most versatile remote control unit ARRI has ever built.

#### **SETUPS**

In its standard version, the WRC-2 enables the user to remotely control:

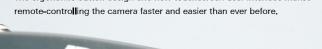
- Camera speed
- Shutter angle of the mirror shutter providing a wide range of compensation options for constant exposure via intuitive software

#### **OPERATION MODES**

The main menu offers three different operation modes:

- Camera Control its adjustments to the speed and shutter angle of the camera
- External Display emulates the display on the side of pre-ARRICAM new generation cameras
- Ramp Mode facilitates compensation for in-shot changes of speed, shutter or iris







In combination with the ARRI WRS and the ARRI Lens Data System, complex applications can be setup.



#### Automatic Exposure Calculation

Uniquely, the WRC-2 automatically calculates the correct exposure value for given ramps (speed, iris or shutter) based on measurements made by the DoP on set. The complete ramp data can then be entered via the clearly arranged Ramp Menu, which guides the user through the sometimes very complex process of programming a ramp. Thus, the WRC-2 is a powerful tool that saves time and provides a new level of exposure-safety and precision.

## Ramp Compensation with or without LDS Lenses

The WRC-2 can automatically compensate speed and iris ramps. In order to compensate for ramps with the iris, a CLM-1 or CLM-2 motor has to be attached to the camera and the mounted lens has to be selected in the WRC-2. This is done automatically when using LDS lenses (Master Prime or LDS Ultra Prime). For other lenses an iris table can easily be created by following a few steps in the Lens Manager. The lens can then be stored in the WRC-2 internal memory.

#### Wired or Wireless Transmission

The WRC-2 works with the ARRI Wireless Remote Control system and attaches to the Wireless Main Unit WMU-2 and WMU-3. It can be wired to an ARRIFLEX or ARRICAM either directly or via a Wireless Handgrip Attachment WHA-2 or WHA-3, using a standard LCS cable.

#### Easy Software-Upgrade Functionality

Being software-based, the WRC-2 can be continually upgraded. Newly released software updates and modules can be uploaded simply by connecting a USB memory stick to the WRC-2 mini-USB port, so there is no need to carry a laptop to the set.

In addition, there is downloadable WRC-2 simulator software on the ARRI website at:

⇒ www.arri.com/wrc-2



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## Wireless Compact Unit 3 wcu-

## The Ultra-Compact Lightweight Remote Control

The Wireless Compact Unit WCU-3 is an affordable, all-in-one remote control for camera on/off, focus and aperture. The Zoom Main Unit ZMU-3A can also be attached with an optional bracket. The WCU-3 is fully compatible with the existing ARRI Wireless Remote System WRS.

Special attention has been given to ergonomics and durability, with features like an adjustable handgrip, backlit buttons, an illuminated index scale, optional cabled or wireless operation, and sealed precision optical encoders for the manual controls. The modern, backlit color TFT display shows the camera and lens status.

The WCU-3 directly communicates with the ARRICAM Studio, ARRICAM Lite, ARRIFLEX 435 Xtreme, ARRIFLEX 416 Plus, and ARRIFLEX 416 Plus HS. In combination with the Universal Motor Controller UMC-3 or UMC-3A, it also works with numerous other still and video cameras. Power is provided by an affordable camcorder battery, such as the Sony Lithium M NP-FM 500H.



#### **MAIN FEATURES**

The WCU-3 enables the user to remotely control:

- Focus
- Iris
- Camera on/off

#### SPECIAL FEATURES

- Display of camera status and lens data
- Ergonomic design
- Adjustable handgrip
- Backlit buttons
- Illuminated index scale
- Optional wired or wireless operation
- Transreflective display
- Water-resistant

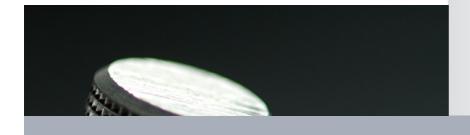
#### **COMPATIBILITY**

The WCU-3 is directly compatible with:

- ARRICAM Studio
- ARRICAM Lite
- ARRIFLEX 435 Xtreme
- ARRIFLEX 416 Plus
- ARRIFLEX 416 Plus HS

In combination with the UMC-3/UMC-3A:

Numerous other film or digital cameras



## **Wireless Remote System Components**









#### WRC-2

Wireless Remote Control

Compatible with all new generation ARRIFLEX and ARRICAM cameras, the WRC-2 combines the functions of previous units such as the RCU-1 and WRC-1 with a number of entirely new features. The WRC-2's range of functions automatically adapts to the camera it is being used with, while the touchscreen user interface makes remote-controlling that camera faster and easier than ever before. Since its functionality is software-based and therefore expandable, the WRC-2 can be described as the most versatile remote control unit ARRI has ever built.

### WCU-3

Wireless Compact Unit

The Wireless Compact Unit WCU-3 is an affordable all-in-one remote control for camera on/off, focus and aperture. The Zoom Main Unit ZMU-3A can also be attached with an optional bracket. The WMU-3 is fully compatible with the existing ARRI Wireless Remote System WRS. The WCU-3 directly communicates with the ARRICAM Studio, ARRICAM Lite, ARRIFLEX 435 Xtreme, ARRIFLEX 416 Plus and ARRIFLEX 416 Plus HS. In combination with the Universal Motor Controller UMC-3 or UMC-3A, it also works with numerous other still or digital high-end cameras, like the SONY F35. Power is provided by an affordable camcorder battery, such as the Sony Lithium M NP-FM 500H.

### WZE-3

Wireless Zoom Extension

The Wireless Zoom Extension WZE-3 frees the Zoom Main Unit ZMU-3A of its cables. Once the WZE-3 is attached to the ZMU-3A by means of a simple bracket, unencumbered wireless zooming is possible from anywhere on the set. As with the other components of the ARRI Wireless Remote System, once switched on, the WZE-3 will automatically negotiate its position in the wireless network on the set. The WZE-3 is powered by an affordable standard camcorder battery and is fully compatible with the existing ARRI Wireless Remote System.

#### ZMU-3A

Zoom Main Unit

The ZMU-3A is an ergonomically-shaped zoom controller that can be used in three different configurations, providing maximum flexibility. Zoom speed can be precisely adjusted and zoom limits can be set. A large bar graph shows the zoom ring position, zoom speed and various status messages. The ZAP button allows for a quick focus check, while the rosette on the right side of the ZMU-3A means it can be attached to a tripod handle.





#### UMC-3A Universal Motor Controller

The Universal Motor Controller UMC-3A is an update to the UMC-3. Through a new voltage booster, higher lens motor speeds are possible when using 12V supply voltages such as those found in many video cameras. Like its predecessor, the UMC-3A provides camera and lens remote control capabilities to film and video cameras that do not have a WRS radio built in. Up to three lens motors can be connected, while hand units communicate with the UMC-3A wirelessly or via cables. In addition, the UMC-3A provides support for the Lens Data Display for Focus Puller (LDD-FP) and its Lens Data Archive (LDA) options.



### WFU-3

Wireless Focus Unit

The WFU-3 is used to control focus and/or iris. Focus and iris can be assigned freely to hand wheel and slider, and electronic lens and knob limits can be easily set. In addition it is possible to set mechanical knob limits. The movable index marker is especially useful when the WFU-3 is held at different angles or swapped between hands.



#### WMU-3

Wireless Main Unit

The WMU-3 is held in the camera assistant's hand. It communicates with the UMC-3 on the camera and accepts the hand controllers for focus, zoom and iris. Through the clean and elegant geometry of the modular hand units the system can be used equally well in the left or right hand.



WZU-3 Wireless Zoom Unit

The WZU-3 is used to control zoom. It can be sandwiched between the WMU-3 and the WFU-3, thus taking up a minimal amount of space. Zoom speed can be adjusted and zoom limits can be quickly set.

## **Universal Motor Controller 3A**

UMC-3A

Some ARRI cameras (ARRICAM, 435 Xtreme, 435 Advanced with FEM-2) have the necessary electronics for wireless lens or camera remote control already built in. Others, including the ARRIFLEX 235, need to be equipped with a remote receiver to facilitate wireless control of camera and lens functions such as zoom, iris and focus. The UMC-3A receives wireless signals and connects with lens motors, thereby bringing advanced remote options to any compatible camera.

Up to three CLM-1, CLM-3 or CLM-3 lens motors can be attached to the UMC-3A, while it communicates either with the Wireless Main Unit WMU-2 or WMU-3. Optionally the WHA-2, WHA-3 or any ZMU can be used for cabled operation.

Once a Lens Data Display for Focus Puller (LDD-FP) and CLM-1, CLM-3 or CLM-3 motors are connected to the UMC-3A, it is possible to use the Lens Data Archive (LDA) for basic Lens Data System functions on any

camera with any lens. Lens tables for many Zeiss lenses are already pre-programmed in the LDD-FP, and tables for other lenses can be input at the rental house. Lens Data Archive functions include a remote display of the lens rings and a dynamic depth of field bar graph, as well as setting and managing of electronic focus marks.

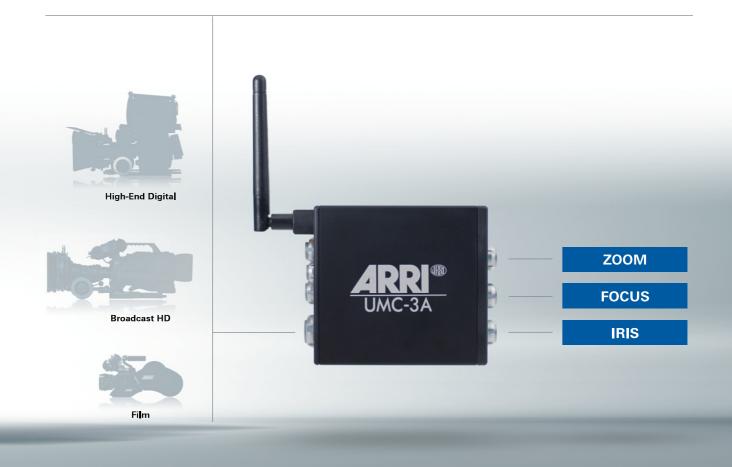
The Universal Motor Controller UMC-3A is an update to the UMC-3. Through a new voltage booster, higher lens motor speeds are possible when using 12V supply voltages, like those found in many video cameras.



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# One Remote Receiver for all Types of Cameras



The exceptionally versatile WRS can be combined with the UMC-3A to interface with all types of camera: DV, HD, high-end digital and film.



## **Controlled Lens Motors**

CLM-2 / CLM-3

These small, lightweight motors are particularly suited to applications for which weight and size are decisive factors, e.g. steadicam shots, when using 16 mm and DV/HD cameras, or with sensitive lenses.

The new CLM-3 has been redesigned from the ground up to meet the needs of working professionals on the set even better. The motor is significantly stronger and faster than the competition to control even heavy, difficult-to-operate lenses under extreme, cold temperature conditions.

The CLM-3's modular concept separates housing, gear, cable and bracket to make handling and routine maintenance much easier. To provide more flexibility and various mounting options, the gear now attaches on either side and the extension bracket can be mounted horizontally or vertically over a quick clamp shoe.

Due to the different types of available teething gears, both motors – the CLM-2 and CLM-3 – are fully compatible to all existing lens gear systems on the market. Additional inserts make mounting to 19 mm or 15 mm support systems possible.



## The New CLM-3

#### SPECIAL FEATURES AND IMPROVEMENTS

- Significantly stronger & faster than the competition
- Modular concept
- Separate cable
- Gear attaches to either side
- Flexible mounting options