

CCM-1

Camera Control Monitor

OPERATING MANUAL

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Imprint

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Original version.

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1 About this document

This operating manual is aimed at everyone involved in using the device. It 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 device for the first time.

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

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

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

For useful information in addition to these manuals please have a look at the [ARRI learn & help](#) section on the [ARRI website](#).

The ARRI Academy courses provide unrivalled insights into the full possibilities of working with ARRI camera systems, lenses, lighting systems 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 service parts. To learn more, please visit [ARRI academy](#) or contact academy@arri.de.



www.arri.com/ccm-1



[ARRI documentation portal](#)

Searchkeys: CCM-1, K2.0048523

Document Revision History

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Version	Release	Date	Note
1.0	K11303	July 2023	First Release
1.01	K11359	October 2023	Added connection options

2 About this Product

2.1 Introduction

The CCM-1 is a 7" onboard monitor that provides full camera control and menu access for the ALEXA 35 and ALEXA Mini LF. The CCM-1 is ideally suited to numerous production types and applications.

For camera operators who prefer to judge framing and exposure with an onboard monitor rather than a viewfinder, the CCM-1 is an easy choice.

2.2 Intended Use

The CCM-1 is a camera control monitor for professional use in broadcast and film production environments.



NOTICE

All versions of the CCM-1 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 safety instructions and system requirements for all equipment involved. ARRI assumes no liability for damages or changes that are caused by improper use. You are not allowed to modify the device.

2.3 Identification



The CCM-1 serial number is located on the product label in the lower center of the CCM-1.

The serial number consists of the last 4 digits of the product number K2.00YYYYYY-1234 (here: 1234).

2.4 Environmental Conditions

The CCM-1 should only be used and stored under certain environmental conditions.

Check the following conditions before commissioning and operation:

Permissible Operating Temperature	+32° F to +113° F (0° C to +45° C)
Permissible Storage Temperature	-4° F to +158° F (-20° C to +70° C)
Permissible Humidity	0 - 95% RH non condensing

2.5 Technical Data

Mechanical Specification

Dimensions (H x W x D)	4.72 x 7.36 x 1.15 in (120 x 187 x 29 mm)
Weight	0.65 lbs (0,3 kg)
Material	Aluminum alloy
Arm mounting	4x ARRI Pin-Lock1/4" mounting points (Top, Bottom, Rear, Right Side)
Hood mounting	Friction attach

Electrical Specification

Power input	PWR + VF connector
Power consumption	up to 20 W
Firmware requirement	Compatible with TBD firmware or later

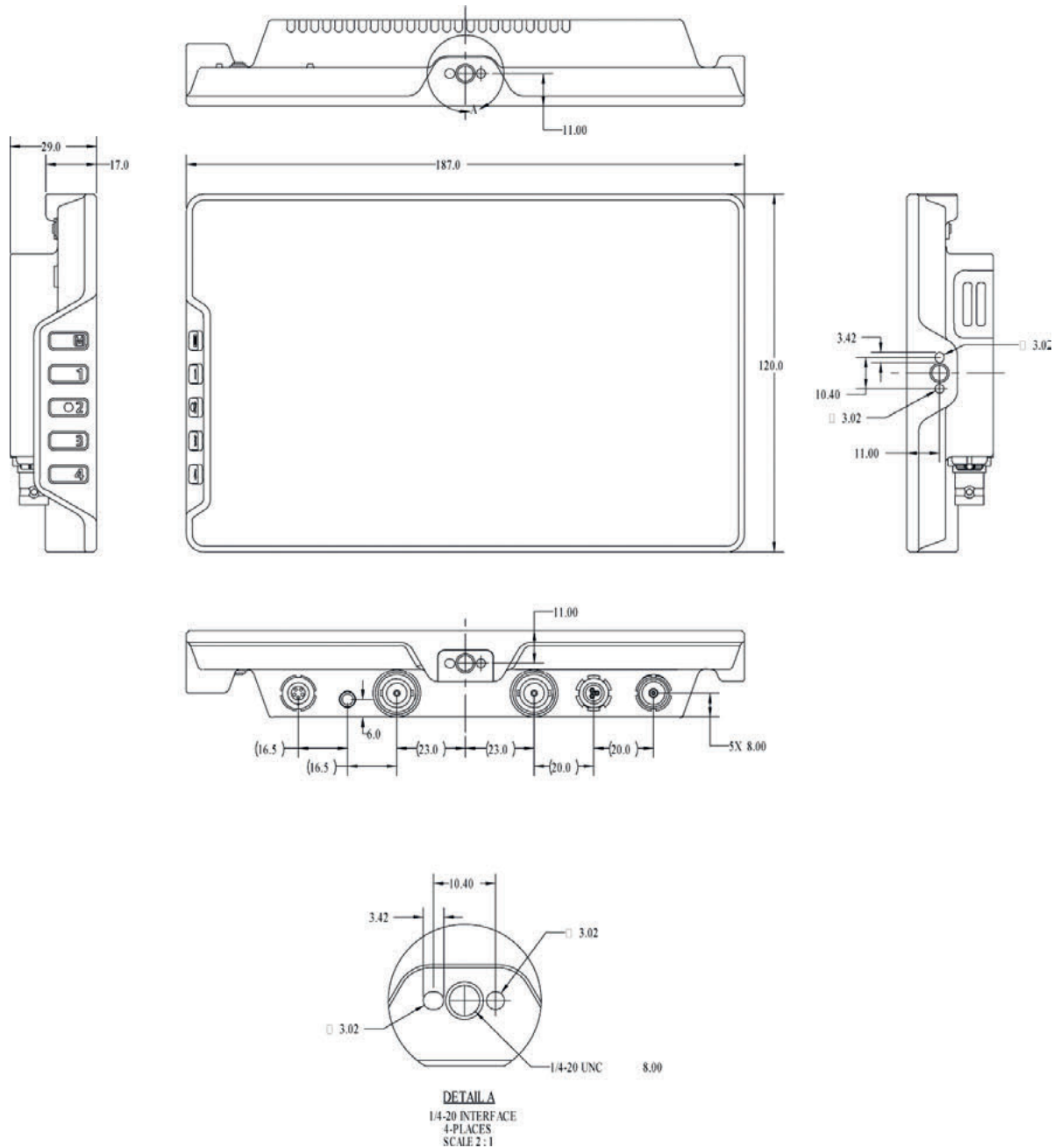
Optical Specification

LCD Type	Thin Film Transistor Liquid Crystal Display (TFT LCD) with LED backlight
Resolution	1920 x 1200
Pixel density	322 ppi
Active screen size	3.72 x 5.95 in (95 x 151 mm)
Refresh rate	30Hz - 60Hz (Locked to incoming frame rate between 7.5fps and 60fps)
Response time	25 ms
Contrast	1.200 : 1
Screen luminance	~1300 cd/m2 (max.) Backlight Dimming 100% to 0%
Color depth	8+2FRC
Luminance uniformity (typical)	89%
Colors (typical)	96% DCI-P3
Viewing angle	160° all axes
Display orientation	Landscape, 180° rotation

User Interface

Touch	pCap Multi-Touch
Buttons	Menu
	User Button 1-4
	Back
	Power
	Lock Slider
	Joystick

2.6 Dimensional Drawing



All Dimensions in mm.

2.7 Scope of Delivery and Warranty



NOTICE

The packaging consists of recyclable materials. For the sake of the environment, dispose of 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 or incomplete delivery.

Delivery

A complete Camera Control Monitor CCM-1 Set KK.0048851 includes:

- 1x K2.0048523 CCM-1 with Foldable Sunhood, Screen Protector
- 1x K2.0048394 Monitor Arm for Camera MAC-1
- 1x K2.0023943 Cable VF (0.5 m / 1.5 ft)
- 1x K2.0001637 Cable RS – RS/PWR IN (0.5 m / 1.5 ft)

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.

2.8 Approval Information

The CCM-1 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: Camera Control Monitor-1
CCM-1

The 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 harmonization of the laws of the Member States relating to electromagnetic compatibility
- Directive 2011/65/EU of the European Parliament and the Council of 8 June 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 has been verified by applying the following standards:

- EN 55032:2015 +AC:2016 +A1:2020 +A11:2020 ; EN 55035:2017 +AC:2019 +A11:2020 ;
- EN IEC 63000:2018

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



UK Declaration of Conformity

Brand Name: ARRI
 Product Description: Camera Control Monitor-1
 CCM-1

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

- 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:

- EN 55032:2015 + A11:2020; EN 55035:2017 + A11:2020;
- EN IEC 63000:2018

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

FCC Class A Statement

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

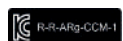
Complies with CAN ICES-003(A)/NMB-003(A).

Australia and New Zealand Compliance



Brand Name: ARRI
 Product Description: Camera Control Monitor-1
 CCM-1

Taiwan Compliance



R-R-ARg-CCM-1
 Brand Name: ARRI
 Product Description: Camera Control Monitor-1
 CCM-1

3 Safety Instructions

This safety information is in addition to the 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 device. 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 device or other objects.

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

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



DANGER

DANGER indicates an imminent danger. If not avoided, death or serious injury will result.

Always follow the recommended measures to avoid this hazardous situation.



WARNING

WARNING indicates a possibly imminent danger. If not avoided death or serious injury may result.

Always follow the recommended measures to avoid this potentially hazardous situation.



CAUTION

CAUTION indicates a potentially imminent danger. If not avoided, slight or minor injuries may result.

Always follow the recommended measures to avoid this potentially hazardous situation.



NOTICE

NOTICE indicates a potentially harmful situation. If not avoided, the equipment or something in its surrounding may be damaged.

Always follow the recommended measures to avoid this situation.

HINT

Not relevant to safety, **HINT** 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 sharp element



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.

3.1 General Safety Instructions



WARNING

Operation of the CCM-1 in Case of Obvious Damage

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

- ▶ Never use the device if electrical lines or housing are visibly damaged.
- ▶ Only use the type of power source indicated in the manual.
- ▶ Always grip the power plug to unplug the power cable.
- ▶ 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 device (incl. warning stickers or paint marked screws).
- ▶ Do not try to repair the device. Repairs may only be carried out by an authorized ARRI service center.



WARNING

Falling System Parts

Do not built up or assemble the CCM-1 the wrong way. It can fall down and cause serious injuries and damage to the product or property.

- ▶ Installation and operation must only be carried out by approved persons who know the product. Obey the accident prevention regulations.
- ▶ Never put the product on a not stable trolley or hand truck, stand, tripod, bracket, table or any other not stable support device.
- ▶ Always place the product on dedicated support devices.
- ▶ Secure the product and its accessories against falling and tipping over. Obey the general and local safety regulations.
- ▶ Always use a suitable safety rope when you use the product above floor level (i.e. on cranes).



WARNING

Connected Cable on the Floor

Risk of injury caused by tripping, falling or slipping over connected cables.

- ▶ Always properly secure cables connected to the device and accessories.
- ▶ Always install cables that they cannot be tripped over.
- ▶ If necessary, use a cable duct or secure the cables with adhesive tape.
- ▶ Always disconnect the cables from the device and accessories before moving.



CAUTION

Hot Surfaces

During extended operation and / or operation at high ambient temperatures, the surface of the CCM-1 can get hot. Direct sunlight can result in housing temperatures above 60° C (140° F).

- ▶ Always use an approved mount to fasten the CCM-1 to the system.
- ▶ Never hold the CCM-1 with bare hands for a long time.
- ▶ Do not touch the monitor surface with bare hands. It can get hot during operation.
- ▶ Do not put covers on the CCM-1 while it is powered. Make sure cooling fins are not obstructed and airflow around cooling fins is free.
- ▶ Do not put the CCM-1 near any heat sources during operation.
- ▶ At ambient temperatures above 25° C (77° F), prevent the CCM-1 from being exposed to direct sunlight.



CAUTION

Use of the CCM-1 or CCM-1 Accessories in a Humid Environment and with Condensation

When you move the device and the accessories from a cool to a warm location or when the device is used in a damp environment, condensation may form inside the device, and on internal or external electrical connections. Do not operate the device while condensation is present. It bears risk of electric shock and/or fire caused by a short circuit.

- ▶ Do not operate the device and accessories when condensation occurs.
- ▶ When you move the device and accessories from a cool to a warm environment, wait for some time for the components to warm up.
- ▶ Find a warmer storage location to decrease the risk of condensation.



CAUTION

Tripping due to Inattention

Risk of injury and damage to the CCM-1.

- ▶ Always pay attention to the surroundings while using the product.



CAUTION

Broken Cover Glass

Risk of cutting fingers.

- ▶ Do not hit the cover glass.
- ▶ Use protective gear in case of broken cover glass.



NOTICE

Drop of the product caused by incorrect assembly on recommended third-party accessories

Risk of damage to the CCM-1

- ▶ Installation and operation must be done by trained personnel.
- ▶ Always read and understand the operating instructions of third-party accessories before you mount recommended the accessories (such as pan bar arm).
- ▶ Always use the tools specified by the manufacturer.



NOTICE

Parts Loosening Caused by External Vibration

Risk of damage to the CCM-1.

- ▶ Do not use in places where the device is subject to vibration.
- ▶ Do not store in places where the device is subject to vibration.



NOTICE

Danger from High Frequency Radiation

Risk of damage to the CCM-1

- ▶ Do not use in places where the product is exposed to high frequency radiation.
- ▶ Do not store in places where the product is exposed to high frequency radiation.



NOTICE

Use of Unauthorized Accessories and Service Parts

Risk of damage to the CCM-1

- ▶ Do not use any accessories and service parts that are not recommended by ARRI. They may damage any connected devices and invalidate the warranty.

4 Product overview

The Camera Control Monitor-1 CCM-1 is a 7" on board monitor that provides full camera control and menu access for the ALEXA 35.



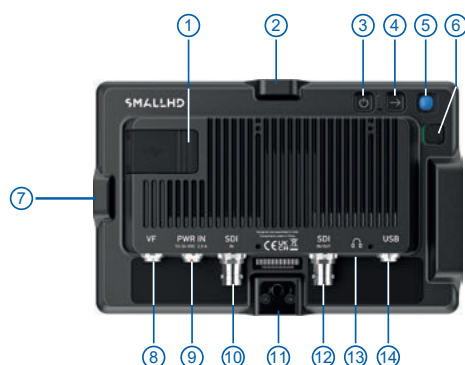
- 1 Display
- 2 Menu button
- 3 User button 1-4

Display

The display (1) is a 7" 1920x1200 IPS LCD touchscreen with a maximum screen luminance of 1300 nits and an active screen size of 95 x 142 mm / 3.72" x 5.95".

MENU Button and User Buttons

The *MENU* button (2) provides access to the camera menu, which is identical to that of the MVF-2. The four user buttons (3) can be assigned camera-specific functions as well as smallHD monitor functions.



- 1 USB-C Slot
- 2 Mounting Point
- 3 POWER Button
- 4 BACK Button
- 5 Joystick
- 6 LOCK Slider
- 7 Mounting Point
- 8 VF Connector
- 9 PWR In Connector
- 10 SDI IN Connector
- 11 Mounting Point
- 12 SDI IN/OUT Connector
- 13 Headphones Connector
- 14 USB Connector

Mounting Points

The monitor has four ARRI Pin-Lock 1/4" mounting points (top (2), right (7), bottom & rear (11)), to attach the monitor to the camera or e.g. a rig.

POWER Button

The monitor can be switched on and off via the *POWER* button (3).

Joystick and BACK Button

The joystick (5) and the *BACK* button (4) are used for menu navigation and provide an alternative control option in environments where the touchscreen is difficult to use.

LOCK Slider

The *LOCK* Slider (6) locks all monitor controls including the touchscreen to prevent unintended triggering of functions.

USB-C Slot

The USB-C slot (1) accepts the same USB-C stick as the ALEXA 35, which can remain plugged in under a weatherproof cover during operation. Via the USB-C stick, firmware updates can be imported, and frame grabs, or 3D-LUTs stored.

VF Connector (CoaXPress)

The VF connector (8) is used to connect the CCM-1 to the camera. The interface transmits power, video and control data and supports cable lengths of up to 10 m (33 ft). If the CCM-1 is operated at a brightness of 100 nits, it can solely be powered via this interface. If higher brightness levels are required, the monitor must additionally be powered via the PWR In connector. The VF connector comes without a key, so the VF cables plug in regardless of their orientation.

PWR In Connector (3-pin Fischer)

The monitor can be supplied with additional power via the PWR In connector (9), which is required if the monitor is operated with a brightness above 100 nits, or when the monitor is used on third party cameras. The PWR In connector accepts input voltages from 10 – 34 V DC.

SDI IN (BNC)

When the MVF-2 and CCM-1 are used in parallel on an ALEXA Mini LF, or when the monitor is used with third party cameras, the CCM-1 receives the camera image via the SDI In connector (10). The SDI In connector accepts 1.5G and 3G SDI signals according to SMPTE ST 292-1:2012 and SMPTE ST 425-1:2014.

SDI IN/OUT (BNC)

As an input, the SDI IN/OUT connector (12) offers the same features as the SDI IN input, and both inputs can be used in parallel. As an output, it outputs the signal that is present at the SDI In connector.

Headphones Out

The headphone output (13) is a 3.5 mm jack that outputs all audio channels (same as the headphone output of the MVF-2).

USB Connector (5-pin LEMO)

When MVF-2 and CCM-1 are used in parallel on an ALEXA Mini LF, the CCM-1 can control the camera via the USB connector instead of the VF connector.

**NOTICE**

Although the camera is equipped with two viewfinder ports, CCM-1 and MVF-2 cannot be used in parallel yet. Parallel support will be enabled in a future software package.

5 Mounting and Assembly

5.1 Power Supply and Connections

Power Supply Options

The CCM-1 can be supplied via a VF cable or a power cable.

When powering the CCM-1 via a VF Cable the brightness of the monitor is limited to 100 nits.

When powering the CCM-1 via a power cable the maximum brightness of the monitor is 1.300 nits.

1. Switch off the power supply.
2. Connect a Coaxpress cable with the VF connector (8) or a power cable with PWR In (9).
3. Switch on the power supply and the CCM-1 with the power button (3).
4. Press the power button (3) to switch off the CCM-1.

Connection Options



Single Cable Operation

With just one cable, the CCM-1 can perform all functions with VF cables up to 10 m in length, and with a brightness of up to 100 nits.



High-Bright Operation

For daylight-viewable imagery, a power cable can be added alongside the VF cable for access to the full 1300 nits of brightness. Power can be supplied by the camera or a local power source such as an onboard battery.



Dual Mode for ALEXA Mini LF

To use the CCM-1 on an ALEXA Mini LF while an MVF-2 is simultaneously used via the VF connector, connect SDI, PWR, and Ethernet (via USB) to the CCM-1 for full brightness and all camera control functionality apart from access to the camera menu.



Standalone Operation

The CCM-1 can also be used as a high-bright, robust, and weather-sealed SDI monitor. With two 3G SDI inputs, loopout functionality, and the full SmallHD monitoring toolset, it becomes a versatile tool for any focus station, third-party camera, or director's monitor.

5.2 Attachment of Accessories

Mounting Options

There are four ARRI Pin-Lock 1/4" mounting points (1 x top, 1 x bottom, 1 x rear, 1 x right side) to mount the CCM-1 to a camera or a rig.



CAUTION

Risk of overheating and burning

The housing of the product gets warm during operation. Always use an approved mount like the ARRI MAC-1 to mount the product to the system.



Monitor Arm for Camera MAC-1

The MAC-1 (K2.0048394) features an adjustable friction system for one-handed repositioning of the monitor, as well as inserts for different mounting standards. The MAC-1 connects to the ARRI Pin-Lock 1/4" mounting points on the bottom, rear, side, and top.

Please observe the orientation of the MAC-1 monitor arm, the marking "Display side" on the front of the monitor arm must face to the display side of the monitor.

**Viewfinder Adapter VFA-4**

The VFA-4 (K2.0048510) enables mounting of the CCM-1 to standard ARRI viewfinder brackets without tools, and comes with inserts for ARRI Pin-Lock and SmallHD mounting standards. A folding mechanism allows quick repositioning and flat storage.

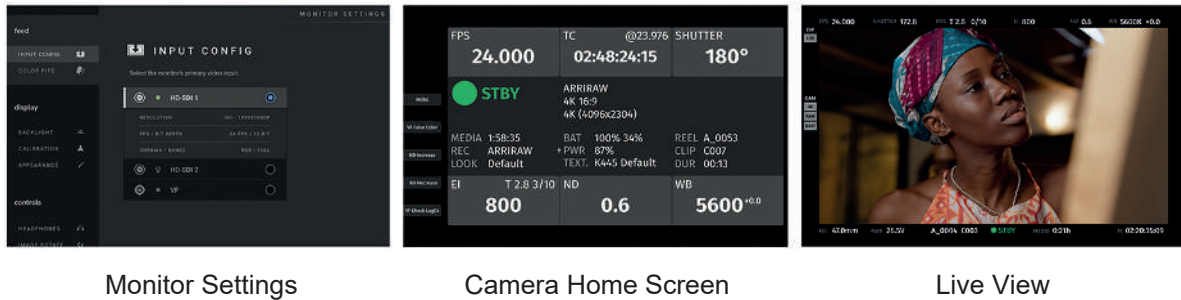
**Sunhood**

This foldable sunhood for the Camera Control Monitor CCM-1 can be mounted to the CCM-1 without any tools, the side flaps and the top flap hold together magnetically. The outside material is strong and durable, the inside microfiber material protects the display and prevents reflections. The sunhood protects the display of the CCM-1 even when folded.

6 Menu Operation

6.1 smallHD PageOS

The smallHD PageOS interface allows users to configure and assign specific image analysis tools and/or functions on up to eight customizable pages. Users can access these tools by navigating to the appropriate page on the monitor instead of having to activate or deactivate the functions individually. The CCM-1 provides three default pages:



Monitor Settings

Camera Home Screen

Live View

Change between the pages by swiping left/right or move the joystick on the monitor rear left/right.

Pages View and Pages Customization

The Pages View offers a zoomed-out perspective of all configured pages, allowing organization and naming to ensure the most efficient overall setup.

- Swipe down or move down the joystick to open the Pages View.
- To create a new page from either a fresh workspace, a premade template, or a specific utility, navigate to the right-hand side of the Pages View. Select the New Blank Page option and then choose which type of page you would like to add, or create a custom one from scratch.
- To rename, move or delete a page, navigate to the page you would like to change, then tap on the context button below the page or move down the joystick to open the context menu. Select the desired action.
- To leave the Pages View tap on a page.

Add New Tool to a Page

- Tap the screen while on any page to reveal the toolbar. Tap on the plus icon that appears on the left side of the page. Select the tool you want added to that page. You will be presented with an option to add to that specific page or to add the tool to all pages. If you choose to add it to all pages, that tool will be present on every single page, whereas if you select a single page, it will be confined to the page you are currently on.
- To activate and deactivate the selected tool, tap the screen. Then tap on the triangle displayed on the top left of the screen.
- To adjust the custom settings of that tool, tap the screen and tap on the arrow that appears next to the name of the tool. This will take you to a submenu that will show your adjustment options for that specific tool.
- To remove a tool from a page, tap the screen and tap on the arrow that appears next to the name of the tool. Then tap on the trashcan icon at the bottom of the submenu.

Monitor Settings

The Monitor Settings page will allow you to adjust a wide range of global monitor settings.

Feed

- Select *Input Config* to set the image source (SDI 1, SDI 2, VF) to be displayed on the monitor.
- Select *Color Pipe* to assign and configure color space and curve transformations, to enable HDR and SDR from incoming log-based sources.

Display

- Select *Backlight* to set a backlight level that suits your viewing environment to maximize contrast and viewability.
- Select *Calibration* to set chrominance and luminance accuracy.
- Select *Appearance* to set the sharpness level applied to the video feed.

Controls

- Select *Volume* to adjust the audio output level for the headphone jack.
- Select *Image Rotate* to enable upside-down mounting - or enable mirroring for when the monitor must face the subject.
- Select *Interlace* to control how interlaced footage is displayed.

Capture

- Select *Image Capture* to configure the Image Capture tool to help facilitate shot matching or for automatic thumbnail creation upon pressing record.
- Select *Image Gallery* to browse the Image Gallery to review the images on your removable media.

Interface

- Select *User Buttons* to configure the monitors user buttons. You can assign monitor-specific or camera-specific functions to the user buttons. Alternatively, camera-specific functions can be assigned via the camera menu (*MENU > User Buttons > Monitor User Buttons*).
- Select *Pages* to determine the operation and behavior of the pages.
- Select *Pixel Zoom* to configure the default zoom levels for Pixel Zoom to 'punch in' to a desired amount when spot-checking a particular shot.
- Select *Status Display* to enable and configure the Status Display to get info on various monitoring-related data such as battery life and frames per second.
- Select *UI Lock* to enable the UI Locking. Once enabled, pressing and holding on the touchscreen for five seconds will lock the UI. Repeating the process will unlock the UI.
- Select *LED Brightness* to set the button LED brightness level.
- Select *Touch Response* to enable an on-screen indicator wherever the touch screen is tapped.

User

- Select *Backdrop* to enable a customizable backdrop for when the monitor is not displaying a signal.
- Select *Power* to set power related options such as auto recovery.
- Select *Date Time* to set the monitor time and date.
- Select *Monitor ID* to set a custom name for your monitor, to make it more easily recognizable.
- Select *Profiles* to save or load the entire monitor's configuration to the USB memory stick.

System

- Select *Firmware* to update the firmware of the monitor.
- Select *Reformat Drives* to format the USB memory stick.
- Select *Factory Reset* to reset the monitor settings to its original factory settings, with the option to clear registration and calibration.
- Select *System Info* to see the monitors serial no. and the installed firmware version.

6.2 Camera Menu

The CCM-1 offers access to the complete camera menu for access to all camera settings. The menu can be controlled with touch or physical keys and offers the same layout as the Multi Viewfinder MVF-2.

- Press the *M* button on the left side of the monitor to open / close the camera menu.

For detailed instructions on how to operate the camera menu please refer to the camera user manual.

Interactive Overlays

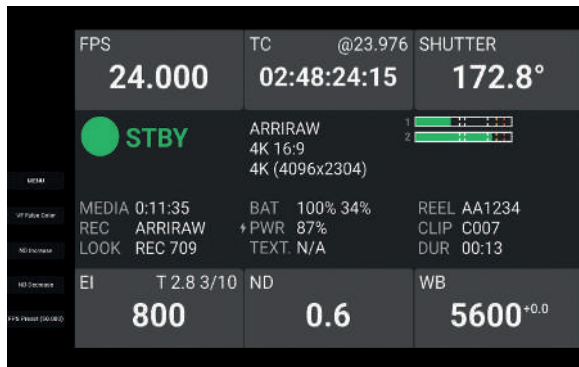
The live image with interactive status components allows quick access to the most frequently adjusted settings:



- Tap on one of the main parameters (FPS, Shutter, ND Filter or White Balance) displayed on top of the camera's status information.
- Select the desired value from the list and tap anywhere outside the list to confirm the change.
- To add a value to the list tap the add button, set a new value and tap the add button to add the value to the list.
- To delete a value from the list, select the value and tap on the delete button twice.

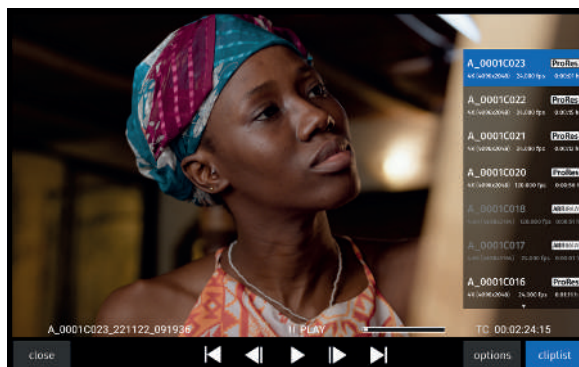
Info: Using the Interactive Overlays requires to have the cameras status information enabled (*MENU > Monitoring > VF > EVF Overlays > Status Info*).

HOME Screen



The HOME screen shows all relevant camera information at a glance. Touching one of the five main parameters will take users to a live image where they can make adjustments with a real-time preview. On the left, an overview of the user button assignments is shown.

Playback Control



- Swipe down or move down the joystick to open the Pages View.
- Select Playback from the Pages View. The last recorded clip is loaded for playback.
- To select another clip for playback tap on the cliplist button.
- Tap on the options button to set the clip end action.
- To exit playback tap on the close button.

7 Cleaning, Maintenance and Repair



NOTICE

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 imprinted labels or the paint on the housing and damage highly polished surfaces.
- ▶ During cleaning of the device, always make sure that protective covers are in place.
- ▶ Do not moisten connectors when cleaning the device.
- ▶ Avoid touching any connector pins when cleaning the device.
- ▶ Avoid wiping dry connector pins with a dry cloth, especially if the surface is not clean.
- ▶ Avoid wiping connector pins without air blow dusting first. If particles or connector pins are electrostatically charged, it may improve dusting efficiency to use deionized air.
- ▶ Compressed air should not be used on the housing.

Recommended Cleaning Agents

- Water
- Glass Cleaner
- Isopropyl Alcohol

Area	Cleaning Procedure
Housing	Clean the housing, mechanical and electronic accessories with a soft, lint free cleaning cloth and some water or glass cleaner. Only when really necessary, e.g. to remove residues of camera tape, isopropyl alcohol should be used.
Narrow spaces and gaps	Use a manual air blower, cotton swabs or a soft brush to remove dust particles from narrow spaces, gaps or connectors.
Ventilation channel	Clean the ventilation channel using a vacuum cleaner at low level.



WARNING

Repairs carried out by untrained persons

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

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

8 Transportation, Storage and Disposal



NOTICE

Improper Packing and Transportation of the CCM-1

Risk of damage to the product.

- ▶ Always follow the specified environmental conditions.
- ▶ Always transport the product and accessories in a suitable case.
- ▶ Always follow the instructions for transport and storage described in this section.

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

Transportation Guidelines:

- Remove all accessories from the product.
- Always attach protective caps where applicable.
- Always transport the product in a suitable case.
- Do not subject the product to severe shocks.

Storage Guidelines:

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

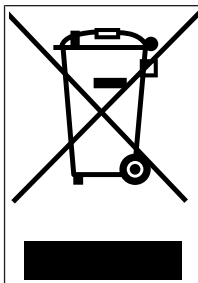
Disposal



NOTICE

You can return the product to the manufacturer Arnold & Richter Cine Technik GmbH & Co. Betriebs KG for disposal.

When you dispose third party accessories, please observe the instructions of the relevant manufacturer.



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
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Mo. - Thu. 09:00 am - 5:30 pm (GMT)
Fr. 09:00 am - 5:00 pm (GMT)
service@arri-ct.com

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3700 Vanowen Street
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