

Device: ARRI Amira



Introduction

At the current moment two Device Cores are utilized in order to communicate with the ARRI Amira camera. The ARRI Amira CAP and the ARRI Amira SSCP Device Core. Development have been done on a ARRI Amira camera with software version 5.3.23, Revision 26107, FPGA (#2) 3190/4412, MVF-1 software 2.17 & Lens mount software 1.69.



ARRI Amira CAP

ARRI Amira CAP (Camera Access Protocol) control via TCP/IP. Allows remote control of parameters in your ARRI Amira camera.



ARRI Amira

ARRI Amira camera control via TCP/IP. Allows remote control of video parameters in your ARRI Amira camera via SSCP (Sony Simple Camera Protocol). The camera acts as a TCP client connecting to the SKAARHOJ controller acting as a TCP server.



UniSketch OS v. 2.2.1.2.4 or later is required for the ARRI Amira CAP Device to work.

Important Information to remember

- Two Device Cores IPs are set on the controller. These **must** match the IP of the camera it self (LAN Static IP)
- The IP of the controller itself **must** match with the "SSCP device ip"
- Multicam **must** be enabled on the camera
- CAP server must be enabled on the camera and CAP server password must be set to: skaarri
- SSCP device port on the camera must be set to 7800

Examples are given below:

The diagram illustrates the configuration of IP settings for a camera and its device cores, comparing the SKAARHOJ RCP interface with the camera's internal settings.

SKAARHOJ RCP (Left): Controller IP Settings

- IP:** 192.168.10.27
- Subnet Mask:** 255.255.255.0
- Gateway:** 192.168.10.1
- DNS:** 192.168.10.1

Camera Internal Settings (Right): MULTICAM

- Multicam** checkbox is checked.
- SSCP device IP:** 192.168.010.027
- SSCP device port:** 07800

Camera Internal Settings (Bottom Left): ARRI Amira CAP and ARRI Amira

Both sections show the same IP configuration:

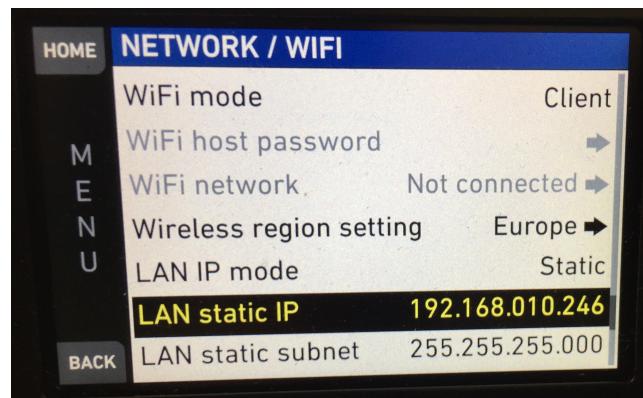
- ARRI Amira CAP:** IP 192.168.10.246
- ARRI Amira:** IP 192.168.10.246

Camera Internal Settings (Bottom Right): NETWORK / WIFI

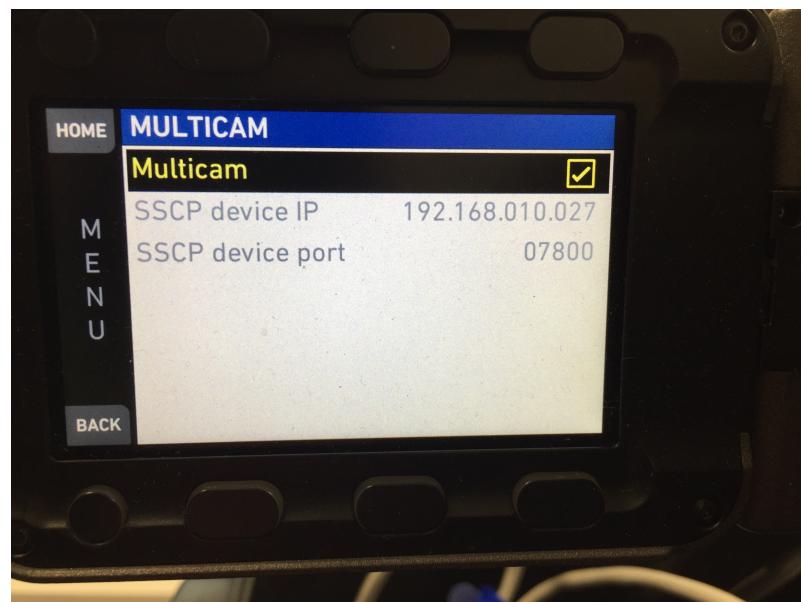
- WiFi mode:** Client
- WiFi host password:** (redacted)
- WiFi network:** Not connected
- Wireless region setting:** Europe
- LAN IP mode:** Static
- LAN static IP:** 192.168.010.246 (highlighted in yellow)
- LAN static subnet:** 255.255.255.000

Red boxes and arrows highlight the matching IP addresses between the RCP and the camera's internal settings for both the SSCP device and the two device cores.

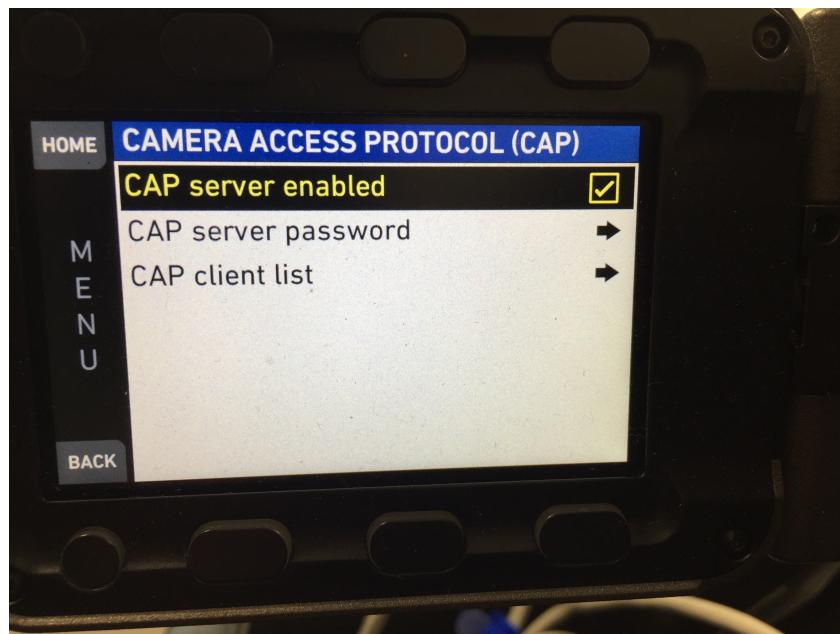
- The "SSCP device IP" on the camera is set to the same as the IP of the SKAARHOJ controller
- The two device cores on the SKAARHOJ RCP are set to the "LAN static IP" of the camera



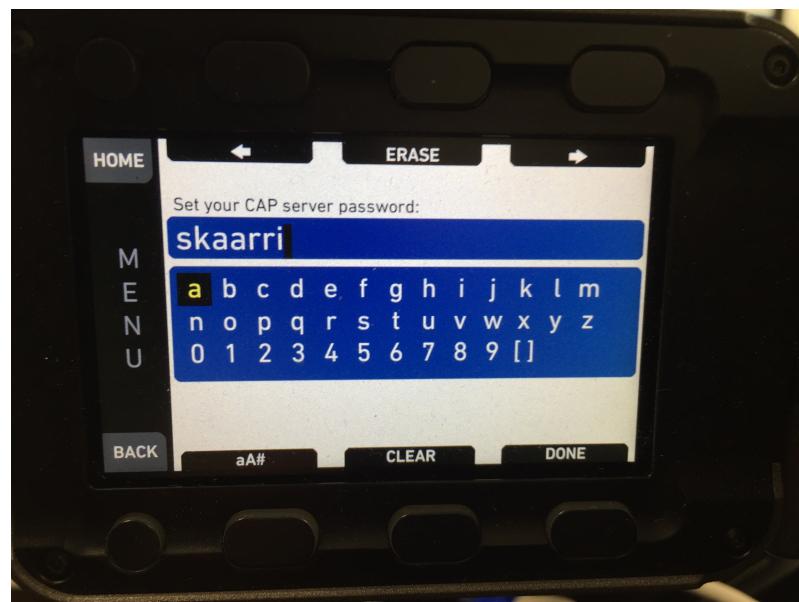
Notice the IP address of the camera (LAN static IP) follows the IP set on the "ARRI Amira CAP" + "ARRI Amira" Device core



Multicam must be enabled *and* the SSCP device IP must be the same as the IP address of the SKAARHOJ controller

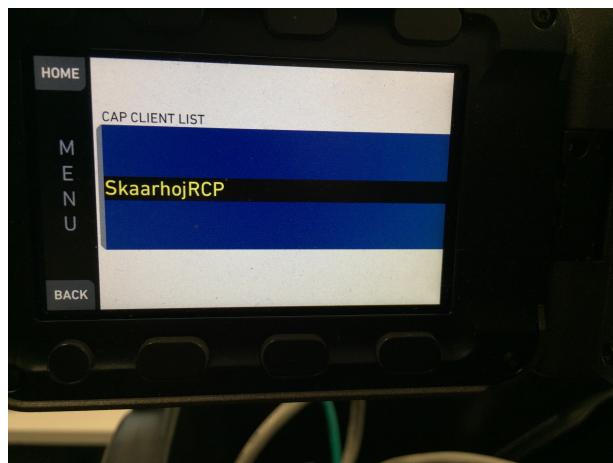


CAP server must be enabled



Set the CAP server password

SKAARHOJ DEVICE CORES



When the controller is connected via CAP it will appear in the CAP CLIENT LIST

Device Configurations for Device Core: ARRI Amira CAP

Device configuration options exist:

- Index 0: **Port Override**
 - Sets custom port number
- Index 1: **Override default Password**
 - Sets reference to "String" number containing the custom password.

Example I:

Setting custom port number to 85 could look like this device configuration code: "D0:0=85" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

If the ARRI Amira CAP Device Core is the first in the list like below:

The screenshot shows the SKAARHOJ Device Cores configuration page. On the left is a sidebar with the UniSketch OS logo and links for Controller Configuration, Device Cores (which is selected and highlighted in blue), Manage Configurations, Manage Options, Manage Media, Button Labels, and Sharing. The main content area has a header "Device Cores". Below it, a note says: "Below, you can see the currently enabled device support on your controller. You can add and delete device cores in accordance with your requirements up to a maximum of 14 devices. To understand the development states Mature, Beta, Alpha and Planned (as well as Pro and Planned actions), please check out the [device core support page](#). For general documentation, please see the [UniSketch Manual](#) and [System Actions Manual](#)". There are two entries in the list:

- ARRI Amira CAP**: ARRI Amira CAP (Camera Access Protocol) control via TCP/IP. Allows remote control of parameters in your ARRI Amira camera. [Go to Manual](#). This entry is highlighted with a red box and labeled "Device core number 0".
- ARRI Amira SSCP**: ARRI Amira camera control via TCP/IP. Allows remote control of video parameters in your ARRI Amira camera via SSCP (Sony Simple Camera Protocol). The camera acts as a TCP client connecting to the SKAARHOJ controller acting as a TCP server. [Go to Manual](#). This entry is highlighted with a red box and labeled "Device core number 1".

At the bottom are "Save Settings" and "Add another device" buttons.

Setting the port number would be set by this configuration under "Manage Media" on the configuration page for your controller. Access this by pressing "Online Configuration" in the Firmware Application. Remember to save on the configuration page and press "Check for updates" in the Firmware Application.

The screenshot shows the SKAARHOJ Manage Media configuration page. The sidebar includes links for Controller Configuration, Device Cores (selected), Manage Configurations, Manage Media (highlighted in blue), Button Labels, and Firmware Overview. The main content area has a header "Manage Media" and a note: "Here, you can add various types of media content to your configuration.". Below is a section titled "Device Core Options" with a note: "Some device cores support additional options that can be defined through this text field. Please refer to the manual for the particular device core for details." A text input field contains the value "D0:0=85". Below this is a section titled "Strings" with a "Add String" button.

To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:

```
D0[0] = 85
DeviceCore #0: ARRIAMIRA CAP0, IP = 192.168.10.244
Started Client Arri Cap!
ArriCAP: Using Port 85
setup() Done
-----
...
```

Example II:

Setting a custom password could look like this device configuration code: "D0:1=9" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

In this case the number "9" is a reference to the string number containing the custom password.

To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:

```
Compiled: Dec 16 2019 15:21:23
D0[1] = 9
DeviceCore #0: ARRIAMIRA CAP0, IP = 192.168.10.244
Started Client Arri Cap!
ArriCAP: Using Password from Media Tab 9
setup() Done
-----
...
```

Actions

An excerpt of the actions in the Device Core

```
ARRI Amira: Iris
ARRI Amira: Auto Iris
ARRI Amira: Iris Limiter
ARRI Amira: Iris Scaler
ARRI Amira: Shutter / ECS
ARRI Amira: Shutter Speed
ARRI Amira: Master Black
ARRI Amira: Master Black Gamma
ARRI Amira: Master Gamma
ARRI Amira: White Balance
ARRI Amira: 5600K Override
ARRI Amira: Auto White Balance Execute
ARRI Amira: Color
ARRI Amira: ND Filter
ARRI Amira: Master Knee Point
ARRI Amira: Gain
ARRI Amira: Detail
ARRI Amira: Detail Enable
ARRI Amira: Saturation
ARRI Amira: Saturation Enable
ARRI Amira: Color Bars
ARRI Amira: Tally
ARRI Amira: CALL
ARRI Amira: Scene File
```