Blustream AV Video Switchers

Video Switcher

Blustream AV Video Switchers, including the ACM200 video over IP system, can be controlled with Mira Connect™, Aveo Systems' smart control appliance. This document shows how to integrate these products with Mira Connect.

Control Interface

Blustream AV Video Switchers are controlled over Ethernet (port 8000) or RS-232 using a Global Caché IP2SL Ethernet to serial adapter (port 4999). The ACM200 system is controlled over port 23.

> *Note: Set a static IP address on the Blustream AV Video Switcher or use a reserved address on your DHCP server so the IP address of the device doesn't change over time. Mira Connect must have a network route to the device to control it.*

Functionality Supported

Mira Connect supports video switching audio and video together (audio follows video) when changing video inputs to outputs. In applications where there is no DSP audio device in the system that has been configured for room volume, volume control is supported directly on the Blustream video switcher and Mira Connect's user interface will automatically include a volume slider.

Note: The MFP72 and MFP112 can be set to operate in *splitter* or *matrix* mode. In *matrix mode*, both output 1 and 2 can be switched independently. In *splitter* mode, only output 2 can be set to different inputs while output 1 follows output 2. Follow the Blustream user guide for how to set up the Blustream device for your intended application.

Models Supported

Blustream MFP62, MFP72, MFP112, and C44-Kit, and ACM200.

The MFP72 only supports RS-232 control, requiring a Global Caché IP2SL interface.
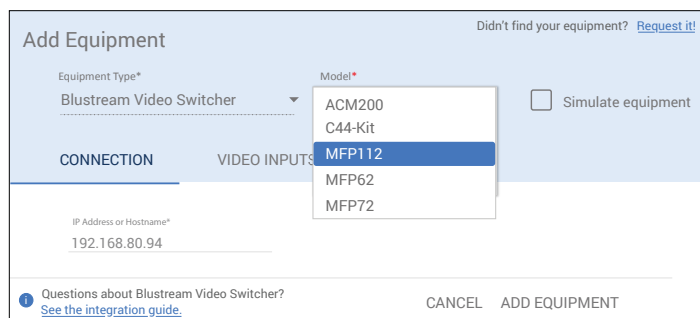
Integration Steps

To integrate a Blustream AV Video Switcher with Mira Connect, follow these steps:

Step 1

Add a Blustream AV Video Switcher to the room in Mira Portal (https://mira.aveosystems.com), select a model number, and enter the IP address of the device.

If you are configuring the control system before you have a Blustream AV Video Switcher, select 'Simulate equipment' to continue. For more information on creating rooms and adding equipment in Mira Portal, see our short training videos.

When using ACM200, add the product and click 'Add Equipment' so Mira Connect can discover the video transmitters (inputs) and receivers (outputs). If the IP address of the system is correct, then once connected, Mira Connect will have discovered the transmitters and receivers. Edit the device by clicking the ⋮ icon to the right on the device name. If simulating the ACM200, a 4 input x 10 output video switcher matrix is created automatically.

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Step 2

Using the Video Inputs tab, enable each desired video input by clicking to add a check mark on the desired input. The inputs are identified by the type of input on the device. Next, select an icon, and enter a label and an optional description. The labels and descriptions will appear on the display menu within Mira Connect.

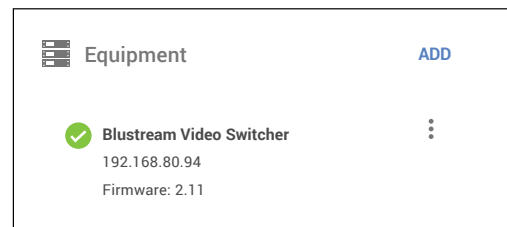When using the ACM200, the discovered channel names are identified as Transmitter 001, Transmitter 002, ... Enter labels and optional descriptions as described above.
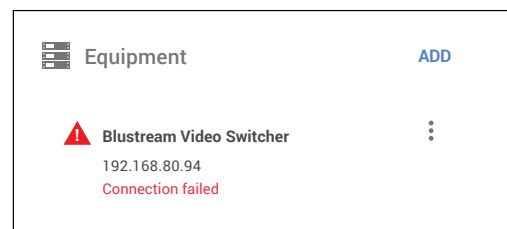
When using the ACM200, if you see the text *Connect to this equipment to detect available inputs*, then click 'Add Equipment' to add the ACM200 device and allow Mira Connect to discover the inputs and outputs. Edit the equipment again to enable the desired inputs and continue.

In this example, we've added TV Tuner, Podium, Digital Signage, and Local Laptop inputs. Scroll, as necessary to configure all the inputs.

Step 3

Click 'Add Equipment' to add the device to the room. You can edit the device by clicking the ⋮ icon to the right of the device name.

If Mira Connect can not connect to the Blustream AV Video Switcher over the network, a red triangle will appear as shown in the figure on the right. To resolve a connection issue, edit the device (by clicking the ⋮ icon to the right on the device name) and confirm the IP address and the video switcher model. Click **Update Equipment** when done and Mira Connect will attempt to connect to the device. See the *Troubleshooting* section for additional information.

Mira Portal will show the equipment status as a green circle with a check mark once the Blustream AV Video Switcher has been confirmed at the specified IP address.

Step 4

When connecting an output from the video switcher to a display or other device, add the display to your room (in this example, an LG LV/UV/UX series display), and edit the display's video inputs.

For the desired input on the display, select 'Use Sources Connected to Other Equipment', as shown in the following figures.

Next, select the video switcher and the desired output from the video switcher that is connected to that input on the display as shown in the figure below and right. The display menu on Mira Connect will show the inputs from the video switcher automatically. The order of the menu items may be changed by clicking and dragging the menu items in the Menu Preview.

The display menu for the LG display will appear on Mira Connect as in the figure on the right. Selecting an input will automatically cause the Blustream AV Video Switcher to change inputs and also ensure the display is set to HDMI 1 (in this example).

RS-232 Interface

If connecting over RS-232, the Global Caché network interface uses TCP, port 4999. Set a static IP address, or use a 'reserved' lease on a DHCP server to ensure the IP address of the Global Caché IP2SL does not change over time.

The MFP72 only supports RS-232 control.

⚠ The default RS-232 baud rate for the video switcher is 57,600 baud. Since the default baud rate of the Global Caché IP2SL interface is 19,200 baud, you **must** change the baud rate on the Global Caché IP2SL interface to 57,600.
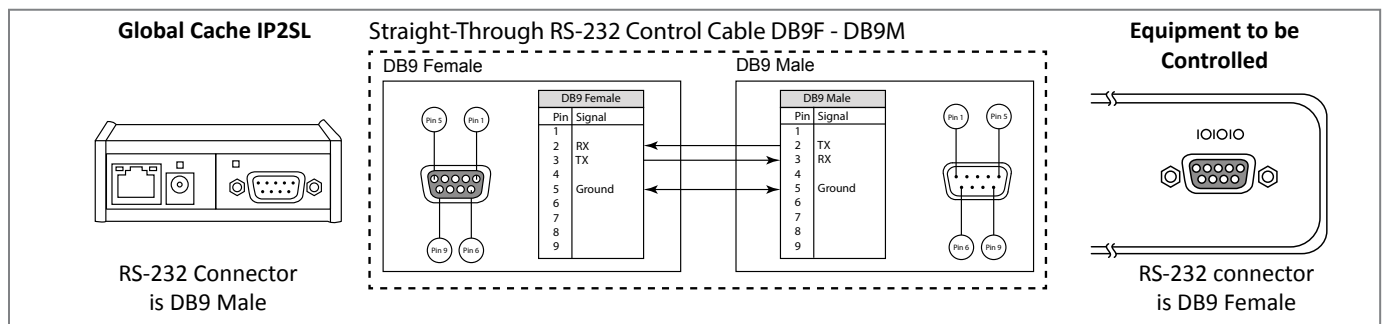
See the Global Caché integration guide for how to change the baud rate and how to set a static IP address.

RS-232 control for the MFP72 and MFP112 require a straight-through RS-232 9-pin Female to 9-pin Male cable as shown in the following figure.

Troubleshooting

If Mira Connect is not able to connect to the Blustream Video Switcher switcher:

- Ensure the IP address of the video switcher is correct and Mira Connect is on the same network or can reach the video switcher over the network.

- You have set a static IP address or reserved lease on the DHCP server so the IP address doesn't change after a power outage.

- If using RS-232, check that Global Caché IP2SL's baud rate is set to

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57,600 and that the serial cable matches the drawing in this document. Use a multi-meter to check continuity between the pins. See the Global Caché integration guide for more information.

See our RS-232 best practices article for best practices when using RS-232.

For more information please contact our Sales team at sales@aveosystems.com.

About Aveo Systems

Aveo Systems is a leading provider of intuitive and easy-to-use solutions for audio, video, and collaboration, improving how systems are used and managed by customers worldwide.