



Scan for full manual

## ASPEN-32UFX Quick Start Guide

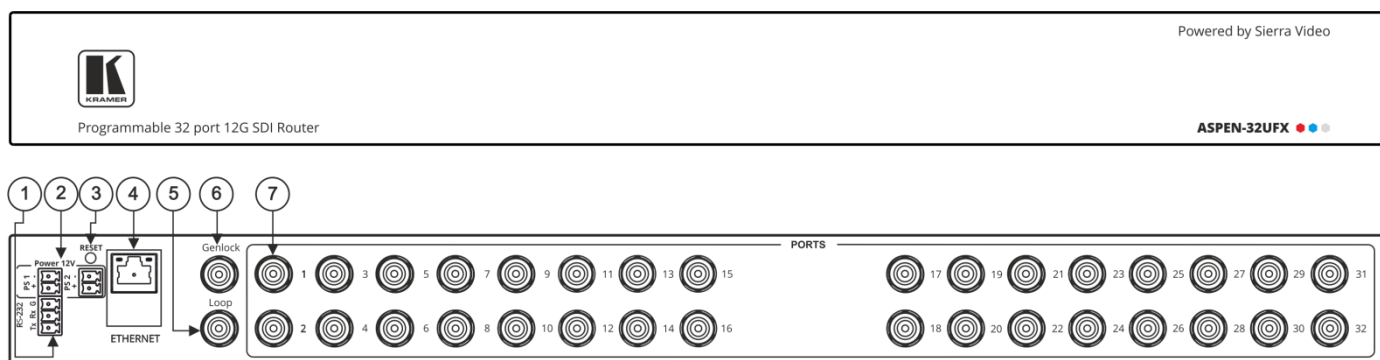
This guide helps you install and use your **ASPEN-32UFX** for the first time.

Go to [www.kramerav.com/downloads/ASPEN-32UFX](http://www.kramerav.com/downloads/ASPEN-32UFX) to download the latest user manual and check if firmware upgrades are available.

### Step 1: Check what's in the box

- ✓ **ASPEN-32UFX** Programmable 32 port 12G SDI Router
- ✓ 1 Power adapter and cord
- ✓ 1 Set of rack ears
- ✓ 4 Rubber feet
- ✓ 1 Quick start guide

### Step 2: Get to know your ASPEN-32UFX



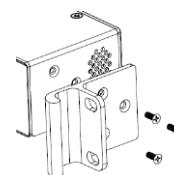
| # | Feature                                   | Function                                                                                                                                                                                                                                         |
|---|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | RS-232 (G,Rx,Tx) Terminal Block Connector | Connect to a PC or remote controller.                                                                                                                                                                                                            |
| 2 | POWER 12V DC Terminal Block Connector     | Dual power supply for redundancy:<br>PS 1 – primary power connector<br>PS 2 – redundant power connector (optional).<br>Connect each power adapter into a separate branch circuit employing a separate service ground.                            |
| 3 | RESET Button                              | Press briefly to restart the system.<br>Press for 5 seconds to reset IP settings to factory default values.<br>The device powers up and loads the factory default values:<br>IP address: 192.168.1.39; Mask: 255.255.255.0; Gateway 192.168.1.1. |
| 4 | ETHERNET RJ-45 Connector                  | Connect to a PC via LAN and also used for firmware upgrade.                                                                                                                                                                                      |
| 5 | LOOP BNC Connector                        | Connect to the GENLOCK connector of the next unit in the daisy chain or terminate with 75Ω.                                                                                                                                                      |
| 6 | GENLOCK BNC Connector                     | Connect to the GENLOCK source.                                                                                                                                                                                                                   |
| 7 | PORTS BNC Connectors (32)                 | Connect to sources and acceptors.                                                                                                                                                                                                                |

### Step 3: Install ASPEN-32UFX

Install **ASPEN-32UFX** using one of the following methods:

Remove the three screws from each side of the unit, reinsert those screws through the rack ears and mount on a 19" rack.

Attach the rubber feet and place the unit on a flat surface.

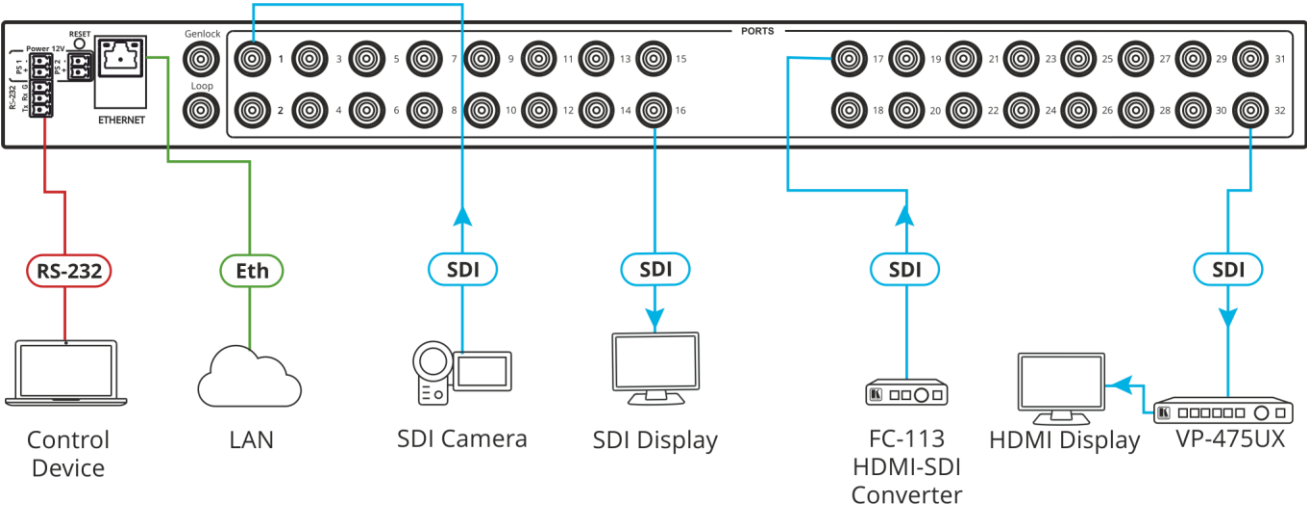


## Step 4: Connect the inputs and outputs

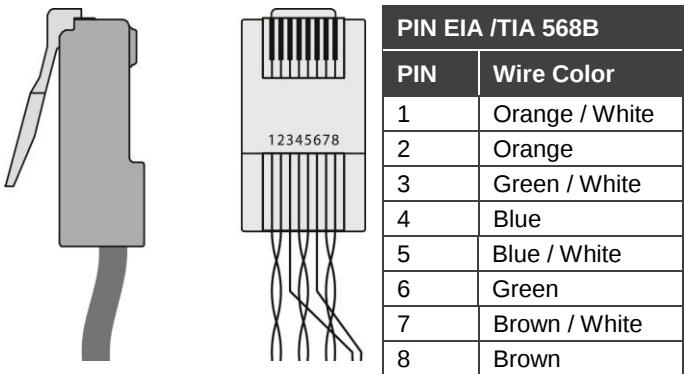
Each **ASPEN-32UFX** port can be defined as an input or an output, enabling flexible configurations such as 1x31distribution amplifiers, 31x1 routers or any other possible input-output combination. By default, the **ASPEN-32UFX** is set to operate as a 16x16 router: PORT 1 to PORT 16 as the inputs, and PORT 17 to PORT 32 as the outputs.

Always switch OFF the power on each device before connecting it to your **ASPEN-32UFX**.

Optionally, daisy-chain the **ASPEN-32UFX** by looping the genlock source to the next machine.



### RJ-45 Pinout:



## Step 5: Connect the power

Connect the 12V DC power supply to **ASPEN-32UFX** and plug it into the mains electricity. You can add a second power supply (not supplied in the package) for backup.

### Safety Instructions

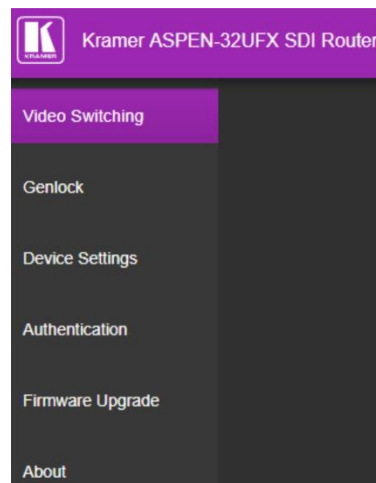


- Caution:** There are no operator serviceable parts inside the unit.
  - Warning:** Use only the Kramer Electronics power supply that is provided with the unit.
  - Warning:** Disconnect the power and unplug the unit from the wall before installing.
- See [www.KramerAV.com](http://www.KramerAV.com) for updated safety information.

## Step 6: Control ASPEN-32UFX

Web Pages:

### RS-232 and Ethernet:



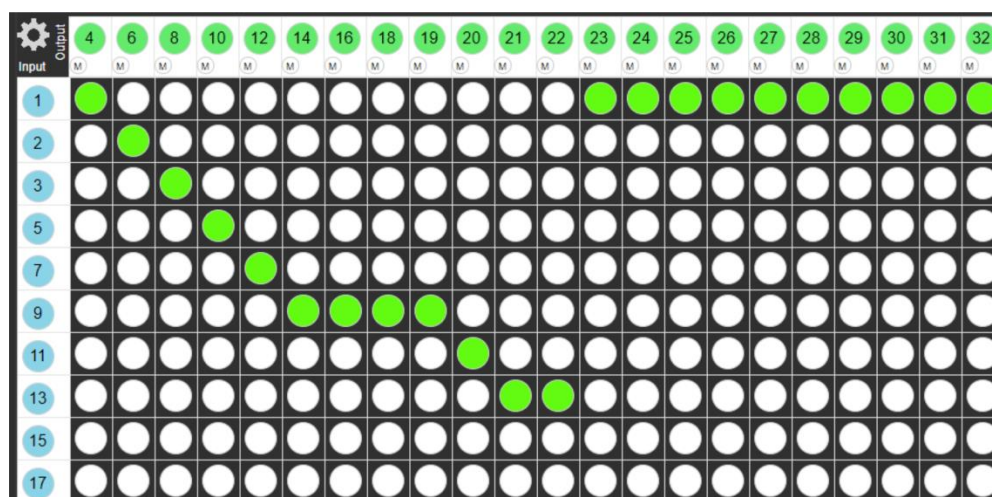
| RS-232                                                   |                                                                                                                                         |                                                 |           |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------|
| Protocol 3000                                            |                                                                                                                                         |                                                 |           |
| Baud Rate:                                               | 115,200                                                                                                                                 | Stop Bits:                                      | 1         |
| Data Bits:                                               | 8                                                                                                                                       | Parity:                                         | None      |
| Command format example (define port 1 as an input port): |                                                                                                                                         | #PORT-DIRECTION 1,IN<br>~01@PORT-DIRECTION 1,IN |           |
| TCP/IP Parameters                                        |                                                                                                                                         |                                                 |           |
| IP Address:                                              | 192.168.1.39                                                                                                                            | UDP Port #:                                     | 50000     |
| Subnet mask:                                             | 255.255.0.000                                                                                                                           | Maximum UDP Connections:                        | 20        |
| Default gateway:                                         | 192.168.0.1                                                                                                                             | TCP Port #:                                     | 5000      |
|                                                          |                                                                                                                                         | Maximum TCP Connections:                        | Unlimited |
| Full Factory Reset                                       |                                                                                                                                         |                                                 |           |
| Web Page:                                                | Device Settings Web page.                                                                                                               |                                                 |           |
| Protocol 3000:                                           | Use "Factory" command: #FACTORY<CR>                                                                                                     |                                                 |           |
| Rear panel RESET button:                                 | Press RESET for 5 seconds while the machine is on. The device automatically resets and powers up again, loading factory default values. |                                                 |           |
| Authentication                                           |                                                                                                                                         |                                                 |           |
| User:                                                    | Admin                                                                                                                                   | Password:                                       | Admin     |

Configure the ports via the Video Switching Web page:

1. Define each port as an input or output by clicking a port number.
2. Toggle Mute (M) on each output.
3. Click a white button in the matrix to switch an input to an output.

 = current input to output routing state

 = optional input to output routing



## Technical Specifications

|                                                                                                               |                                |                                                                                               |
|---------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------|
| Ports                                                                                                         | 32 12G HD-SDI/HD-SDI/SDI Video | 75Ω on BNC connectors (by default, 1 to 16 are set as inputs and 17 to 32 are set as outputs) |
|                                                                                                               | 1 Genlock                      | 75Ω on a BNC connector                                                                        |
|                                                                                                               | 1 Genlock Loop                 | Passive loop output on a BNC connector                                                        |
| SMPTE Standards                                                                                               | 12G-SDI                        | SMPTE ST-2082-1                                                                               |
|                                                                                                               | 3G HD-SDI                      | SMPTE 424M                                                                                    |
|                                                                                                               | HD-SDI                         | SMPTE 292M                                                                                    |
|                                                                                                               | SDI                            | SMPTE 259M/344M                                                                               |
| Video                                                                                                         | Max Resolution                 | 4K@60Hz (4:2:2)                                                                               |
|                                                                                                               | Max Bandwidth                  | 12Gbps                                                                                        |
| Controls                                                                                                      | Remote                         | RS-232                                                                                        |
|                                                                                                               |                                | Ethernet                                                                                      |
|                                                                                                               |                                | Web pages                                                                                     |
| Reach                                                                                                         | SD Signals                     | Up to 300m                                                                                    |
|                                                                                                               | HD Signals                     | For 1.5GHz, up to 200m                                                                        |
|                                                                                                               |                                | For 3GHz, up to 100m                                                                          |
|                                                                                                               |                                | For 6GHz, up to 100m                                                                          |
|                                                                                                               | UHD Signals                    | For 12GHz, up to 80m                                                                          |
| Coupling                                                                                                      | DC                             |                                                                                               |
| Power                                                                                                         | Consumption                    | 12V DC, 2A                                                                                    |
|                                                                                                               | Source                         | 12V DC, 5A                                                                                    |
| Environmental Conditions                                                                                      | Operating Temperature          | 0° to +40°C (32° to 104°F)                                                                    |
|                                                                                                               | Storage Temperature            | -40° to +70°C (-40° to 158°F)                                                                 |
|                                                                                                               | Humidity                       | 10% to 90%, RHL non-condensing                                                                |
| Regulatory Compliance                                                                                         | Safety                         | CE                                                                                            |
|                                                                                                               | Environmental                  | RoHs, WEEE                                                                                    |
| Enclosure                                                                                                     | Size                           | 19", 1U                                                                                       |
|                                                                                                               | Type                           | Aluminum                                                                                      |
|                                                                                                               | Cooling                        | Fan ventilation                                                                               |
| General                                                                                                       | Net Dimensions (W, D, H)       | 43.64cm x 10cm x 4.36cm (17.18" x 4" x 1.72")                                                 |
|                                                                                                               | Shipping Dimensions (W, D, H)  | 55cm x 27.6cm x 10.7cm (21.7" x 10.87" x 4.21")                                               |
|                                                                                                               | Net Weight                     | 1kg (2.2lbs)                                                                                  |
|                                                                                                               | Shipping Weight                | 1.9kg (4.2lbs) approx.                                                                        |
| Accessories                                                                                                   | Included                       | Power cord                                                                                    |
| Specifications are subject to change without notice at <a href="http://www.kramerav.com">www.kramerav.com</a> |                                |                                                                                               |