

Just Add Power



2G DEVICE MANAGEMENT

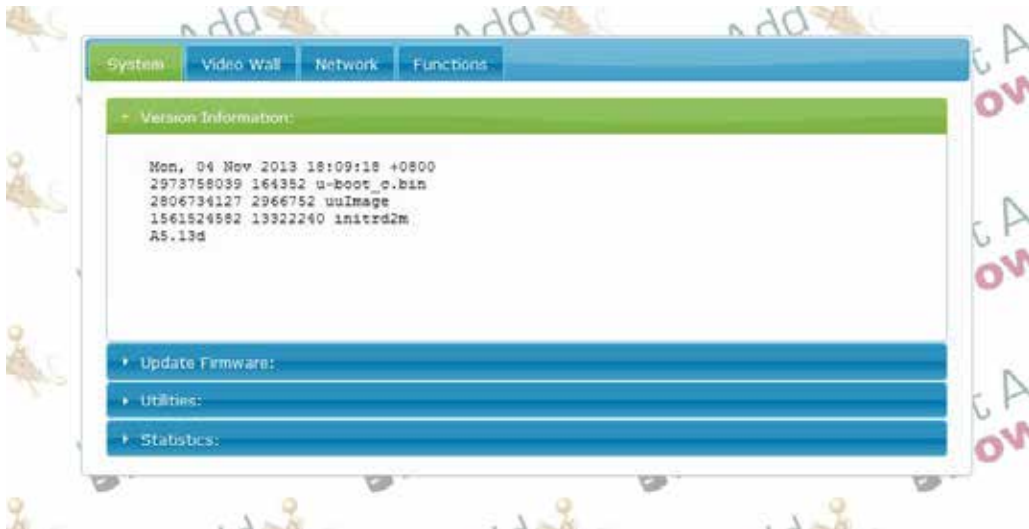
Revised 2014-03-19



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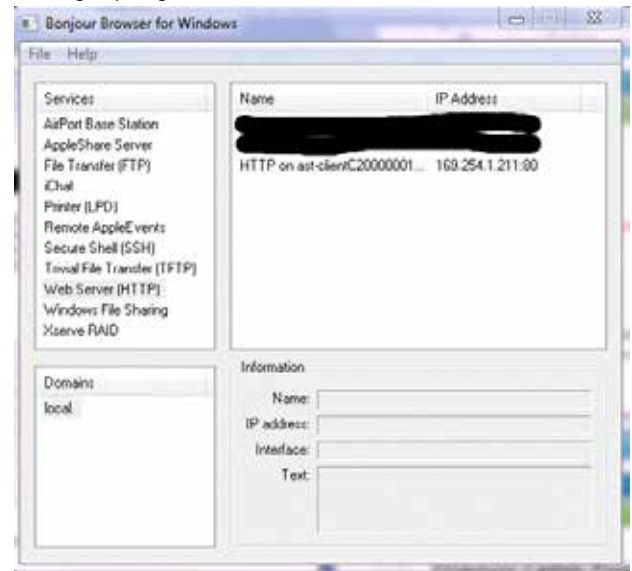
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Access the Web Interface



Just Add Power devices broadcast their IP address to connected devices. Using a program that can detect those broadcasts, the IP address can be discovered.

1. Bonjour Browser is a program that can detect IP address broadcasting. It is included in every 2G firmware download on the Just Add Power website. Go to www.justaddpower.com and download a 2G firmware file.
2. Open Bonjour Browser and select the Web Server (HTTP) option in the Services box. Any attached devices will show up in the window to the right.
3. Just Add Power Transmitters will display as *ast-gateway*, and Just Add Power Receivers will display as *ast-client*.
4. Change the IP address of the computer to be in the same IP range as the Just Add Power device.



Bonjour Browser with 1 attached Receiver at factory default

- a. For Just Add Power devices at factory default, set the computer's IP to 169 . 254 . 100 . 200 with a subnet mask of 255 . 255 . 0 . 0.
- b. For Just Add Power devices not at factory default, set the computer's IP so that it has the first 3 numbers the same and the 4th number different, with a subnet mask of 255 . 255 . 255 . 0.

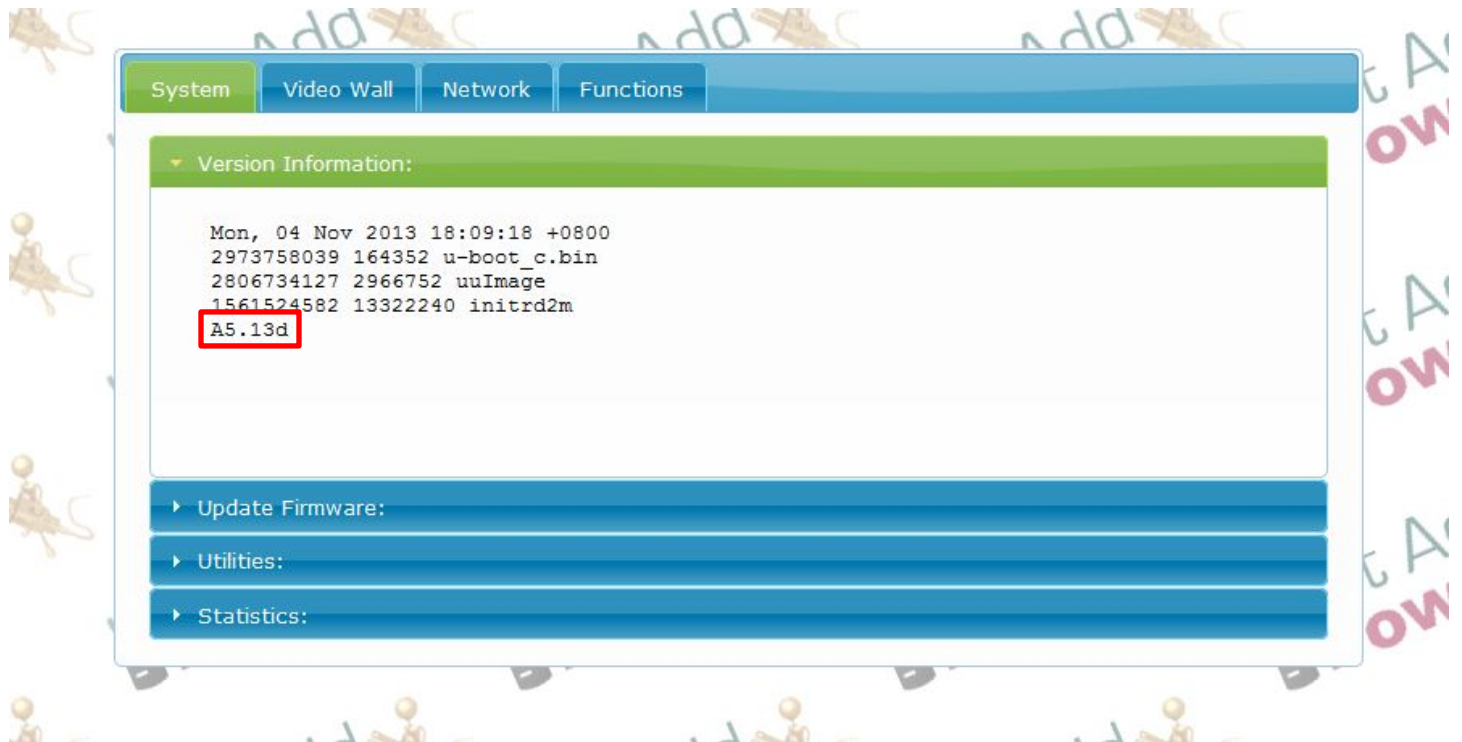
Example: Just Add Power IP address – 192 . 168 . 100 . 129
 Set computer IP address – 192 . 168 . 100 . 200

5. Open a web browser – Google Chrome is preferred – and type in the IP address of the Just Add Power device as shown in the Bonjour Browser. The page will open

Web Interface Tools

Check Firmware

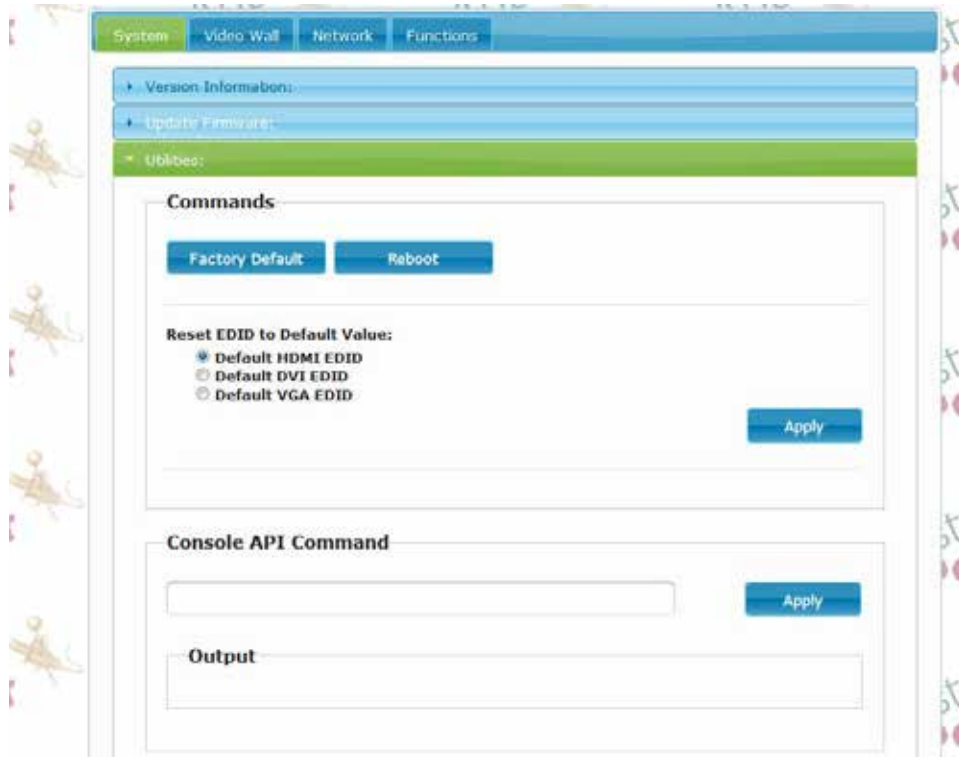
The firmware version is on the page first shown when accessing the web interface. **ALL** Just Add Power devices **MUST** be on the same version of firmware in order to communicate with each other.



Update Firmware

For instructions on how to update firmware, please go to www.justaddpower.com, download the desired firmware, and follow the Firmware Update Instructions included in the download.

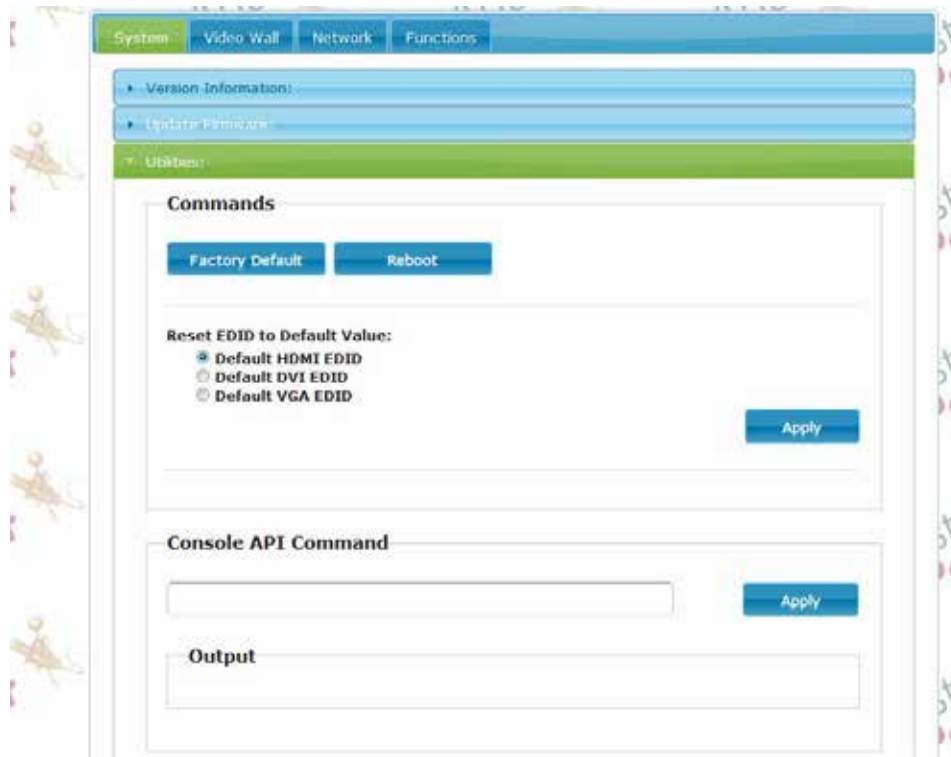
Reset to Factory Defaults



To reset a Just Add Power device to default settings:

1. Access the web interface
2. On the System tab, select the Utilities bar
3. Click the Factory Default button. The device will reboot automatically in factory defaults.
 - Factory Default does not return EDID to the default value, even though the screen shows it does. The EDID must be reset separately.

Reboot



To reboot a Just Add Power device:

1. Access the web interface
2. On the System tab, select the Utilities bar
3. Click the Reboot button
4. Alternatively, unplug the power connector and reattach it to physically reboot the device.

Change IP Address

The screenshot shows the 'Network' tab in the device management interface. Under 'IP Setup', the 'IP Mode' is set to 'Auto IP'. Below it, the 'IP Address' is 169.254.5.52, 'Subnet Mask' is 255.255.0.0, and 'Default Gateway' is 169.254.0.254. An 'Apply' button is at the bottom right. Under 'Casting Mode', 'Multicast' is selected, and an 'Apply' button is at the bottom right. A checkbox for 'Auto select USB operation mode per casting mode (recommended)' is checked.

Just Add Power devices in default settings will auto-assign an IP in the 169.254.xxx.xxx range.

To change the IP address of a Just Add Power device:

1. Access the web interface
2. Go to the Network tab
3. Choose DHCP or Static
 - If Static is chosen, enter the desired IP Address, Subnet Mask, and Default Gateway.
4. Click Apply
5. Reboot the device to apply the new IP address permanently

This screenshot shows the 'Network' tab with 'IP Setup' where 'Static' is selected. The 'IP Address' is 172.16.128.2, 'Subnet Mask' is 255.255.0.0, and 'Default Gateway' is 172.16.128.1. An 'Apply' button is at the bottom right. Under 'Casting Mode', 'Multicast' is selected, and an 'Apply' button is at the bottom right.

Change Serial Settings

Serial over IP

Enable Serial over IP

Operation Mode:

- Type 1 - Dumb Redirection:** (Recommended)
Any RS232 sent to a Transmitter is sent out all connected Receivers' RS232
- Type 2 - Guest Mode:**
TELNET directly to port 6752. Gives discrete 2-way RS232 access when TX/RX are linked
- Type 3 - CLI Access:**
Advanced command-line access. Requires significant programming.
For advanced programmers ONLY.

Baudrate Setting for RS232:

Baudrate: 9600

Data bits: 8

Parity: None

Stop bits: 1

Apply

The RS232 port on the back of every Just Add Power device can be used to send serial commands to attached devices. There are 3 Operation Modes available:

- Type 1 – Dumb Redirection à **DEFAULT**
 - Any RS232 input to a Transmitter is sent out all connected Receivers' RS232
 - Any RS232 input to a Receiver is sent out the RS232 of the Transmitter it is watching
 - Baudrate Setting **MUST** be the same on Transmitters and Receivers
- Type 2 – Guest Mode
 - TELNET directly to port 6752. Gives discrete 2-way RS232 access when TX/RX are linked
 - Gives individual control of each device through a control system and provides feedback
 - Baudrate Setting can be different for each Just Add Power device
 - Just Add Drivers are automatically set in this mode (except for RTI)
- Type 3 – CLI Access
 - Advanced command-line access. Requires significant programming. For advanced programmers ONLY.
 - Serial commands are applied through command-line of Just Add Power device at TELNET port 23
 - Contact Just Add Power Support for more information
 - Just Add Drivers for RTI is automatically set in this mode

To change the serial settings of a Just Add Power device:

1. Access the web interface
2. Go to the Functions tab
3. Go down to Serial over IP, choose the Operation Mode, and choose Baudrate Settings
 - If using Type 1, the Baudrate Setting must be the same on the Transmitter and Receiver in order for pass-through to work
4. Click Apply and reboot the unit
 - If having issues with serial pass-through after applying the correct settings, try using a Null Modem. The TX and RX pins on the receiving device may not match the TX and RX pins on the Just Add Power device.

Check Video Output Resolution

```
Video

EDID Used:

00 ff ff ff | ff ff ff 00 | 4c 2d 4d 09 | 01 00 00 00 |
2e 15 01 03 | 80 6f 3e 78 | 0a ee 91 a3 | 54 4c 99 26 |
0f 50 54 bd | ef 80 71 4f | 81 c0 81 00 | 81 80 95 00 |
a9 c0 b3 00 | 01 01 02 3a | 80 18 71 38 | 2d 40 58 2c |
45 00 a0 5a | 00 00 00 1e | 66 21 56 aa | 51 00 1e 30 |
46 8f 33 00 | a0 5a 00 00 | 00 1e 00 00 | 00 fd 00 18 |
4b 0f 51 17 | 00 0a 20 20 | 20 20 20 20 | 00 00 00 fc |
00 53 41 4d | 53 55 4e 47 | 0a 20 20 20 | 20 20 01 33 |
02 03 26 f4 | 45 90 04 03 | 20 22 23 09 | 07 07 83 01 |
00 00 e2 00 | 0f 70 03 0c | 00 10 00 80 | 2d 21 d0 06 |
01 40 00 37 | 20 50 01 1d | 00 72 51 d0 | 1e 20 6e 28 |
55 00 a0 5a | 00 00 00 1e | 8c 0a d0 8a | 20 e0 2d 10 |
10 3e 96 00 | a0 5a 00 00 | 00 18 00 00 | 00 00 00 00 |
00 00 00 00 | 00 00 00 00 | 00 00 00 00 | 00 00 00 00 |
00 00 00 00 | 00 00 00 00 | 00 00 00 00 | 00 00 00 00 |
00 00 00 00 | 00 00 00 00 | 00 00 00 00 | 00 00 00 e4 |

Local Video Output:

attached=n

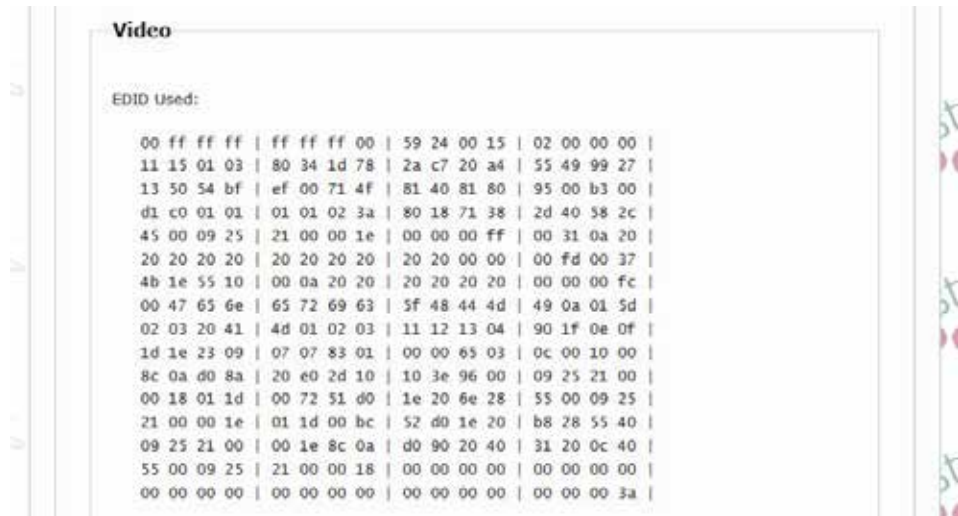
Video Timing Information:

timing=[3] 1280x720p@60Hz H+ V+
type=HDMI 16:9
HDCP=y
color depth=0
```

To check the resolution being output by a Transmitter or a Receiver:

1. Access the web interface
2. On the System tab, select the Statistics bar
3. Scroll down to the bottom and look for the section called Video Timing Information

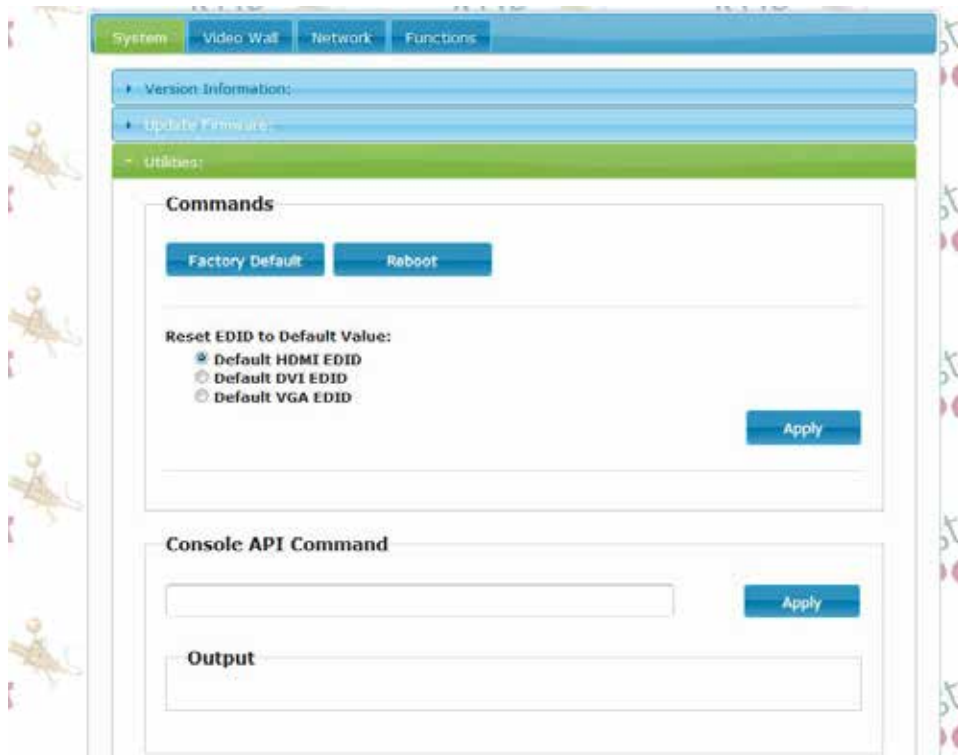
Check EDID



To check the EDID being used by the Transmitter, or to check the EDID of the Receiver-attached display:

1. Access the web interface
2. On the System tab, select the Statistics bar
3. Scroll down to the video section and look for EDID Used on the Transmitter, or EDID= on the Receiver

Reset EDID



To reset the EDID to one of the default EDIDs (Transmitter only):

1. Access the web interface
2. On the System tab, select the Utilities bar
3. Select one of the EDIDs available (HDMI is the factory default) and click Apply
4. The EDID will change immediately, but the source device may need to be power cycled for it to pick up the new EDID.

Change EDID

For instructions on how to update firmware, please go to www.justaddpower.com, download Firmware A5.13d, and follow the 2G EDID Management document included in the download.