

INSTREAMER

Quick Install Guide Version 2.0

Network IP Audio Encoder

Package contents

- a Instreamer
- b Power supply

Cable Set AUDIO (not included)

- c Earphone
- d RCA stereo cable
- e Network cable
- f Serial cable

Firmware

This device comes preloaded with standard firmware.
Alternative firmware can be downloaded from www.barix.com.

Support

For support please contact your local dealer or visit www.barix.com.

Front view



A Reset button

A brief press of the button will reset the device. Holding the reset button pressed in for approximately 10 seconds will reset the device and restore the factory default settings when the button is released.

B Green and red LEDs

For device status display

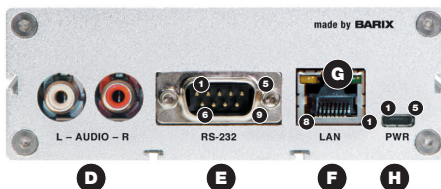
C Headphone out

Standard stereo mini jack (3.5 mm)

D Audio & I/O (Stereo RCA sockets)

Pin	Description
cent	Left Line input (white)
ring	Ground [GND]
cent	Right Line input (red)
ring	Ground [GND]

Rear view



E RS-232 serial port (DSub 9 pin male)

Pin	Description
1,6,9	Not connected
2	Receive Data [Rx/D]
3	Transmit Data [Tx/D]
4	V+ 5V, 100mA max
5	Ground [GND]
7	Ready to Send [RTS]
8	Clear to Send [CTS]

F LAN port 10/100 (RJ45 socket)

Pin	Description
1	Tx +
2	Tx -
3	Rx +
4, 5	spare
6	Rx -
7, 8	spare

G LAN status LEDs

Green LED for Link, yellow LED for Activity

H Power (Standard microUSB, 2 Watt max.)

Pin	Description
1	V+ 5V
2,3,4	Not connected
5	Ground [GND]

1 Installation

STEP 1

Plug the earphone (c, not included) or standard headphones into the mini jack (C).

STEP 2

Plug a standard (straight) network cable (e, not included) into the network port (F) of the Instreamer and the other end into your switch. You can also use a crossover network cable (not included) for a direct connection to your PC.

STEP 3

Connect the Power supply (b) to the device (socket H) and then to an appropriate electrical outlet.

STEP 4

- i) The Instreamer will now acquire an IP address and announce it over the headphones output (if no DHCP server is available this can take up to 5 minutes).
- ii) If you did not connect any 'phones in step 1, either see the next page for the ARP command procedure, or use the "Barix Discovery Tool" Java application (download the latest version from www.barix.com) on your computer (Windows, Mac or Linux) and click the "Get" button to find out which IP address the device has obtained (see picture at the bottom of the page). Make sure that the Ethernet address (MAC) matches your device (see label on the bottom of the device).

Now that you know the IP address proceed to the next section "Network configuration by web browser".

If you were not able to obtain the device's current IP address with the previous steps see section "Troubleshooting".

2 Network configuration by web browser

Most Barix applications require no configuration but use DHCP to configure network settings dynamically. If you need to use static (fixed) network settings follow steps 1 to 3, otherwise continue from step 4.

STEP 1

Open your web browser.

STEP 2

Enter the IP address that was announced by the Instreamer and press Enter. Example: 192.168.0.12 Click on the Configuration button, then on Advances Settings/Network.

NETWORK SETTINGS

Use SonicIP	<input checked="" type="radio"/> Yes <input type="radio"/> No
IP Address	0 . 0 . 0 . 0
Netmask	0 . 0 . 0 . 0
Gateway IP Address	0 . 0 . 0 . 0
Primary DNS	0 . 0 . 0 . 0
Alternative DNS	0 . 0 . 0 . 0
Syslog Address	0 . 0 . 0 . 0
DHCP Host Name	
Web Server Port	80

STEP 3

In order to make the application work the following parameters must be set (check with your network administrator):

- static IP address (the default «0.0.0.0» sets automatic discovery: BootP, DHCP) and netmask
- If you your devices are connected via routers also:
- Gateway IP address

Hit the «Apply» button to save all changes. The device will reboot with the configured IP address.

STEP 4

To complete the application setup, download the firmware documentation from www.barix.com. Download the product manual for additional information about the hardware installation, technical and mechanical details as well as instructions on updating or changing the loaded application firmware.

Discovery Tool							
Set reply	Ethernet address	IP address	HW type	IPAM type	Product ID	FW version	DHCP name
	00-08-e1-02-5a-4d	192.168.11.170	Annunicom 100				
	00-08-e1-01-0a-02	192.168.2.19	Exstreamer 200				
	00-08-e1-02-d5-00	192.168.2.66	Instreamer				

Device selected:

3 Setting temporary IP address using ARP command

This procedure will work only in a local network.
After this procedure the temporary IP will be active only until restart/reboot. After a restart the procedure has to be repeated.

STEP 1

Either use a network cable to link the Instreamer and the PC directly, or connect the Instreamer to the PC via your network switch and power the device. Make sure that you have a valid static IP address configured on your PC (e.g. 192.168.0.2)

STEP 2

Windows : For a command window, click on «Start», click on «Run..», in the «Open» field type `cmd`, click on «OK».
OSX / Linux : Open a terminal window.

STEP 3

Please proceed to step 4 if you linked the PC directly to the device in step 1. To ensure that you use a free IP address (not already used by another device in the network) please use the Ping command. To verify availability in this example we assume the PC to have the IP address «192.168.0.2» and want to check if «192.168.0.6» is free. Type `ping 192.168.0.6` and hit the «Enter» key. You should get no reply which gives you reasonable assertion that the «pinged» IP is available.

STEP 4

Look for the Instreamer's MAC address printed on a label on the bottom of the device (12 hex digits, separated by a hyphen every 2 digits). Type into the windows command window

```
arp -s 192.168.0.6 00-08-E1-00-B1-77
```

or on a OSX or Linux system type into the terminal

```
arp -s 192.168.0.6 00:08:E1:00:B1:77
```

and hit the «Enter» key (replace the digits according to your devices MAC address). You must have administrative rights to be able to do so (sudo on OSX / Linux).

STEP 5

Now we have to make the Instreamer listen to the IP address «192.168.0.6» using the Telnet command. To do so type into the command window `telnet 192.168.0.6 1` and hit the «Enter» key (the number «one» must be there for this command to work correctly !!!). The Instreamer will immediately refuse the connection on port 1, but will be available for browser access as long as the device stays powered.

STEP 6

To check if the Instreamer is responding you can use the ping command again. To do so type `ping 192.168.0.6` and hit the «Enter» key. If you do get a reply the IP address 192.168.0.6 can be used to access the Instreamer using a web browser. Please go back to section «2 Network configuration by web browser» to configure a static IP address. If you do get «request timed out» then please repeat step 5 carefully (you most likely mistyped the telnet command) or repeat the entire procedure. If the ARP method does not work for you, refer to the user manual for further methods.

4 Troubleshooting

- If the status LEDs (B) stay dark check the power cabling (installation step 3).
- Check if the green LINK LED (G) is lit, if it is not then check your network cabling (network port F).
- If you have doubts about the current device settings you can revert the device to its factory defaults by pressing the Reset button (A) until the red status LED (B) blinks rapidly (takes about 10 seconds). The device will reboot once the button is released.

For information about our products, manuals, technical documentation, latest firmware, support and access to the user forum please visit www.barix.com.

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