

RECEIVING LIVE STREAMS

SmartCast streams H.264 video and AAC audio streams using RTP/UDP mechanism. Elementary streams are compliant with RFC-3984 and RFC-3640 recommendations and MPEG-TS stream are compliant with RFC-2250 for RTP payload format. RTP/UDP streaming is supported by many broadcast servers like Apple Darwin server, Wowza media server and many media players like Quicktime, VLC, etc. H.264 and AAC streams generated by SmartCast are also compatible to play on Adobe flash player.

Audio and video elementary streams are streamed to a specified IP address on the ports selected by the user. Broadcast servers and players require a SDP file to broadcast or play the streams. SDP file can be generated with the **Generate SDP** feature in the control center.

Unicast applications: Please choose proper Destination IP and port forwarding options depending on your network setup.

Receiving computer	Destination IP	Port Forwarding
On Same LAN	Private IP of Receiving computer	Not necessary
On different LAN	Public IP of receiving computer	Video and audio ports used should be forwarded to receiving computer
Has public IP	Public IP of receiving computer	Not necessary, some servers might require input port authorization

Broadcast Applications: Refer to instructions by broadcast servers on setting up server to receive and stream RTP/UDP video and audio streams.

NOTE: Do not use same or consecutive port numbers for audio and video port while using elementary stream format.

TROUBLESHOOTING

- All LEDs are ON or only PWR LED ON
 - SmartCast initializing, please wait for approx. 30 Sec
- LINK LED is blinking
 - SmartCast is initialized but failed to get internet access. Check internet connectivity on the network port. Refer to network requirements.
- Streaming is started but I don't receive anything in player
 - Check whether the box is streaming, CH LED should be blinking.
 - Check whether Destination IP is correct and video /audio ports are forwarded as required.
 - Check with your network administrator for firewalls blocking the data
 - Check whether the data packets are reaching the destination computer with network analyzing tools like *wireshark* (<http://www.wireshark.org>)
- Streaming works but CH LED blinks slow
 - SmartCast is not able to record data to the SD-card. Check SD-card or restart the box

SmartCast

H.264, AAC encoding and live streaming...

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Quick Start Guide

For more information visit:
<http://smartcast.fastvdo.com>

FASTVDO SMARTCAST

SmartCast captures analog NTSC/PAL video and stereo audio (L/R), digitizes, encodes using the latest H.264/AAC technologies and streams live over an Ethernet interface.

PACKAGE CONTENTS



1. Status LED 2. Ethernet port 3. Ch-1 A/V input 4. Power supply input

INSTALLATION GUIDE

Step 1: Plug one end (RJ45 Head) of the Cat5 N/W cable into the SmartCast ETH [2] (Ethernet) port and the other end to the internet enabled network port.

Step 2: Plug the 3.5 mm jack of the A/V cable to input of the SmartCast CH1 [3]. Plug the other end of the cable (Yellow, Red, and White) to Audio Video source, like camera, media caster, TV, DVD/VHS player, etc.

Yellow – Video **White** – Left audio channel **Red** – Right audio channel

Step 3: To Power-on SmartCast, Plug the power supply unit to the wall mount power outlet and the jack to SmartCast power supply input PWR [4]

NETWORK REQUIREMENTS

SmartCast requires sustained internet connectivity and static or DHCP enabled network for reliable performance. SmartCast by default uses DHCP to pull an IP address.

- SmartCast should be connected to a static or DHCP enabled router/network
- SmartCast does not require any port forwarding from the firewall.
- Depending on the content, it is advisable to have a sustained uplink bandwidth of 1.5 times the total audio and video bit-rate used for streaming.

For networks with static IP

To configure the SmartCast to acquire a static IP

- Login to advance settings webpage on the box [Refer to Direct Access section]
- Select Static IP and set the new static IP address as desired.

NOTE: For access and recovery purposes, note down static IP used for the box carefully. Change the network settings to DHCP before switching to a network of different type or settings.

TIP: To reset Network settings to default (DHCP), insert an SD-card with an empty file named “ResetStaticIP” in SmartCast_files folder on the SD-card and power-up the SmartCast.

POWER-UP PROCEDURE

After power-up wait for approximately 30 seconds for the SmartCast to initialize and connect to the internet.

LED status [1]	Description
All ON or only PWR ON	Wait SmartCast is initializing
PWR ON and LINK ON	SmartCast initialized and running
LINK blinking	Internet connectivity failed. Refer to Network Requirements
CH1 or CH2 blinking	SmartCast is streaming video and/or audio data from respective channel

SMARTCAST CONTROL CENTER

SmartCast can be controlled and configured by any of the following methods.

FastVDO Control Center

FastVDO offers SmartCast *Control Center* service through which you can manage, configure and control your SmartCast remotely. To access Control Center service, visit SmartCast product page <http://smartcast.fastvdo.com> and click on **login to Control Center**

- First time users have to sign up and register to Control Center service. It’s free!
- A confirmation email will be sent to you.
- Please complete and verify your registration by following the link in the email
- Once registered, you can login to the control center and
 - Add your SmartCast
 - Configure your SmartCast settings and manage your streams

Direct Access

SmartCast can also be controlled through the web interface of the box. This method is useful when user wants to use SmartCast within a LAN or a private network without internet.

- Find the IP address of the SmartCast using software like *IPSCAN* or from the router DHCP table or by checking the SmartCast IP address in the statistics section of the **control center**
- In your web browser, access the page <http://ipaddress-of-SmartCast>
- When prompted, provide the following user name and password
User Name : admin Password: fastvdo

TIP: To reset password to default (fastvdo), insert an SD-card with an empty file named “ResetPassword” in SmartCast_files folder on the SD-card and power-up the SmartCast.

RECORDING DATA

SmartCast provides an option to record the video and audio being streamed live on to an SD-card. To enable recording, insert a FAT-32 formatted SD-card in the slot at the back of the box, select file format type in the control center and start streaming. Remember to stop streaming to complete the file operations. MP4 file format recorded data might be unusable if the power is lost without stopping the stream.

NOTE: Power-off the box before inserting or removing the SD-card for proper functionality.