



Application of DVEO MultiStreamer™ in Religious Services and Special Events

Application Note (v1.4)



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Introduction

DVEO is a provider of encoders, transcoders and streamers for various IP video applications, such as managed IPTV services and streaming video using the public Internet or third-party Content Delivery Networks (CDN).

Religious and faith-based ceremonies form a large part of our lives. Such ceremonies are emotional markers for major events, such as baptisms and christenings, weddings and funerals, and provide meaning to our lives. At the same time, there will always be segments of a congregation that cannot attend each ceremony for personal reasons. In such cases, live streaming of the event will allow interested parties to participate remotely in the ceremony, whether at home or on the move using various mobile devices.

Streaming such events presents a perfect illustration of the basics of streaming video, and how easy it is to provide this as a value-added service, either by the event host (church, etc), or by a third-party with the right equipment and basic skills.

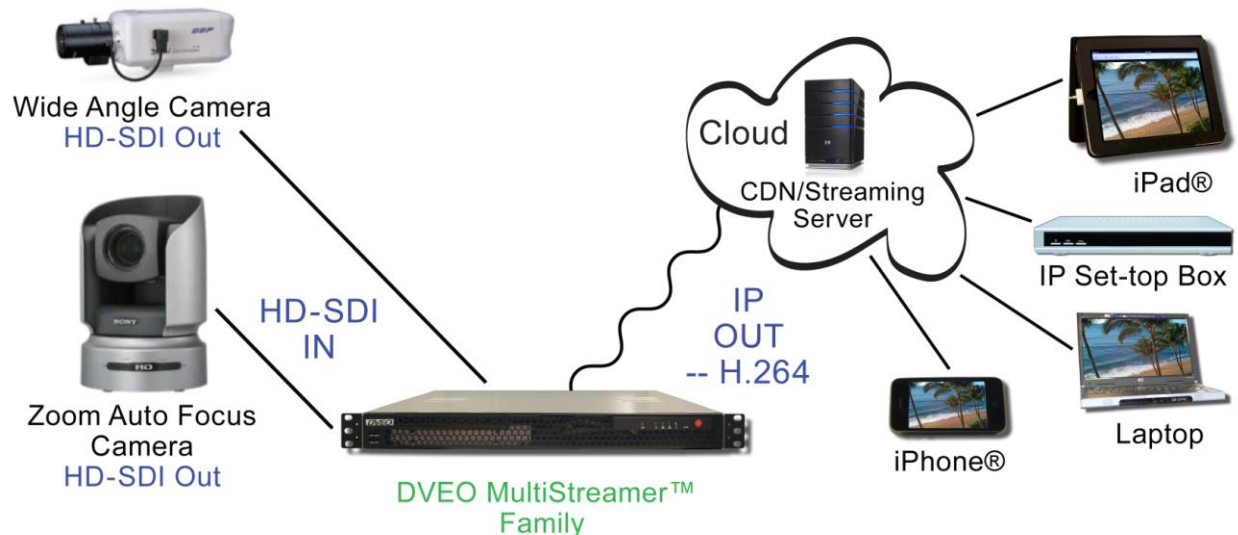
Recommended Environment and Tools

- 1) 2 x Video Cameras – Compatible with DVEO inputs: SDI, HD-SDI, or GigE IP
- 2) Streaming Server – DVEO MultiStreamer DIG/IP™ ("mini") or Mamba DIG/IP™ (portable unit)
- 3) Bandwidth – Depending on the no. of anticipated simultaneous viewers
- 4) CDN – Optional

Equipment Event Setup

The MultiStreamer DIG/IP and Mamba DIG/IP two channel encoders are configured to be easily used for live video streaming, featuring two SDI or HD-SDI inputs. The MultiStreamer features a 1RU form factor intended for rack mount whereas the Mamba is a self-contained portable unit.

System architecture:



Simply connect one fixed focus, wide angle camera to the encoder via the HD-SDI input. This feed will be a view of the congregation, flowers, or some other meaningful image.

Connect a second camera with zoom, autofocus, and audio to the second HD-SDI port of the encoder. This will cover the speaker and podium area, or other area where the key event will take place.



Once these connections are made along with the Internet connection to the encoder, video can be streamed to connected devices such as iOS and Android smart phones and tablets, PCs and Macs, smart TVs, and IP set-top boxes with streaming capabilities, e.g. Roku®, Dune HD and Amino.

When utilizing HLS output each MultiStreamer can support 500+ simultaneous users natively, streaming about 400 Mbps in aggregate bandwidth via the built-in GigE NIC card. There are some bandwidth and distribution issues to consider when using such a powerful streamer:

- Ability to stream e.g. 40 x 10 Mbps or 400 x 1 Mbps live streams (using unicast).
- If the local facility has a 5 Mbps upload connection to the Internet, then it can put through only 5 x 1 Mbps or 10 x 500 Kbps streams. With a 25 Mbps connection, it could output 25 x 1 Mbps or 50 x 500 Kbps streams.
- If the number of potential viewers exceeds the local facility bandwidth then it would be recommended to contract with a CDN, which in principle can provide unlimited bandwidth distributed over hundreds of points of presence across an entire country.

Conclusion

The system described here offers an effective way for people who could not attend the event to still be a part of it in a meaningful manner. Beyond religious ceremonies the solution can be used for many other purposes, such as military, education and corporate video services.

It is also a potential source of income for anybody with an interest to provide this as a value-added service. In general this solution can provide a return on investment in 3-6 months.

DVEO can also furnish contact information to companies that can provide interested parties with a Roku channel.

More Information

Download the [MultiStreamer Mini](#) and [Mamba](#) product sheets.



DVEO MultiStreamer DIG/IP (mini)



DVEO Mamba DIG/IP

Contact Us

Call DVEO at +1 858 613-1818 or visit www.dveo.com