



Live Production Control System – White Paper

Broadcasters Push for Integration and Efficiency

Intense fiscal pressures, industry consolidation and the high costs of migration to DTV are forcing broadcasters to look at every opportunity for efficiency. Additional revenue streams made possible by DTV multi-channel capabilities are creating the need for additional on-air content at lower costs. Similar pressures have already led the broadcast industry to widespread automation of master control facilities, reducing the manual operational requirements while increasing reliability and consistency of the on-air broadcast.

Production control rooms have already benefited in similar ways with the advent of video servers for quick and accurate clip playback, robotic camera systems to set up repeatable camera shots and production switchers with enhanced external device control. These advances have enabled a more sophisticated, efficient and consistent product with less operational effort. Ross Video's OverDrive is a step further along this path, bringing everything in the control room together under a simple and powerful user interface. For News applications, OverDrive enables, for the first time, a direct *live link* to your newsroom system with an evolutionary no compromises approach toward fully integrated control while using traditional and existing production equipment.

A New Approach

OverDrive is a Windows based production control system designed for a wide range of live production applications. It allows for a show to be pre-built using innovative templates and *custom control* macros. The production can then be easily executed from the OverDrive touch screen. Simple shows can be taken to air on OverDrive with



virtually no requirement for advance pre-production. OverDrive integrates with traditional and existing hardware and maintains a real-time “live link” to the newsroom system during a production.

Direct Link to News Room System

OverDrive provides a link between your newsroom editorial system and other production devices including the video production switcher, audio mixer, robotic camera devices and more. OverDrive integrates to those devices that do not already have a direct connection through the newsroom system and provides an optimized control interface.

Newsroom editorial systems such as Associated Press’ ENPS and Avid iNews currently have the ability to drive the order of some production devices, such as character generators and teleprompters, directly from the line-up. The line-up is used as a semi-automation system, downloading a list when initialized and then transmitting changes in the order of the list to the devices connected. By tying in the remaining control room devices, and triggering those that are ordered by the line-up, OverDrive allows your entire show to be driven directly from the newsroom system line-up!

I Want my Control Room!

OverDrive combines a traditional approach to control room design together with a direct link to your newsroom line-up. This provides for multi-purpose functionality that makes possible producing a fully automated minimum crew morning show and a traditional fully-staffed evening newscast, all from the same control room.

OverDrive Offers a Variety of Integration Possibilities

Ross realizes that no two productions have the same production requirements. The OverDrive system with Synergy is designed to accommodate a wide range of different productions even within the same system. The possibilities include the following:

- Full Integration
 - ▶ A fully integrated production system with a live link to the newsroom system line-up.
- Partial Integration
 - ▶ A partially integrated production system with some devices driven by the OverDrive system and the others run by operations staff. For example, a particular system could have camera operators to provide a more “live feel” to the show or in a CG intensive show, continue to run the CG manually.
- Production Switcher Only
 - ▶ By tying the production switcher into the line-up, the Technical Director is able to use OverDrive to drive switcher templates, delivering a consistent, error-free show.

OverDrive Offers a Migration Path

OverDrive can be implemented in stages, from semi to fully automated, providing a smooth transition for your productions. OverDrive can start out as a standalone system controlling the production switcher with templates and grow as external devices such as servers are brought on-line or when a future newsroom interface is required.



OverDrive Makes the Hybrid Control Room Possible

OverDrive allows you to set up the control room the way you want it, as it has been thoughtfully designed to interface to traditional broadcast hardware. In most cases, broadcasters desire a system that allows for some fully automated shows and some that are run in a traditional manner with a full crew. OverDrive makes it possible.

OverDrive Utilizes Open Industry Standards

OverDrive makes use of open industry standards wherever possible for interfacing to devices. Standards such as MOS protocol to connect to your newsroom system, MIDI for audio mixers and VDCP for video servers allow OverDrive to work in any environment.

How does OverDrive work?

OverDrive users can easily build a show by pasting story templates into the OverDrive run down area. This sets the ordering of events for the show. When the show is taken to air, the operator simply advances from one story to the next using the touch screen, a mouse or keyboard. Full preview is always available. Individual stories can have several moves that are manually triggered or have automated events that follow a pre-set timeline. There's even room for "ad lib" with quick recalls of preset scenes, macros, or manual control over frequently used keys, effects and sources.

News

OverDrive includes an optional interface application that runs within your newsroom system. This application allows a drag and drop approach to preparing your show. Templates are created for the standard story "looks" similar to a CG template concept. These templates are then dragged and dropped into stories in the newsroom system along with C.G. text, server clips, etc. When the line-up is initialized, these items are automatically downloaded into OverDrive and the other production equipment directly. From that point on, the OverDrive run down area becomes identical to the Newsroom line-up. Any additional changes to the line-up during the show are automatically reflected in the Overdrive run down.

Synergy Series Production Switchers

The key to OverDrive is the tight integration to the Ross Synergy Series production switcher family. Many of the device interfaces such as audio mixers, video servers, and robotic cameras are connected through Synergy enabling a tightly integrated news production system. This configuration enables the Synergy production switcher to have direct control over these devices itself even without the OverDrive system present; this is key for the flexibility in moving from automated to manual productions easily while protecting your investment in existing equipment.

OverDrive Offers the Best of Both Worlds

If the pressures mentioned earlier in this article sound familiar to you, then OverDrive may be the answer to solving them. If you are in the fortunate position of not experiencing these pressures today, it may be prudent to consider them in your plans for tomorrow. Either way, Ross offers a solution tailored to fit your current needs with an evolutionary growth path for the future.

