



APPLICATION NOTES

News Cut-ins

Major Benefit of ParkerVision's PVTV NEWS

- ability to perform clean, professional news cut-ins at times when there is a minimum of staff available. With just a little planning and forethought, templates can be created and saved for immediate access at any time.

PVTV NEWS can be effectively used for anything from Weather Bulletins, Breaking News and Cable system cut-ins to regularly scheduled live teases. The operator may be anyone from a regular newscast director, to an overnight engineer, to a news producer, or even the anchor of the cut-in.

One Person Weather Bulletins

- Weather Bulletins can be aired with only the weathercaster on site.
- Chromakeys or standard camera shots can be programmed incorporating all required cut-in elements, such as opens, graphics, maps, and radar.
- On-air material can be controlled by talent through use of a remote triggering device, which operates through PVTV NEWS by means of General Purpose Inputs, or GPIs, and a user-provided switch. The switch advances each step of the Transition Macro, just like a director in the control room, or like changing the maps on the weather computer.

The same procedure would enable a lone newsperson to get breaking news on the air quickly and cleanly without having to wait for a crew.

Quick Creation of Special Reports

- Templates for special events can be created in PVTV NEWS with some of the basic elements that already exist on the Transition Macro Timeline.

A Special Report will probably start with a video open which transitions to an anchor, either on the news set or in the newsroom. It will usually conclude with a video close. These elements would form the structure of the Special Report Template, requiring only the specific items in the body of the report. The operator merely recalls this template when needed and, using the appropriate Late Breaking News Hotkeys, completes the Transition Macro.

Rundown templates can also be created in the station's newsroom computer system with programming information already entered for those basic elements. The producer, director or anchor can then enter the remaining elements on the rundown. Returning to PVTV NEWS, the rundown is imported and the Special Report, or even a scheduled news tease, is ready for air.



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Late Breaking News Hotkeys

Defining Breaking News

- anything that was not originally scheduled for a particular newscast, but that occurs during, or just prior to the show.
- Breaking News may be as simple as an anchor on-cam reading information - what used to be called "rip and read" in the days when most out-of-station news came from an AP or UPI teletype machines – or as complex as multiple live shots with videotape, graphics and so forth.

ParkerVision's PVTV NEWS systems contain Late Breaking News Hotkeys to enable directors to smoothly manage such last-minute events. Like news itself, the Late Breaking News Hotkeys (called LBNs) can be very simple or quite complex.

Using LBNs

- LBNs may be entered on the Timeline as the next event (much like selecting a source on pre-set on a traditional switcher).
- LBNs can be dragged to a specific location for later use without affecting the layout of the rest of the timeline.

The content of the Late Breaking News Hotkeys is saved with the timeline, so each show can have a structure according to its particular needs. In addition, these hotkeys can be easily changed or updated as the format of the show evolves.

In use, the LBN can be more reliable and efficient than with a traditional operation. Rather than the producer telling the director, who then tells the anchor, who then tells the TD, audio, cameras, teleprompter...any of whom may miss the instruction...the producer tells the director who then presses a button.

Using a Modular Approach Ensures Flexibility

- Each Hotkey takes one element that would be used in a breaking news situation.
- Some of the keys would contain a close-up shot of each anchor, others the transition effect to a live shot (such as a Double-Box), and another would be the live shot itself.
- Other Hotkeys would be designed to transition to each videotape source. When breaking news occurs, the director selects only the Hotkeys necessary and inserts them on the Timeline, ready for air.

As an example, LBN-1 might point Camera 1 to Talent 1, sending the camera to the preset location for a close-up shot, bringing up that microphone and closing all other audio sources. LBN-2 would do the same for Camera 2 and Talent 2. LBN-3 could be Weather Chromakey. LBN-9 and LBN-10 might cut to VTRs 1 and 2 respectively, with full sound for each machine and closing all other audio sources.

Benefits of the Modular Approach

- provides the director with the flexibility to mix and match elements depending on the needs of the moment.
- Coverage is not locked into one particular method. If the coverage develops into something more extensive than first thought, Late Breaking News Hotkeys can be recalled one at a time as the coverage progresses.
- This modularity also serves to permit other uses for the LBNs, such as "floating" stories.

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Late Breaking News Hotkeys

Floating Stories

If a story is not in house a few minutes before air, the producer may wish to “float” the story and air it at another place in the newscast. The director highlights all the elements for that story and saves them to an open LBN hotkey. If the decision is made to skip the story, the director bypasses it on the timeline. When the story is finally ready for air, the director can recall the entire setup from the LBN hotkey and place it wherever it should go, without having to return to the previous place in the timeline or rebuild the story piece by piece.

Recovery

Late Breaking News Hotkeys can also be used in emergency situations not related to breaking news. Within seconds, the director can bail out of a failed live shot or bad tape by selecting the appropriate LBN to return to the set for the anchor(s) to continue with the show. This allows the director to get an acceptable source on the air while moving to the next story on the timeline. If a dropped tape affects the machine rotation, the director can use LBNs to access the correct machine until the rotation can be stabilized.



APPLICATION NOTES

Production

Automating Production with PVTV STUDIO

- PVTV NEWS takes a non-linear approach to a linear product, so it follows that the same approach will work for other types of production.

Using PVTV NEWS to build a commercial is fairly simple, since few of the variables inherent in news exist. For instance, there are usually no worries about a live shot not being ready. Plus, there is no rendering time as is associated with most non-linear editing systems. In addition, PVTV NEWS can be programmed to record the spots as well.

As with all production, the amount of time needed to complete the session depends on the complexity of the spot and the amount of preparation beforehand.

Many stations cut topical news promos with the anchors after each show. The format is usually the same each time: anchor on camera with music underneath, voice-over video, transition to another voice-over video, transition to animated logo. By creating a base template containing all of the elements and transitions, spots of this type are easily and efficiently produced daily by simply putting different videotapes in the machines.

Canned Promo Example

- **Cue:** Switcher to black, audio down, cue source tape, Recall Camera preset, Recall CG "Tonight"
- **Open:** Roll and transition to VTR, fade audio full
- **Anchor:** Dissolve to Camera, crossfade microphone up, VTR down and under
- **VO-1:** Roll and take VO-1 video with CG super
- **VO-2:** Roll and wipe to VO-2 video with CG super
- **Anchor:** Dissolve to Camera clean
- **Close:** Dissolve to VTR full, crossfade Anchor mic down and VTR audio full.
- **Black:** Fade video to black, fade audio down.

In fact, this can all be put together from the newsroom computer and imported into PVTV NEWS, just like a newscast.

Naturally, if the video isn't ready when the spots are recorded, PVTV NEWS can be used to record only the on-camera portions to be used later in post-production.

Defining Spot Tagging

- Like News Topicals, spot tagging is a type of production that has a standard format with only certain details changing each time.

Creating Spot Tagging with PVTV STUDIO

- A master template containing all of the basic elements is created and saved to a file to use on a daily or weekly basis.
- Playback timecode as well as which audio tag or graphic to use, are then modified for each version. This is especially useful for topical promos for syndicated programs which have several versions (:30, :20, :15, :10) all with the same tag.
- Only the playback's time-code would need to be changed.

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As an example, a talk show's topical promos provide the last five seconds for the station information. The cuts are all one minute apart on the master tape, and the station tag uses the same graphic and audio cut for each daily spot.

- **Cue:** Switcher to black, audio down, cue source tape to 00:01:00:00, Recall SS #4000, Cue Audio Tag cut "Monday at 4"
- **VTR:** Roll and take VTR online, fade VTR audio full.
- **Graphic:** Dissolve to SS full, crossfade VTR audio down and Tag audio full.
- **Black:** Fade video to black, fade audio down.

By copying and pasting this spot further down on the timeline, the second spot is ready merely by changing the source tape's timecode in the search command to 00:02:00:00, the third pass sends the source tape to 00:03:00:00 and so on. Succeeding days would also recall a different graphic and audio tag.

Creating a Commercial or Promo for the First Time

- The director would take a base Template with transitions already built and simply insert command files onto the timeline.
- Each command file would contain the appropriate elements for each step; tape cues, video and audio transitions, graphics and so forth.
- Once all of the elements are on the timeline, the appropriate information is entered and the spot, depending on the complexity, can be assembled in one pass. This is similar to an "edit-list" such as that used with CMX or Sony editors.
- **Cue:** Switcher to black, audio down, cue source tape one to (*enter time-code*), cue source tape two to (*enter time-code*), cue source tape three to (*enter time-code*) Recall SS # (*enter message address*), Recall CG # (*enter message address*), Cue Audio Cart cut (*enter file ID*)
- **VTR-1:** Roll and take VTR-1 online, fade Audio Cart audio full
- **CG:** Insert CG super over VTR-1
- **VTR-2:** Roll and transition to VTR-2 online with CG super
- **VTR-3:** Roll and transition to VTR-3 online with CG super
- **SS:** Transition to SS full
- **Black:** Fade video to black, fade audio down.



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News Automation

Interaction with Newsroom Automation Systems

- AP NewsCenter
- iNews (formerly AvStar and Newsstar)
- ENPS
- DCM

During training, the station's directors will build command files. These command files are all of the effects and transitions used within a newscast, such as a cut to a camera with an anchor's microphone open, a sound-on-tape for each machine, a double-box effect to a live shot and so forth. As the command files are built, Association Files are created to use in the newsroom system's rundown. These Association Files are shortcuts which point to a specific command file. An Association File named "C1T1" would point to a command file which contains all the elements needed to take **Camera 1** video and **Talent 1** audio to air.

To Bring a Newscast to Air

- A rundown is created by the producer
- Scripts are written and CGs are entered in the newsroom automation system.
- The newscast director (or producer in some cases) uses specific columns of the computer rundown to enter commands, much like marking a rundown in a traditional manner. One column contains the Association File codes, which point to a particular command file with the effects and transitions used in each story. Another column contains the message addresses for graphics and another the time-codes or file IDs for the video source machines.

Once the show is "air-ready," the director imports the rundown through PVTV NEWS. The Timeline is populated with the command files and other information entered through the newsroom computer. The Timeline is now a graphical representation of the show's rundown. The director then checks the show by "stepping through" the commands to ensure accuracy. The show may then be run "as-is" or elements may be modified as desired.

Actually, the entire show does not have to be complete in order for the director to perform a step-through. If the B, C and D blocks are complete and stable, but the A-block is in flux, the director can import the rundown, check those segments and then continue to work on the A-block.

Changes to the rundown are constantly tracked by the PVTV teleprompter, so if a story is rewritten or a character generator message is added, those changes will follow the script. PVTV NEWS, however, does *not* automatically adjust the Timeline according to changes on the newsroom rundown. This would take control away from the director and introduce the possibility of someone in the newsroom accidentally affecting the show.

If the rundown changes before the show, the director can make the necessary adjustments directly to the Timeline, or modify the rundown and re-import. During the show, the method for adapting to changes varies according to the extent of the changes and when they occur. Dropping a story might involve simply skipping over those commands on the timeline. Adding a story might involve the use of Hotkeys to bring in the required commands. Whatever the circumstances, PVTV STUDIO allows for changes during the show.



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Morning Shows and Special Programs

Morning news shows are generally unlike the other newscasts. The format may be less structured and more open to ad-libs and spontaneity than the evening shows, for instance. A balance must be struck between the desire to have a free-flowing program and the need to have at least some structure. The producer must be aware of the director's needs, the talent must be aware of how their actions can affect the program, and the director must be willing to be flexible.

Interaction among the on-set talent is probably the most challenging part of using automation on a morning show. An off-camera anchor may throw in comments while the other is on-camera. The weathercaster may add a comment from across the room. Even in a traditional environment, where there is an operator dedicated only to opening microphones at the proper time, this is a hit or miss proposition. In automation, where the director is responsible for every aspect of the program, it can become quite challenging but not impossible.

There are several ways to accommodate anchor interaction. The most obvious, of course, is not to do it. Barring that option, there are ways to program the Timeline to allow for such spontaneity. The command elements for this show might be designed to keep all microphones partially open whenever any one is open. The toss to Weather might be programmed with an additional step to leave the anchor mics open until the director is sure they are through.

Live on-set interviews can be completely programmed through PVTV NEWS if there is a strictly defined order to the interview: Anchor intro and question, Guest answer, Anchor question, Guest answer, Anchor Wrap. However, usually only the first two elements are defined. After the first question, it's a back and forth proposition. In this case, the director would program only the Anchor intro and question, the Guest's first answer and the wrap-up. During the interview, after the Guest's response, the director would take camera shots manually on the switcher or through use of the Hotkeys. When the segment concludes, the director resumes operating from the existing show timeline.

Many stations bring live bands, or other entertainment, such as cooking segments or the Humane Society, into the studio for the morning shows. ParkerVision's robotic cameras are not designed to perform on-air moves, but live moves can be accomplished through manual operation of the SHOT Director. A three-camera studio might use preset positions for two of the cameras – wide shot, medium shot – and use the third camera to obtain tight shots, pans, tilts and zooms. An operator for the SHOT Director or a hand-held or other camera might be brought in on occasions when there are a large number of guests.

PVTV NEWS may also be used in other programming such as election coverage, holiday shows, sports highlights shows and public affairs. Every type of video production has at least some standard formatting. Those portions that don't vary, or that vary little, are programmed on the Timeline. Anything else is done by switching manually or, since they are saved with each Timeline, inserting Late Breaking News Hotkeys specific to the production.