



Outline for GV Kayenne Switcher Course

Week 1 - Day 1

Intro to Denali Gold Classroom

- Engineering
 - Router
 - Patch Panels
- Record/PB Area
 - EVS, Abekas, GV K2 Servers
 - BMD SSD Recorders
 - SD card Recorder

Week 1 - Day 2

Intro to Denali Gold (Continued)

- Camera Control
- Expression Graphics
- Chyron Character Generator
- Adobe Premiere Pro Editor
- Color Correction

Week 1 - Day 3

Intro to Denali Gold (Continued)

- PTZ Camera Control
- Audio Mixer & Peripherals
- Tri-pods / Heads / Audio-Video External Connections

Week 1 - Day 4

A.M.

What Is a Switcher?

- Panel
 - M/E Stripes
 - Crosspoint Buttons
 - Backgrounds
 - Program Out
 - Preview Out
 - M/E Outputs
 - M/E PGM
 - M/E PVW
 - AUX Outputs

P.M. Hands-On test Week 1 - Days 1-3

Week 2 - Day 1

- **What are the Functions of a Switcher?**
 - Doing CUTS between Sources
 - Doing a DISSOLVE Between Sources
 - Doing a WIPE Between Sources
 - Selecting a Pattern
 - NORM / REVERSE / N/R Directions
 - Modifying the Wipe Pattern
 - Pattern Multipliers
 - Aspect Control
 - Positioning Control
 - Adding Softness to a wipe edge

Week 2 - Day 2

- Built-In Still Stores
- Built-In DVE's
- Color Correction

Week 2 - Day 3

- **Switcher Components**
 - Main Frame
 - Inputs
 - Outputs
 - Ethernet / RS-422 Ports
 - Format
 - NTSC / PAL
 - SD / HD
 - 720p
 - 1080i
 - 1080p
 - 4K
 - 8K
 - Working with multiple formats in the same switcher
 - Format Converters

Week 2 - Day 4

- A.M.** Utility Buses
- Transition Control
 - M/E Data & Information Displays
 - AUX Panel
 - Aux Bus Selection
 - Source Selection

P.M. Hands-On test Week 2 - Days 1-3

Week 3 - Day 1

- DVE Control
- Machine Control
- Still Store Control

Week 3 - Day 2

- Menu
 - Menu Layout & Hierarchy
 - Engineering Menus
 - User Menus
 - E-MEM / Timeline / Editing Control
 - Macro Record / Editing / Playback
 - Internet Streaming
 - Embedded Audio

Week 3 – Day3

- **Switcher Inputs**
 - Connectors on Main Frame
 - Types of Inputs
 - Video
 - Key
 - Mapping Source Inputs to Buttons
 - Source Patching
 - Built-In Sources
- **Switcher Outputs**
 - Connectors on Main Frame
 - What is a PGM Output?
 - What is a PVW Output?
 - What is an M/E Output?
 - Each M/E has 6 Outputs
 - What is an AUX Output?

Week 4 - Day 4

A.M.

- Adding a Matte color(s) to a wipe edge
- Adding Video to a wipe edge
- Pattern Limiting
- Doing a USER TRANSITION Between Sources
- Doing a PRESET BLACK TRANSITION Between Sources
- Doing a TRANSITION PREVIEW

P.M. Hands-On test Week 4 - Days 1-3

Week 5 - Day 1

- **Building Effects**
 - Adding KEYS
 - Self Key vs. Auto Select Key
 - Luminance Key vs. Linear Key
 - Key Transparency
 - Bringing Keys On & Off
 - Matte-Filling Keys
 - Adding Borderlines, Edges & Shadows
 - Masking Keys
 - Creating a Preset Pattern Key

- Routing a Keyer through a DVE / Resizer
- Chroma Keys
- Introduction to E-MEMs
- Introduction to Timelines

Week 5 - Day 2

- **Re-Entry and Layering**
 - Using another M/E as a background source
 - Using another M/E as a key source
 - Layered Mode
- **Controlling Stills and Animations**
 - Mapping Still Store Outputs
 - Setting up Still Store Inputs
 - Recording a Still
 - Recalling a Still
 - Manipulating a Still

Week 5 - Day 3

- Recording an Animation
- Replaying an Animation
- Controlling the Still Store with E-MEMs / Timelines

Week 5 - Day 4

A.M.

- **Color Correction**
 - RGB vs. YUV Modes
 - Where to find Color Correction Handles
 - Controlling Color Correction using E-MEMs / Timelines

P.M. Hands-On test Week 5 - Days 1-3

Week 6 – Day 1

- **Advanced Timeline Features**
 - Accessing E-Mem Registers (Banks / Levels)
 - All-Inclusive Timelines on an M/E
 - Partial Timelines on an M/E
 - Editing Timelines
 - Local E-Mem / Timelines vs. Master E-Mem / Timelines

Week 6 - Day 2

- **Manipulating Video using Digital Video Effects Devices**
 - Effects Send Theory - Number of Available Channels
 - Using a DVE Upstream vs. Downstream of a Source
 - 2D vs. 3D
 - DVE Terminology & Functionality
 - Sizing
 - Positioning
 - Aspect Control

- Using 2D Space

Week 6 – Day 3

- Using 3D Space
 - X, Y & Z
- Using TARGET Space
- Using SOURCE Space
- Using Rotations & Spins
- Non-Linear Effects, Warps, Mattes, Shadows, Lighting
- Using Multiple Channels
- GLOBAL Control

Week 6 - Day 4

A.M.

- Chaining Macros
- Playing a Macro from the Timeline
- Attaching a Macro to a Panel Button
 - Pre-Attach
 - Post-Attach
 - Replace-Attach
- Using the Menu to View Attachments
- Removing an Attachment

P.M. Hands-On test Week 6 - Days 1-3

Week 6 - Day 5

A.M. Q&A

P.M. Finals

- **GRADUATION!!!**