

2-Day MVS Training Outline

DAY 1

- **Introduction**

Goals of the Training: At end of training, students should be able to maintain the equipment, diagnose problems, save/load files, upgrade software, test the major operational features (but will not get into TD level of operational training), and know how to contact SONY for assistance.

- **MVS System Wiring Configuration**

Discuss in detail the configuration, connectivity, wiring, and components of the Switcher system, including an Overview of the LAN Switches, SCU, DCU, DME, Processor, and Control Panels. An Overview of the Boards in each unit will also be reviewed, with detail Block diagrams and Theory of operation of each board to be explained later in the training.

- **MVS_MVE Mechanical Overview**

Discuss the mechanical assembly and main mechanical components of the system, including Power Supplies, FAN assemblies, and routine cleaning and maintenance of the systems. Do's and Don'ts – such as NO HOT SWAPPING of boards and the need to keep the Filters clean and FAN's serviced.

- Break –

- **MVS Board Review**

Discuss the Block diagram of each board in the MVS processor. Review theory of operation and locate key circuitry on each board. Discuss how to diagnose problems on each board, including LED displays and useful test points. Use of a PC for monitoring VXworks. Review commands for requesting status data from the PC board, such as the "i" command, to view suspended tasks.

- **MVE Overview and Board Review**

Discuss Block diagrams of each board in the MVE. Review theory of operation and locate key circuitry on each board. Discuss how to diagnose problems on each board, including LED displays and useful test points. Use of the PC for monitoring VXworks.

- Lunch –

- **SCU DCU Mechanical Overview**

Discuss the mechanical assembly and main mechanical components of the SCU and DCU, including Power Supplies, FAN assemblies, and routine cleaning and maintenance of the systems. Review the different modules for the Control Panel. Learn how to change the Hard Drive in the SCU. Do's and Don'ts – such as NO HOT SWAPPING of boards and need to keep the Filters clean and FAN's serviced.

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- **SCU Control Panel Overview and Board Review**

Discuss Block diagrams of each board in the SCU. Review theory of operation and locate key circuitry on each board. Discuss how to diagnose problems on each board, including LED displays and useful test points. Use of the PC for monitoring VXworks. Review Panel diagnostic using a USB keyboard and mouse to access Linux. Login as Root: Review ~diagnostic menus.

- **DCU Overview and Board Review**

Discuss Block diagrams of each board in the DCU. Review theory of operation and locate key circuitry on each board. Discuss how to diagnose problems on each board, including LED displays and useful test points. Use of the PC for monitoring VXworks.

- Break -

- **Questions about MVS system**

- (Review teachers notes)

Discuss specific issues, problems and solutions. Review and have students disassemble and assemble SCU, DCU, MVE, MVS processor.

- **File Saving and Loading procedure**

Review the Setup and Initial status memory and the purpose and function of the Hard Drive.

Learn how to SAVE and LOAD setup, snapshot, effect, frame memory files.

Learn how to backup the switcher prior to maintenance or loading software.

- **Menu Setup Overview**

Begin to review the MENU panel button layout.

DAY 2

- **Review and questions from previous day's information**

- **Menu Setup Overview**

- (Operational checkout)

Review the MENU panel button layout. Learn how to perform some simple Switcher functions, testing Chroma Keys, testing Color Correction, DME control and building a simple effect, and Device control.

Overview of the Engineering Setup menus, setup and configuration.

- **Engineering menu setup**

Review each menu within the Engineering Menu. Discuss the SYSTEM menus and go through each menu describing the function of each. Go through Setup and Configuration for the Switcher, Panel, DME, DCU, and Tally/Router.

- Break -

- **Panel setup Menu**

Name and configure buttons. Setup and configure the Control Panel and AUX panel.

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- **Switcher setup Menu**

Configure the Assignable outputs. Learn how to link buses and configure the Device interface etc.

- **DME setup Menu**

Simple DME interface configuration and GPI input or output configuration.

- **DCU setup Menu**

Setup the tally/GPI configuration. Configure the Serial interface ports for VTR control, Mixer, VDCP, etc.

- **Router/Tally setup Menu**

Learn how to setup tally interface and control as well as router interface. Also setup REMOTE panels, such as the MKS-808x.

- Lunch –

- **Software upgrade procedure**

- Hands on

Students will actually upgrade software

- **Test Switcher functions and apply knowledge of configuration of the switcher**

Provide functions for the students to perform on the switcher. Test their knowledge of the training they received.

- **Review and questions**

Everyone receives a certificate for completion of the training.