

Chapter 1 Introduction

The Lynx Keyboard Control Unit (KCU) is a versatile, powerful machine controller and editor, encompassing a wide spectrum of multiple machine synchronization and audio editing applications.

Because the operating environment of the KCU incorporates multiple microprocessors, there are several versions of software available. Features vary with each software version. This manual describes the KCU features and functions when fitted with the following series of operating software:

- KCU080 Stand-alone KCU operation
- KCU300 System Supervisor Unit, multiple controller operation
- KCU600 Stand-alone Varispeed synchronization

This chapter introduces the KCU in the following categories:

- KCU features
- System overview
- System configurations
- Specifications

Keyboard Control Unit Features

The KCU provides comprehensive control of up to six tape or film transports and two programmable GPI (General Purpose Interface) relay closures. Machines may be operated individually, or any selection of available machines may be operated as a synchronized group. Any machine may be operated as the master transport for group operations.

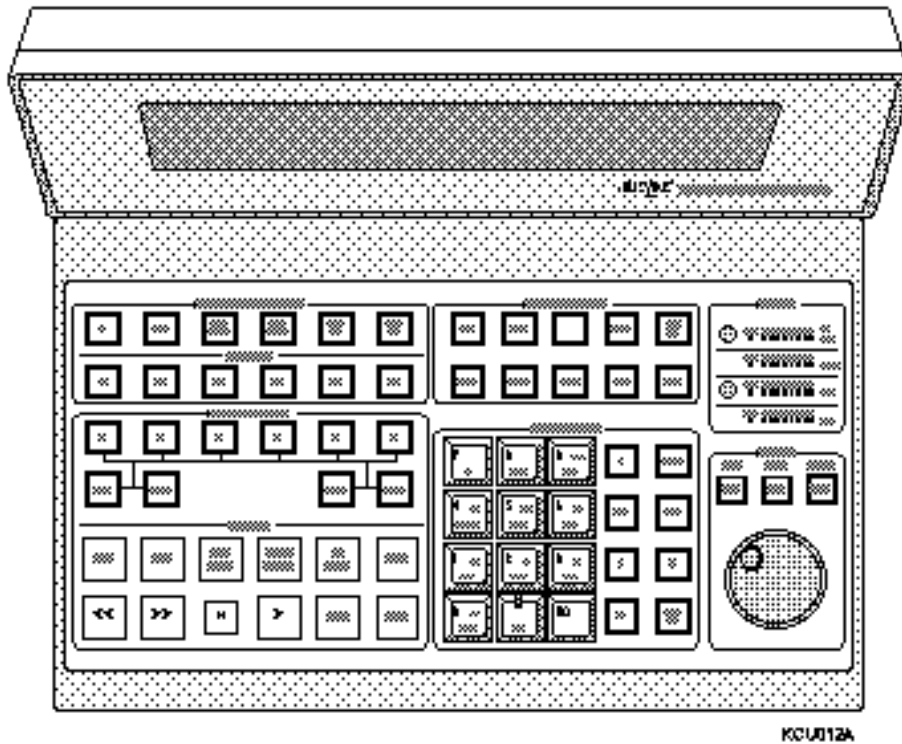


Figure Chapter 1 -1. Keyboard Control Unit

The following is a partial list of features of the Keyboard Control Unit (KCU):

- User panel with lighted keys.
- Two-row alphanumeric display with large (.25" high), blue-green characters.
- Programmable macro keys to execute complex operations with a single keystroke.
- Special function keys for single keystroke time code capture and store-to-key data registers.
- Calculator keypad for direct entry of time code numbers.
- Calculator keypad for track enable.
- Calculator keypad to control data access in system register store and recall operations.
- Jog wheel for shuttle and frame jog functions with VTRs and many ATRs.
- Jog wheel for trimming of data register values in frames and subframes.
- Intuitive, prompting environment to minimize the need for operator training.
- All time code and system setup data retained when powered down, due to independent CPU with battery backed-up RAM.
- Two GPI relays, including dialog beep mode with menu selections for three or four beeps, beep spacing, and beep duration.
- System lock tally.
- Supervisor Port communicates with Lynx System Supervisor Unit.
- Large illuminated transport keys operate single transports (Solo mode) or all selected transports (Group mode).
- 25-foot RS422 cable provided to connect KCU power supply and the first Lynx-2 module.

System Overview

This section describes the following components of the KCU system (shown in the following figure):

- Keyboard Controller Unit (KCU)
- Lynx-2 and Lynx Time Code Modules
- Lynx System Supervisor Unit (SSU)
- Lynx Console Control Unit (CCU)
- Remote Motion Controller (RMC)
- Jog/Shuttle Wheel

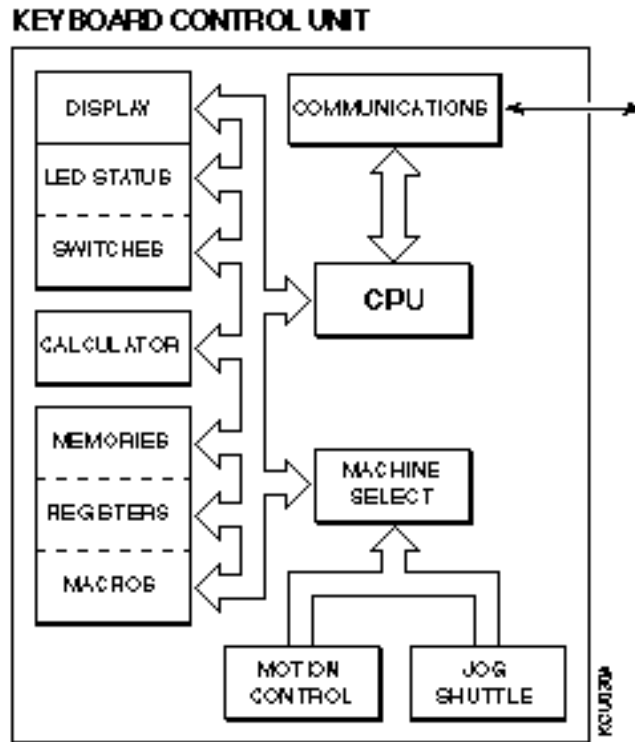


Figure Chapter 1 -2. System Overview

See the Applications chapter of this manual for examples of configurations to meet specific needs.

Keyboard Control Unit (KCU)

The Keyboard Control Unit (KCU) allows remote control of up to six machines. Editing and control commands are entered on the keyboard. Time code status and register contents appear on the 40-character fluorescent display that is hinged above the keyboard.

The control panel is designed with separate key banks for ease of operation for the following:

- Motion control
- Device selection
- Function macros
- Special functions

A numeric calculator keypad addresses specific devices and associated memory registers, performs time code calculations, and allows direct input of time and numeric data.

The KCU keypad jog/shuttle wheel allows jog operations and shuttle operations. The wheel can be used for convenient trimming of numeric data.

Using the KCU is described in the Getting Started and the Features and Controls chapters of this manual.

Lynx System Supervisor Unit (SSU)

The Lynx System Supervisor Unit (SSU) is a sophisticated communications interface unit. The SSU provides integrated control of a variety of devices used in audio and sound post-production environments.

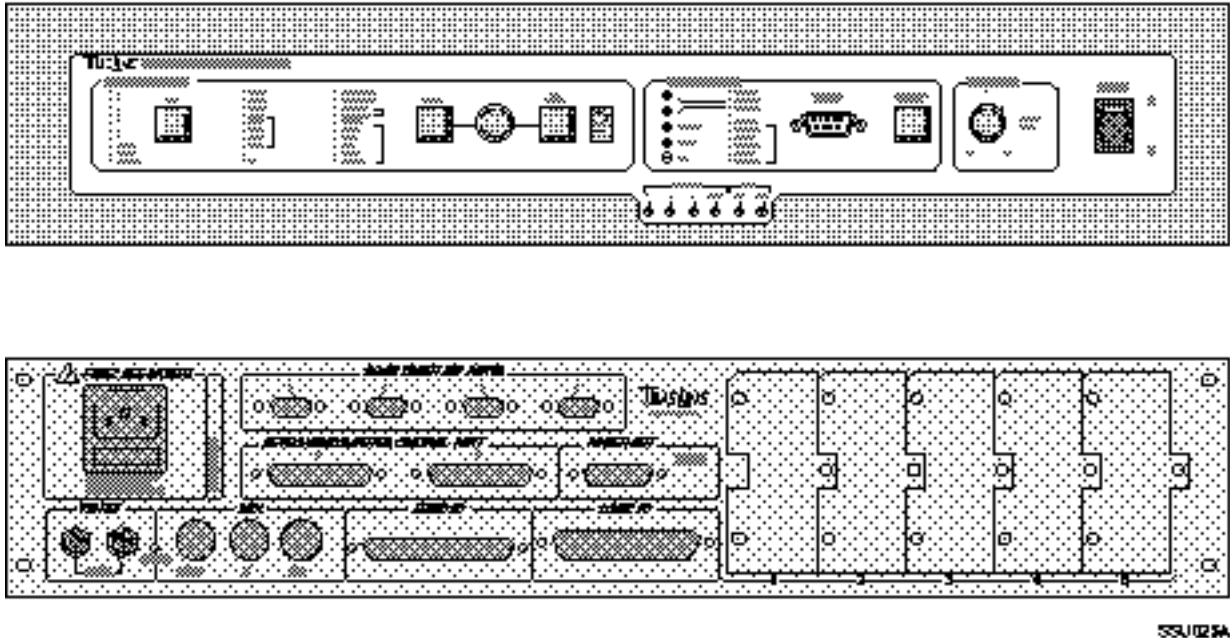


Figure Chapter 1 -4. System Supervisor Unit

The SSU simplifies external computer control of a complex post-production system. The SSU assumes the workload of all high-speed data communications necessary to control and synchronize tape machines and film transports, via Lynx-2 and Lynx Time Code and Film Modules.

The SSU provides a variety of additional control facilities including, but not limited to, eight GPI relays, two annunciator outputs, three externally controllable time code outputs, multiple remote controller connections, and MIDI Time Code output.

Using the Lynx SSU is described in detail in the Advanced Features chapter of this manual.

Lynx Console Control Unit (CCU)

The Console Control Unit (CCU) is a keyboard input accessory for the System Supervisor Unit. A CCU may be used in conjunction with a KCU. The optional Jog/Shuttle wheel assembly is available for console mounting.

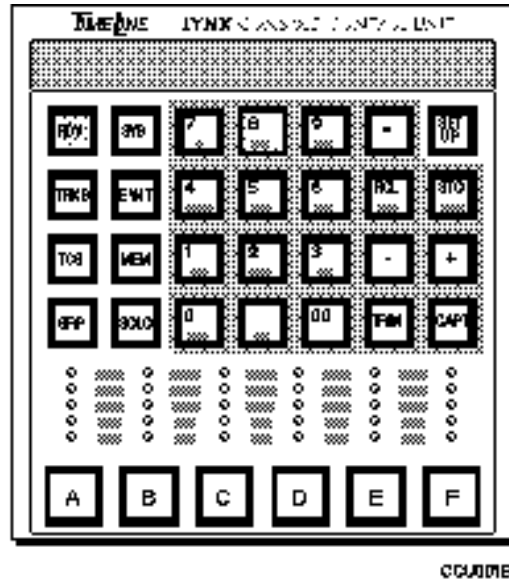


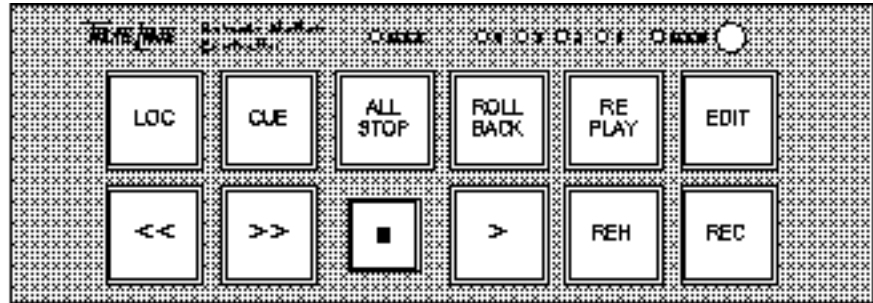
Figure Chapter 1 -5. Console Control Unit

The miniature CCU keyboard mounts in the faceplate of Neve, SSL, and other consoles. The CCU handles up to six transports. Multiple CCUs can be connected to the System Supervisor Unit to provide expanded configurations for film dubbing multiconsoles.

Each operator has individual control of machine transport functions.

Remote Motion Controller

The Remote Motion Controller (RMC) mirrors the motion control switches of the KCU.



93U027A

Figure Chapter 1 -6. Remote Motion Controller

The RMC may be added to the System Supervisor Unit to provide an additional remote transport controller, or to provide machine control and editing features for a CCU/SSU installation. The RMC provides LED indications for ADR beep countdown, group lock, and loop. The RMC is available as a kit for mounting into a console or other remote location.

Jog/Shuttle Wheel Assembly Kit

A Jog/Shuttle Wheel assembly kit is available for customer installation into several System Supervisor Unit applications. The Logic I/O connector on the back of the SSU provides for a connection to the Jog/Shuttle Wheel outputs. Please refer to the System Supervisor Unit (SSU) manual for wiring information.

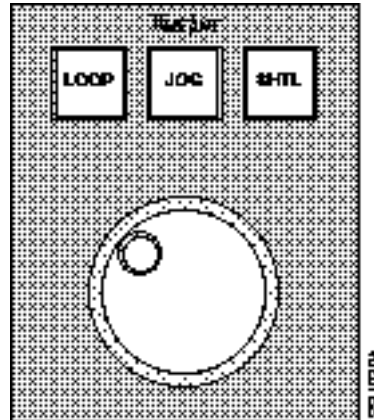


Figure Chapter 1 -7. Jog/Shuttle Wheel

The Jog/Shuttle Wheel assembly provides console-top mounting for CCU or KCU applications, and allows expansion of the Remote Motion Controller. The RMC and Jog/Shuttle Wheel may be configured as a single unit for ease of installation.

System Configurations

In stand-alone operation, the KCU provides control of up to six Lynx-2 or Lynx Time Code or Film modules, two programmable GPIs (General Purpose Interface), and a system lock tally. The KCU handles all the real-time communications with the Lynx Modules via RS422 serial communication.

Lynx modules are daisy-chained to each other with their supplied RS422 connectors, and continue to the KCUs power supply Lynx Port. The 15-pin GPI/Supervisor port on the KCU power supply provides two GPI relay closures to control turntables, CD players, cart machines, and ADR beep outputs. The KCU is connected to its power supply with a supplied 25-pin to 25-pin, 25-foot cable.

When connected to the SSU, the SSU assumes all high speed communication and cabling to centralize operation and installation. The KCU connects to the SSU Computer Control Port, while the Lynx modules connect to SSU Trib Port 1. This configuration provides a total of eight available GPIs, three programmable time code generators, annunciator countdown outputs, a MIDI interface, and system tally status.

See the Applications chapter of this manual for examples of configurations to meet specific needs.

Specifications

This section describes specifications for the KCU.

Keyboard

Display Type	40 character fluorescent, pivot tilting
Keys	57 numeric, function keys 12 transport control keys

Jog/Shuttle Wheel

Communications	RS422, 38.4 k baud asynchronous
----------------	---------------------------------

Power Supply

A remote power supply unit connects to the KCU via a supplied single multi-conductor cable, 20 feet long.

Power Supply Mains Input 100-250 VAC at 50/60 Hz W nominal
30 W max.

Output +5V, 3A max.

Physical

Keyboard Size	5 1/8 " high, 12" wide, 8 1/3" deep
Weight	7 lbs., 5 oz.
Mounting	Freestanding

Software Versions

KCU080	Stand-alone KCU operation
KCU300	System Supervisor Unit, multiple controller operation
KCU600	Stand-alone Varispeed synchronization

When the KCU operating software is updated, functional and operational changes are covered in an addendum to this manual. The information on the title page of this manual indicates the date and designation of the latest software version covered by the manual and any included addenda.

TimeLine Vista, Inc. reserves the right to change the design and specification of equipment without notice.