Utah Scientific

Hardware and Software Router Control Panels

Router Control Panels

Utah Scientific offers a wide range of control panels to suit any type of routing switcher application. Whether you need a completely customizable, software-based GUI panel, a simple single-bus hardware panel in which you can push a single button to select a source, or a sophisticated, multibus, multilevel control panel that can operate the entire routing system, Utah Scientific has the panel to fit your exact requirement.

UCP Router Control Panels

There are two panel types in the UCP router control panel line:

- The standard **UCP Series**, providing a traditional feature set with a wide array of powerful and cost-effective panels.

- The **UCP-LC Series**, a completely new approach to router control panel design that provides a "soft" user interface through dynamic labeling of LCD switches and touchscreen displays.

Utah Scientific's Ucon GUI configuration software enables programming of UCP control panels. A software emulation enables users to program the panel simply by dragging and dropping sources, destinations, groups, and functions onto the buttons. Copy and paste is available to duplicate when necessary. Users can program panels for immediate use, or they can save the configurations for a more convenient time.

UCP Features

- LCD switches with high-resolution displays

- Multicolor LED illumination of buttons

- Intensity adjustments for superb legibility under all lighting conditions

- User-configurable, menu-driven operation

- Easy configuration via Ucon software, with ability to customize panels to suit each application

- 8-character, alphanumeric LED status displays

- Ability to restrict access to certain sources and destinations, avoiding accidental switching of critical feeds

- Multilevel switching capability

- Output protect / lock options

- Flexible connection options — Ethernet, U-Net or both using CAT-5 cabling

- Audio attribute switching and status, enabling users to monitor and change attributes directly from the panel

- Salvo execution for executing multi-bus salvos in the same manner as making a single-source selection

- Monitor matrix bus control

- Console mount available on many models

Router Control Panels at a Glance

UCP-LC16
22 user-programmable, high resolution, multicolor LCD display buttons. (Console mount style available)

UCP-LC32
32 user-programmable, high resolution, multicolor LCD display buttons. (Console mount style available)

UCP-LC80
80 user-programmable, high-resolution, multicolor LCD display buttons.

UCP-MM/A/E
Multimode full X-Y with 16-button, dynamic LCD keypad.

UCP-MM/B/E
Multimode full X-Y with 20-button, dynamic LCD keypad.

UCP-XY/E
Full X-Y with 15 assignable buttons and scroll. (Console mount available)

UCP-SX/E
Full X-Y with direct take feature. (Console mount available)

UCP-MX/E
Full X-Y with multidestination feature. (Console mount available)

UCP-1/E
Full X-Y with 10 assignable buttons.

UCP-2/E
Single or dual bus with full source access and 12 assignable buttons. (Console mount style available)

Router Control Panels at a Glance

UCP-36/E
44 user-programmable buttons. (Console mount style available)

UCP-48/E
Multifunction button per source with LCD displays. (Console mount style available)

UCP-64/E
64 user-programmable buttons. (Console mount style available)

UCP-72/E
44 user-programmable buttons with shift. (Console mount style available)

UCP-DT/A/E
Full matrix control panel with additional "Direct Take" features. (Console mount style available)
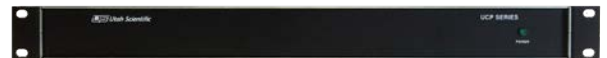
UCP-DT/B/E
Sixteen-level/destination XY panel that includes the core features and button layout of the UCP-SX. (Console mount style available)

UCP-GPIO/E
16 GPI and 16 GPO. Programmable using Ucon, Utah Scientific's configuration software.

Universal UDS-GPIO
16 GPI and 16 GPO. Programmable using internal web server.

UCP-LC Series

Utah Scientific's UCP-LC family features dynamic labelling of high-resolution LCD switches to provide a completely "soft" user interface. These panels are driven by a unique user-configurable menu system that offers a very powerful, yet user-friendly means of controlling any routing system.

UCP-LC80
80 user-programmable, high-resolution, multicolor LCD display buttons

The UCP-LC80 panel offers two rows of programmable buttons with eight characters and user-definable colors. The flexible, 32-menu layering structure provides fast access to a variety of panel configurations. All buttons are fully programmable for any function such as source, destination, salvos, level mapping, audio attributes, protect/lock, paging, and breakaway switching.

UCP-LC32
38 user-programmable, high-resolution, multicolor LCD display buttons

The UCP-LC32 panel offers two rows of programmable buttons with eight characters and user-definable colors. The flexible, 32-menu layering structure provides fast access to a variety of panel configurations. All buttons are fully programmable for any function such as source, destination, salvos, level mapping, audio attributes, protect/lock, paging, and breakaway switching.

UCP-LC16
22 user-programmable, high-resolution, multicolor LCD display buttons

The UCP-LC16 panel provides two rows of programmable buttons with eight characters and user-definable colors. The flexible, 32-menu layering structure provides fast access to a variety of panel configurations. All buttons are fully programmable for any function such as source, destination, salvos, level mapping, audio attributes, protect / lock, paging, and breakaway switching.

UCP Series

UCP-MM/A/E
Multimode with full X-Y and dynamic 16-button LCD keypad

The UCP-MM/A/E is a full-matrix X-Y panel used to route any source to any destination, with full, 16-level breakaway. The panel's four touchscreen LCD display panels offer highly legible read-out of levels, sources, destinations, or router status, and the 16 selector buttons each have an eight-character LCD display.

In the X/Y mode, the panel offers two LCD displays giving page views of destinations. Multiple pages are available, with each page containing 12 user-assignable destinations. Takes can be made directly in these displays, with scroll-up and scroll-down buttons for easy navigation. The panel also features a button-per-source mode for switching sources quickly to the selected destination. Multiple pages are available, with user-assignable sources using the scroll buttons.

UCP-MM/B/E
Multimode with full X-Y and 20-button keypad

The UCP-MM/B/E is a full matrix X-Y panel used to route any source to any destination, with full, 16-level breakaway. The panel's four touchscreen LCD display panels offer highly legible read-out of levels, sources, destinations, or router status and 20 selector buttons.

In the X/Y mode, the panel offers two LCD displays giving page views of destinations. Multiple pages are available, with each page containing 12 user assignable destinations. Takes can be made directly in these displays, with scroll-up and scroll-down buttons for easy navigation. The panel also features a button-per-source mode for switching sources quickly to the selected destination. Multiple pages are available, with user-assignable sources using the scroll buttons.

UCP Series

UCP-XY/E
Full X-Y with 15 assignable buttons and scroll

The UCP-XY/E is a full-matrix X-Y panel used to route any source to any destination, with full 16-level breakaway and status. The panel includes eight alphanumeric displays, each with eight characters, providing direct indication of status. A ninth display shows the active destination. The 20-button keypad provides the ability to select sources and destinations by name or numeric value. Scroll-up and scroll-down buttons provide easy navigation of sources and destinations.

The panel also provides 15 dedicated buttons to give users direct access to the most commonly used functions, such as direct sources, direct destinations, salvos, attributes, and protect/lock of outputs.

UCP-SX/E
Full X-Y with direct take feature

The UCP-SX/E is a full-matrix X-Y panel used to route any source to any destination, with full 16-level breakaway and status. The panel includes eight alphanumeric displays, each with eight characters, providing direct indication of status. A ninth display shows the active destination. The 20-button keypad provides the ability to select sources and destinations by name or numeric value. Dedicated salvo, attribute, and protect/lock output buttons are included.

Firmware in this panel allows for two operation modes: XY and Direct. In the XY mode, the panel operates as a standard XY panel. In the Direct mode, the panel allows the user to store and select 16 direct sources and 16 destinations. Switching between the two modes is easily accomplished with a simple button push.

UCP Series

UCP-MX/E
Full X-Y with multidestination feature

The UCP-MX/E is a full matrix XY panel used to route any source to any destination, with full 16-level breakaway and status. The panel includes eight alphanumeric displays, each with eight characters, providing direct indication of status. A ninth display shows the active destination. The 20-button keypad provides the ability to select sources and destinations by name or numeric value. Dedicated salvo, attribute, and protect/lock output buttons are included.

Firmware in this panel allows for two operation modes: XY and Multi. In the XY mode, the panel operates as a standard XY panel. In the multimode, the panel allows the user to store and control 16 destinations. Switching between the two modes is easily accomplished with a simple button push.

UCP-1/E
Full X-Y with 10 assignable buttons

The UCP-1/E is a full-matrix XY panel used to route any source to any destination with level breakaway and status. The panel includes an alphanumeric display, with 8 characters providing direct indication of status. A second display shows the active destination. The 20-button keypad provides the ability to select sources and destinations by name.

Ten dedicated buttons give users direct access to the most commonly used functions, such as direct sources, direct destinations, salvos, attributes, and protect/lock of outputs.

UCP-2/E
Single or dual bus with full source access and 12 assignable buttons

The UCP-2/E can be operated as a single- or dual-bus panel with full access to all sources for the panel destinations with level breakaway and status. The panel includes an alphanumeric display, with 8 characters providing direct indication of status. With the 20-button keypad, users can select sources by name.

Twelve dedicated buttons give users direct access to the most commonly used functions, such as direct sources, direct destinations, salvos, attributes, and protect/lock of outputs.

UCP Series

UCP-48/E
Multifunction button-per-source with LCD displays

The UCP-48/E provides 32 direct source buttons, each with a 4-character LCD display for status and dedicated up/down scroll buttons. The active source selection is indicated by a contrasting backlight color on the LCD display. Sixteen user-programmable buttons can be assigned to pages, destinations, levels, sources, and salvos. To change the user- programmable buttons, simply change the ID label.

With the scroll buttons, users can access up to 640 separate sources. The panel supports up to 20 pages with 32 sources on each page, and the pages are completely user-definable — they can show sources by functional groups, sequentially, or in any other method the application requires.

UCP-64/E
64 user-programmable buttons

With 64 buttons, the UCP-64/E is typically configured as a button-per-source panel for direct switching to a single destination. This panel is generally used in applications that require fast, simple access to a limited number of sources. For special applications, the UCP-64's buttons can be programmed as source, destination, salvo, or level-select buttons. This allows the panel to be set up as a 32 x 32 panel, a single-bus, 64-input panel, or any other combination of 64 selections. The panel offers removable legend strips for quick and easy labeling of the buttons, a big advantage in applications for which the panel configuration changes frequently. An extender panel, CX-64, is available to add 64 more buttons if required.

UCP-36/E
44 user-programmable buttons

With 36 buttons, the UCP-36/E is typically configured as a button-per-source panel for direct switching up to four destinations and multi-level breakaway. This panel is generally used in applications that require fast, simple access to a limited number of sources. For special applications, the UCP-36's buttons can be programmed as source, destination, salvo, or level-select buttons. This allows the panel to be set up for any combination of 44 selections. An extender panel, CX-36, is available to add 44 more buttons if required.

UCP Series

UCP-72/E
44 user-programmable buttons with shift

The UCP-72/E offer similar capabilities as the UCP-36, with a SHIFT key added to double the number of sources available on the panel. The labels for sources 1-36 are located on the top half of each button, while labels for sources 37-72 are located on the bottom half. The appropriate half segment lights when selected. An extender panel, CX-72, is available to add 44 more buttons if required.

UCP-DT/A/E
Multi-mode with full X-Y and dynamic, 16-button LCD keypad

The UCP-DT/A/E is a desktop version of the UCP-MM/A full matrix X-Y panel, designed for placement on a desktop, console, or other location where rack-mount space is not available. The panel's two touch-screen LCD display panels offer highly legible read-out of levels, sources, destinations, or router status, and 16 selector buttons each provide an 8-character LCD display.

UCP-DT/B/E
Multimode with full X-Y and 20-button keypad

The UCP-DT/B/E is a desktop version of the UCP-MM/B full matrix X-Y panel, designed for placement on a desktop, console, or other location where rack-mount space is not available. The panel's two touch-screen LCD display panels offer highly legible read-out of levels, sources, destinations, or router status, and 20 selector buttons each provide an 8-character display.

UCP Series

Universal UDS-GPIO
16 GPI and 16 GPO

The UDS-GPIO is a universal GPIO unit that can operate with any Utah Scientific control system. Its functionality duplicates that of the UCP-GPIO/E, allowing mapping of individual contacts to a specific source-destination combination. Latching and revert (joystick override) modes are also included. The UDS-GPIO does not utilize Ucon Utah configuration software but instead provides an internal web server that operates with standard web browsers for simple setup. With its small footprint, the unit can be placed in a discrete location.

UCP-GPIO/E
16 GPI and 16 GPO

The UCP-GPIO/E provides the means to extend any Utah Scientific router control system to external devices by means of contact closures. The 16 in-bound contact closures (GPIs) are opto-isolated for ease of installation. These contacts can be configured for latching or momentary operation, and they are programmable for mapping the individual contacts to specific source-destination combinations.

In momentary operation, the crosspoint associated with that contact is activated as long as the closure is active. When the closure is released, the router output is switched back to the input that was selected before the closure was activated. This mode of operation is generally referred to as "Joystick Override" mode.

The 16 outbound closures are provided by relays, allowing external devices such as tally lights or other indicators to be activated when a specific source-destination combination is active in the router.

Rear View of 2-RU and 1-RU control panels

Flexible connection options include Ethernet or U-Net (Utah Scientific's network that enables serial looping of panels) using standard CAT-5 cabling. In critical applications, UCP panels provide unique redundancy by allowing both connection methods; in the event of an Ethernet or U-Net failure, the panel automatically switches to the alternate connection mode.

SoftPanel-2 GUI Control Panel System

SoftPanel-2 is a software-based, virtual control panel for personal computers. Users can create custom, virtual control panels with the panel creation toolkit. With the free-form toolkit, users can create their own layouts and choose background and button colors, button sizes, and a variety of other attributes. SoftPanel-2 also includes templates that emulate the Utah Scientific UCP Series hardware control panels.

Using the Player module, virtual panels created with SoftPanel-2 can be operated from network computers connected to the Utah Scientific control system. Router definitions and source/destination tables are fully synchronized with the Utah Scientific controller, ensuring that labeling in the SoftPanel-2 panels matches the labels that appear on the hardware control panels. Virtual control panels can be installed on any computer in a facility, and they can be operated using touch screen monitors for added flexibility.

SoftPanel-2 Features

- Free-form panel creation

- Replicates hardware control panels for traditional control panel operation

- Linked with Utah Scientific controllers for full synchronization

- Multiple license packages available

Hardware Panel Specifications

Connection

(1) RJ-45:	10/100 Ethernet
(2) RJ-45:	Looping U-Net
	(Utah Scientific control network)
(1) 422/232:	DB-9F Subminiature
	Utah Scientific RCP-1 serial protocol
(1) RJ-45:	Diagnostic port
(1) RJ45:	Can Exp port - panel expansion

Connection Using GPIO Terminal Blocks

(8) Detachable blocks with push release

Power

100-240VAC 50/60Hz
Power consumption less than 15 watts

Power, UCP-DT Desktop

100-240VAC 50/60Hz external +5V
Captive nut fastener

Physical Rack Mount

Width:	19" (48.26cm)
Depth:	5.5" (14cm)
Height:	1RU, 1.75" (4.45cm)
	2RU, 3.5" (8.9cm)
Weight:	1RU, 3.5lb (1.6kg)
	2RU, 5lb (2.27kg)

SoftPanel-2 Specifications

Processor	Pentium 4 (1 GHz)
Operating System	Windows XP, 7, 8
RAM	Windows XP, 1GB / Windows 7,8, 4GB
Hard Disk Space	10MB
Display	1440x900 (WXGA+)
CD-ROM	CD
Ethernet	10 Megabit

Physical Console Mount Electronics Chassis

Width:	19" (48.26cm)
Depth:	5.5" (14cm)
Height:	1RU, 1.75" (4.45cm)
Weight:	1RU, 3.5lb (1.6kg)
	2RU, 5lb (2.27kg)

Button Panel

Width:	19" (48.26cm)
Depth:	3" (7.6cm)
Height:	1RU, 1.75" (4.45cm)
	2RU, 3.5" (8.9cm)

Physical UCP-DT Desktop

Width: 10" (25.4cm)
Depth: 5.5" (14cm)
Height: 3.5" (8.9cm)
Weight: 3.5lb (1.6kg)

Environmental

Operating temperature 32-104 degrees F (0-40 degrees C)
Relative humidity range: 0-90%, non-condensing

Warranty

10-year limited warranty, 24/7 service support

Ordering Information

Rack Mount Panels

UCP-LC80	80 high-resolution, user-programmable LCD buttons
UCP-LC32	38 high-resolution, user-programmable LCD buttons
UCP-LC16	22 high-resolution, user-programmable LCD buttons
UCP-MM/A/E	Multimode full XY with 16-button LCD keypad
UCP-MM/B/E	Multimode full XY with 20-button keypad
UCP-XY/E	Full XY with 15 assignable buttons and scroll
UCP-SX/E	Full XY with direct take feature
UCP-MX/E	Full XY with multidestination feature
UCP-1/E	Full XY with 10 assignable buttons
UCP-2/E	Single or dual bus with full source access and 12 assignable buttons
UCP-48/E	Multifunction button per source with LCD displays
UCP-64/E	64 user-programmable buttons
UCP-36/E	44 user-programmable buttons
UCP-72/E	44 user-programmable buttons with shift
UCP-GPIO/E	16 GPI and 16 GPO

Desktop Panels

UCP-DT/A/E	Desktop multi-mode full XY with 16- button LCD keypad
UCP-DT/B/E	Desktop multi-mode full XY with 20-button keypad
UDS-GPIO	16 GPI and 16 GPO

Ordering Information

Console Mount Panels

UCP-LC32 Console	Console mount version
UCP-LC16 Console	Console mount version
UCP-XY/E Console	Console mount version
UCP-SX/E Console	Console mount version
UCP-MX/E Console	Console mount version
UCP-2/E Console	Console mount version
UCP-48/E Console	Console mount version
UCP-64/E Console	Console mount version
UCP-36/E Console	Console mount version
UCP-72/E Console	Console mount version

Extension Panels

CX-64	64-button extension panel for UCP-64/E
CX-36	44-button extension panel for UCP-36/E
CX-72	44-button extension panel for UCP-72/E

Softpanel-2

SoftPanel 2/1	Single user license
SoftPanel 2/5	Five user license
SoftPanel 2/25	Twenty-five user license

Custom license options are available

Specifications are subject to change without notice