Kaleido-RCP2

Ethernet remote control panel and KM gateway

Guide to Installation and Operation

M735-9902-104

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grass valley

A **BELDEN** BRAND

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Important Safeguards and Notices

This section provides important safety guidelines for operators and service personnel. Specific warnings and cautions appear throughout the manual where they apply. Please read and follow this important information, especially those instructions related to the risk of electric shock or injury to persons.

Symbols and Their Meanings

Indicates that dangerous high voltage is present within the equipment enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

Indicates that the user, operator or service technician should refer to the product manuals for important operating, maintenance, or service instructions.

This is a prompt to note the fuse rating when replacing fuses. The fuse referenced in the text must be replaced with one having the ratings indicated.

Identifies a protective grounding terminal which must be connected to earth ground prior to making any other equipment connections.

Identifies an external protective grounding terminal which may be connected to earth ground as a supplement to an internal grounding terminal.

Indicates that static sensitive components are present, which may be damaged by electrostatic discharge. Use anti-static procedures, equipment and surfaces during servicing.

Indicates that the equipment has more than one power supply cord, and that all power supply cords must be disconnected before servicing to avoid electric shock.

The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Canadian Standard Association (CSA) regulations and recommendations for USA/Canada.

The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Underwriters Laboratory (UL) regulations and recommendations for USA/Canada.

The presence of this symbol in or on Grass Valley equipment means that it has been tested and certified as complying with applicable Intertek Testing Services regulations and recommendations for USA/Canada.

The presence of this symbol in or on Grass Valley product means that it complies with all applicable European Union (CE) directives.

The presence of this symbol in or on Grass Valley product means that it complies with safety of laser product applicable standards.

Warnings

A warning indicates a possible hazard to personnel, which may cause injury or death. Observe the following general warnings when using or working on this equipment:

- Appropriately listed/certified mains supply power cords must be used for the connection of the equipment to the mains voltage at either 120 V AC or 240 V AC.
- This product relies on the building's installation for short-circuit (over-current) protection. Ensure that a fuse or circuit breaker for 120 V AC or 240 V AC is used on the phase conductors.
- Any instructions in this manual that require opening the equipment cover or enclosure are for use by qualified service personnel only.
- Do not operate the equipment in wet or damp conditions.
- This equipment is grounded through the grounding conductor of the power cords. To avoid electrical shock, plug the power cords into a properly wired receptacle before connecting the equipment inputs or outputs.
- Route power cords and other cables so they are not likely to be damaged. Properly support heavy cable bundles to avoid connector damage.
- Disconnect power before cleaning the equipment. Do not use liquid or aerosol cleaners; use only a damp cloth.
- Dangerous voltages may exist at several points in this equipment. To avoid injury, do not touch exposed connections and components while power is on.
- High leakage current may be present. Earth connection of product is essential before connecting power.
- Prior to servicing, remove jewelry such as rings, watches, and other metallic objects.
- To avoid fire hazard, use only the fuse type and rating specified in the service instructions for this product, or on the equipment.
- To avoid explosion, do not operate this equipment in an explosive atmosphere.
- Use proper lift points. Do not use door latches to lift or move equipment.
- Avoid mechanical hazards. Allow all rotating devices to come to a stop before servicing.
- Have qualified service personnel perform safety checks after any service.

Cautions

A caution indicates a possible hazard to equipment that could result in equipment damage. Observe the following cautions when operating or working on this equipment:

- This equipment is meant to be installed in a restricted access location.

- When installing this equipment, do not attach the power cord to building surfaces.
- Products that have no on/off switch, and use an external power supply must be installed in proximity to a main power outlet that is easily accessible.
- Use the correct voltage setting. If this product lacks auto-ranging power supplies, before applying power ensure that each power supply is set to match the power source.
- Provide proper ventilation. To prevent product overheating, provide equipment ventilation in accordance with the installation instructions.
- Do not operate with suspected equipment failure. If you suspect product damage or equipment failure, have the equipment inspected by qualified service personnel.
- To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel. Servicing should be done in a static-free environment.
- This unit may have more than one power supply cord. Disconnect all power supply cords before servicing to avoid electric shock.
- Follow static precautions at all times when handling this equipment.

Electrostatic Discharge (ESD) Protection

Electrostatic discharge occurs when electronic components are improperly handled and can result in intermittent failure or complete damage adversely affecting an electrical circuit. When you remove and replace any card from a frame always follow ESD-prevention procedures:

- Ensure that the frame is electrically connected to earth ground through the power cord or any other means if available.
- Wear an ESD wrist strap ensuring that it makes good skin contact. Connect the grounding clip to an *unpainted surface* of the chassis frame to safely ground unwanted ESD voltages. If no wrist strap is available, ground yourself by touching the *unpainted* metal part of the chassis.
- For safety, periodically check the resistance value of the antistatic strap, which should be between 1 and 10 megohms.
- When temporarily storing a card make sure it is placed in an ESD bag.
- Cards in an earth grounded metal frame or casing do not require any special ESD protection.

Cautions for LCD and TFT Displays

Excessive usage may harm your vision. Rest for 10 minutes for every 30 minutes of usage.

If the LCD or TFT glass is broken, handle glass fragments with care when disposing of them. If any fluid leaks out of a damaged glass cell, be careful not to get the liquid crystal fluid in your mouth or skin. If the liquid crystal touches your skin or clothes, wash it off immediately using soap and water. Never swallow the fluid. The toxicity is extremely low but caution should be exercised at all times.

Mesures de sécurité et avis importants

La présente section fournit des consignes de sécurité importantes pour les opérateurs et le personnel de service. Des avertissements ou mises en garde spécifiques figurent dans le manuel, dans les sections où ils s'appliquent. Prenez le temps de bien lire les consignes et assurez-vous de les respecter, en particulier celles qui sont destinées à prévenir les décharges électriques ou les blessures.

Signification des symboles utilisés

Signale la présence d'une tension élevée et dangereuse dans le boîtier de l'équipement ; cette tension peut être suffisante pour constituer un risque de décharge électrique.

Avertit l'utilisateur, l'opérateur ou le technicien de maintenance que des instructions importantes relatives à l'utilisation et à l'entretien se trouvent dans la documentation accompagnant l'équipement.

Invite l'utilisateur, l'opérateur ou le technicien de maintenance à prendre note du calibre du fusible lors du remplacement de ce dernier. Le fusible auquel il est fait référence dans le texte doit être remplacé par un fusible du même calibre.

Identifie une borne de mise à la terre de protection. Il faut relier cette borne à la terre avant d'effectuer toute autre connexion à l'équipement.

Identifie une borne de mise à la terre externe qui peut être connectée en tant que borne de mise à la terre supplémentaire.

Signale la présence de composants sensibles à l'électricité statique et qui sont susceptibles d'être endommagés par une décharge électrostatique. Utilisez des procédures, des équipements et des surfaces antistatiques durant les interventions d'entretien.

Le symbole ci-contre signifie que l'appareil comporte plus d'un cordon d'alimentation et qu'il faut débrancher tous les cordons d'alimentation avant toute opération d'entretien, afin de prévenir les chocs électriques.

La marque C-CSA-US certifie que l'appareil visé a été testé par l'Association canadienne de normalisation (CSA) et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.

La marque C-UL-US certifie que l'appareil visé a été testé par Underwriters Laboratory (UL) et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.

La marque ETL Listed d'Intertek pour le marché Nord-Américain certifie que l'appareil visé a été testé par Intertek et reconnu conforme aux exigences applicables en matière de sécurité électrique en vigueur au Canada et aux États-Unis.

Le marquage CE indique que l'appareil visé est conforme aux exigences essentielles des directives applicables de l'Union européenne en matière de sécurité électrique, de compatibilité électromagnétique et de conformité environnementale.

Le symbole ci-contre sur un appareil Grass Valley ou à l'intérieur de l'appareil indique qu'il est conforme aux normes applicables en matière de sécurité laser.

Avertissements

Les avertissements signalent des conditions ou des pratiques susceptibles d'occasionner des blessures graves, voire fatales. Veuillez vous familiariser avec les avertissements d'ordre général ci-dessous :

- Un cordon d'alimentation dûment homologué doit être utilisé pour connecter l'appareil à une tension de secteur de 120 V CA ou 240 V CA.

- La protection de ce produit contre les courts-circuits (surintensités) dépend de l'installation électrique du bâtiment. Assurez-vous qu'un fusible ou un disjoncteur pour 120 V CA ou 240 V CA est utilisé sur les conducteurs de phase.

- Dans le présent manuel, toutes les instructions qui nécessitent d'ouvrir le couvercle de l'équipement sont destinées exclusivement au personnel technique qualifié.

- N'utilisez pas cet appareil dans un environnement humide.

- Cet équipement est mis à la terre par le conducteur de mise à la terre des cordons d'alimentation. Pour éviter les chocs électriques, branchez les cordons d'alimentation sur une prise correctement câblée avant de brancher les entrées et sorties de l'équipement.

- Acheminez les cordons d'alimentation et autres câbles de façon à ce qu'ils ne risquent pas d'être endommagés. Supportez correctement les enroulements de câbles afin de ne pas endommager les connecteurs.

- Coupez l'alimentation avant de nettoyer l'équipement. Ne pas utiliser de nettoyants liquides ou en aérosol. Utilisez uniquement un chiffon humide.

- Des tensions dangereuses peuvent exister en plusieurs points dans cet équipement. Pour éviter toute blessure, ne touchez pas aux connexions ou aux composants exposés lorsque l'appareil est sous tension.

- Avant de procéder à toute opération d'entretien ou de dépannage, enlevez tous vos bijoux (notamment vos bagues, votre montre et autres objets métalliques).

- Pour éviter tout risque d'incendie, utilisez uniquement les fusibles du type et du calibre indiqués sur l'équipement ou dans la documentation qui l'accompagne.

- Ne pas utiliser cet appareil dans une atmosphère explosive.

- Présence possible de courants de fuite. Un raccordement à la masse est indispensable avant la mise sous tension.

- Après tout travail d'entretien ou de réparation, faites effectuer des contrôles de sécurité par le personnel technique qualifié.

Mises en garde

Les mises en garde signalent des conditions ou des pratiques susceptibles d'endommager l'équipement. Veuillez vous familiariser avec les mises en garde ci-dessous :

- L'appareil est conçu pour être installé dans un endroit à accès restreint.
- Au moment d'installer l'équipement, ne fixez pas les cordons d'alimentation aux surfaces intérieures de l'édifice.
- Les produits qui n'ont pas d'interrupteur marche-arrêt et qui disposent d'une source d'alimentation externe doivent être installés à proximité d'une prise de courant facile d'accès.
- Si l'équipement n'est pas pourvu d'un modules d'alimentation auto-adaptables, vérifiez la configuration de chacun des modules d'alimentation avant de les mettre sous tension.
- Assurez une ventilation adéquate. Pour éviter toute surchauffe du produit, assurez une ventilation de l'équipement conformément aux instructions d'installation.
- N'utilisez pas l'équipement si vous suspectez un dysfonctionnement du produit. Faites-le inspecter par un technicien qualifié.
- Pour réduire le risque de choc électrique, n'effectuez pas de réparations autres que celles qui sont décrites dans le présent manuel, sauf si vous êtes qualifié pour le faire. Confiez les réparations à un technicien qualifié. La maintenance doit se réaliser dans un milieu libre d'électricité statique.
- L'appareil peut comporter plus d'un cordon d'alimentation. Afin de prévenir les chocs électriques, débrancher tous les cordons d'alimentation avant toute opération d'entretien.
- Veillez à toujours prendre les mesures de protection antistatique appropriées quand vous manipulez l'équipement.

Protection contre les décharges électrostatiques (DES)

Une décharge électrostatique peut se produire lorsque des composants électroniques ne sont pas manipulés de manière adéquate, ce qui peut entraîner des défaillances intermittentes ou endommager irrémédiablement un circuit électrique. Au moment de remplacer une carte dans un châssis, prenez toujours les mesures de protection antistatique appropriées :

- Assurez-vous que le châssis est relié électriquement à la terre par le cordon d'alimentation ou tout autre moyen disponible.
- Portez un bracelet antistatique et assurez-vous qu'il est bien en contact avec la peau. Connectez la pince de masse à une *surface non peinte* du châssis pour détourner à la terre toute tension électrostatique indésirable. En l'absence de bracelet antistatique, déchargez l'électricité statique de votre corps en touchant une surface métallique *non peinte* du châssis.

- Pour plus de sécurité, vérifiez périodiquement la valeur de résistance du bracelet antistatique. Elle doit se situer entre 1 et 10 mégohms.
- Si vous devez mettre une carte de côté, assurez-vous de la ranger dans un sac protecteur antistatique.
- Les cartes qui sont reliées à un châssis ou boîtier métallique mis à la terre ne nécessitent pas de protection antistatique spéciale.

Précautions pour les écrans LCD et TFT

Regarder l'écran pendant une trop longue période de temps peut nuire à votre vision. Prenez une pause de 10 minutes, après 30 minutes d'utilisation.

Si l'écran LCD ou TFT est brisé, manipulez les fragments de verre avec précaution au moment de vous en débarrasser. veillez à ce que le cristal liquide n'entre pas en contact avec la peau ou la bouche. En cas de contact avec la peau ou les vêtements, laver immédiatement à l'eau savonneuse. Ne jamais ingérer le liquide. La toxicité est extrêmement faible, mais la prudence demeure de mise en tout temps.

Recycling

Visit www.grassvalley.com for recycling information.

Certification and Compliance

Safety Compliance

This equipment complies with the requirements of UL 60950-1, 2nd Edition, 2007, and CAN/CSA-22.2 No. 60950-1, 2nd Edition, 2007.

The power cord supplied with this equipment meets the appropriate national standards for the country of destination.

Electromagnetic Compatibility

This equipment has been tested for verification of compliance with FCC Part 15, Subpart B requirements for class A digital devices.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE This equipment has been tested and found to comply with the requirements of the EMC directive 2004/108/EC:

- EN 55022 Class A Radiated and conducted emissions
- EN 61000-3-2 Limits for harmonic current emissions
- EN 61000-3-3 Limitation of voltage fluctuations and flicker
- EN 61000-4-2 Electrostatic discharge immunity
- EN 61000-4-3 Radiated, radio-frequency, electromagnetic field immunity
- EN 61000-4-4 Electrical fast transient immunity
- EN 61000-4-5 Surge transient immunity
- EN 61000-4-6 Conducted disturbances immunity
- EN 61000-4-11 Voltage dips, short interruptions and voltage variations immunity

Kaleido-RCP2

The Kaleido-RCP2 is a compact control panel for the Kaleido multiviewers. Featuring direct key control for the most common commands, it provides easy multi-room, multi-operator control over Ethernet, with local connections for a mouse and a keyboard.

Summary

Description

The Kaleido-RCP2 is a compact, freestanding controller. All operating controls are located on the top of the unit. It requires only a single Ethernet cable for both connectivity and power. It also provides two USB ports allowing a USB mouse and one standard keyboard or numeric keypad to be connected.

> Note: Multi-function keyboards or numeric keypads that have a built-in USB hub do not work when connected to the Kaleido-RCP2. No other device than a mouse, a numeric keypad without USB hub, a keyboard without USB hub or special function keys can be connected to the Kaleido-RCP2.
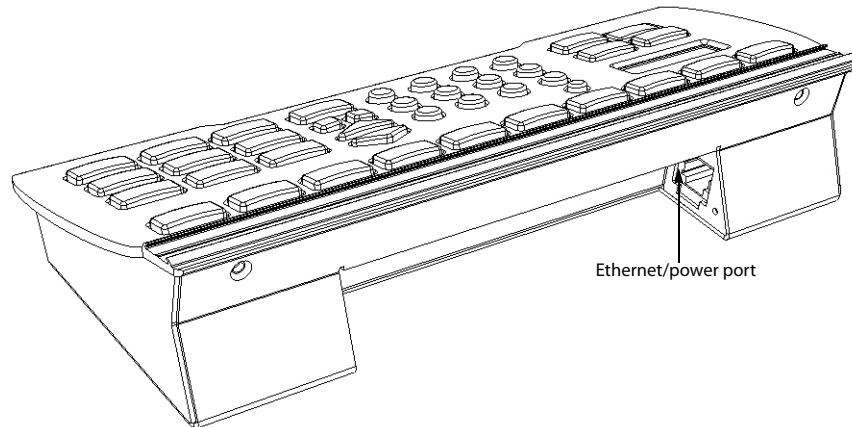
When logged on to a Kaleido multiviewer via the Kaleido-RCP2's Ethernet connection, you can control various operating features of the multiviewer.

Connections

The Kaleido-RCP2 is equipped with three connectors, located on the inside rear supports of the case.

Ethernet / Power Port

The power for the Kaleido-RCP2 arrives on an RJ-45 connector, and shares this connector with an Ethernet interface. The Kaleido-RCP2 conforms to the IEEE 802.3af standard for powered devices.

Ethernet/power port

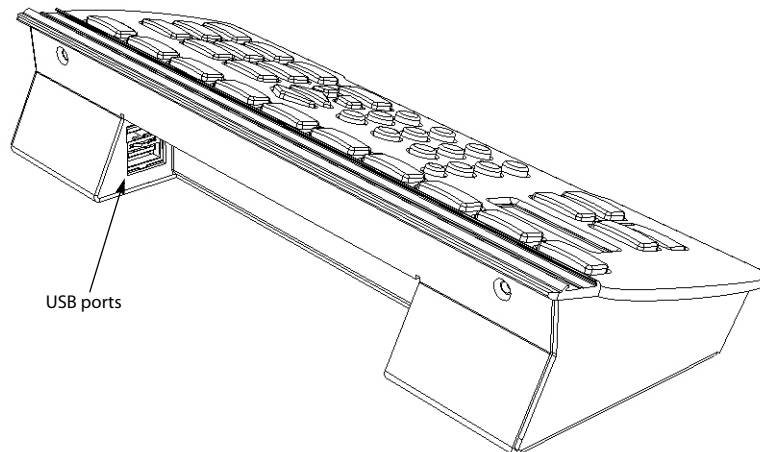Two kinds of power sources are supported:

- midspan power source injector into an existing Ethernet network, and
- power sourcing Ethernet switch.

Full redundancy is obtained with both supplies present at the same time.

Ethernet connectivity is 10/100 Mbps.

2 USB Ports

These ports are used to connect a mouse and keyboard, which may be used in operating the multiviewer.
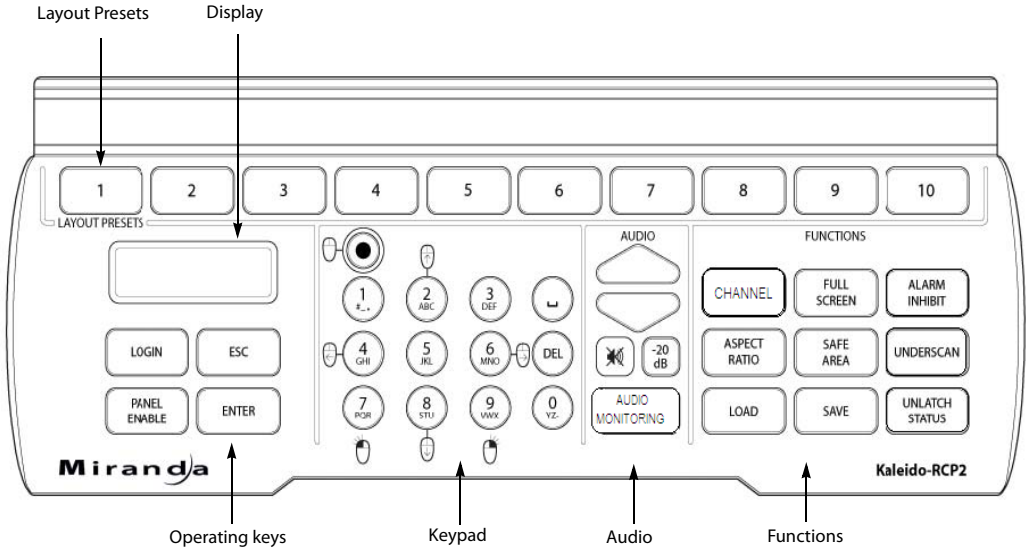

USB ports

Note: Other USB devices (e.g. memory sticks) are not supported.

Control Surface Layout

The operating controls are laid out in functional groups:

Layout Presets   Display

Operating keys   Keypad   Audio   Functions

Layout Presets

The ten numbered keys laid out across the top of the panel are used to recall saved layouts to the monitor wall, and are also used to save layouts.
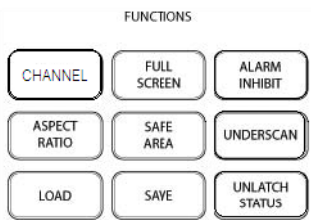
- Pressing and holding one of the preset buttons for 8 seconds will store the current layout to that button, allowing the user to easily return to it later.
- The layout associated with each button can be configured beforehand in XEdit.

You can insert a labeled strip into the built-in slot located above the keys to identify the saved layouts.

Functions

These function keys activate operating modes or functions on the multiviewer.

CHANNEL	FULL SCREEN	ALARM INHIBIT
ASPECT RATIO	SAFE AREA	UNDERSCAN
LOAD	SAVE	UNLATCH STATUS

Note: The exact functionality of these buttons is determined by the configuration of the Kaleido system.
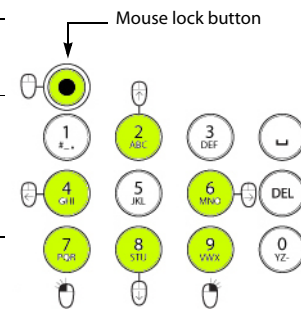
Audio

UP ARROW	Increase the audio monitoring volume
DOWN ARROW	Decrease the audio monitoring volume
MUTE	Mute the audio monitoring (push on/push off)
-20dB	Attenuate the audio monitoring gain by 20dB (push on/push off)
AUDIO MONITORING	Audio source selection

Keypad

The keypad buttons have double functions. Use the MOUSE LOCK button (top left) to switch between the two modes:

Numeric	All buttons at low brightness, alpha-numeric function as printed on each button is enabled.
Mouse	Numeric function disabled, and some keys are assigned mouse-equivalent functions. The MOUSE LOCK button and the mouse-function keys are bright.

Number key	Mouse-equivalent function
2	Pointer up
8	Pointer down
4	Pointer left
6	Pointer right
7	Click
9	Right-click

Display and Operating Keys

The operating keys let you connect to a Kaleido system, navigate menus, and control the behavior of your Kaleido-RCP2's functions.

DISPLAY	The LCD display shows messages and text entries
LOGIN	Log on to a multiviewer system through the Ethernet interface
ESC	Menu navigation
ENTER	Menu navigation
PANEL ENABLE	Enable/disable all other keys on this control panel, to prevent accidental operation

Note: To reset the control panel, simultaneously press ESC, ENTER, and DEL.

Configuration

Before you can use your Kaleido-RCP2 to operate your Kaleido system, you must set up the Ethernet connection between the two devices.

> Note: The Kaleido-RCP2 is powered through the RJ-45 Ethernet connector. There is no power ON/OFF button, so the device is ON when a powered Ethernet cable is connected.

Ethernet Configuration

By default, the Kaleido-RCP2 is shipped with DHCP enabled, so it will automatically be assigned an IP address by a DHCP server.

- If no DHCP server can be found, the Kaleido-RCP2 will default to its static IP address.
- The time-out period before the Kaleido-RCP2 defaults to its static address is about 1 minute. To speed up the initialization, disable the DHCP option (see Enabling or Disabling DHCP, on page 7).
- The default static IP address is 10.0.3.191, but this can be changed (see Setting an IP Address, Subnet Mask and Gateway, on page 8).
- If you need to operate with a fixed IP address, you must use the **Configuration** menu to disable DHCP and set up the correct IP address, Network Mask and Gateway.
- To access Kaleido *rooms* located in other subnets, the Kaleido-RCP2 must be configured with the appropriate unicast IP addresses (see Configuring Unicast IP Addresses, on page 9).

Room Selection

Before you can use your Kaleido-RCP2 to operate a Kaleido multiviewer system, you must select the room in which to operate. Use the **Configuration** menu to access the list of available rooms and select the one you wish to control. See Selecting a Position and Logging On on page 14 for details.

> Note: To log on to a room that is part of a Kaleido system configured in a different subnet, the Kaleido-RCP2 must be configured with the appropriate unicast IP addresses (see Configuring Unicast IP Addresses, on page 9).
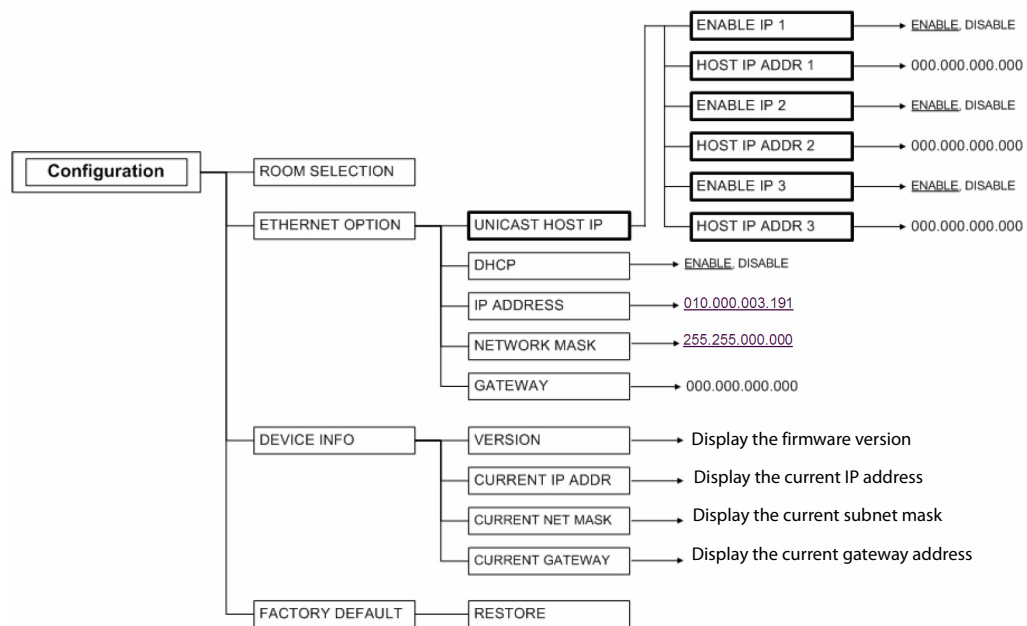
Navigating the Configuration Menu

Resources for setting up the Kaleido-RCP2 to operate multiviewers are available through the Kaleido-RCP2's **Configuration** menu. The current menu selection is shown on the LCD

display. To access the menu press and hold the ENTER button until the ESC button lights up, and then use the keys to navigate, as indicated below:

2	Move UP
8	Move DOWN
ENTER	Access the submenu, or select the displayed value
ESC	Go back to the previous menu level, or cancel a value selection

Note: These keys are lit when menu access is enabled.

Kaleido-RCP2 Configuration menu summary

Selecting a Room

Use the **Configuration** menu to select the room you wish to access with your Kaleido-RCP2—the *ON AIR* room, for example. Once you select the room, you can log on as a specific user, corresponding to one of the login positions that are available for this room

only. In the example described below, the three rooms that are available, are listed in this sequence: *RMA*, *RMB*, *RMC*. We will select room RMC.

Action	LCD indication	Other buttons
Press and hold the ENTER button until the ESC button lights up to access the **Configuration** menu.	**Configuration** **ROOM SELECTION**	Digit keys *2* (UP) and *8* (DOWN), and the ENTER and ESC buttons are lit; other digit keys are dimmed.
Press ENTER again to obtain the list of rooms from all Kaleido systems currently available on the network.	For some time until the list is received: **Acquiring room list...** Once the room list is received: **ROOM Select** **RMA**	
Press the *8* key twice, until the room you wish to select (i.e. RMC) appears on the display. (Press *2* to scroll in the opposite direction.)	**ROOM Select** **RMC**	
Once the display shows the desired room name, you can: • press ENTER to select this room • press ESC to cancel the selection and return to the previous menu level in the menu.	**Configuration** **ROOM SELECTION**	Digit keys *2* (UP) and *8* (DOWN), and the ENTER and ESC buttons are lit; other digit keys are dimmed.
Press ESC to exit the **Configuration** menu.	**RMC**	All buttons are dimmed.

Enabling or Disabling DHCP

The following table shows how to enable or disable the automatic allocation of an IP address from a server. This option is commonly called DHCP (the protocol that is used for

address allocation). In our example, we suppose that the DHCP option is enabled, and must be disabled. This task is performed by using the **Configuration** menu.

Action	LCD indication	Other Buttons
Press and hold the ENTER button until the ESC button lights up to access the **Configuration** menu.	**Configuration** **ROOM SELECTION**	Digit keys *2* (UP) and *8* (DOWN), and the ENTER and ESC buttons are lit; other digit keys are dimmed.
Press 8 once to go to the **ETHERNET OPTIONS** submenu.	**Configuration** **ETHERNET OPTION**	
Press ENTER to open the Ethernet parameter menu.	**ETHERNET OPTIONS** **DHCP**	
Press ENTER again to see the current DHCP status.	**DHCP** **ENABLE**	
Press 8 to go to the DISABLE option. (Press 2 to go back to the previous selection.)	**DHCP** **DISABLE**	
Press ENTER to select this option, or press ESC to cancel. In either case, you will return to the previous menu level.	**ETHERNET OPTIONS** **DHCP**	
Press ESC twice to exit the **Configuration** menu. Note: If you changed the DHCP parameter, the Kaleido-RCP2 unit will reboot.	**RMC**	All buttons are dimmed.

When you change the DHCP mode, the device must be restarted for the new option to take effect. This is done automatically but only after you exit the **Configuration** menu. You can make other changes using the **Configuration** menu, and only exit, once you are done with the changes.

Setting an IP Address, Subnet Mask and Gateway

The table below shows how to set a fixed IP address for a Kaleido-RCP2 unit. As an example, the IP address will be changed from 10.0.3.191 to 192.168.0.10. This task is performed by using the **Configuration** menu.

> Note: The method is the same for the **Subnet Mask** and **Gateway** menus.

Action	LCD indication	Other Buttons
Press and hold the ENTER button until the ESC button lights up to access the **Configuration** menu.	**Configuration** **ROOM SELECTION**	Digit keys *2* (UP) and *8* (DOWN), and the ENTER and ESC buttons are lit; other digit keys are dimmed.
Press 8 once to go to the **ETHERNET OPTIONS** submenu.	**Configuration** **ETHERNET OPTIONS**	
Press ENTER to open the Ethernet parameter menu.	**ETHERNET OPTIONS** **DHCP**	
Press 8 to go to the next option in the menu. (Press 2 to return to the previous option.)	**ETHERNET OPTIONS** **IP ADDRESS**	
Press ENTER again to select this option and display the current IP address. You can move the cursor to the next digit position by pressing the space ⌣ key. Use the DEL key to move the cursor back to the previous position.	**IP ADDRESS** **010.000.003.191** The cursor blinks, alternating between a black square and the digit.	All digit keys are lit as well as the ENTER, ESC, DEL and space ⌣ key.
Use the digit keys to change the current value. Once you pressed a digit key, the cursor moves to the next position.	**IP ADDRESS** **192.168.000.010** The cursor blinks, alternating between a black square and the digit.	
When done, press ENTER to confirm the address, or ESC to cancel the change and go back to the previous menu level.	**ETHERNET OPTIONS** **IP ADDRESS**	All buttons are dimmed.
Press ESC twice to exit the **Configuration** menu. Note: If you changed any of the network parameters (IP address, subnet mask or gateway), the Kaleido-RCP2 unit will reboot.	**RMC** (the current room)	

When you change the DHCP mode, the device must be restarted for the new option to take effect. This is done automatically but only after you exit the **Configuration** menu. You can make other changes using the **Configuration** menu, and only exit, once you are done with the changes.

Configuring Unicast IP Addresses

The unicast IP feature enables a Kaleido-RCP2 to find up to three Kaleido systems on different subnets and connect to them (via network gateways), while maintaining

connections to Kaleido systems in its own subnet.

> **Notes**
>
> • To navigate the Kaleido-RCP2 menu, press the **2** key to move up, or the **8** key to move down.
>
> • There is no need to configure unicast IP addresses for Kaleido systems on the same subnet as the Kaleido-RCP2.

To configure a unicast IP address on the Kaleido-RCP2, do the following:

1 Press and hold the ENTER button until the ESC button lights up to access the **Configuration** menu.

2 Select **ETHERNET OPTIONS** on the LCD display, and then press ENTER.

3 Select **Unicast host IP**, and then press ENTER.

4 Select **Enable IP 1**, and then press ENTER.

The *Enable IP n* parameter instructs the Kaleido-RCP2 to query the Kaleido system at the selected IP address for a list of rooms.

5 Select **Host IP ADDR**, and then press ENTER.

6 Using the numeric keypad, type the IP address of a Kaleido system on a remote subnet, and then press ENTER.

7 Repeat step 4 to step 6 to add unicast IP addresses for up to three remote Kaleido systems.

Restoring Default Parameters

The Kaleido-RCP2's **Configuration** menu provides an option to restore the device's default parameters. This option is called FACTORY DEFAULT.

Select this option to revert the following elements to their default values:

• The network parameters.

• The room selection.

• The login position.

Once you exit the **Configuration** menu, the device will restart.

Here are the default parameter values:

DHCP	Enable
IP address	10.0.3.191
Subnet mask	255.255.0.0
Gateway	0.0.0.0
Unicast IP addresses	All three host IP address parameters set to 10.0.3.70 and disabled by default

In addition, the current room and login position are erased from the Kaleido-RCP2 memory.
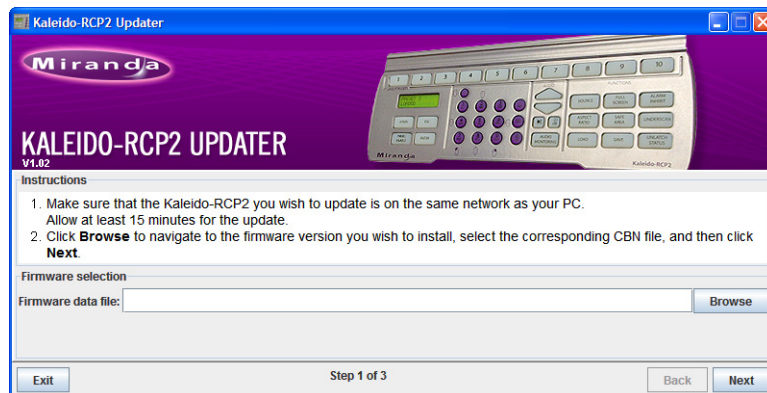
Action	LCD indication	Other Buttons
Press and hold the ENTER button until the ESC button lights up to access the **Configuration** menu.	**Configuration** **ROOM SELECTION**	Digit keys *2* (UP) and *8* (DOWN), and the ENTER and ESC buttons are lit; other digit keys are dimmed.
Press 8 three times to go to the FACTORY DEFAULT submenu.	**Configuration** **FACTORY DEFAULT**	
Press ENTER to open the FACTORY DEFAULT submenu.	**FACTORY DEFAULT** **RESTORE**	
Press ENTER to select the RESTORE option, or press ESC to return to the previous menu level without restoring the factory values.		
Press ENTER again to restore the factory defaults.	**Configuration** **FACTORY DEFAULT**	
Press ESC once to reboot the Kaleido-RCP2.	The LCD screen is blank after reboot.	All buttons are dimmed.

Updating the Kaleido-RCP2 Firmware

Firmware updates for the Kaleido-RCP2 are issued occasionally, usually with the release of a new version of the Kaleido-X Software. The firmware update package, including the Kaleido-RCP2 Updater utility, is available on the Kaleido-X Upgrade DVD, and from the *Software and documentation* section of Grass Valley's support portal.

To determine if you need to update your Kaleido-RCP2, check its firmware version (refer to the diagram under Navigating the Configuration Menu, on page 5), and compare it with the version of the firmware update file indicated under *Software and Firmware,* in the Kaleido-X Release Notes.

The Kaleido-RCP2 firmware can be updated over the Ethernet connection, and this may take as long as 15 minutes to complete. The **Kaleido-RCP2 Updater** window includes step-by-step instructions:
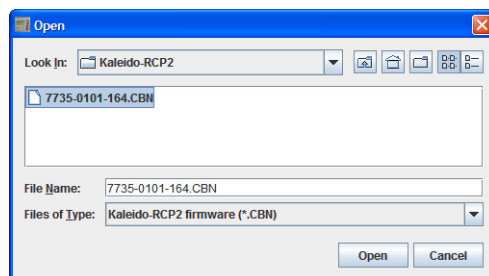
Firmware Selection (Step 1 of 3)

Make sure you fulfill the following conditions before beginning this procedure:

- You have a PC connected to the same subnetwork as your Kaleido-RCP2 unit.
- A copy of the Kaleido-RCP2 Updater utility is on the PC.
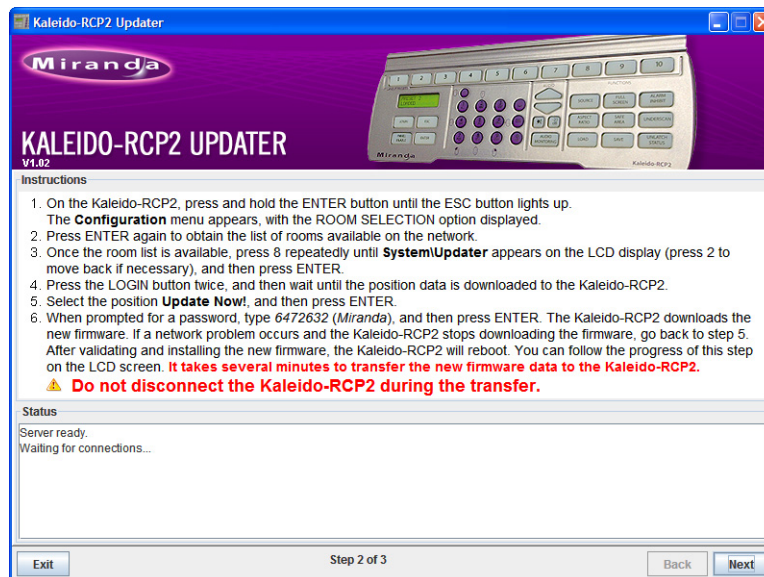- A copy of the Kaleido-RCP2 firmware update file is on the PC.

To prepare the firmware update

1 Open the Kaleido-RCP2 Updater utility from a PC located on the same network as the Kaleido-RCP2 you wish to update.

2 Type the name of the firmware data file you wish to use to upgrade your RCP2 unit in the **Firmware data file** box. Alternatively, click **Browse** to locate the appropriate file:

3 Click **Next**.

The next window includes step-by-step instructions for uploading the data file to the Kaleido-RCP2:

Firmware Update (Step 2 of 3)

To proceed with the firmware update

1 On the Kaleido-RCP2, press and hold the ENTER button until the ESC button lights up to access the **Configuration** menu.

2 Press ENTER to select the first option: ROOM SELECTION, and then wait until the room list is downloaded to the Kaleido-RCP2.

3 Once the room list is available, press 8 repeatedly until `System\Updater` appears on the LCD display (press 2 to move back if necessary), and then press ENTER.

4 Press the LOGIN button twice, and then wait until the position data is downloaded to the Kaleido-RCP2.

5 Once the position data is available, select the position *Update Now!*, and press ENTER.

The Kaleido-RCP2 prompts you for a password.

6 Type "6472632" (i.e., "Miranda"), and then press ENTER.

The Kaleido-RCP2 downloads the new firmware from your PC. Progress information is shown in the **Status** section of the **Kaleido-RCP2 Updater** window on your PC.

> Note: If a network problem occurs and the Kaleido-RCP2 stops downloading the firmware, go back to step 5.
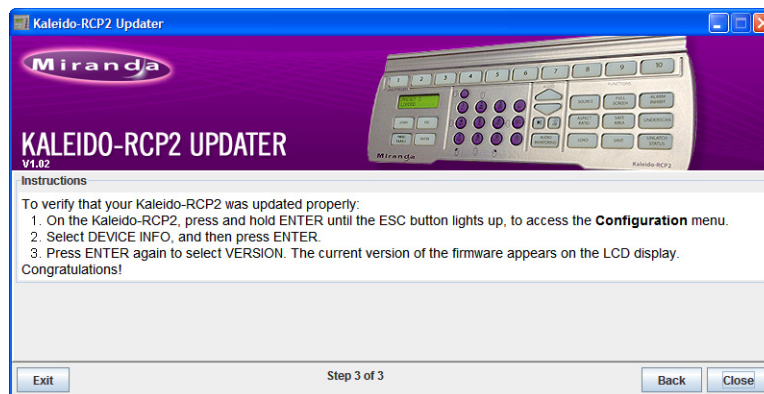
The Kaleido-RCP2 validates the data, copies it into the main memory and then reboots. You can follow the progress of this step on the Kaleido-RCP2 screen.

> IMPORTANT
> Transferring the new firmware data to the main memory takes several minutes. Do not disconnect the Kaleido-RCP2 while it is updating its firmware, as this may result in a fatal error. In this event, it will be necessary to return the unit to Grass Valley to be reprogrammed.

7 Once the Kaleido-RCP2 has rebooted following the successful firmware upgrade, click **Next** in the **Kaleido-RCP2 Updater** window, on the PC.

The final screen includes instructions for verifying that the new firmware is installed and functional:

Verification (step 3 of 3)

To verify that your RCP2 is updated properly

1 On the Kaleido-RCP2, press and hold ENTER until the ESC button lights up, to access the **Configuration** menu.

2 Select the option DEVICE INFO, and then press ENTER.

3 Select the first option, VERSION, by pressing ENTER again.

The Kaleido-RCP2 displays the currently-installed version of the firmware.

If this number matches the version number in the updater file you selected in the in the first step (see Firmware Selection (Step 1 of 3), on page 12), then the update has been successful.

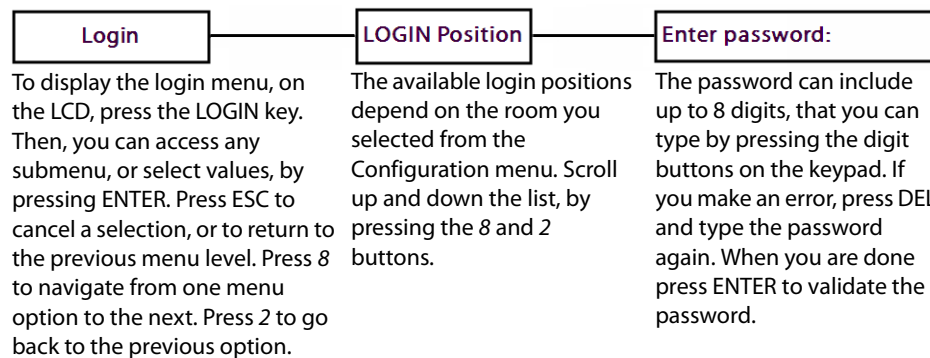4 In the **Kaleido-RCP2 Updater** window on your PC, click **Close** to exit the updater.

Operation

Many of the operational functions of the Kaleido-RCP2 are determined by the configuration of the Kaleido operating environment, and are explained in the *Kaleido-X User's Manual*.

Selecting a Position and Logging On

To use your Kaleido-RCP2, you must validate your access to the Kaleido system. Press the LOGIN key, and select the appropriate position that corresponds to the type of user you are. You may require a password to log on. A room is supposed to be already set through the configuration menu of the device.

Here is a graphical summary of the login menu as it appears on the Kaleido-RCP2's LCD display:

Login	LOGIN Position	Enter password:
To display the login menu, on the LCD, press the LOGIN key. Then, you can access any submenu, or select values, by pressing ENTER. Press ESC to cancel a selection, or to return to the previous menu level. Press *8* to navigate from one menu option to the next. Press *2* to go back to the previous option.	The available login positions depend on the room you selected from the Configuration menu. Scroll up and down the list, by pressing the *8* and *2* buttons.	The password can include up to 8 digits, that you can type by pressing the digit buttons on the keypad. If you make an error, press DEL and type the password again. When you are done press ENTER to validate the password.

The following table shows how to change the login position. As an example, the position will be changed from *TD01* to *TC01*. To accomplish this task, you must have first selected a room (see Selecting a Room, on page 6).

Action	LCD indication	Other buttons
Press LOGIN.	Until the unit receives the list of login positions from the Kaleido system: **Acquiring login list...**	Lit (depending on the Kaleido system's configuration)
	Once the list of login positions is available: **LOGIN Position** **[first list item]**	Digit keys *2* and *8* are lit to indicate that they can be used to scroll the list
	If the list of login position is not available, the following message displays for 3 seconds: **No login list available**	Lit (depending on the Kaleido system's configuration)
	If the Kaleido system is not active, the following message displays for 3 seconds: **Target system is offline**	Dimmed (depending on the Kaleido system's configuration)
Press *8* repeatedly to scroll the list until you reach the position you wish to log on to, and then press ENTER to select the new position.	**Enter password:**	Digit buttons are lit as well as the ENTER and ESC buttons
Type the password using the digit keys (up to 8 digits), and then press ENTER.	**Enter password:** ******** (one asterisk appears for each digit you type)	
	If the password is valid, the following message displays for 2 seconds: **Access granted** and then: **RMC** **TC01**	Dimmed (depending on the Kaleido system's configuration)
	If the password is wrong, the following message displays for 2 seconds: **Access is denied** and then: **RMC** **TD01**	Lit (depending on the Kaleido system's configuration)

Enabling/Disabling the Kaleido-RCP2 User Interface

The PANEL ENABLE button cycles the Kaleido-RCP2 between ENABLE and DISABLE modes.

In the DISABLE mode

• The PANEL ENABLE LED is flashing.

- All other keys on the Kaleido-RCP2 are disabled (LEDs off).
- The LCD display is off.
- Any peripherals (e.g. mouse, keyboard) connected to the Kaleido-RCP2's USB ports are also disabled.

The purpose of the panel enable function is to lock the user interface of the remote, thus avoiding any accidental access to the Kaleido system.

Resetting the Kaleido-RCP2

To reset the Kaleido-RCP2

- Press ENTER + ESC + DEL simultaneously to restart the device.
- Disconnect and reconnect the Kaleido-RCP2's Ethernet cable to power cycle the device.
- The device will be reset automatically in case of software or hardware failure of its internal controller.

Specifications

Ethernet port	
Signal	100/10 BASE-T, (IEEE 802.3AF)
Connector	RJ-45 with LED and 48 V power

USB ports	
Signal	USB 2.0 (for low speed HID devices only, compatible with 1.1)
Connector	2 USB host connectors (mouse and keyboard only)
Dimensions	78 mm × 203 mm × 32 mm (3.5 in × 8 in × 1 in)
Voltage	48 V
Power	5 W Max for RCP2 itself + 5 W Max for USB Devices

Miscellaneous	
Operating temperature range (ambient)	5–40°C (41–104°F)

Grass Valley Technical Support

For technical assistance, contact our international support center, at
1-800-547-8949 (US and Canada) or +1 514 333 1772.

To obtain a local phone number for the support center nearest you, please consult the
Product Support section of Grass Valley's Web site, at `http://www.grassvalley.com/`
`support/contact`.

An online form for e-mail contact is also available from the Web site.

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