



Table of Contents

What's in the Box.....	2
Hardware Installation... ..	3
Cable Management Installation.....	6
Connecting your LCD/Keyboard.....	7
Operating your LCD/Keyboard.....	8
Navigating the Menu	9
On-Screen Display (OSD) Menus.....	10
Trouble Shooting Image Quality.....	11
Specifications.....	12
Warranty.....	13

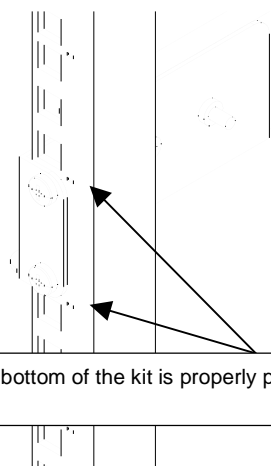

Box Inventory

As you unpack the kit, ensure that you have the following items included in the box:

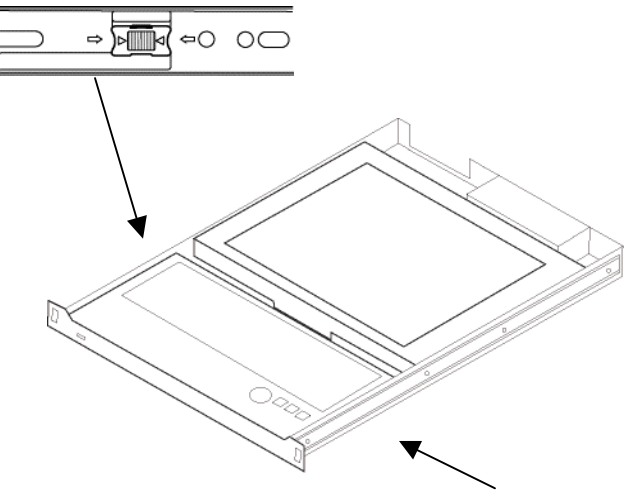
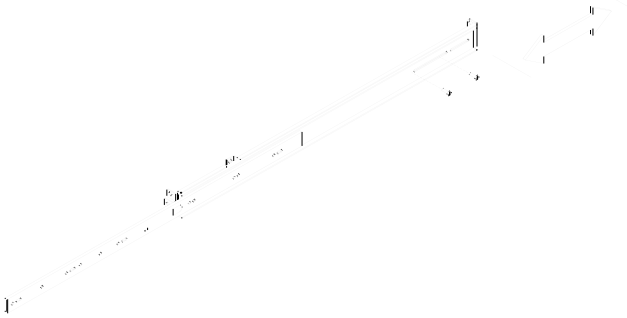
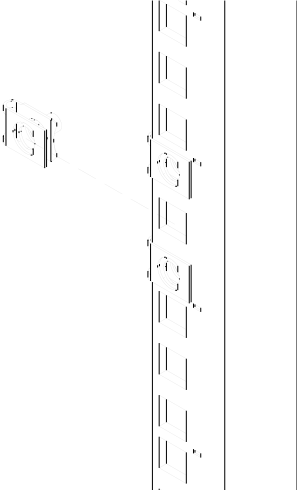
- 1 – 1U LCD with Keyboard
- 1 – 3m HD-15 to HD-15 Video Cable
- 1 – 3m DVI-D to DVI-D Video Cable
- 1 – 3m A to B USB Cable
- 1 – 3m PS/2 Combo Cable
- 1 – 2m IEC Power Cable
- 1 – Cable Management System (unless ordered without)
- 2 – Outer Rails (Mounting to Rack)
- 2 – Inner Rails (Already mounted to RFT)
- 1 – Mounting Hardware
- 4 – Zip Ties for securing cables to the back of the unit

If any of these parts are missing, please call your local distributor or NLS at +1 805.389.5435 x21, or email support@nlsdisplays.com to receive the missing parts.

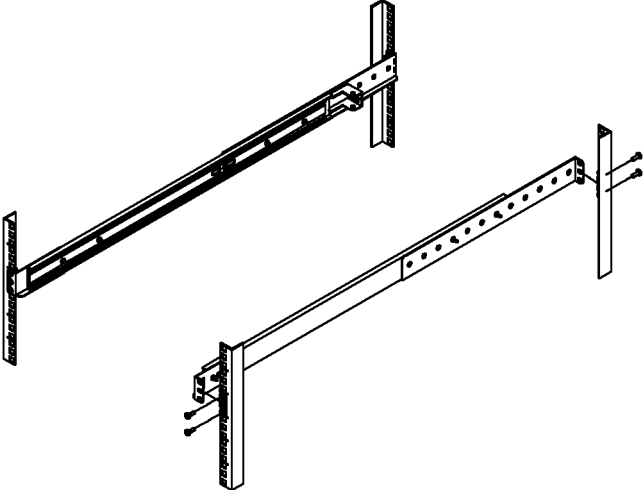
Hardware Installation

Step	Detail
<p>1. The following instructions assume that your equipment rack utilizes caged nuts. If your rack has pre-taped holes there will be no need to include the caged nuts and the size of the mounting bolts may vary from that described.</p> <p>Determine the vertical location for the LCD/keyboard in the rack. Mark the location with tape or a pencil. This product requires one rack unit (1 3/4") of vertical space. Mount the LCD/keyboard at a convenient height for an average user. (Approx 44" from floor)</p>	 <p>Ensure the bottom of the kit is properly positioned in a rack unit</p>
<p>2. Measure the distance from the front rack mounting rail to the rear rack mounting rail. (This distance will be needed during installation of the Rear slide mounting brackets in step 4)</p> <p>Distance= _____</p>	

RFT2 Rack Kit Installation Guide

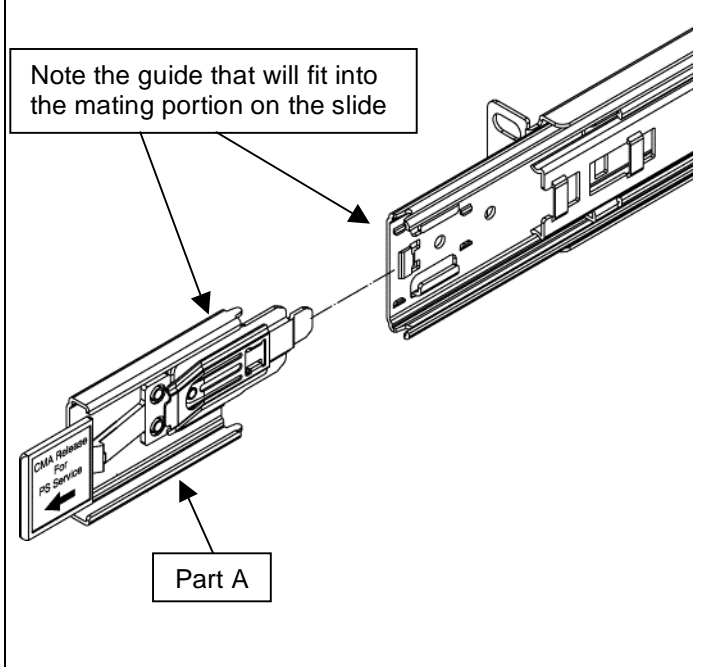
Step	Detail
<p>3. Remove the slides from the tray assembly. The slides come shipped attached to the tray assembly, the outer slide members must be removed to be properly installed into the rack. To remove the outer slide members, fully extend both slides to the open position. Once extended unlock the outer slide members by pressing or pulling on the blue tab on the side of the slides. The outer slide member can now be removed from the tray assembly. The inner slides are left attached to the tray assembly.</p> <p>Also remove the Cable Management System if installed. This makes the installation easier.</p>	
<p>4. Adjust the rear slide mounting brackets to the proper depth. The rear slide mounting brackets are pre-assembled, but may need to be adjusted to the proper distance measured in step 2. The rear bracket that will mount to the rack rails is free sliding, so no screws are required.</p>	
<p>5. Insert nut clips into the rack mounting rails as required. If your rack has square or round untapped holes, you will need to use 10-32 nut clips. Do not place a nut in the center hole, this is just for illustration purposes.</p>	

RFT2 Rack Kit Installation Guide

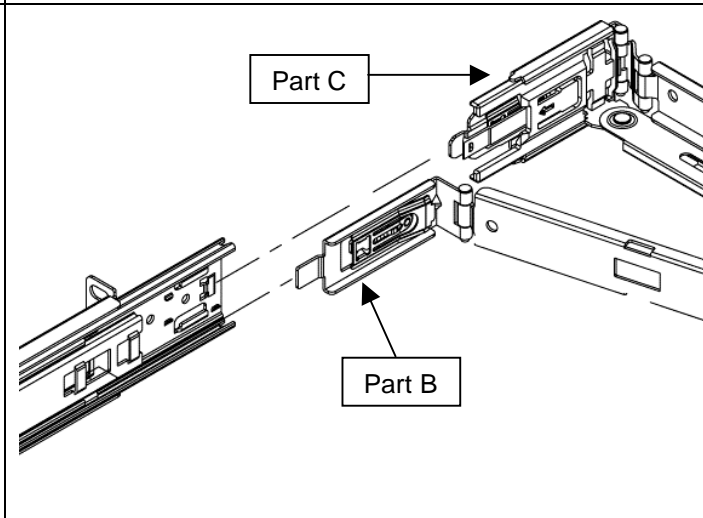
Step	Detail
<p>6. Attach the left slide rail assembly to the rack mounting rail by using (4) #10-32 x 1/2" screws for the front and rear slide mounting brackets.</p> <p>7. Repeat for the right slide rail assembly.</p>	
<p>8. Extend the slides from the rack.</p> <p>9. Install the LCD/keyboard assembly into the rack. Lift the tray assembly and approach the rack with the rear of the tray facing the rack enclosure. Align the tray assembly with the slide rails in the rack. Carefully assemble the two slide members together. Push the tray assembly in until the slides latch together. Release the lock mechanisms as shown in step 3 in order to slide the tray assembly completely closed.</p> <p>You are now ready to install the Cable Management System. See next page.</p>	

Cable Management Installation

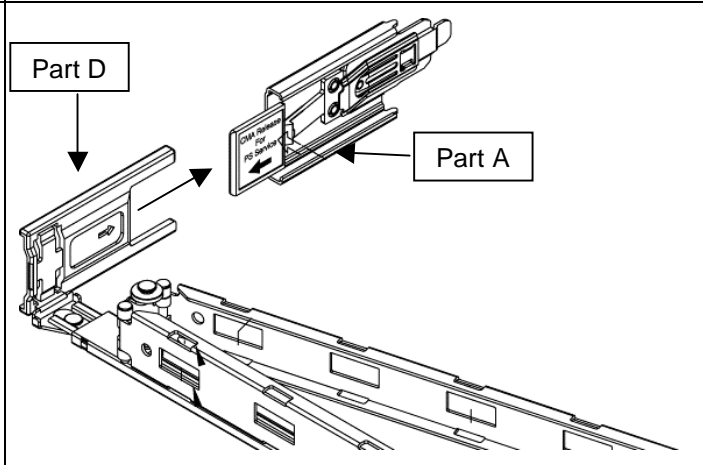
1. With the RFT installed, go to the back of the rack to install the cable management system.
2. Attach Part A to part extension of outer member on the left side.



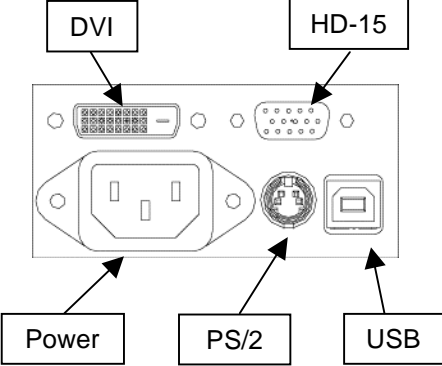
3. Connect Part B to the inside right hand side slide member by sliding it into place. A “click” will be heard once it is secured. The Cable Management System is designed to have the cross-support beam on the bottom...not the top.
4. Connect Part C to the outside right hand side slide member. Note that the extruded portion on the top of Part C needs to line up with the mating portion on the outer slide member. Similar to Step 2 above. A “click” will be heard once it is secured.



5. Insert Part D into Part A on the left hand side. The large tab on Part A will keep Part D in place.



Connecting your LCD/Keyboard

Step	Detail
<p>! Note: Before connecting the LCD monitor/keyboard to a KVM or Server, all systems should be turned off.</p> <ol style="list-style-type: none"> The keyboard and trackball's design allows its use with most servers and KVMs. The monitor uses a standard HD-15 male video connector. If your server uses a DVI connection, connect the supplied DVI cable from the Connector Panel to the server. An adapter may be required depending on the type of DVI video card installed. If both HD-15 and DVI cables are connected at the same time, HD-15 will be the default input. 	 <p>The diagram shows a front panel connector area with five ports labeled: DVI (top left), HD-15 (top right), Power (bottom left), PS/2 (bottom center), and USB (bottom right). Arrows point from each label to its corresponding port on the panel.</p>
<p>4. How to connect the keyboard</p> <p>The RFT2 comes with a keyboard/trackball that supports USB and PS/2 connections. You will determine the functionality of the keyboard by the way the cables are used.</p> <ul style="list-style-type: none"> If the PS/2 cable is connected, the keyboard and trackball will act as PS/2 devices. If you connect the USB cable in addition to the PS/2 cable, you will have enabled the USB Port on the front panel of the RFT2. To enable the front USB port, first turn off the RFT2 via the power switch at the back of the unit. Attach the USB extension cable to the connector panel then connect the other end to the server and turn the RFT2 power back on. The USB port may take up to 10 seconds to be identified depending on your server. If you connect only the USB cable, the keyboard and trackball will become a USB devices a USB keyboard and mouse. In addition, the front USB Port will also become active. If you want the mouse and keyboard and trackball to function as PS/2 devices, you need to connect the PS/2 cable prior to booting the server. 	
<ol style="list-style-type: none"> Connect the monitor to a power source. The LCD Monitor's power supply is auto ranging, and will operate on AC voltages ranging from 90-264V and 50-60 Hz. The monitor uses an IEC 320-C14 connector and a 2m IEC C13 to C14 cable is included. An adapter will be required to interface with other connector types. 	
<ol style="list-style-type: none"> Secure the cables to ensure they will not bind when operating the LCD/keyboard slide mechanism. Cycle the tray in and out of the cabinet to ensure there is enough of a service loop in the cables. Zip ties may be used to hold the cables securely to the back of the unit. 	

Operating the LCD/Keyboard

NOTE: It is important to ensure that the monitor is connected and powered on prior to powering up the connected server and/or KVM. Powering up the KVM then the server last will with some servers allow the video card and monitor to self configure to the correct settings.

After the unit has been installed and all cables connected, power on the LCD monitor by lifting the head unit. (There is a power button at the rear of the LCD which is actuated by lifting the head of the LCD monitor.) The LED situated on the top of the LCD panel will alert you to its status. It will illuminate green when everything is working properly. If the LED is orange, the monitor is powered up but not receiving a valid video signal.

Once the LCD monitor is powered on, power on the connected server and/or KVM and log in (or otherwise ensure that a full screen image is displayed). Now press the monitor AUTO/SEL button. This will Auto-adjust the display to optimum performance.

NOTE: If the monitor does not power up automatically when raised, the power button at the rear of the unit may need to be cycled. There is also a Power button on the top of the LCD which may also need to be cycled.

NOTE: It is important to ensure that a full screen image is being displayed at the time the monitor is in the Auto-Adjust function. The display may be miss-positioned if an image with a black border (such as a login screen) or partial screen is used.






Navigating the Menu



(The OSD Controls may be located on the back or the top of the LCD head)

Although not required, you can make numerous adjustments to your monitor using the on-screen menu. To access the OSD (On-Screen Display) menu Press the MENU button located at the top of the LCD monitor.

The table below describes various function controls of the LCD Monitor. The control buttons can be accessed from the top of the LCD monitor once it has been raised in to the operating position. The OSD menu will disappear after a pre-set time of no use.

Label	Control	Function when not displaying menu	Function when displaying menu
	Menu button	Displays the On-Screen Display (OSD)	Selects the next page of the menu
	Brightness/minus	Decrease display brightness	Decreases or changes value of the adjustment item or moves down in a menu
	Brightness/plus	Increase display brightness	Increases or changes value of the adjustment item or moves up in a menu
	Input Select	Switches video input signal from DVI to/from VGA	No Function
	Power switch	Turn power on and off manually	Turn power on and off manually

RFT2 Rack Kit Installation Guide

On-Screen Display (OSD) Menus

The menu pages can be displayed by pressing the Menu button. Not all menu functions can be adjusted. (Menu items or layout may change without notice)

Picture: Controls for Picture Quality (most of these settings are optimized by using the "Auto Adjust" feature in the VGA Adjust menu option).
Brightness
Contrast
Dimming
Sharpness

VGA Adjust: Adjusts the way the picture is displayed.
H Position: moves the image horizontally
V Position: moves the image up or down
H Size: increases the width of the image
Phase: Adjusts horizontal scan rate – Set by Auto Adjust
Auto Adjust*
Auto Color

Temperature: Controls for picture "coolness" or "warmth".
User
4200k
5000k
6500k
7500k
9300k

Setup: Reset: Resets all settings back to factory defaults.

Source: Normally auto-sensing based on what cable is connected. Manual switching can be used if 2 cables are connected at once.
VGA
DVI

Information: Displays various information about the LCD such as bios version and current resolution settings.

Exit: Quits OSD. This may also be obtained by letting the OSD time out (the period of inactivity where no buttons are pressed).

* Auto-Adjustment will reset all parameters to the optimum values which the LCD determines. This is the optimum method of setting up the LCD.

Trouble Shooting Bad Image Quality

Image quality problems (blurry characters, distorted images, etc) are usually caused by one of the following:

The graphics card is running at the wrong resolution for the LCD monitor:

The monitor optimally runs at a resolution of 1280x1024x60Hz. To display the monitor resolution, press the Menu Button at the top of the LCD twice. The on-screen display will display the current resolution and frequency. If this is not what was expected (variances of a fraction of a hertz in the displayed refresh rate are not significant), adjust the settings of your graphics card to display 1280x1024 at 60Hz resolution.

The monitor has not been adjusted for the particular graphics card driving it:

Perform an "Auto Adjustment" after logging in (ensuring a full screen image is being displayed prior to running the Auto Adjustment). In some cases it may be necessary to power cycle the monitor prior to running the Auto Adjust function (e.g. when the resolution is altered during the system boot sequence).

Improperly matched timing:

Some computer systems communicate with the monitor during system startup and configure an optimum resolution. Ensure that the monitor is powered on before the computer system to ensure that this process can occur.

Refresh set rate is too high.

For LCD monitors it is recommended the refresh rate be set to 60 Hz. The monitor is capable of running at higher refresh rates, but optimally runs at 60Hz. The LCD Monitor uses advanced technology that has no flicker in normal operation, and it is never influenced by the refresh rate. When the monitor is run at refresh rates higher than 60Hz there is processing overhead, which can cause a number of performance issues, included degraded image quality and greater tendency for interference. The first and foremost recommended vertical refresh rate for the LCD Monitor is 60Hz (1280x1024@60Hz). Use other rates only if the connected system's graphics card cannot accommodate 1280x1024x60Hz.

Specifications

General Compatibility	
Keyboard	USB 1.1 and PS/2
USB Ports	USB 1.1 and 2.0
Rack	4 Post EIA
Systems	Windows – Linux – Unix – AIX - Solaris -Mac OS X 10.1.x
LCD Panel Specifications	
LCD Native (Pixel) Resolution	1280x1024
Protective Covering	2mm strengthened glass
Keyboard Specifications	
Type	USB 1.1 and PS/2
Pointing Device	Three button integrated trackball
General Specifications	
Form Factor	1U rack mounting on slide-out rails
Size (without Rackslides)	1.75 x 19.0 x 26.3in (45x483x668mm HxWxD) (without ears)
Length (with Slides and Cable Mgt)	30.8 inches
Weight (unpackaged)	32 lbs (15.4 Kg)
Storage/Operating Temperature Range	-25°C to +60°C / 0°C to +50°C
Operating Humidity	5 to 95% RH (non-condensing)
Approvals	EMC: EN55022 Class A, FCCA, RoHS Safety: CSA 22.2.950, NRTL/C, IEC 950, EN60950, CE Approval
Power Supply	Internal auto-ranging 90-264VAC 50/60Hz
Power Consumption	25W (<5W in standby)
Warranty	24 months

Warranty

Neuro Logic Systems warrants to the original retail purchaser that this product is and will be free from defects in materials and workmanship for a period of 24 months from the date of purchase. During the warranty period, purchaser must promptly call Neuro Logic Systems (+1.805.389.5435) to log any such defects in materials and workmanship. If you purchased the unit from a distributor or reseller, contact them first as they may be able to assist you.

The warranty is void under the following conditions:

1. If non-Neuro Logic Systems approved cabling is attached to the product. Poorly constructed and/or miswired cabling can diminish video quality and damage equipment. Neuro Logic available cabling is built to high quality standards utilizing overall braided shield to comply with FCC emission standards, and each cable is individually tested under load.
2. If abuse, mishandling, unauthorized repair, or use other than intended has caused the product to be defective or malfunction.
3. If unauthorized modifications were made to product.
4. If unreported damages occurred in any shipment of the product.
5. If damages were due to/caused by equipment or software not provided by Neuro Logic Systems.
6. If the product is used with non-grounded or incorrectly polarized AC power.

EXCEPT AS SPECIFICALLY PROVIDED ABOVE, NEURO LOGIC SYSTEMS MAKES NO WARRANTIES EITHER EXPRESS OR IMPLIED AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE CONDITION OF THE PRODUCT, ITS MERCHANTABILITY, OR ITS FITNESS FOR ANY PARTICULAR PURPOSE. EXCEPT AS EXPRESSLY PROVIDED ABOVE, NEURO LOGIC SYSTEMS SHALL NOT BE LIABLE FOR LOSS OF PROFIT, LOSS OF BUSINESS, SPECIAL OR CONSEQUENTIAL DAMAGES, OR OTHER FINANCIAL LOSS WHICH MAY BE CAUSED BY, DIRECTLY OR INDIRECTLY, THE INADEQUACY OF THE PRODUCT FOR ANY PURPOSE OR USE THEREOF OR BY ANY DEFECT OR DEFICIENCY THEREIN EVEN IF NEURO LOGIC SYSTEMS OR AN AUTHORIZED NEURO LOGIC SYSTEMS DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES.

Nothing in these terms will reduce your statutory rights.