ICS ADVENT

RMX-1U15TFTB Keyboard/Monitor Drawer

User's Guide

Manual PN: 931-0011-01-A
December 2001

CE

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Foreword

This product manual describes how to set up RMX-1U15TFTB keyboard/ monitor drawers which involves connecting cables, adjusting the video display, and installing the drawer in a rack.

This product manual is intended as a reference tool for the following products:

- RMX-1U15TFTB/AC
- RMX-1U15TFTB/DC

This manual assumes you have basic computer skills and know how to use the touch pad, keyboard, choose commands from menus, open and run application programs, and save files.

Note: Additional technical information is available from the ICS Advent Web site, www.icsadvent.com.

Customer Comments

If you experience any problems with this manual or just want to provide some feedback, please send us a message using the online form under "Contact Us" on our Web site (*www.icsadvent.com*) under "Technical Support." Detail any errors you find. We will correct the errors or problems as soon as possible and post the revised manual in our online Support Library. Thank you.

Note: You may also use the online form on our Web site to submit comments or concerns about our products, or request technical support.

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Guarantee and Warranty Policy

Guarantee

A thirty day money-back guarantee is provided on all standard products sold. Special order products are covered by our Limited Warranty, *however they may not be returned for refund or credit. EPROMs, RAM, Flash EPROMs or other forms of solid electronic media are not returnable for credit - but for replacement* only. An extended warranty is available. Consult the factory.

Refunds

In order to receive a refund on a product for the purchase price, the product must not have been damaged by the customer or by the common carrier chosen by the customer to return the goods and the product must be returned complete (meaning all manuals, software, cables, etc.) within 30 days of receipt and in an as-new and resalable condition. The "Return Procedure" must be followed to assure a prompt refund.

Restocking Charges

Product returned *after* 30 days, and *before* 60 days, of the purchase will be subject to a minimum 20% restocking charge and charges for any damaged or missing parts. Products not returned within 60 days of purchase, or products which are not in an as-new and resaleable condition, are not eligible for a credit return and will be returned to the customer.

Limited Warranty

Effective April 1, 1998, all products carry a 2-year limited warranty. Within two years of purchase, ICS Advent will repair or replace, at our option, any defective product. ICS Advent will service the warranty for all standard catalog products for the first two years from the date of shipment.
Please Note: the two year warranty may not apply to special promotion items. Please consult the factory for warranty verification.

The limited warranty is void if the product has been subjected to alteration, neglect, misuse, or abuse; if any repairs have been attempted by anyone other than ICS Advent or its authorized agent; or if the failure is caused by accident, acts of God, or other causes beyond the control of ICS Advent or the manufacturer. Neglect, misuse, and abuse shall include any installation, operation, or maintenance of the product other than in accordance with the user's manual.

No agent, dealer, distributor, service company, or other party is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. ICS Advent reserves the right to make changes or improvements in any product without incurring any obligation to similarly alter products previously purchased.

Return Procedure

For any Guarantee or Limited Warranty return, please contact ICS Advent Customer Service at 800-480-0044 or 858-677-0877 and obtain a Return Material Authorization (RMA) Number. All product(s) returned to ICS Advent for service or credit **must** be accompanied by a Return Material Authorization (RMA) Number. Freight on all returned items **must** be prepaid by the customer who is responsible for any loss or damage caused by common carrier in transit. Returns for Warranty **must** include a Failure Report for each unit, by serial number(s), as well as a copy of the original invoice showing the date of purchase.

To reduce risk of damage, returns of product must be in an ICS Advent shipping container. If the original container has been lost or damaged, new shipping containers may be obtained from ICS Advent Customer Service at a nominal cost.

ICS Advent owns all parts removed from repaired products. ICS Advent uses new and reconditioned parts made by various manufacturers in performing warranty repairs and building replacement products. If ICS Advent repairs or replaces a product, its warranty term is not extended.

ICS Advent will normally return your replacement or repaired items via Second Day Air. Overnight delivery or delivery via other carriers is available at an additional charge.

Shipments not in compliance with this Guarantee and Limited Warranty Return Policy will not be accepted by ICS Advent.

Limitation of Liability

In no event shall ICS Advent be liable for any defect in hardware, software, loss, or inadequacy of data of any kind, or for any direct, indirect, incidental, or consequential damages in connection with or arising out of the performance or use of any product furnished hereunder. ICS Advent's liability shall in no event exceed the purchase price of the product purchased hereunder. The foregoing limitation of liability shall be equally applicable to any service provided by ICS Advent or its authorized agent.

Some sales items and customized systems are **not** subject to the guarantee and limited warranty. However in these instances, any deviations will be disclosed prior to sales and noted in the original invoice. **ICS Advent reserves the right to refuse returns or credits on software or special order items.**

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Advisory Conventions

Follow all instructions marked on the product and described in this document. Pay close attention to the three types of advisories used throughout this manual: Notes, Cautions, and Warnings. They provide helpful information or alert you to the potential for hardware damage or personal injury. The following is an example of each type of advisory. Use caution when servicing any electrical component.

Note: A Note indicates information that will help you make better use of the system.

CAUTION

A CAUTION indicates potential damage to hardware and tells you how to avoid the problem.

WARNING

A WARNING indicates the potential for bodily harm and tells you how to avoid the problem

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Disclaimer: We have tried to identify all situations that may pose a warning or caution condition in this manual. However, ICS Advent does not claim to have covered all situations that might require the use of a Caution or Warning.

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Safety Instructions

Before handling the RMX-1U15TFT keyboard monitor drawer, read the following instructions and safety guidelines to prevent damage to the product and to ensure your own personal safety. Refer to the "Advisories" section for advisory conventions used in this manual, including the distinction between Warnings, Cautions, and Notes.

- Do not remove any of the covers. Only qualified, experienced, authorized electronics service personnel should access the interior of the computer. The power supplies produce high voltages and energy hazards, which can cause bodily harm.
- Do not use the drawer near water. Do not place any liquids (even a wet or damp cloth) on or near the drawer. Liquids create an electrical hazard. Do not expose the drawer to rain or moisture.

WARNING

To avoid the risk of severe electric shock, do not remove the cover or back of the monitor. There are no user serviceable parts inside. Refer all servicing to ICS Advent Technical Support.

Installation Precautions

In addition, take note of these installation precautions when appropriate:

- When you disconnect the power cable from the socket, pull on the plug not the cord.
- To help prevent electric shock, connect the power cable to a properly wired and grounded power source. Do not use adapter plugs or remove the grounding prong from the cable.
- Always connect any equipment used with the drawer to properly wired and grounded power sources. Be sure to tighten all connector screws.
- Reliable earthing of this equipment must be maintained. Particular attention should be given to supply connections when connecting to power strips, rather than direct connections to the branch circuit.
- Do not connect or disconnect this product during an electrical storm.

- Do not place any object on the cables that might cause the cables to make sharp bends or that affect the integrity of the cables. Be sure that cables are not located where they can be stepped on or tripped over.
- Route all wiring and cabling away from heat sources and sharp metal edges to avoid damage.
- Keep the touchscreen cable away from sources of electromagnetic and radio frequency interference.
- Keep drawer away from direct sunlight and heat sources. Hot air may cause damage to the cabinet and other parts.
- Install the drawer in a well-ventilated area. Do not block ventilation slots and openings with objects.
- Do not allow metal pieces or objects of any kind to fall into the ventilation holes. Keep the ventilation holes and openings clean. Vacuum openings if you notice dirt accumulating on them.
- Handle the drawer with care. The display contains glass parts. Dropping the drawer may cause the glass parts to break.
- To help protect the drawer from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Consideration should be given to the connection of the equipment to the supply circuit and the effect that circuit overloading might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- The ambient temperature within the rack may be greater than room ambient. Installation should be such that the amount of air flow required for safe operation is not compromised. Consideration should be given to the maximum rated ambient.
- Installation should be such that a hazardous stability condition is not achieved due to uneven loading.

Rack Mounting Precautions

The following safety guidelines are provided for all rack-mountable equipment:

- Maximum operating ambient temperature is 40 °C
- Never restrict the airflow through the devices' fan or vents.
- When installing equipment into a rack, distribute the units evenly. Otherwise, hazardous conditions may be created by an uneven weight distribution.
- Connect the unit only to a properly rated supply circuit.
- Reliable earthing (grounding) of rack-mounted equipment should be maintained.
- Use the supplied rail only to rack mount the unit.
  Accuride PN: C305-A22-LR.

Service and Repair Precautions

Unplug the product from the power outlet and refer servicing to qualified service personnel in the event that:

- Liquid is spilled in to the product or the product is exposed to rain or water.
- The product does not operate properly when the operating instructions are followed.
- The product has been dropped or the frame has been damaged.
- The product exhibits a distinct change in performance, indicating a need for service.
- The power cable or plug is damaged or frayed.
- Recognized Sleeving/Tubing (YDPU2)/(YDPU8) with minimum length 4 cm and 0.4 mm thick, minimum rated 90 ^{o}C, shall be replaced when changing the in-line fuse on the RMX-1U15TFTB/DC.

Safety Standards

The product(s) described in this manual has met the safety requirements of Underwriters Laboratories (UL) for the US and Canadian market based on UL's published Standards for Safety.

The product (s) described in this manual have met the safety requirements of TUV Rheinland for the European Union and is based on the Low Voltage Directive.

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Beratende Hinweise

Folgen Sie allen auf dem Gerät markierten und in diesem Dokument beschriebenen Anweisungen. Beachten Sie genau die drei Hinweise, die in diesem Handbuch benutzt werden: Hinweise, Vorsichtsmassnahmen und Warnungen. Sie enthalten hilfreiche Informationen über womöglichen Hardwareschaden oder Personenschaden. Es folgen je ein Hinweisbeispiel. Elektrische Wartung nur mit Vorsicht durchführen.

Hinweis: Ein Hinweis enthält Informationen, die es erleichtern, das Gerät in Gebrauch zu nehmen.

VORSICHT

VORSICHT deutet auf womöglichen Hardwareschaden hin und gibt Anweisungen, wie das Problem vermieden werden kann.

WARNUNG

WARNUNG deutet auf womöglichen Personenschaden hin und gibt Anweisungen, wie das Problem vermieden werden kann.

Haftungsausschluß: Es wurde versucht, alle Situationen, die eine Warnung oder einen Vorsichtshinweis benötigen, in diesem Handbuch zu identifizieren. ICS Advent behauptet jedoch nicht, alle Situationen, welche eine Warnung oder einen Vorsichtshinweis benötigen, identifiziert zu haben.

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Sicherheitsanweisungen

Vor Benutzung der RMX-1U15TFTB Tastatur-Monitorschublade lesen Sie die folgenden Instruktionen und Sicherheitsanweisungen, um Schaden am Gerät zu vermeiden und für die persönliche Sicherheit. Beziehen Sie sich auf die "Beratenden Hinweise" auf der vorgehenden Seite inklusiv der Unterschiede zwischen Hinweisen, Vorsichtshinweisen und Warnungen.

- Das Gehäuse nicht entfernen. Zugriff auf das Innere des Computers nur durch qualifiziertes Wartungspersonal. Die Netzteile erzeugen gefährliche Spannungen, die Personenschaden verursachen können.
- Nicht in der Nähe von Wasser benutzen. Keine Flüssigkeiten (auch keine nassen oder feuchten Tücher) in die Nähe des Gerätes bringen. Das Gerät nicht Regen oder Feuchtigkeit aussetzen.

WARNUNG

Um einen elektrischen Schlag zu vermeiden, sollen das Gehäuse oder die Rückwand des Monitors nicht entfernt werden. Das Gerät enthält keine vom Verbraucher zu wartenden Teile. Alle Wartungen sind von ICS Advent technischem Personal auszuführen.

Installationsvorkehrungen

Beachten Sie folgende zusätzliche Installationsvorkehrungen:

- Das Netzkabel immer am Stecker, nicht am Kabel herausziehen.
- Um einen Schlag zu vermeiden, muß das Netzkabel immer mit einem geerdeten und ordnungsgemäß verdrahteten Netzanschluß verbunden sein. Keine nicht-geerdeten Zwischenstecker verwenden.
- Alle mit dieser Schublade verbundenen Geräte müssen an ordnungsgemäß verdrahteten und geerdeten Netzanschlüssen ansgeschlossen sein. Alle Verbindungsschrauben fest anziehen.
- Zuverlässige Erdung dieses Gerätes muß erhalten bleiben. Der Anschluß mit Verlängerungsschnüren muß besonders beachtet werden.
- Dieses Gerät nicht während eines Gewitters vom Netz trennen oder ans Netz anschließen.
- Keine Gegenstände auf die Kabel legen, wodurch die Kabel geknickt oder beschädigt werden können. Die Kabel so verlegen, daß man nicht auf sie tritt oder darüber stolpern kann.

- Alle Kabel von Hitzequellen und scharfen Metallkanten fernhalten.
- Das Kabel des Sensor-Bildschirmes von elektromagnetischen und Radiofrequenzstörungen fernhalten.
- Die Schublade von direktem Sonnenlicht and Hitzequellen fernhalten. Heiße Luft kann am Gehäuse und anderen Teilen Schaden verursachen.
- Die Schublade in gut gelüfteten Räumen einbauen. Die Lüftungsschlitze und andere Öffnungen nicht blockieren.
- Keine metallischen oder anderen Objekte in die Lüftungslöcher fallen lassen. Die Lüftungslöcher und Öffnungen sauber halten. Die Öffnungen können mit einem Staubsauger gereinigt werden.
- Die Schublade mit Vorsicht behandeln. Der Monitor enthält Glasteile. Durch Fallenlassen können die Glasteile zerbrechen.
- Um die Schublade von unvorhersehbaren, vorübergehenden Stromschwankungen zu schützen, soll ein Überspannungsbegrenzer, ein Leitungsüberwacher oder eine Unterbrechungsfreie Stromversorgung (USV) benutzt werden.
- Der Anschluß dieses Gerätes an das Versorgungsnetz und der Einfluß einer Überspannung auf den Überspannungsschutz und die Versorgungsleitungen müssen beachtet werden. Beachten Sie die Leistungsschild-Nennwerte.
- Die Umgebungstemperatur innerhalb des Gestells kann höher als die Umgebungstemperatur des Raumes sein. Die Installation darf die für ein sicheres Betreiben benötugte Lüftung nicht beschränken. Die angegebene maximale Umgebungstemperatur muß beachtet werden.
- Die Installation muß so ausgeführt werden, daß gefährliche Stabilitätszustände wegen ungleicher Gewichtsverteilung (Übergewicht) vermieden werden.

Gestell-Einbau Vorsichtsmassnahmen

Die folgenden Sicherheitsmassnahmen müssen bei allen in Gestelle einzubauenden Geräten befolgt werden:

- Die maximale Umgebungstemperatur für den Betrieb ist 40 °C
- Die Luftzufuhr des Lüftungsventilators oder anderer Öffnungen nicht beschränken.
- Die Geräte gleichmäßig in dem Gestell verteilen , um ungleiche Gewichtsverteilung zu vermeiden.
- Das Gerät nur an eine entsprechende Nennspannung anschließen.
- Zuverlässige Erdung der im Gestell eingebauten Geräte muß jederzeit erhalten bleiben.

Wartungs- und Reparaturvorsichtsmaßnahmen

Das Gerät vom Netzanschluß trennen und von qualifiziertem Personal warten lassen, wenn:

- Flüssigkeit in das Gerät verschüttet wurde oder es mit Regen oder Wasser in Kontakt kam,
- das Gerät nicht ordnungsgemäß betrieben werden kann, nachdem alle Anweisungen befolgt wurden,
- das Gerät fallen gelassen oder der Rahmen beschädigt wurde,
- das Gerät nicht ordnungsgemäß betrieben werden kann, (Wartungsbedarf),
- das Netzkabel oder der Stecker beschädigt wurden.

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Regulatory Compliance Statements

This chapter provides the FCC compliance statement for Class B digital devices, Industry Canada compliance statement, and CE marking statement.

FCC Compliance Statement for Class B Devices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by ICS Advent could void the user's authority to operate the equipment.

Note: This product was FCC certified under test conditions that included the use of shielded I/O cables and connectors between system components. To be in compliance with FCC regulations, the user must use shielded cables and connectors and install them properly.

Declaration of Conformity

We, the Responsible Party

ICS Advent
6260 Sequence Drive
San Diego, CA 92121

declare that the product

Model # RMX-1U15TFTB

is in conformity with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

CE Marking

CE The product(s) described in this manual complies with all applicable European Union (CE) directives.

Chapter 1
Drawer Setup

The RMX-1U15TFTB keyboard/monitor drawer is 1U high, which only requires 1.75 inch of rack space. The drawers provide a 15.1" LCD flat panel display and a mini-input keyboard with built-in touch pad all integrated into a space saving drawer (Figure 1-1). A key lock is included for added security (Figure 1-2).

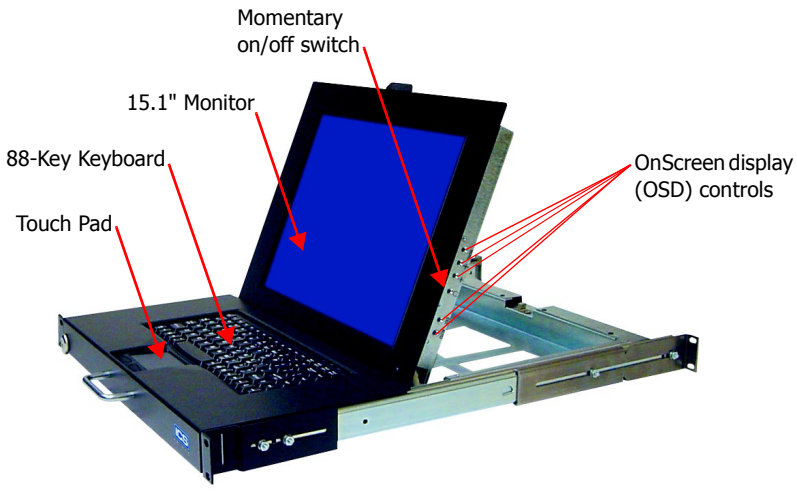


Figure 1-1. Side View (opened) - RMX-1U15TFTB Drawer

Figure 1-2. Front View - RMX-1U15TFTB Drawer

System Requirements

The RMX-1U15TFTB keyboard/monitor drawer requires a personal computer (PC). The requirements for your PC are as follows:

- Your PC must have a video card and video driver already installed for the monitor. If you need to install a video card or a video driver, refer to your computer documentation for instructions.
- Your computer must have a PS/2 port for both the mouse and keyboard connectors. You may need to use adapters if your computer does not have PS/2 ports.
- Your Macintosh will require a "mac adapter" for video.
- Your video card must be capable of operating in the ranges indicated in Table 1-1.

Table 1-1. Video Timing and Display Resolution Specifications

Kiosk Touch Monitor	Horizontal Timing	Vertical Timing	Displayable Resolution
RMX-1U15TFTB keyboard/ monitor drawer	30 kHz to 61 kHz	50 Hz to 75 Hz	XGA 1024 x 768 Maximum Non-interlaced

Setting Up the Drawer

The RMX-1U15TFTB keyboard/monitor drawer is designed specifically for rack mount enclosures or other types of industrial enclosures. This section describes how to set up the RMX-1U15TFTB keyboard/monitor drawer, which includes the following:

- Unpack the components
- Rack Mounting
- Check that a video card and the video software driver are already installed in your system
- Connect the video and power cables
- Power on the monitor and test your setup

Unpacking

Carefully unpack the carton and inspect the contents. The RMX-1U15TFTB keyboard/monitor drawer has two cables (the VGA and keyboard/mouse) exiting out of the rear of the unit.

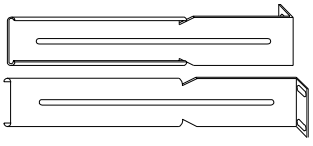
Additionally, make sure you received the following cables and accessories:

- Keys for key lock
- Rack ear and rear bracket mounting hardware, (8) size 8-32 x 3/8" slotted pan head screws and (8) Kep nuts. Additional mounting screws and hardware (not included) may be necessary to mount the slides to the rack or enclosure. Rack mount slides are already attached.
- AC Power cable (for RMX-1U15TFTB/AC only)
- (2) sets of rack ears: flush-mount and raised-mount (for use with Omnix Series chassis)
- (2) rear rack mount brackets

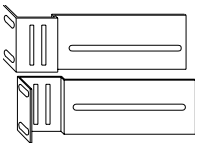
Keys for key lock

Rack ear and rear bracket mounting hardware

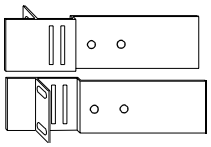
AC Power cable



Rear rack mount brackets



Flush-Mount rack ears

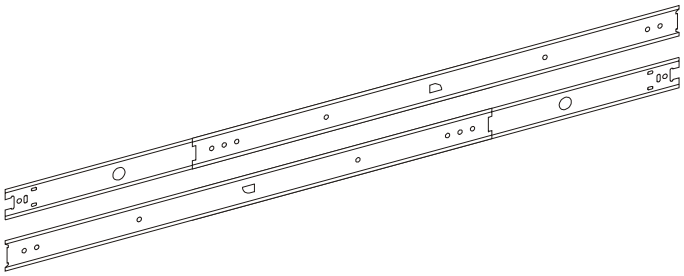


Raised-Mount rack ears (for use with Omnix Series chassis)

Rack Mounting

Note: Refer to the Rack Mounting Precautions on page xvii of the Foreword of this manual prior to mounting.

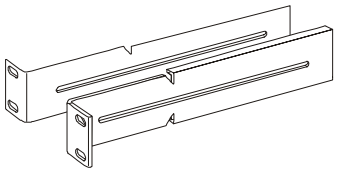
The following guidelines are for integrating the RMX-1U15TFTB keyboard/ monitor drawer into an industrial rack. The RMX-1U15TFTB keyboard/ monitor drawer comes with a set of 22-inch rack mount ball bearing slide rails. This set of rails consists of three members that fully extend and have a lock out capability. One of the members is already mounted on both the left and right sides of the RMX-1U15TFTB keyboard/monitor drawer.



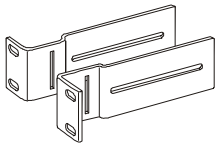
Mounting Hardware

Included with the set of slide rails are rack ears and rear brackets along with hardware. There should be (8) 8-32 x 3/8" slotted pan head screws and (8) Kep nuts to help mount the rack ears and rear brackets to the set of slides. Additional mounting screws and hardware (not included) may be necessary to mount the slides to the rack.

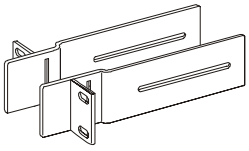
Rack ear and rear bracket mounting hardware



Rear rack mount brackets



Flush-Mount rack ears



Raised-Mount rack ears (for use with Omnix Series chassis)

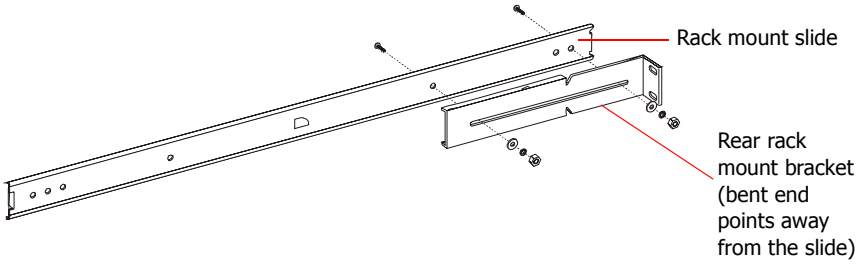
Mounting Instructions

To ensure proper operation of the slides, make certain that all bracket mounting screws are inserted so that the screw heads are inside the slides.

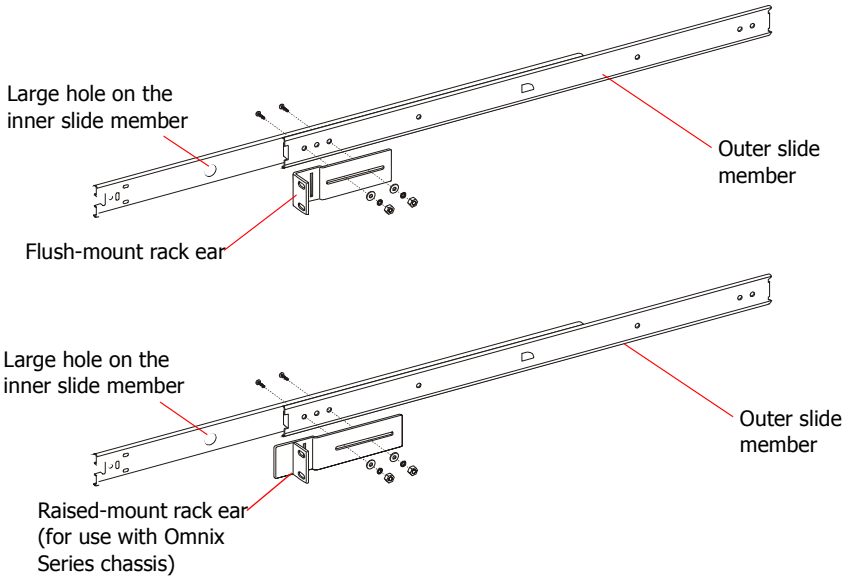
1) Install the rear rack mount bracket as follows:

   a) Fully extend the two slide members that are together until you hear a click.

b) Mount the rear rack mount brackets to the outer slide member on the side with the two holes as shown in the figure below. For adjustment purposes, screw the back brackets on loosely.



2) Mount the rack ears (raised-mount or flush-mount) by aligning the large hole on the inner slide member with the first and then the third smaller hole on the outer slide member and install the screws as shown in the figure below.



3) Install the slides into your rack mount enclosure using necessary hardware (not included). Rear adjustment is possible by aligning the rear bracket. Do not tighten screws until final adjustment is made.

4) With cabinet members in the closed position and ball retainers fully forward, install the chassis by engaging the slide members and close completely.

5) Mount the rack ears to the chassis. Make sure both slides are parallel.

6) Check slide alignment by opening and closing the chassis. Any sign of binding indicates lateral stress or misalignment.

7) Adjust slide position until movement is smooth.

8) Tighten all screws and if necessary use more to secure slides and complete installation.

Installing the Video Card and Video Driver

Before connecting the RMX-1U15TFTB keyboard/monitor drawer, make sure your computer has a video card already installed. After you connect the unit, install the video software driver. The video driver is supplied by the video card manufacturer and may be found on the diskettes that came with your computer.

If you need information on installing a video card or video driver, refer to the manual that came with your video card.

Configuring the Display Settings

After connecting the drawer and turning on your computer, you may need to configure one or more of the following display settings:

- Display mode (also called desktop area or video resolution)
- Refresh rate (also called vertical scan rate or vertical sync)
- Color depth (also called color palette or number of colors)

Each video card has several controls that let you adjust the display settings. However, the software and driver for each video card is unique. In most cases, you adjust these settings by using a program or utility provided by the manufacturer of the video card.

Most video cards use the Windows Display Properties control panel to configure the display. To open the Windows Display Properties, click the right mouse button in a blank area of the Windows desktop and then select **Properties**. The Settings tab usually lets you change the Color Palette and the Desktop Area (*x* by *y* pixel resolution).

Some video cards integrate additional features into the Windows Display Properties control panel to give you an exceptional setup that is flexible and easy to use. For example, the control panel may include an Advanced Properties button, an Adjustment tab, or a Refresh tab for changing other settings. Other video cards have a separate utility for setting display properties.

Whenever you change the resolution, color, or refresh rate, the image size, position, or shape may change. This behavior is normal. You can readjust the image using the monitor controls. For more information on the monitor controls, refer to Chapter 2. For more information on configuring the display settings, refer to the manual that came with your video card.

Refer to Appendix A for a list of the factory pre-set video modes for your monitor.

Connecting the Monitor

RMX-1U15TFTB/AC

To connect the AC version of the RMX-1U15TFTB keyboard/monitor drawer, perform the following steps:

1) Turn off your computer. You should always turn off the computer before connecting or disconnecting a device.

2) Connect the video cable to the video card in your computer.

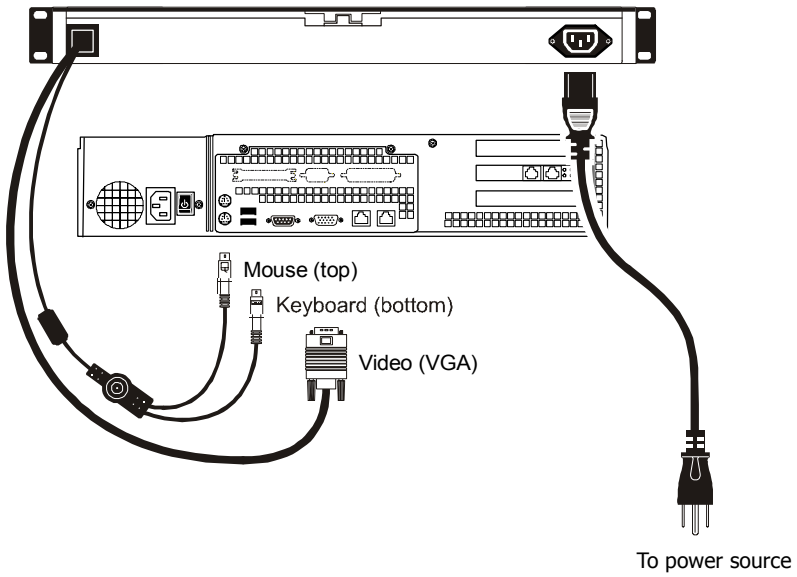


Figure 1-3. Cabling Diagram

3) Identify and connect the PS/2 mouse and PS/2 keyboard connector to the correct PS/2 ports on the computer.

4) Connect the AC power cable to the power inlet on the RMX-1U15TFTB keyboard/monitor drawer and then to a power outlet.

RMX-1U15TFTB/DC

Before connecting the DC unit observe all safety warnings as outlined below.

WARNING

The drawer is designed so that the power supply can be electrically grounded by connecting a wire (electrode conductor) from the terminal block ground screw on the back of the drawer to the appropriate grounding point in the rack.

SOMMATION

Cet appareil est conçu pour permettre le raccordement du conducteur relié à la terre du circuit d'alimentation c.c. au conducteur de terre de l'appareil.

WARNUNG

Das Netzteil kann mittels eines Verbindungsdrahtes (Elektrodenleiters) zwischen der Erdungsschraube am Anschlußklemmenblock an der Rückseite der Schublade und der passenden Erdungstelle am Gestell geerdet werden.

CAUTION

The correct DC polarity is essential, incorrect connection can cause damage to the equipment. An internal non-field replace fuse will open and render the unit inoperable.

Note: DC wiring is not provided with this unit. It is recommended to use 18-AWG minimum wiring with crimped-on locking fork terminals to complete the power connections. Use terminal screws that have a torque value of 12 in-lb.

Note: The drawer should be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection to the ground conductor and all equipment must use the same ground point.

Constater: Les appareils dont les conducteurs de terre respectifs sont raccordés au conducteur de terre du même circuit d'alimentation c.c. doivent être installés à proximité les uns des autres (p.ex., dans des armoires adjacentes) et à proximité de la prise de terre du circuit d'alimentation c.c. Le circuit d'alimentation c.c. ne doit comporter aucune autre prise de terre.

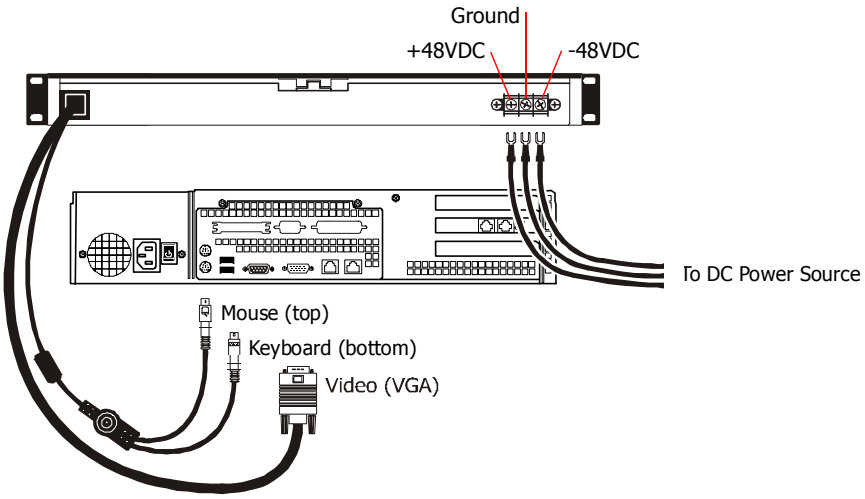
Haftungsausschluß: Die Schublade muß sich in unmittelbarer Nähe (z.B. einem nebenliegenden Schrank) der anderen geerdeten Geräte befinden, und alle Geräte müssen an der gleichen Erdung angeschlossen sein.

Note: The chassis ground may be jumpered to +48VDC as an option, depending on site requirements. However, ground jumpering is not necessary, a separate chassis ground is the standard connection.

To connect the DC version of the RMX-1U15TFTB keyboard/monitor drawer, perform the following steps:

1) Turn off your computer. You should always turn off the computer before connecting or disconnecting a device.

2) Connect the video cable to the video card in your computer.



3) Identify and connect the PS/2 mouse and PS/2 keyboard connector to the correct PS/2 ports on the computer.

4) Connect the +48 and -48VDC wires from the DC power cord to the power terminals on the RMX-1U15TFTB keyboard/monitor drawer, as shown above.

Note: Connect a wire (electrode conductor) from the terminal block ground screw on the rear of the unit to the appropriate grounding point on the rack.

Constater: Ce matériel doit être raccordé directement au conducteur de la prise de terre du circuit d'alimentation c.c. ou à une tresse de mise à la masse reliée à une barre omnibus de terre laquelle est raccordée à l'électrode de terre du circuit d'alimentation c.c.

Haftungsausschluß: Verbinden Sie einen Draht (Elektrodenleiter) zwischen der Erdungsschraube am Anschlußklemmenblock und der passenden Erdungsstelle am Gestell.

5) Supply power to the system by connecting the DC power cord to a power source.

Turning On the Drawer

Make sure all cables and power cable are connected properly. Be sure to tighten all connector screws. Using two hands, grasp the rear of the drawer, lift the tab and pull the panel up and forward. This will disengage the momentary on/off switch and the unit should power on.

Note: If the unit does not power up, pushe the momentary power switch on the right of the monitor panel.

Testing the Display

With the drawer and your computer turned on. Make sure the video image is centered within the screen area. Use the OSD controls to adjust the image, or press the Auto Sync button on the right hand side of the monitor.

Note: You can adjust the horizontal and vertical position, contrast, and brightness to better suit your video card and your personal preference. Refer to Chapter 2 for more information on using the on-screen menu to adjust the video display.

Side View of Monitor

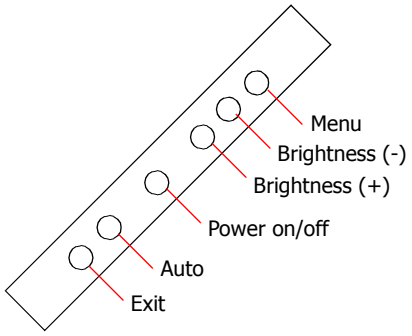


Figure 1-4. OSD Controls

Self-Test Feature Check (STFC)

Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark and the power indicator is blinking, run the monitor self-test by performing the following steps:

1) Turn off both your computer and the monitor.

2) Unplug the video cable from the back of the computer.

3) Turn on the monitor.

If the monitor is functioning properly, you will see a white box with a red border and black text inside as shown in the following illustration:

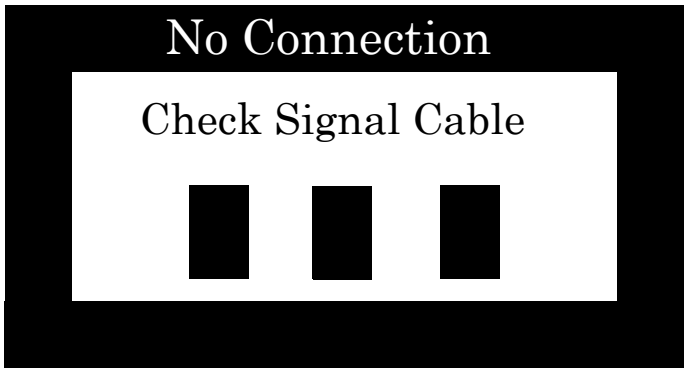


Figure 1-5. Monitor Self Test Screen

The three boxes inside the border are red, green and blue. Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

4) Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; your monitor is functioning properly.

Warm-up Time

All LCD monitors need time to become thermally stable the first time you turn them on each day. Therefore, to achieve more accurate adjustments for parameters, allow the LCD monitor to warm (be on) for at least 20 minutes before making any screen adjustments.

Chapter 2
Video Display Adjustment

The RMX-1U15TFTB keyboard/monitor drawer is equipped with screen adjustment controls that enable you to adjust the video display. The video display is adjusted through the on-screen display (OSD) menu which is standard on the RMX-1U15TFTB keyboard/monitor drawer.

For example:

- You can adjust the image contrast and brightness to your ambient lighting conditions.
- You can adjust the horizontal and vertical position of the image.

This chapter presents guidelines for adjusting the video display and describes how to use the OSD controls to adjust the image to your liking.

Guidelines

Before You Make Any Adjustments

- Be sure to set the controls under your normal lighting conditions.
- Wait for the unit to warm up for 30 minutes before adjusting the video display. Most units will require at least 30 minutes to warm up, stabilize completely, and reach their optimal operating point. Some image characteristics, such as image centering and black-level, will vary until the unit warms up.

Using the Standard Controls for the Video Card

In addition to the standard controls on the monitor, each video card has several controls that let you adjust the display settings. The software and driver for each video card is unique. In most cases, you adjust these settings by using a program or utility provided by the manufacturer of the video card.

For example, you can use the Windows Display Properties control panel to adjust the desktop area (resolution), color depth, and refresh rate. Whenever you change these settings, the image size, position, or shape may change. This behavior is normal. You can readjust the image using the monitor controls described in this chapter.

For more information on adjusting the desktop area (resolution), color depth, or refresh rate, refer to the user manual that came with your video card.

Plug and Play

Our adoption of the new VESA ® Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your monitor in a Plug and Play compatible system without the usual hassles and confusion. Your PC system can easily identify and configure itself for use with your display. This monitor automatically tells the PC system its Extended Display Identification (EDID) data using Display Data Channel (DDC) protocols so the PC system can automatically configure itself to use the LCD. If your PC system needs a video driver, refer to "Installing the Video Card and Video Driver" on page 1 - 7.

Controls for Adjusting the Video Display

The pushbuttons for the display adjustment controls are located on the right hand side, behind the bezel faceplate. The OSD controls consist of four pushbuttons that are used to adjust the video display. Refer to Table 2-1 for a description of the control buttons.

Table 2-1. Monitor Adjustment Controls

Name	Description
Auto	Activates the Auto Adjustment function.
Exit	■ Exits from menus and sub-menus. ■ Exits from the on screen display (OSD).
Power Button	Turns the monitor on and off.
Brightness +/-	■ Moves the selector between menus and sub-menus on the OSD. ■ Decreases or increases values of the selected function. ■ Directly adjusts the brightness level if pressed while the OSD is off (See the section on "Direct-Access Features" on page2-3).
Menu	■ Opens the OSD system and sub-menus. ■ Selects the highlighted function.

Automatic Save

Whenever you open the OSD and allow an adjustment window to remain active for about 3 seconds without pressing another button, the monitor automatically saves any adjustments you have made. These changes are saved into a user area in the monitor. User areas are reserved according to the signal frequency from your computer. The monitor can save adjustments for up to 5 user modes. It has 12 factory preset or preload modes, one for each signal frequency as listed in "Display Modes" on page 26.

If you have made no adjustments, the OSD disappears and the monitor does not save anything. To exit without saving the changes you have made, press the **EXIT** button before the 3 seconds elapse.

Direct Access Features

The features described in this section can be accessed quickly, at the touch of one button. Once you finish making adjustments to a feature, push the **EXIT** button to turn off the menu or allow the OSD to time-out and disappear automatically.

Auto Adjustment

Figure 2-1. Auto Adjustment

Even though your computer system can recognize your new LCD monitor, the auto adjustment function will optimize the display settings for use with your computer.

Follow these instructions to activate the automatic screen adjustments for your monitor.

1) Push the **Auto** button. The automatic adjustment display appears and the slidebar moves to indicate progress during the auto adjustment procedure.

Note: 1. For Auto Adjustment to function correctly, the monitor must display a full screen, colored image such as the Windows desktop.
2. Even though Auto Adjustment sets most image adjustments automatically, distortions may remain depending on the video board performance. After using Auto Adjustment, we recommend that you perfect the image by using the OSD functions.
3. The setting time of Auto adjustment may be different depending on the screen image.

Brightness

Figure 2-2. Brightness

Follow these instructions to adjust the brightness of the monitor's display.

1) With the menu off, push the "–" or "+" button to display the brightness screen.

2) Push the "+" button to increase the brightness; push the "–" button to decrease the brightness.

OSD Lock/Unlock

Use this function to secure the current settings so that they cannot inadvertently be changed, while still allowing you to adjust Brightness and Contrast. You can unlock the OSD controls at any time by using the same procedure as described below.

1) Push and hold the **MENU** button for 5 seconds to Lock or Unlock the controls. When locked, a "LOCKED!" message displays along the bottom of each OSD menu screens except the "Brightness" and "Contrast" screens.

On Screen Display (OSD)

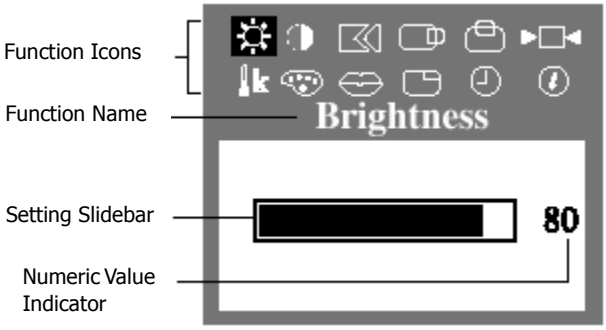


Figure 2-3. On Screen Display (OSD)

Accessing the Menu System

To access the menu system, follow these steps:

1) With the OSD off, push the **MENU** button to open it and display the main function menu.

2) Use the "–" and "+" buttons to move between the function icons. As you move from one icon to another, the function name changes to reflect the function or group of functions represented by that icon. See the Screen controls table to view a complete list of all the functions available for the monitor.

3) Push the **MENU** button once to activate the highlighted function then use the "–" and "+" buttons to move to sub-menus, or according to the indicators on the menu, to make your changes.

4) After selecting a function, use the "–" and "+" buttons to make the adjustments. The setting slidebar moves and the numeric value indicator changes to reflect your adjustments.

Note: The numeric value indicator is provided as a point of reference only and does not reflect any measureable value.

5) Push the **EXIT** button once or twice to return to the main menu to select another function or push the **EXIT** button 1 to 3 times to exit from the OSD.

OSD Functions and Adjustments

Table 2-2. Screen Controls

Icon	Menus and Sub-menus	Function Descriptions -	 +
☼	**Brightness**		
◑	**Contrast**		

Icon	Menus and Sub-menus	Function Descriptions - +
	Image Lock:	Image Lock controls adjust for and limit the amount of noise in the video signal which causes horizontal lines or areas on the screen where the image appears to be unstable and jitters or shimmers.
	■ Fine ■ Course*	The Fine and Coarse adjustments allow you to more closely adjust your monitor to your preference. Use the "–" and "+" buttons to adjust away interference. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again.
	H-position	 
	V-position	 

Icon	Menus and Sub-menus	Function Descriptions - +	
	**Reset**	Restores the viewing area and color settings to their original manufacturing levels.	
	Geometry Reset	Resets the H-Position and V-Position of the viewing area.	
	Color Reset	Resets the Brightness, Contrast and Color Control functions.	
	**Color Temperature**	Select the Color Mode you find most comfortable and then fine tune the colors using the Color Control menus.	
	Mode 1	Sets the color to the natural characteristics of the LCD.	
	Mode 2	Sets the color to a warm (reddish) white.	
	Mode 3	Sets the color to a cool (bluish) white.	
	**Color Control**	Adjusts the saturation of Red, Green and Blue in the display area.	
	R(ed)	Decreases Redness	Increases Redness
	G(reen)	Decreases Greenness	Increases Greenness
	B(lue)	Decreases Blueness	Increases Blueness

Icon	Menus and Sub-menus	Function Descriptions - +
	Language ■ English ■ Deutsch ■ Español ■ Français ■ Italiano ■ Svenska	Language sets the OSD to display in one of six languages. The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.
	Menu Position	Each time the OSD opens it displays in the same location on the screen. Menu Position controls that location.
	H-position	 
	V-position	 
	Menu Display Time ■ 5 Seconds ■ 10 Seconds ■ 20 Seconds ■ 200 Seconds	The OSD stays active for as long as it is in use. Menu Display Time sets the length of time the OSD will remain active after the last time you pushed a button.
	Display Mode	This screen shows the horizontal and vertical frequencies, sync polarity and the display resolution of the images received from the computer or video card.

Note: Depending on the video adapter you are using, the lower limit of the control can not go down to Min. Number on OSD or go up to Max. Number on OSD. This is due to the video signal character istics due to the video graphics adapter, and it narrows the range of user adjustable parameter. When your LCD monitor detects this video signal and reaches the limit, it displays information message saying "Limit Reached" to inform you that the parameter can not be adjusted any further.

Chapter 3
Maintenance and Troubleshooting

If you have a problem setting up or using your RMX-1U15TFTB keyboard/ monitor drawer, refer to the suggested actions in this chapter to troubleshoot the problem before calling for technical support. You may also want to consult the video card user's manual for additional troubleshooting advice.

Maintaining Your RMX-1U15TFTB Keyboard/ Monitor Drawer

To maintain your drawer and keep the unit operating at peak performance:

- Keep your display screen clean.
- Adjust the OSD controls. Refer to Chapter 2 for more information.
- Keep all ventilation holes and openings clean. Vacuum the opening if you notice dirt accumulating on them.
- Do not block ventilation holes and openings with objects or install the drawer in a place where ventilation may be hindered. Always maintain adequate ventilation to protect the drawer from overheating and to ensure reliable and continued operation.

Installation Problems

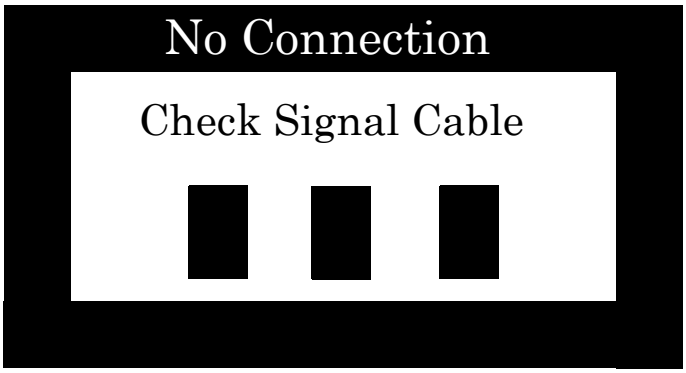
Problem	Possible Causes and Solutions
No image displayed (blank screen)	**Is the unit receiving power?** ■ Check that the computer's power cable is connected properly and securely into a grounded electrical outlet. ■ Check that the monitor's power cable is connected properly and securely to an electrical outlet. ■ Check that the panel is in a raised position for the power switch to automatically activate. ■ Try using another electrical outlet. **Is the unit receiving a valid video signal from the PC?** ■ Check that the computer is powered on. ■ Check that the video cable is connected properly and securely to the computer. ■ Check that no pins are bent in the video cable connector. ■ Check that the video card is firmly seated in the card slot in your computer. **Is the unit in Power Management mode?** Touch the screen (if applicable), press any key on the keyboard, or use the touch pad to restore operation. **Are the brightness and the contrast settings too low?** Use the monitor controls to adjust these values.
Abnormal image	■ Check that the video signal is within specifications for the monitor ■ Check that the video cable is connected properly and securely to the computer.
Colors of image are abnormal	■ Check that the video cable is connected properly and securely to the computer. ■ Check that no pins are bent in the video cable connector. ■ Check that a magnetized object is not nearby. ■ Check the settings under the color balance options.

Problem	Possible Causes and Solutions
"Video Mode not supported" message	■ Check the maximum resolution and the frequency on the video port of your computer. ■ Compare these values with the data in the Display Modes Timing Chart.
The image is too dark or too light	■ Adjust the Brightness and Contrast.
Horizontal bars appear to flicker, jitter or shimmer on the image	■ Adjust the Fine function.
Vertical bars appear to flicker, jitter or shimmer on the image	■ Adjust the Coarse function and then adjust the Fine function.
Image is not atable and may appear to vibrate	■ Check that the display resolution and frequency from your PC or video board is an available mode for your monitor. On your computer check: Control Panel, Display, Settings ■ If the setting is not correct, use your computer utility program to change the display settings. ■ Horizontal Frequency: 30kHz ~ 61kHz Vertical Frequency: 50kHz ~ 75kHz Maximum Refresh Rate: 1024 x 768 @ 75Hz
Image is not centered on the screen	■ Adjust the horizontal and vertical position of the screen.
You need the monitor driver software	■ Download the driver: http://www.samsung-monitor.com http://www.samsungmonitor.com (USA only)

Additional Screen Displays

Video Cable Not Connected

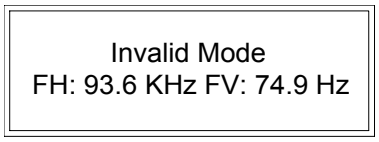
If you apply power to the unit without the video cable connected to the computer, the following screen is displayed:



The OSD adjustment buttons are inactive. This message will appear for 10 seconds before turning off. If the video cable is connected to the computer, this information is not displayed.

Video Signal Out of Specification

If the video sync signals do not meet the monitor specifications, the unit will display the following screen:



The message will detail the current horizontal and vertical scan frequencies, which the LCD panel does not support. This message will appear for 15 seconds before turning off.

Power Saver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The available modes are “On”, “Standby”, “Sleep”, and “Deep Sleep”.

The RMX-1U15TFTB keyboard/monitor drawer conforms to the Video Electronics Standards Association (VESA) Display Power Management Signaling (DPMS) standard. PowerSaver operates with a VESA DPMS compliant video card installed in your computer. A software utility installed on your computer is used to set up this feature.

Table 3-1 lists the power saving modes for the RMX-1U15TFTB keyboard/ monitor drawer.

Table 3-1. Power Saving Modes

State	Normal Operation	Power Saving Function Mode (EPA/NUTEK/ENERGY 2000)		
		Standby Mode	Sleep Mode Position A1	Deep Sleep Mode Position A2
H-Sync V-Sync Video	Active Active Active	Inactive Active Blanked	Active Inactive Blanked	Inactive Inactive Blanked
Power indicator	Green	Amber	Amber Blinking (.5 sec interval)	Amber Blinking (1 sec interval)
Power Consumption	25W (Nom.)	<3W	<3W	<3W

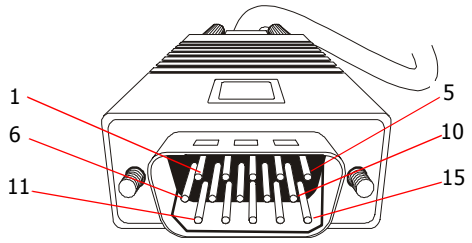
Note: This monitor automatically returns to normal operation when horizontal and vertical sync return. This occurs when you move the computer’s mouse or press a key on the keyboard.

This monitor is EPA Energy Star ® compliant and NUTEK/ ENERGY 2000 compliant when used with a computer equipped with VESA DPMS functionality.

For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.

Video Connector Pin Assignment

Table 3-2 describes the pin assignment of the video connector on the RMX-1U15TFTB keyboard/monitor drawer. The connector is a 15-pin D-sub.



Input signals are RS-342 compatible with the video level up to 0.7 V point-to-point @ 75 ohms impedance. The sync signals are TTL positive or negative, with separate sync signals for horizontal and vertical.

Table 3-2. Video Input Pin Assignment (15-pin D-sub connector)

Pin	Separate H/V	Composite H/V	Sync-on-green
1	Red	Red	Red
2	Green	Green	Green
3	Blue	Blue	Blue
4	GND	GND	GND
5	GND (DDC Return)	GND (DDC Return)	GND (DDC Return)
6	GND-Red	GND-Red	GND-Red
7	GND-Green	GND-Green	GND-Green
8	GND-Blue	GND-Blue	GND-Blue
9	NC	NC	NC
10	GND-Sync/Self Test	GND-Sync/Self Test	GND-Sync/Self Test
11	GND	GND	GND
12	DDC Data	DDC Data	DDC Data
13	Horizontal sync	H/V sync	Not used
14	Vertical sync	Not used	Not used
15	DDC Clockf	DDC Clock	DDC Clock

Chapter 4
Specifications

Drawer Details

Mounting

Rack mounting, 19in (482.6mm)

Slide rails provided, 22in (609.6mm), fits cabinets with 18 to 30in rail depth

Display Type

LCD, TFT, active matrix

Display Size

15.1" (383.5mm) diagonal

Viewing area (H x W): 8.98 x 11.97in (228.1 x 304.1mm)

Keyboard Type

88 keys with touch pad

PS/2 connector

Dimensions (W x H x D)

1.75 (1U) x 19 x 22in max. (44.5 x 483.6 x 558.8mm max.)

Security

Key lock

Contrast Ratio

250:1 (typical)

Viewing Angle

120 ^{o} from center horizontal min.

100^{o} from center vertical min.

Display Colors

16.7M

Maximum Resolution

XGA (1024 x 768) at 75Hz, auto-switching

Luminance (White)

200 nits (cd/m^2), typical

Response Time

Tr: 20ms, Tf: 30ms (typical)

Interface

Analog RGB

Horizontal Scanning Frequencies

30 - 61kHz

Vertical Scanning Frequencies

50 - 75Hz

Backlight

Backlight automatically shuts off when display is closed

Cable Connector

Standard 15-pin D-sub VGA connector

Monitor Control Type

Digital microprocessor OSD control

Memory Modes

12 factory presets, 5 user settable

VESA Plug-n-Play Level

DDC1/2B

On-Screen Adjustment

Contrast, brightness, H-position, V-position, phase, clock, factory defaults, auto-setup, color, and language

Power Management

VESA DPMS compatible

Construction

Aluminum/zinc plated steel

Color

Black, medium texture paint, water based

Weight

25 lbs (11.34 kg)

MTBF

25,000 POH (power on hours)

Environment Conditions

Operating Temperature

10 ° to 40 °C (50 ° to 104 °F)

Storage Temperature

-25 ° to 45 °C (-13 ° to 113 °F)

Power Requirements

AC Requirements

100/240VAC, 50 - 60Hz, 0.5A autoranging

25 Watts (typical)

DC Requirements

48VDC, 0.5A

25 Watts (typical)

Operating Humidity

10 to 80% non-condensing

Storage Humidity

5 to 95%

Altitude

0 to 10,000 ft

Agency Approvals

FCC Conformity with

Part 15B, Class B

CE Conformity with

EU EMC Directive 89/336/EEC

EU Low Voltage Directive 72/23/EEC

UL/cUL Listed to

UL/cUL 60950 Third Edition

TUV

GS Mark Certification

Appendix A
Monitor Display Preset Modes

The RMX-1U15TFTB keyboard/monitor drawer comes with 12 factory preset display modes. Refer to Table A-1 (shown below) for a description of the preset modes. Additionally, you can define up to 5 user defined display modes.

If the video signal is different from the factory preset modes, the new video signal timings will be stored in the monitor as a user defined mode. The only condition to store as a user mode is that there must be a 1kHz difference for horizontal frequency or 1Hz for vertical frequency or the sync signal polarities are different from the default modes.

Table A-1. RMX-1U15TFTB Preset Modes

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Band Width (MHz)	Polarity	
					H	V
MAC *	640 x 480	35.00	66.67	30.24	–	–
MAC*	832 x 624	49.73	75	57.284	–	–
VGA	640 x 350	31.47	70	25.175	+	–
VGA	720 x 400	31.47	70	28.322	–	+
VGA	640 x 480	31.47	60	25.175	–	–
VGA	640 x 480	37.50	75	31.5	–	–
SVGA	800 x 600	35.16	56.2	36	+, –	+, –
SVGA	800 x 600	37.88	60.30	40	+	+
SVGA	800 x 600	46.88	75	49.5	+	+
XGA	1024 x 768	48.36	60	65	–	–
XGA	1024 x 768	56.48	70	75	–	–
XGA	1024 x 768	60.02	75	78.75	+	+

* The “mac adapter” allows the user to switch to several resolutions other than the preset mode.

Declaration of Conformity

Information Technology Equipment

6260 Sequence Drive
San Diego, CA 92121-4371
800 523-2320 / 858-677-0877

The product(s) covered by this declaration has a CE marking:

1U Drawer with keyboard and 15" LCD TFT Monitor (model number RMX-1U15TFTB/AC)
1U Drawer with keyboard and 15" LCD TFT Monitor (model number RMX-1U15TFTB/DC)

The European Union directives covered by this declaration:

EMC Directive 89/336/EEC

The basis on which conformity is declared:

EN 50081-1:1992 Emissions, Generic Requirements

-EN 55022:1998 Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment.

EN 61000-3-2 : 1995 Electromagnetic Compatibility, Harmonic Emmisions
EN 61000-3-3: 1995 Electromagnetic, Compatibility, Voltage Flicker

EN 50082-1:1992 Immunity, Generic Requirements

- EN61000-4-2: 1995 Electrostatic Discharge (ESD) Immunity
- EN61000-4-3: 1995 Radiated RF Field Immunity
- EN61000-4-4: 1995 EFT Immunity for AC and I/O Lines
- EN61000-4-5: 1995 Surge Immunity
- EN61000-4-6: 1996 Conducted Disturbances
- EN61000-4-8: 1993 Power Freq. Magnetic Field
- EN61000-4-11: 1994 Voltage Dips and Fluctuations

EN 60950:1992 Safety of Information Technology Equipment

The technical documentation required to demonstrate this product meets the requirements of the EMC Directive and the Low Voltage Directive has been compiled by ICS Advent and is available for inspection by the relevant enforcement authorities.

Attention

The attention of the specifier, purchaser, installer, or user is drawn to special measures and limitations for use which must be observed when the product is taken into service to maintain compliance with the above directives. Details of these special measures and limitations are in the product manual.

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