

**Mult
Tasker™**

MANUAL PART NUMBER: 400-0182-003

MT103-115

2-IN, 2-OUT CAT-5 TO VGA TRANSMITTER

CARD FOR MULTI-TASKER™

USER'S GUIDE

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PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **MT103-115**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **MT103-115** and to prevent fire and shock hazard. Please read them carefully and heed all warnings.

1.1 GENERAL

- Qualified ALTINEX service personnel, or their authorized representatives must perform all service.

1.2 INSTALLATION

- To prevent fire or shock, do not expose this unit to rain or moisture. Do not place the **MT103-115** in direct sunlight, near heaters or heat radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the **MT103-115** carefully. Dropping or jarring can damage the card.
- Do not pull the cables that are attached to the **MT103-115**.
- Insert the card carefully into the slots of the Multi-Tasker™ without bending any edges.
- When removing a card, please make sure that the card to which it is attached is also pulled out simultaneously.

1.3 CLEANING

- Clean only the connector area with a dry cloth. Never use strong detergents or solvents, such as alcohol or thinner. Do not use a wet cloth or water to clean the card. Do not clean or touch any component or PCB.

1.4 FCC / CE NOTICE

- This device complies with part 15 of the FCC Rules. Operation 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.
- 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 their expense.
- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment.

ABOUT YOUR MT103-115 2

MT103-115

2-In 2-Out VGA to CAT-5 Transmitter

The **MT103-115** is a 2-in 2-out VGA to CAT-5 transmitter card. The **MT103-115** card transmits computer video signals over twisted pair CAT-5 (Category 5, 5e, 6) type cable. The **MT103-115** must be used with a compatible CAT-5 receiver like the MT103-116 card or the stand alone DA1921SX receiver.

The use of CAT-5 cable is an alternative to the traditional method of using RGB or VGA type multi-channel coaxial cable. This solution is very desirable due to the fact that CAT-5 cable is thinner, more flexible and less costly than multi-channel coaxial cable. Furthermore, many facilities already have a CAT-5 cable infrastructure, allowing this solution to reduce the amount of labor and intrusion required for retrofit installations.

The **MT103-115** offers two 15-pin HD female input connectors (Plug & Play compatible with built-in EDID), and two RJ-45 female output connectors. The **MT103-115** can transmit signal resolutions from VGA thru UXGA. Together with an MT103-116 receiver card and properly adjusted with built-in equalization controls, the maximum cable distance is approximately 500 feet/152 meters for VGA (640x480, 60Hz refresh) and 250 feet/ 76 meters for UXGA (1600x1200, 60Hz refresh). Please see the complete specifications for other resolutions.

TECHNICAL SPECIFICATIONS 3

FEATURES/DESCRIPTION	MT103-115
GENERAL	
Inputs	Two
Input from Transmitter	RJ-45 Female
Outputs	Two
Output Connectors	15-pin HD Female
Cable Distance Limitations	
640x480: 500ft/152m	1280x1024: 350ft/107m
800x600: 450ft/137m	1600x1200: 250ft/76m
1024x768: 400ft/122m	

Table 1. **MT103-115** General

MECHANICAL	MT103-115
Enclosure Slots Required	One
Weight	0.43lb (0.19kg)
Shipping Weight	1 lb. (0.42kg)
Connector Panel	Black
T° Operating	10°C-40°C
T° Maximum	0 to 50°C
Humidity	90% non-condensing
MTBF (calc.)	55,000 hrs

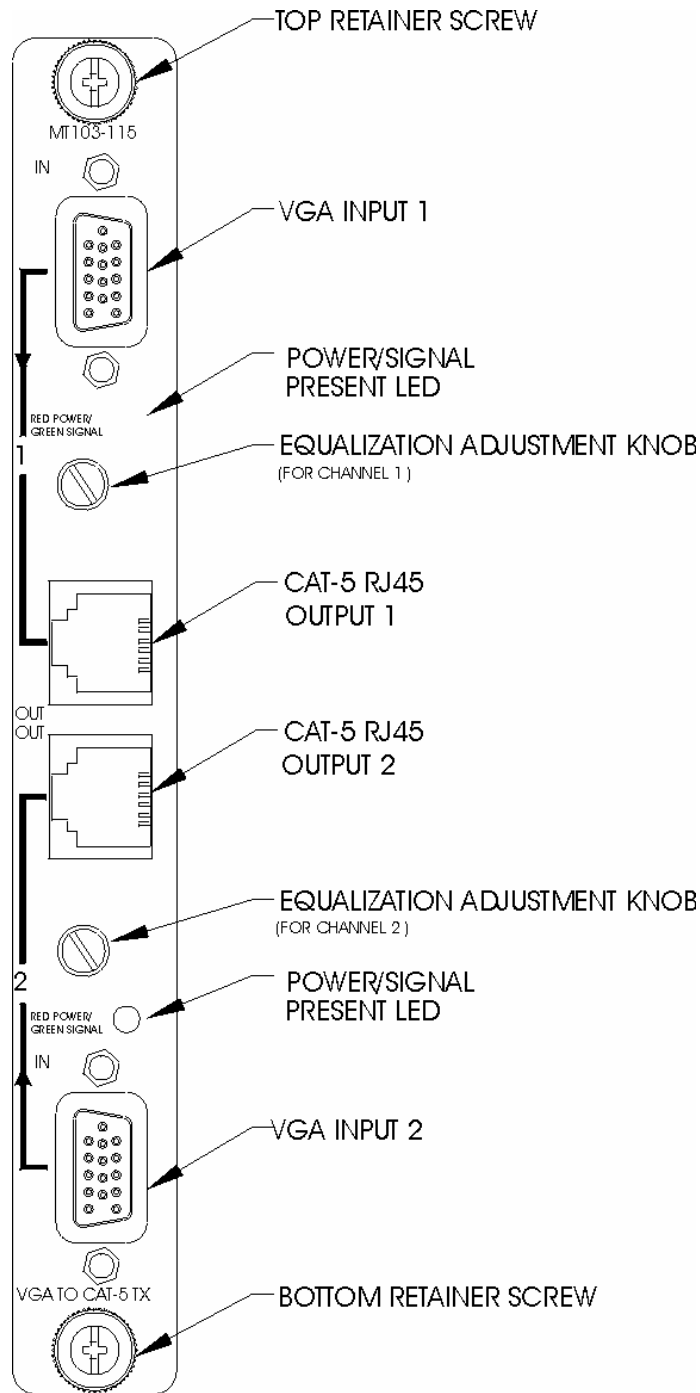
Table 2. **MT103-115** Mechanical

ELECTRICAL	MT103-115
Input Video Signal	
Analog Signal Level	1.7V max
Impedance	75 Ohms
Input Sync Signal	
Horiz., Vertical, & C-Sync	TTL (+/-)
Impedance	10K Ohms
Output Video Signals	
Analog Signal Level	Gain of 1.05 (+/-5%)
Fall/Rise Time (ns)	1.0
Impedance	75 Ohms
Output Sync Signals	
Horizontal, Vertical Sync	TTL (+/-)
Impedance	22 Ohms
Power	
Power (from Enclosure)	+6V DC (230mA) -6V DC (200mA)
Power Consumption	2.6 watts max.

Table 3. **MT103-115** Electrical

PRODUCT DESCRIPTION

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APPLICATION DIAGRAM

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DIAGRAM 1: TYPICAL SETUP

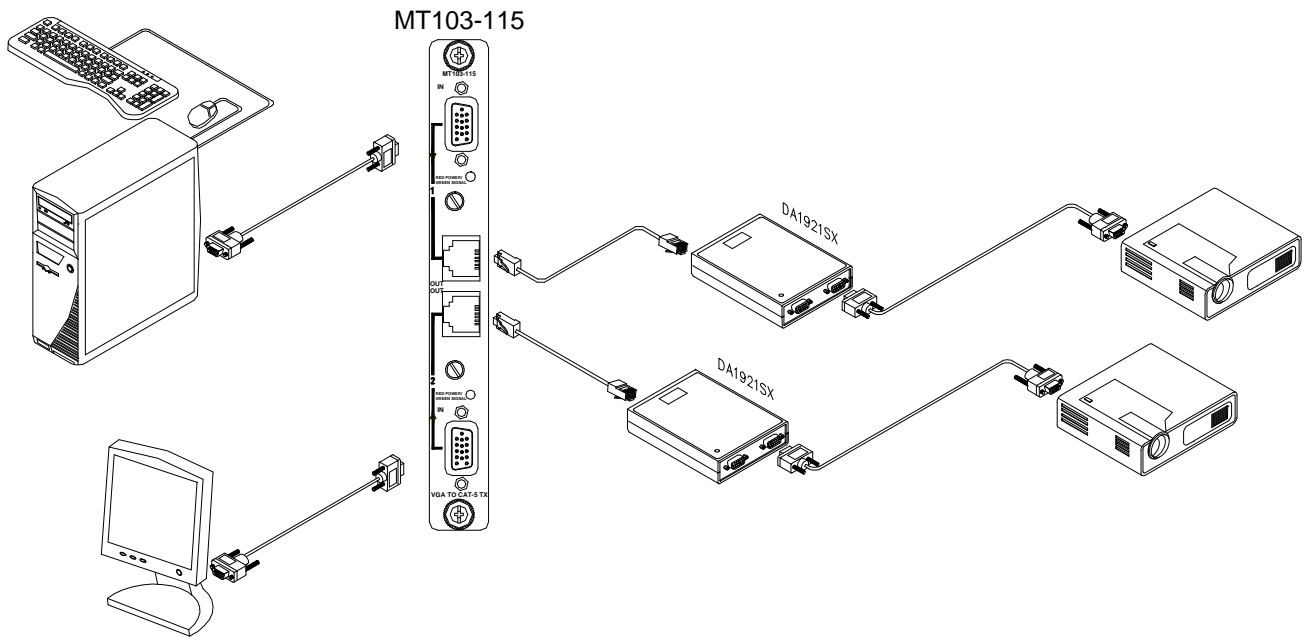
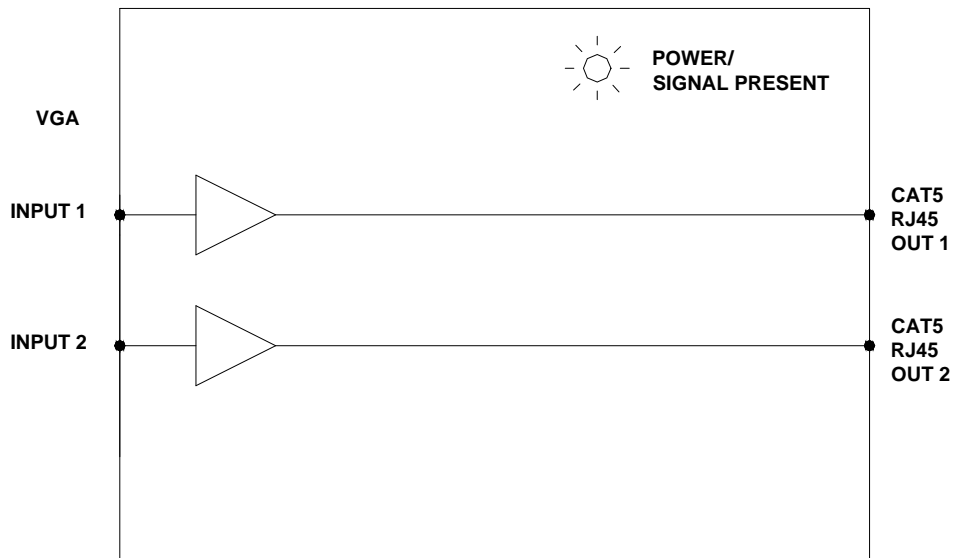


DIAGRAM 2: INTERNAL VIEW



INSTALLING YOUR MT103-115 6

- Step 1.** Turn OFF the power to the Multi-Tasker™ enclosure.
- Step 2.** Slide the **MT103-115** into an available slot in the Multi-Tasker™. Make sure the card fits into place. Secure the card by tightening the retainer screws located on the top and bottom of the card.
- Step 3.** Turn ON the power to the Multi-Tasker™ enclosure.
- Step 4.** The LED on the card panel will turn RED indicating that the card is in full operation.
- Step 5.** Connect a VGA cable from the video source to the **MT103-115** input connector.
- Step 6.** The power LED will turn GREEN, indicating an input signal is present.
- Step 7.** Connect the **MT103-115** output connector to the Receiver (MT103-116) thru a CAT-5 cable.

OPERATION 7

There is only one adjustment necessary to operate the **MT103-115**. The adjustment is for equalization on long cable runs. It is adjustable according to the cable length.

The unit will operate successfully as long as cables are attached properly and other technical specifications are followed.

TROUBLESHOOTING GUIDE 8

We have carefully tested and have found no problems in the supplied **MT103-115**; however, we would like to offer suggestions for the following:

7.1 LED IS NOT LIT

Cause 1: Card cage is not plugged in.

Solution: Plug in the card cage. If the LED turns ON, the problem is solved. If not, see Cause 2.

Cause 2: Card is not plugged in all the way.

Solution: Push the card in all the way. If the LED is still not lit, see Cause 3.

Cause 3: Card cage slot has a problem.

Solution 1: Test the card in other slots. If other slots work, the problem is the card cage slot. The card cage may require service. Call ALTINEX at (714) 990-2300. If the other slots do not work, see Solution 2.

Solution 2: Take any other known good card with an LED and verify that the slot used is good by seeing if the other card's LED lights in that slot. If it lights, then the original card may be the source of the problem. Call ALTINEX at (714) 990-2300.

7.2 NO DISPLAY

Cause 1: The source has a problem.

Solution: Check the source and make sure that there is a signal present and all source connections are correct. If the source is working and there is still no display, see Cause 2.

Cause 2: Cable connections are incorrect.

Solution: Make sure the cables are connected properly. Also, make sure the continuity and wiring are good. If there is still no display, see Cause 3.

Cause 3: The display has a problem.

Solution: Make sure that the display is powered. If there is still no display, call ALTINEX at (714) 990-2300.

ALTINEX POLICY

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9.1 LIMITED WARRANTY/RETURN POLICY

Please see the Altinex website at www.altinex.com for details on warranty and return policy.

9.2 CONTACT INFORMATION

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