Multi Tasker™

MANUAL PART NUMBER: 400-0352-001

MT107-201

8 BNC INPUTS + GLI 300MHz FOR MULTI-TASKER™ MATRIX SWITCHER USER'S GUIDE

ALTINEX

SIGNAL MANAGEMENT SOLUTIONS

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PRECAUTIONS / SAFETY WARNINGS   1

Please read this manual carefully before using your **MT107-201**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **MT107-201** 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 **MT107-201** 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 **MT107-201** carefully. Dropping or jarring can damage the card.

- Do not pull the cables that are attached to the **MT107-201.**

- Insert the card carefully into the slots of the Multi-Tasker™ without bending any edges.

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 his own expense.

- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment .

MULTI-TASKER™

MT107-201
8 BNC INPUTS 300MHz

The **MT107-201** is an 8 BNC Input expansion card for use with the MT107-100 64X64 Matrix Engine. The **MT107-201** is capable of receiving video and/or sync signals.

Each **MT107-201** connects to Input Connector on the **MT107-100** Matrix Engine. Up to 7 **MT107-201**'s may be connected to the Engine. Each card is connected via specially provided with the Engine high bandwidth video cables.

As part of the **MT107-100** Matrix Engine, the **MT107-201** has built-in special features. The signal detection circuitry allows to determine the presence of an input signal on any channel.

Video Input signals are buffered to the matrix system through individual Ground Loop Isolation Amplifiers. The video amplifier can be used for either video or sync signals.

Altinex's software and hardware allow for the switching of any input to output combination and prevents illegal switching combinations that may damage components.

FEATURES/ DESCRIPTION	MT107-201
GENERAL	
Inputs	8
Input Connectors	8 BNC Female
Compatibility	
Signal types	RGBHV, RGBS, RGsB, Composite Video, Sync
Signal resolution	VGA through UXGA

Table 1. **MT107-201** General

MECHANICAL	MT107-201
Enclosure Slots Required	1 Slot per Card
Weight	0.4 lb (0.2 kg)
Connector Panel	Black Anodized
T° Operating	10°C-50°C
T° Maximum	75°C
Humidity	90% non-condensing
MTBF (calc.)	38,000 hrs

Table 2. **MT107-201** Mechanical

ELECTRICAL	MT107-201
Video Input Signals	R,G,B
Impedance Analog	75 Ohms
Analog Signal Level	1.5V p-p max.
Sync Input Signals	H,V
Signal Level	3 - 5 Volts TTL
Bandwidth	
Bandwidth	300 MHz @ -3dB

Table 3. **MT107-201** Electrical

PRODUCT DESCRIPTION   4

TOP RETAINER SCREW

MT107-201
INPUT

1

2

3

4

8 INPUTS

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6

7

8

VIDEO/SYNC

BOTTOM RETAINER SCREW

ALTINEX

SIGNAL MANAGEMENT SOLUTIONS

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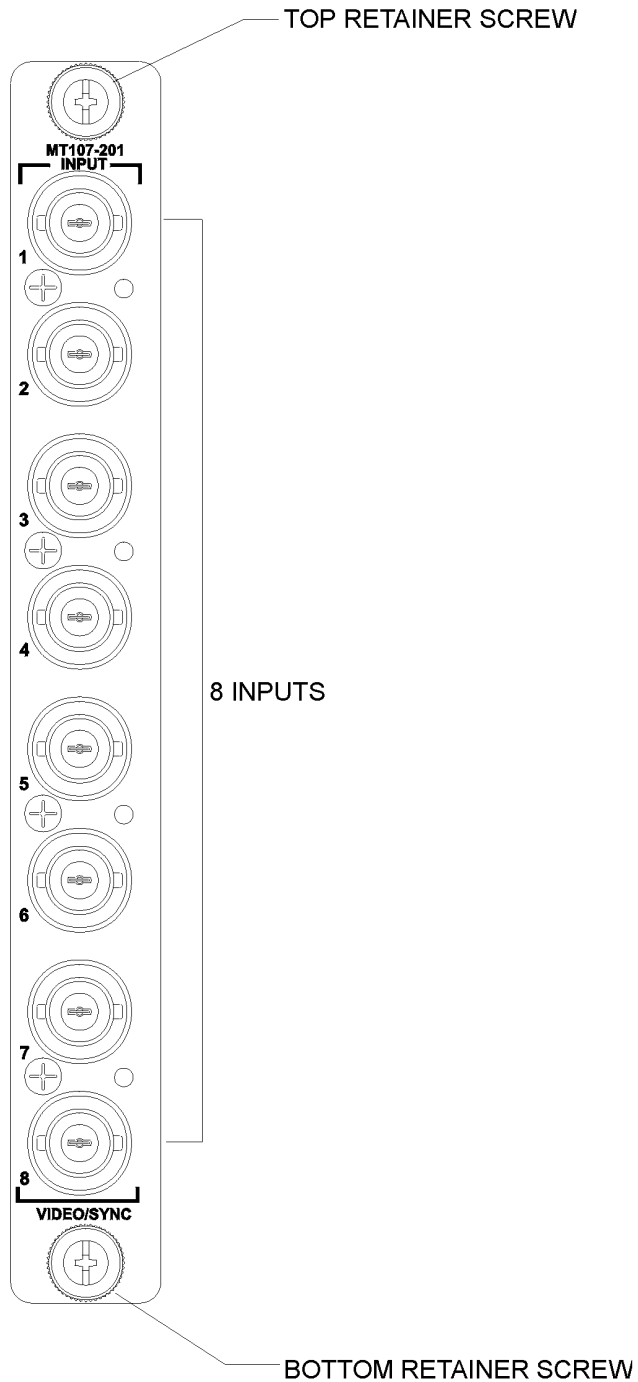
APPLICATION DIAGRAM   5

DIAGRAM 1: TYPICAL CONFIGURATION
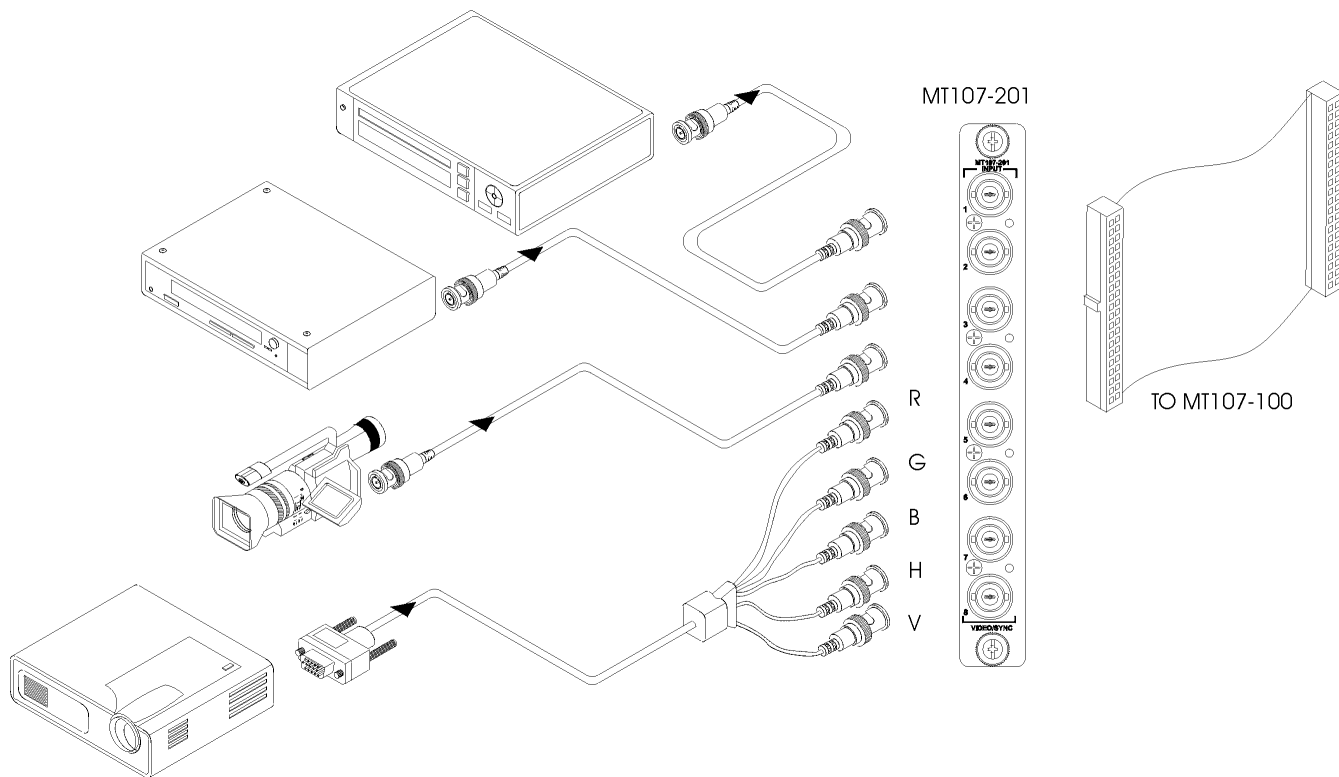

MT107-201
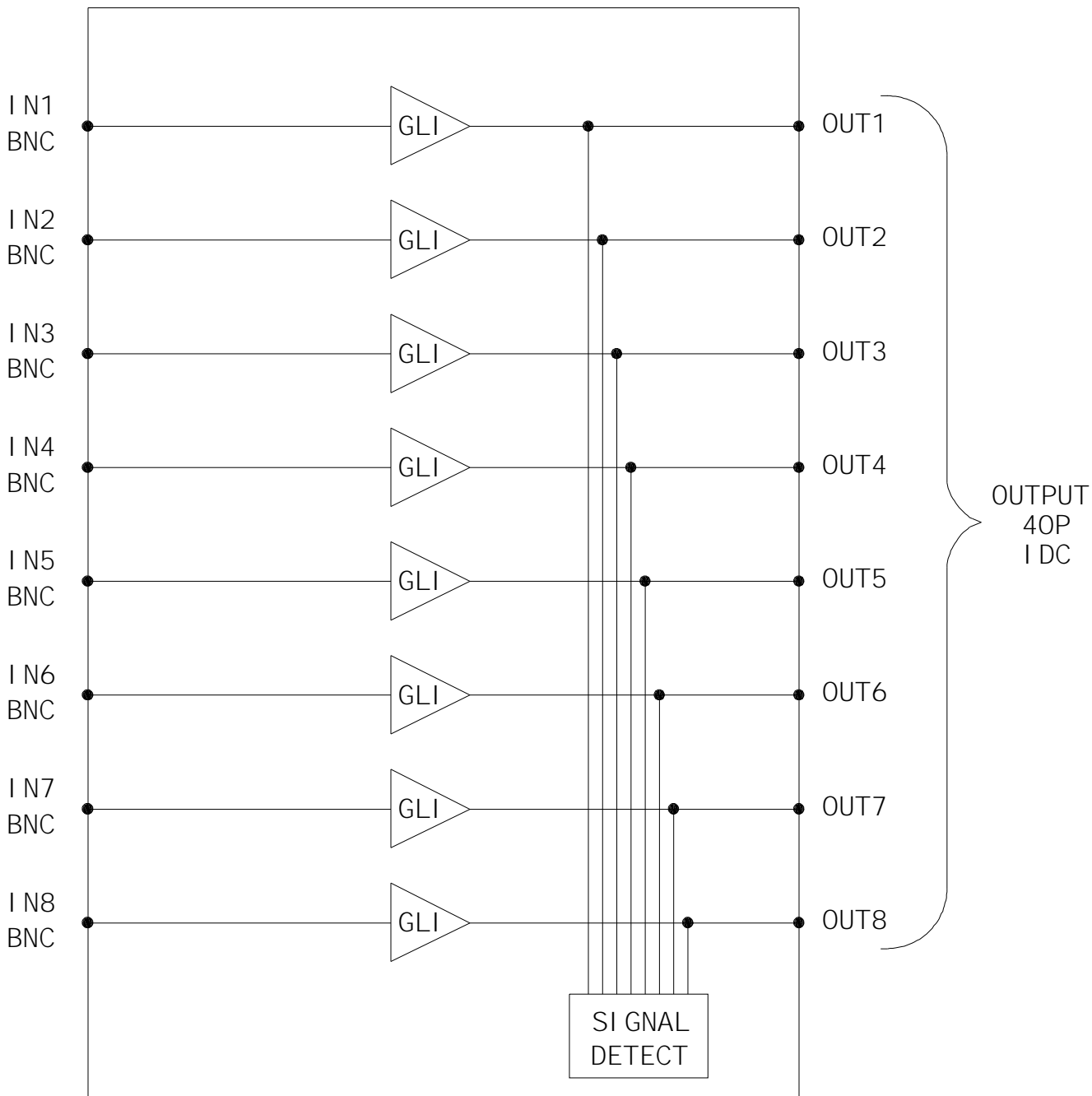
R
G
B
H
V

TO MT107-100

DIAGRAM 2 INTERNAL VIEW

MT107-201, 8 BNC INPUTS + GLI, 300MHz

INSTALLING YOUR MT107-201   6

Step 1. Locate the **MT107-100** currently installed in the Multi-Tasker™. Ensure there are enough empty slots in the enclosure to allow for the one or more **MT107-201**'s to be installed.

Step 2. Route the ribbon cables through the notch in the add-on boards and connect to the **MT107-100** base assembly using special high bandwidth cables provided with the Engine. Make sure that cable connector is secured in the socket of the input card.

Step 3. Carefully, slide the **MT107-201** into slot of the Multi-Tasker™ Enclosure.

Step 4. Secure each card by tightening the retainer screws at the top and bottom of each card.

OPERATION   7

7.1 RS-232 CONTROL

The **MT107-201** has many advanced remote control capabilities when used in the Multi-Tasker™ Enclosure as part of an **MT107-100** Matrix Switcher. These capabilities are accessible through standard RS-232 communication. The actual controlling can be accomplished through a computer control system or any other device capable of sending RS-232 commands.

7.2 DESCRIPTION OF COMMANDS

Please, see the **MT107-100** User's Guide for a full listing of commands available for the **MT107-201** as part of a Multi-Tasker™ Matrix Switcher.

TROUBLESHOOTING GUIDE   8

We have carefully tested and have found no problems in the supplied **MT107-201.** However, we would like to offer suggestions for the following:

8.1 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: **The input signal is not detected.**

Solution 1: In MTSetup™, or other control software, send the [SDI] command. This command is detailed in the **MT107-100**'s User Guide. Verify a signal is detected for the input number in question. If a signal is not detected, see Solution 2.

Solution 2: Verify the **MT107-201** is connected to the **MT107-100** and that the cable is in good condition. If a signal is detected, see Cause 3. If there is no signal detected, please, call Altinex at (714) 990-2300.

Cause 3: **The path is not selected.**

Solution: Make sure the input to output path is correctly selected.

For example, Input 17 is connected to Output 1 in the matrix engine. Physically, the source signal is connected to Input 17 and the display cable is connected to Output 1. See RS-232 accessible commands in Section 7 of the **MT100-107**'s User Guide for command details.

If no display is present, see Cause 4.

Cause 4: **Cable connections are incorrect.**

Solution: Make sure that cables are properly connected. Also, make sure that the continuity and wiring are good. If there is still no display present, see Cause 5.

Cause 5: **The display has a problem.**

Solution: Make sure the display has power and is turned ON. If there is still no display, please call Altinex at (714) 990-2300.

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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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