

**Mult
Tasker™**

MANUAL PART NUMBER: 400-0397-001

MT107-304

**8 OUTPUTS, FIBER OPTIC
FOR MULTI-TASKER™
MATRIX SWITCHER
USER'S GUIDE**

TABLE OF CONTENTS

	Page
PRECAUTIONS / SAFETY WARNINGS	2
GENERAL.....	2
INSTALLATION	2
CLEANING.....	2
FCC / CE NOTICE.....	2
ABOUT YOUR MT107-304.....	3
TECHNICAL SPECIFICATIONS.....	3
PRODUCT DESCRIPTION	4
APPLICATION DIAGRAM	5
DIAGRAM 1: TYPICAL CONFIGURATION	5
DIAGRAM 2 INTERNAL VIEW	6
INSTALLING YOUR MT107-304	7
OPERATION	7
RS-232 CONTROL.....	7
DESCRIPTION OF COMMANDS	7
TROUBLESHOOTING GUIDE	7
NO OUTPUT	7
ALTINEX POLICY	8
LIMITED WARRANTY/RETURN POLICY	8
CONTACT INFORMATION	8

PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **MT107-304**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **MT107-304** 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 **MT107-304** 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 **MT107-304** carefully. Dropping or jarring can damage the card.
- Do not pull the cables that are attached to the **MT107-304**.
- 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.

ABOUT YOUR MT107-304 2

MT107-304 8 OUTPUTS, FIBER OPTIC OUTPUT CARD

The **MT107-304** is an 8 Fiber Optic Output expansion card for use with the **MT107-104** 64X64 Matrix Engine. The **MT107-304** outputs are compatible with Altinex **DA1934KM** Receiver.

Each **MT107-304** connects to the Output Connector on the **MT107-104** Matrix Engine. Up to 8 **MT107-304**'s may be connected to the Engine. Each card is connected with the Engine via specially provided, high bandwidth cables.

The output signals are driven by high speed, fiber optic transmitters. Each transmitter is designed to drive any of four popular fiber sizes.

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

TECHNICAL SPECIFICATIONS 3

FEATURES/DESCRIPTION	MT107-304
GENERAL	
Outputs	8
Output Connectors	8 ST Fiber Optic Transmitter
Compatibility	
Signal types	Keyboard and Mouse Serial Data
Signal resolution	5Mbaud

Table 1. **MT107-304** General

MECHANICAL	MT107-304
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

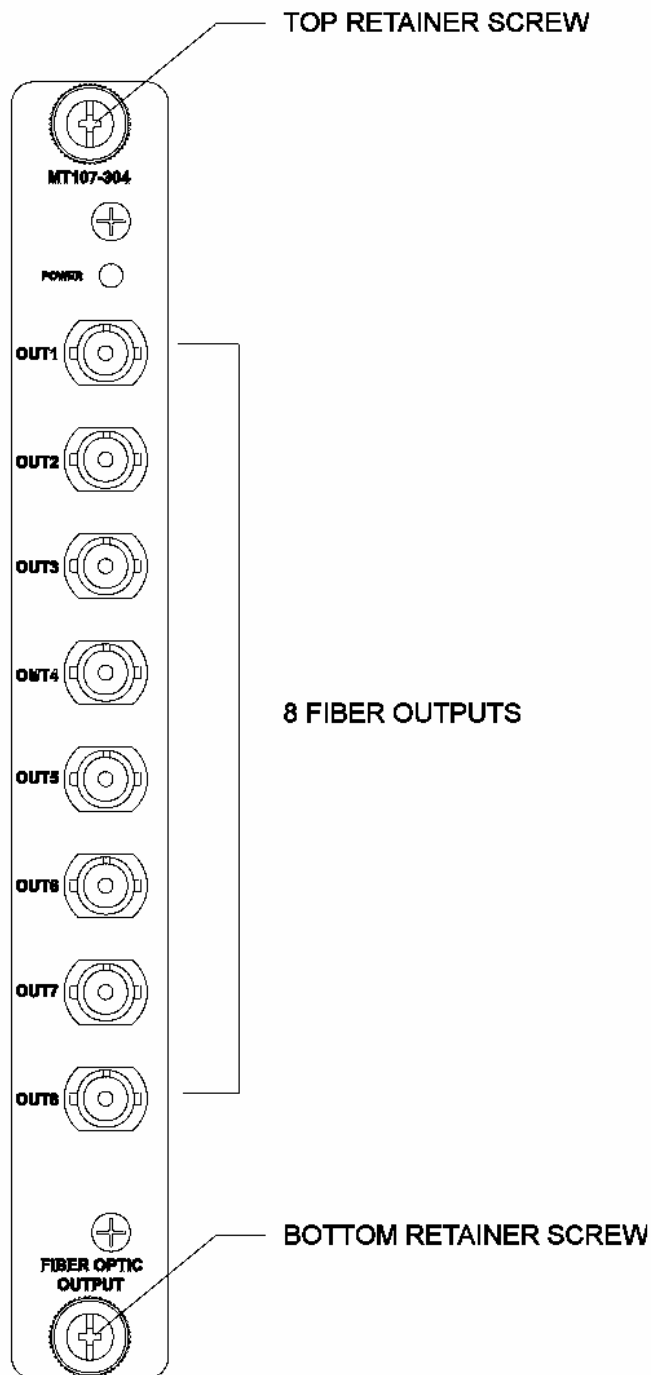
Table 2. **MT107-304** Mechanical

ELECTRICAL	MT107-304
Output	
Fiber Optic Transmitter	
Compatible Fibers	62.5/125um
Input	
Input from Matrix Engine	TTL Levels
Maximum Rate	5MBaud (5mb/s)

Table 3. **MT107-304** Electrical

PRODUCT DESCRIPTION

4



4

APPLICATION DIAGRAM 5

DIAGRAM 1: TYPICAL CONFIGURATION

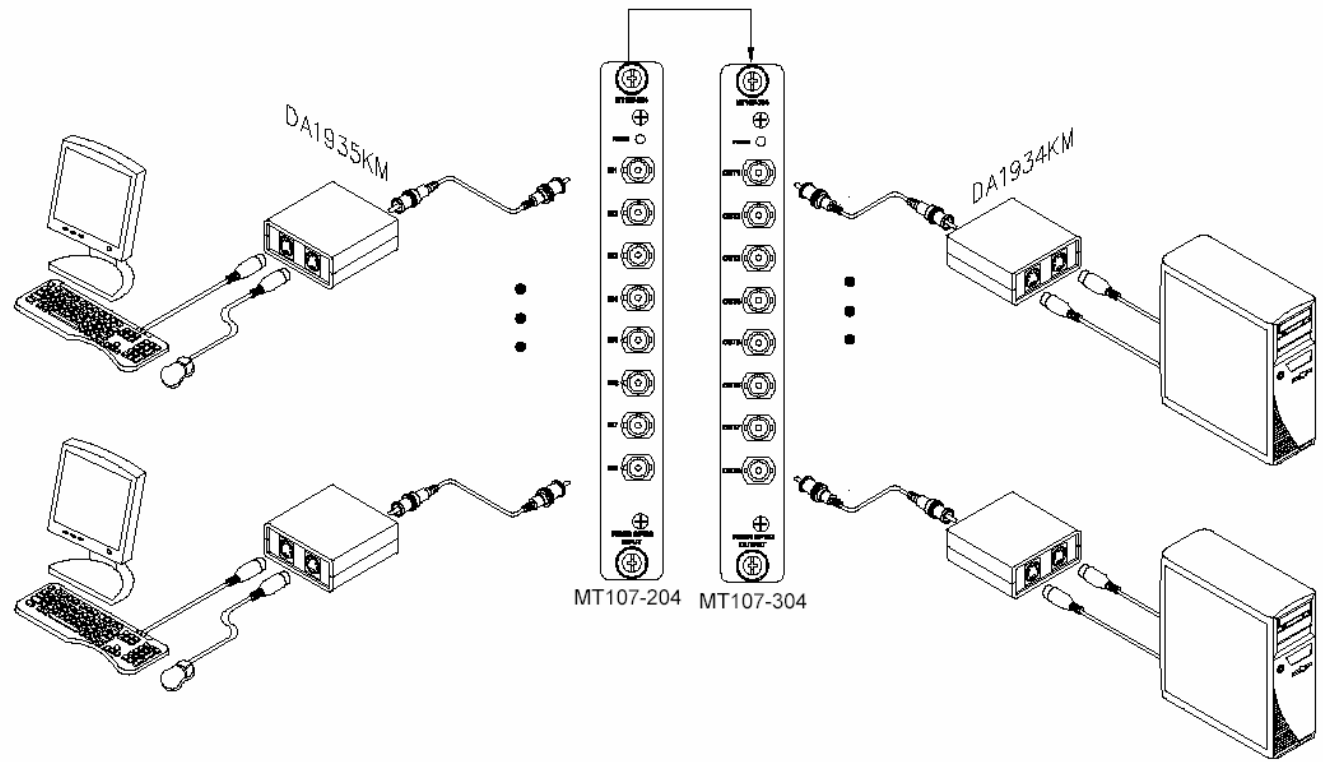
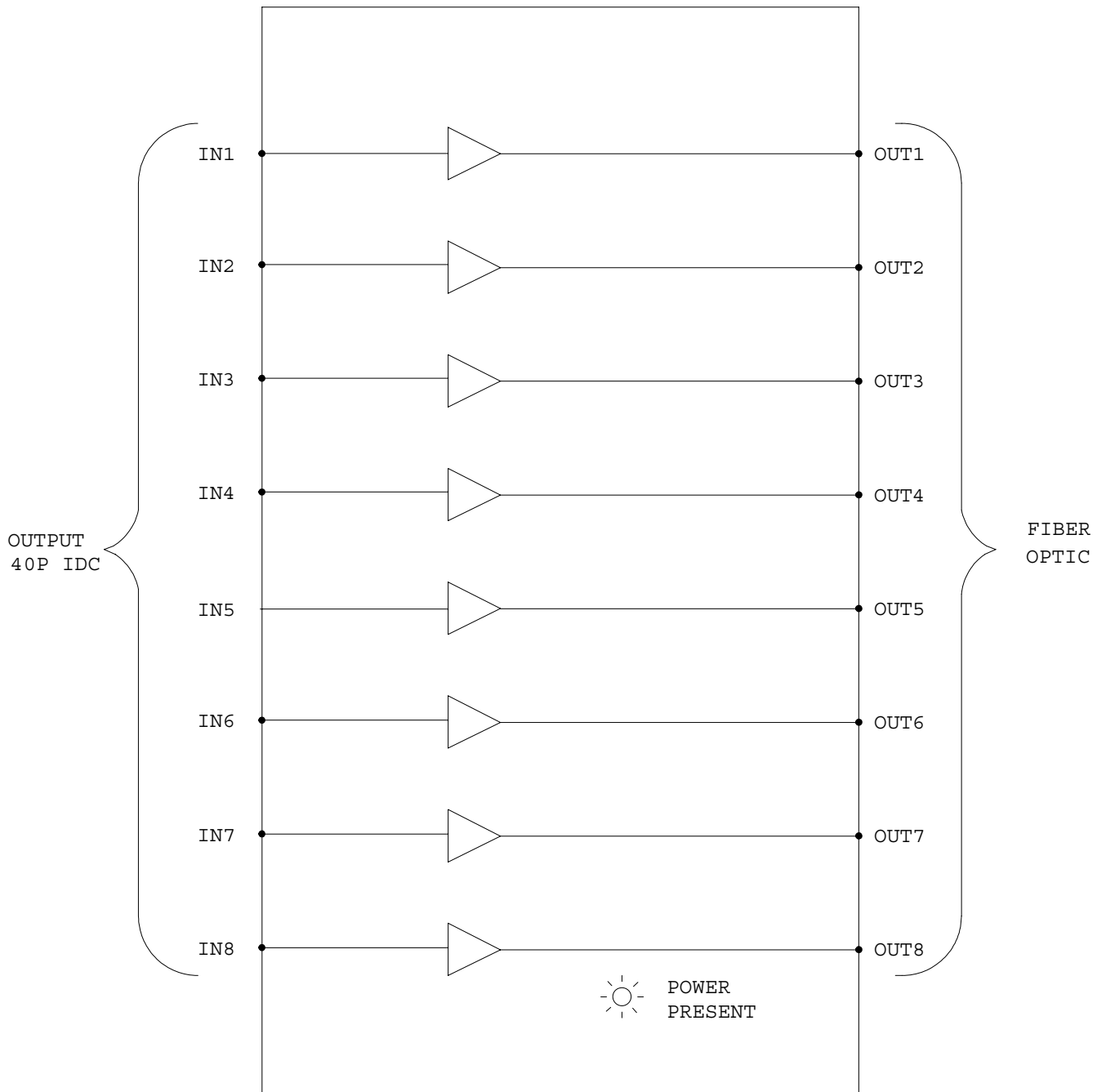


DIAGRAM 2 INTERNAL VIEW

MT107-304, 8 FIBER OPTIC OUTPUTS



INSTALLING YOUR MT107-304 6

- Step 1.** Locate the Matrix Engine, **MT107-104** or **MT107-100**, currently installed in the Multi-Tasker™. Ensure there are enough empty slots in the enclosure to allow for the one or more **MT107-304**'s to be installed.
- Step 2.** Route the ribbon cables through the notch in the add-on boards and connect to the Engine base assembly using the special high bandwidth cables provided. Make sure that the cable connector is secured in the socket of the input connector card.
- Step 3.** Carefully, slide the **MT107-304** into a slot in the Multi-Tasker™ Enclosure.
- Step 4.** Secure each card by tightening the retainer screws at the top and bottom of each card.
- Step 5.** Connect the output of the **DA1935KM** transmitter to one of the inputs on the **MT107-204**.
- Step 6.** Connect the output of the **MT107-304** to one of the inputs on the **DA1934KM** Receiver.
- Step 7.** Using MTSetup or other RS-232 communication software, send commands to the Engine to connect the new output to the desired input.

OPERATION 7

7.1 RS-232 CONTROL

The **MT107-304** has many advanced remote control capabilities when used in the Multi-Tasker™ Enclosure as part of an **MT107-104** 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 **MT107-104** User's Guide for a full listing of commands available for the **MT107-304** as part of a Multi-Tasker™ Matrix Switcher.

TROUBLESHOOTING GUIDE 8

We have carefully tested and have found no problems in the supplied **MT107-304**. However, we would like to offer suggestions for the following:

8.1 NO OUTPUT

Cause 1: The source has a problem.

Solution: Check the source by connecting the keyboard and mouse directly to the computer and verifying they work correctly. If they are functioning, see Solution 2.

Solution 2: Verify the **MT107-204** is connected to the **MT107-100/104** and that the cable is in good condition. If there is no signal, 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 should be connected to Input 17 and the receiving cable should be connected to Output 1. See RS-232 accessible commands in Section 7 of the **MT107-100/104's** User Guide for command details.

If the devices still fail to function properly, 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 they are still not functioning, see Cause 5.

Cause 5: The transmitting or receiving device has a problem.

Solution: Make sure the receiving **DA1934KM** and Transmitting **DA1935KM** have power and are properly connected. If there is still no response, please call Altinex at (714) 990-2300.

ALTINEX POLICY

9

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

ALTINEX, INC

592 Apollo street

Brea, CA 92821 USA

TEL: 714 990-2300

TOLL FREE: 1-800-ALTINEX

WEB: www.altinex.com

E-MAIL: solutions@altinex.com