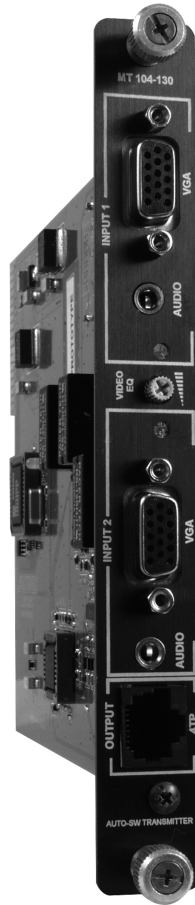


**Mult
Tasker®**



MANUAL PART NUMBER: 400-0425-003

MT104-130

**2-IN VIDEO + AUDIO, 1-OUT 4TP
AUTO-SWITCHER/TRANSMITTER CARD
USER'S GUIDE**

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PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **MT104-130**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **MT104-130** and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

1.1 GENERAL

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

1.2 HANDLING

- Handle the **MT104-130** carefully. Dropping or jarring can damage the card.
- The **MT104-130** contains components that are sensitive to electrostatic discharge (ESD). Always use ESD safety precautions when touching the card.

1.3 INSTALLATION

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the **MT104-130** in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Do not pull any cables that are attached to the **MT104-130**.
- Insert the card carefully into the slots of the MultiTasker without bending any edges.

1.4 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.

1.5 FCC 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 MT104-130

2

MT104-130

2-In Video + Audio, 1-Out 4TP Auto-Switcher/Transmitter

The **MT104-130** is a 2-In Video + Audio, 1-Out 4TP Auto-Switcher/Transmitter. It is designed to switch between two video + audio sources. The selected source is converted and transmitted to ALTINEX's Twisted Pair standard. The **MT104-130** is designed for use with an equivalent ALTINEX Twisted Pair Receiver, such as the TP115-111 or DA1931CT.

The **MT104-130** may be operated manually or using the automatic switching feature. In auto-mode, Input 2 is the default selection with no signals present. The **MT104-130** automatically switches to Input 1 when a signal is detected on Input 1. In manual mode, the input is selected using commands sent using RS-232 communication or via preprogrammed buttons on the MultiTasker front panel

The **MT104-130** offers the ability to transmit the audio input signal in either mono or stereo format. The stereo mode should be used for ALTINEX TP receivers such as the DA1931CT. Mono mode should be used with TP receivers like the TP115-111.

The latest generation of Twisted Pair devices uses an innovative, patented technology* developed by ALTINEX. The new signal processing technology allows transmitting and receiving fully equalized computer video signals, stereo, and audio signals over long distances. The maximum distance at full UXGA resolution is 400 ft (122 m) between devices and may reach up to 750 ft (230 m) at VGA resolution.

* US Patent 7,065,190

TECHNICAL SPECIFICATIONS

3

Specifications are subject to change. See www.altinex.com for up-to-date information.

FEATURES/DESCRIPTION	MT104-130
Inputs	
Video	15-pin HD female (2)
Audio	3.5 mm female (2)
Output	
CAT-5/6 Twisted Pair	RJ-45 female (1)
Power	DC Power Jack

Table 1. **MT104-130** General

MECHANICAL	MT104-130
Enclosure Slots	One
Weight (pounds)	0.5 lb (0.23 kg)
T° Operating	10°C-35°C
T° Maximum	50°C
Humidity	90% non-condensing
MTBF (calculations)	40,000 hrs (min.)

Table 2. **MT104-130** Mechanical

ELECTRICAL	MT104-130
Video Input Signal	
Video Signal	1.5 Vp-p max.
Video Impedance	75 ohms
SYNC Signal	TTL (+/-)
SYNC Impedance	10 kohms
Audio Input Signal	
Impedance	30 kohms
Level	0.9 Vp-p max.
Twisted Pair Output	
CAT-5/6 Twisted Pair	Video/Sync/Audio Signals ALTINEX Standard
Video Resolution	VGA through UXGA 480p to 1080i
Power (from enclosure)	
+6V	0.23 A (1.4 W)
-6V	0.18 A (1.1 W)
+13V	0.05 A (0.7 W)
Total Power Consumption	3.2 W max.

Table 3. **MT104-130** Electrical

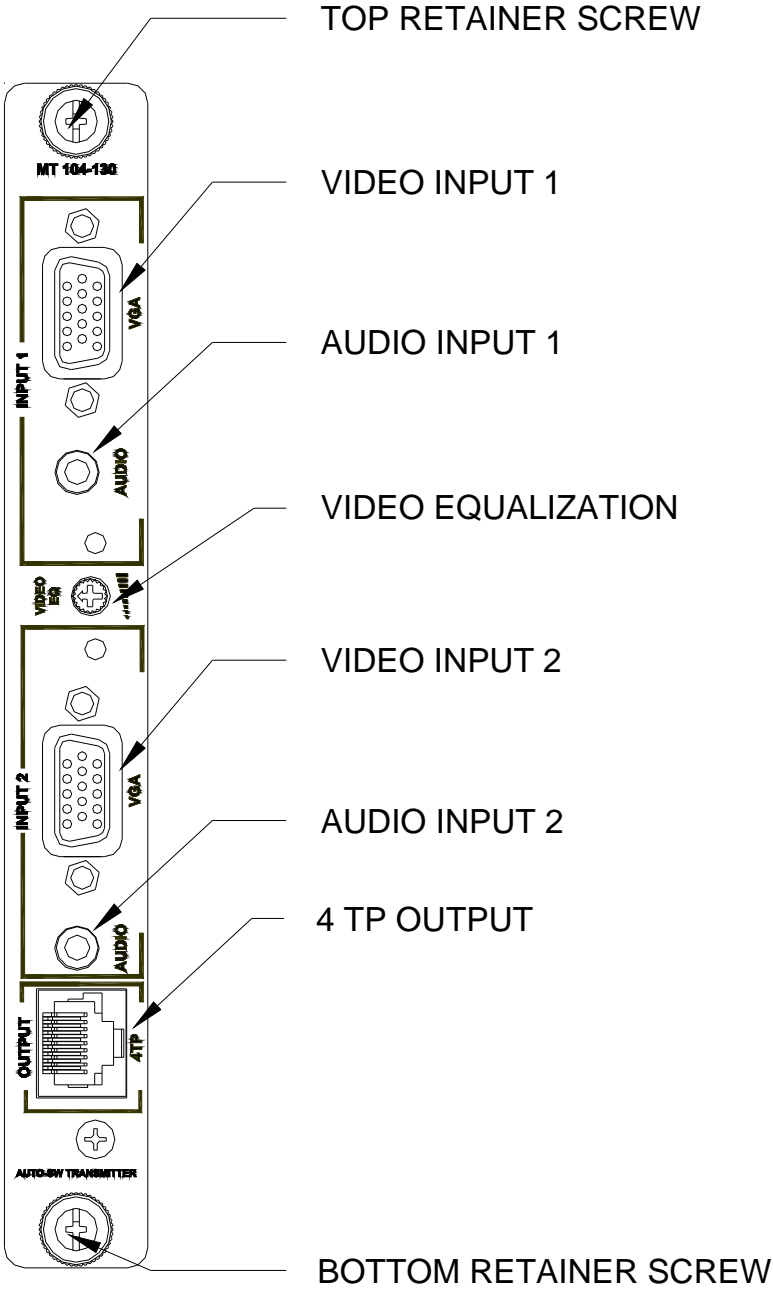


DIAGRAM 1: TYPICAL SETUP

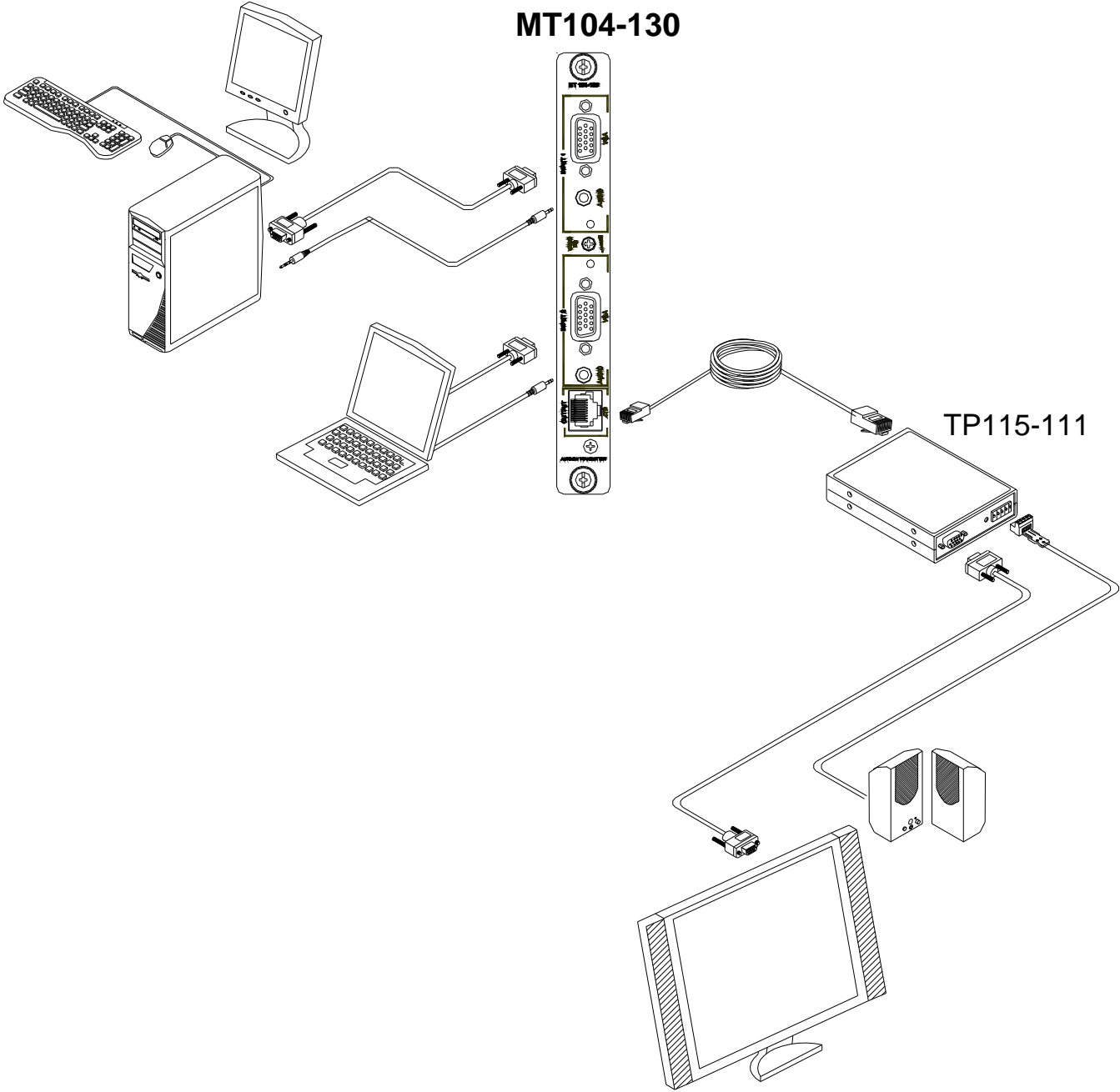
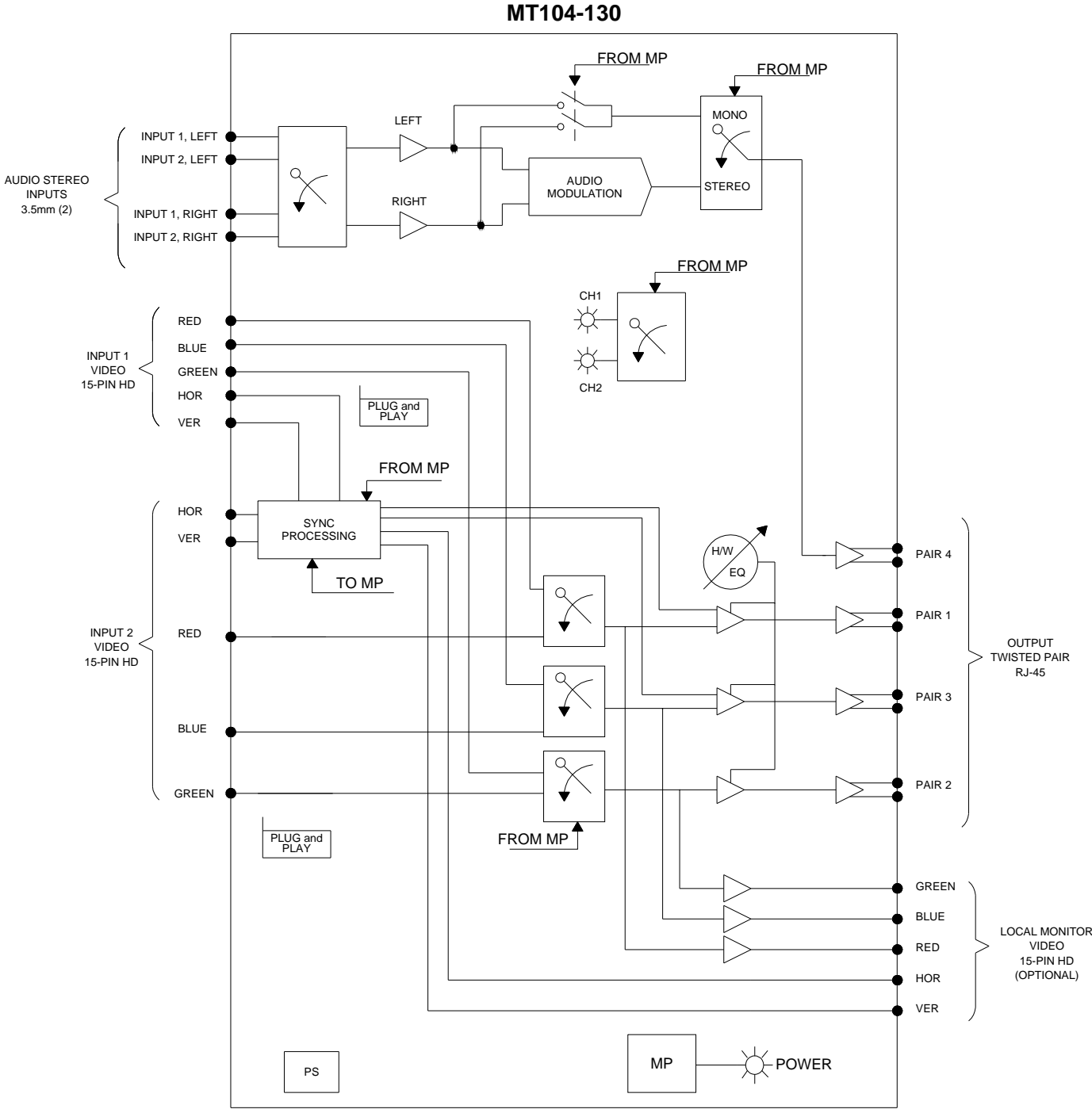


DIAGRAM 2: INTERNAL VIEW



INSTALLING YOUR MT104-130 6

- Step 1.** Turn off power to the MultiTasker enclosure and disconnect the input AC power cord.
- Step 2.** Slide the **MT104-130** into an available slot in the MultiTasker enclosure in order to connect it to the bus. Make sure that the **MT104-130** card fits into place.
- Step 3.** Starting from the left, identify the slot number of the **MT104-130** in the enclosure, and note that it is for RS-232 control.
- Step 4.** Restore power to the MultiTasker enclosure.
- NOTE: Input 2 is the default if there is no signal on Input 1 and the switch control is set to automatic.
- Step 5.** Connect a computer video and audio source to Input 1. If a properly formatted input signal is on Input 1, the switcher will switch to Input 1 automatically, and the Input 1 LED will turn on.
- Step 6.** Connect a computer video and audio source to Input 2. If there is a properly formatted input signal on Input 1, the switcher will remain on Input 1.
- Step 7.** Connect the 4TP Main Output to the input of the Twisted Pair receiver.
- NOTE: Connect the Twisted Pair receiver per its instructions.
- Step 8.** The **MT104-130** is now ready for operation. Video equalization is provided to fine-tune the displayed image on the remote display. The equalization adjustments on the **MT104-130** and Twisted Pair receiver work together. Typically, for short cable runs the equalization will be set to near minimum. Cable lengths up to 400 ft (122 m) will require near maximum equalization on both units.

OPERATION 7

7.1 RS-232 CONTROL

The **MT104-130** has many advanced remote-control capabilities accessible through standard RS-232 communication. Control may be accomplished through a computer control system or any other device capable of sending RS-232 communication.

7.1.1 RS-232 INTERFACE

The control commands for the **MT104-130** are in a simple ASCII character format.

1. **Square brackets “[]” are part of the command.**
2. **Use uppercase letters for all commands.**
3. **Spaces are not legal characters.**

The cards in a MultiTasker system are capable of performing various functions, as well as providing feedback to the user or control system. Commands instruct a card to perform specific actions or request information about the status of the card. Some commands do both simultaneously.

A command that instructs the card only to perform an action will generate feedback of “[]”. The open bracket immediately followed by a closed bracket indicates the card received a valid command. If the command requested information from the card, the feedback generated by the card is the acknowledgement of having received a valid command. Invalid commands generate feedback of “[ERR001]”.

After processing a command, an “OK” or “[ERR001]” will be returned as feedback if “F” is included at the end of a command string.

Commands ending in “S” will be saved into memory. Commands not ending in “S” will still be executed, but will not be restored when the system is reset or powered off, then on.

7.2 DESCRIPTION OF COMMANDS

Each command consists of three parts: Function, Card ID, and Unit ID.

[Function , Card ID , Unit ID]

Example: [VERC3U2]

VER = Function

C3 = Card ID or Group ID

U2 = Unit ID (optional for Unit ID 0)

For Function, see a detailed explanation under each command description.

The card ID is a unique identifier. It is equal to the enclosure slot number, or it may be an assigned value. As the slot number, the value can range from 1-4 up to 1-20 depending on the enclosure. If the value is assigned, the ID may be a maximum of 99. Card ID 0 (C0) is used for the controller and cannot be reassigned.

The group ID is a number representing a group of cards defined with the [WR] command. When using the group ID, all cards in the group will perform the given instruction.

NOTE: In this manual, cards will be referenced by their ID (C1, C2...C99). Typically, the ID number will be equivalent to the slot number. Groups will be referenced by their ID (G1-G8).

Changing the position of a card will significantly affect the commands recorded on software definitions or third-party control systems.

The unit ID has a value from 0 to 9. Unit ID 0 should be used for single unit operation. If the unit ID is set to zero, each command may be used without Ui. Use the command [SETU0], as explained in the MT100-100 User's Guide.

Example:

[VERC3]: For Unit ID Zero

[VERC3Ui]: For Unit ID other than Zero

[VERC3]: Equivalent to [VERC3U0]

BASIC COMMANDS

1. [VER]

This command displays the firmware version and model number.

Command Format: [VERCn]

Cn = Card ID (n = slot # from 1 to max slots)

Example:

An **MT104-130** card is in slot 4. Send the command [VERC4], and the MultiTasker will return the following feedback:

[MT104-130 690-0222-001 C04]

MT104-130 = Model Number

690-0222-001 = Firmware version

C04 = Card ID/slot number

2. [C]

This command displays the status of the card.

Command Format: [Cn]

Cn = Card ID (n = # from 1 to max slots)

Example:

There is an **MT104-130** card in slot 4. Sending the command [C4] to the MultiTasker will yield the following feedback:

AutoMode ON

In2

AudioMode Mono

In this case, the card is set for automatic switching. Input 2 is currently the active path and the audio output is mono.

If there is no card in slot 4, sending the [C4] command will not return any feedback.

3. [CnS]

This command saves the card settings and displays the status. After the system is reset or powered on, the saved settings are restored.

Cn = Card ID

S = Save configuration

Example:

Save the status by sending the command [C4S]. The feedback returned will be similar to the following:

```
AutoMode ON
In2
AudioMode Mono
SAVED
```

4. [...S] - SAVE

This command will save the configuration command being sent in memory. When sending the command [AUTO=0C4S], after reset or power-up, C4 will be in manual mode.

5. [CLR]

This command clears the card settings and returns the card to its factory default values. The defaults settings are auto-mode off, audio mode to stereo, and Input 1 selected.

Command Format: [CLRCn]

Cn = Card ID (n = slot # from 1 to max slots)

Example:

In order to clear the card in slot 4, send the command [CLRC4].

6. [TEST]

This command performs a series of tests on the internal memory and displays a pass message if successful. Otherwise, failures are indicated.

Command Format: [TESTCn]

Cn = Card ID (n = slot # from 1 to max slots)

Upon completion, the system will display the results. This feedback will be similar to the following:

```
MEMORY IC TEST RESULTS:
MEMORY IC PASS
```

7. [HELP]

This command displays information available for the MultiTasker interface commands.

Command Format: [HELPCn]

Cn = Card ID (n = # from 1 to max slots)

Example:

In order to display the RS-232 commands available for the **MT104-130** card in slot 4, send the command [HELPC4]. The commands along with a brief description will be displayed in the Terminal Window.

FEEDBACK COMMANDS

The next several commands are a function of both the card and the front panel and are only available with MultiTasker Front Panel systems that have the following firmware:

690-0122-015	= Version 015 or later.
690-0123-004	= Version 004 or later.
690-0124-018	= Version 018 or later.

Send the command [VER] to the system and the feedback will include the following:

```
690-0122-015 690-0123-004 690-0124-018
```

Check the last three digits against the numbers above to determine if the option is available.

8. [FBD]

This command turns feedback delay on or off. It is necessary when installing some newer cards in older systems. If the system does not receive all of the feedback from the card, the card may be communicating too fast. This command will slow down the card's communication rate.

Command Format: [FBDm]

m = Delay (0= no delay, 1= delay 100mS)

Example:

The command [HELPC4] is sent to the card in slot 4. Some of the HELP file is displayed on the screen, but most is missing. Send the command [FBD1] to slow down the rate at which the card sends feedback to the system.

9. [?]

This command displays general information about the MultiTasker and cards installed in the unit.

Command Format: [?Ui]

Ui = Unit ID (i = from 0 to 9)

Example:

A MultiTasker with unit ID 1 has a front panel with part number MT101-101 and contains an MT103-122, MT103-123, and MT104-130. Send the command [?U1] and receive the following feedback:

```
[(MT101-101U1)(MT103-122C01)
(MT103-123C02)(MT104-130C04)]
```

MT101-101U1 = Panel Number and Unit ID
MT103-122C01 = An MT103-122 is in slot 1
MT103-123C02 = An MT103-123 is in slot 2
MT104-130C04 = An MT104-130 is in slot 4

10. [?C]

This command displays general information about the card and its status.

Command Format: [?Cn]

Cn = Card ID (n = # from 1 to max slots)

Example:

The **MT104-130** in slot 4 has Input 1 selected. Send the command [?C4] and receive feedback status similar to the following.

```
[(MT104-130C04) (VR690-0222-001C04)
(ON2C04) (AU0C04) (AM0C04)]
```

All feedback is enclosed in square brackets. Each data field in the status is in parentheses. The first two characters identify the status type and the last three are the card's ID.

MT104-130 = Card model number
VR690-0222-001 = Firmware version
ON2 = Input 2 is selected
AU0 = Auto-switch is off
AM1 = Audio output is stereo

The on/off status line indicates which input is connected to the output port. The number is either a 1 or 2.

The AU status (auto-switch) indicates whether auto-switching is enabled or not. A "1" indicates on and a "0" shows off.

The AM status (audio mode) indicates whether the audio output is set to "0" for mono mode or "1" stereo.

11. [STA1]

This command enables automatic feedback from the front panel. The command affects any card with auto-feedback capability, not just the **MT104-130**. The power on default or reset is STA0, off. For more details, see the [?Cn] command definition.

Command Format: [STA1]

Feedback Prefix Definitions:

MT Card model number
VR Firmware revision
ON Output enabled
AU Auto-switch on/off
AM Audio mode

Example:

Command = [ON1C4]
Feedback = (ON1C04)
ON = Input enabled
1 = Input 1 is selected
C04 = Card ID

12. [STA0]

This command disables automatic feedback from the card and front panel. The command affects all cards with auto-feedback capability, not just the **MT104-130**. The default at power on or reset is STA0, OFF.

Command Format: [STA0]

CARD CONTROL

13. [ON]

This command selects the input to be active regardless of whether a signal is present or not. In order for this command to work, the **MT104-130** must have auto-switching disabled.

Command Format: [ONmCn]

m = Input No. (m = 1 or 2)

Cn = Card ID (n = slot # from 1 to max slots)

Example:

In order to switch Input 1 to the output, send the command [ON1C4].

14. [AUTO]

This command is used to enable or disable the auto-switching feature. In auto-switch mode, the default input is Input 2 if no signals are present. However, if there is a signal on Input 1, the signal on Input 1 will be switched to the output.

Command Format: [AUTOxCn]

x = Mode (0 = Manual, 1 = Auto)

Cn = Card ID (n = # from 1 to max slots)

Example:

Send the command [AUTO1C4] to place the **MT104-130** in slot 4 in auto-switch mode.

15. [AMODE]

This command changes the audio output between stereo and mono. Stereo mode should be used for ALTINEX TP receivers such as the DA1931CT and mono mode should be used with TP receivers like the TP115-111.

Command Format: [AMODEmCn]

m = Mode (1 = stereo, 0 = mono)

Cn = Card ID (n = slot # from 1 to max slots)

Example:

Set the **MT104-130** card in slot 4 to stereo mode by sending the command [AMODE1C4].

ID COMMANDS

The default card ID is the same as the card slot number. The next several commands allow the user to change the card ID to a value other than the slot number. Once the ID is changed, moving the card to another slot will not change the card ID. If a card in slot 4 is set to ID 1, then moved to slot 10, its ID will remain 1. The [RSI] command forces each installed card to take its slot number as its ID number, regardless of the slot in which it is installed.

Some cards require more than one slot in the MultiTasker system. As an example, some matrix switcher cards require 4 slots. If 5 of these cards are installed, they would be numbered C4, C8, C12, C16, and C20. Changing the ID allows the user to define the cards as C1, C2, C3, C4, and C5.

Another use for changing the card ID is to be able to use multiple systems without having to set each unit to a different unit ID. All systems may be left as unit ID 0 for ease of programming. The cards in the first unit may be numbered 1-10 and in the second unit 11-20.

The ID commands work with all MultiTasker systems. However, front panels that have firmware releases prior to the following will not be able to address card IDs greater than the number of slots in the system:

690-0122-019 = Version 019 or later.

690-0123-005 = Version 005 or later.

690-0124-019 = Version 019 or later.

Send the command [VER] to the system and the feedback will include the following:

690-0122-019 690-0123-005 690-0124-019

Check the last three digits against the numbers above to determine if the card ID commands can address all 99 card IDs.

16. [RSI]

This command resets the card IDs in the system. After sending this command, each card ID in the system will match the slot number of the card. If the card is moved to another slot, its ID number will be the new slot number.

Command Format: [RSI]

Example:

Send the command [RSI] to the system with Unit ID 0. The card in slot 1 will have ID 1, the card in slot 2 will have ID 2, and so on. If the card in slot 1 is then moved to slot 4, the card ID will then be 4.

17. [SIDn]

This command sets all the cards installed in the MultiTasker system to the same card ID. After sending this command, all cards will be addressed with the same ID. Use caution when sending this command to a system with multiple board types.

Command Format: [SIDn]

n = Card ID (n = # from 1 to 99)

Example:

Send the command [SID1] to the system. All the cards in the system now have ID 1. Any commands that are sent to card ID 1 will be received and executed by each card.

18. [SIDnCi]

This command sets the card ID of a single card to a number from 1 to 99.

Command Format: [SIDnCi]

n = Card ID (n = # from 1 to 99)

Ci = Slot Number (i = # from 1 to max slots)

Example:

Send the command [SID50C10] to set the ID of the card in slot 10 to an ID of 50.

19. [SID+n]

This command sets the card ID of all cards in a system to their slot number plus the offset value.

Command Format: [SID+n]

n = Offset amount (n = # from 0 to 99)

The maximum card ID is 99, so subtract the highest slot number from 99 to find the maximum offset. For example, in an 8-slot enclosure, the maximum offset would be 91. The slot number (8) plus the offset (91) equals 99.

Example:

There are two 20-slot enclosures to be connected together during normal operation. The first unit will use the default IDs where the card ID is equal to the slot number. The second unit will have the same unit ID, but each card ID will be offset by 20.

Connect the computer to the second unit only and send [SID+20] to set the ID of all the cards in the second enclosure to their slot number plus 20. Reconnect both units to the computer.

The cards in the first unit will be referenced as card IDs 1-20 and the cards in the second unit will be referenced by card IDs 21-40.

20. [RSN]

This command displays the slot number of a card with a specified ID number. If more than one card has the same ID, each slot number will be displayed.

Command Format: [RSNCi]

Ci = Card ID (i = # from 1 to 99)

Example:

The card in slot 4 takes up four slots in the enclosure. Its ID was set to 1 since it is the first card installed in the system, reading from left to right. Send the command [RSNC1] to find the slot number of this card. The system responds with the following feedback:

[4]

GROUP COMMANDS

The next few commands are group commands. The use of groups allows several cards with the same functions to be controlled simultaneously using a single command. Up to 8 groups (G1-G8) may be defined in a MultiTasker system. These commands apply to all cards, not only the **MT104-130**.

21. [WR]

This command adds cards to a group allowing all the group members to be controlled simultaneously with the same commands. Each MultiTasker unit may define a maximum of eight groups.

In MultiTasker systems with audio and video cards, the groups are typically as follows:

Group 1 = Video Cards

Group 2 = Audio Cards

Group 3 = Video and Audio Cards

Command Format: [WRC_{n1}C_{n2}...G_k]

C_n = Card ID (n = slot # from 1 to max slots)

G_k = Group ID (k = # from 1-8)

Example:

Add C2, C4, and C6 to G5 by sending the command [WRC2C4C6G5]. After executing this command, C2, C4, and C6 will be G5. The system will return the following feedback:

[G5=C2C4C6]

Now when a command is sent to G5, each board in G5 will execute the same command.

22. [RMC]

This command may be used to remove one or more group members from a group. Reset the system after using this command for all changes to take effect.

Command Format: [RMC_{n1}C_{n2}...G_k]

C_n = Card ID (n = # from 1 to max slots)

G_k = Group ID (k = # from 1-8)

Example:

G5 consists of the C2, C4, and C6. Remove only C4 and C6 from the group by sending the command [RMC4C6G5]. The system will return the following feedback:

[G5=C2]

23. [RMG]

This command may be used to delete an entire group, or all groups.

REMOVE A GROUP

Remove all the members from the group, effectively deleting the group.

Command Format: [RMG_k]

G_k = Group ID (k = # from 1-8)

Example:

G5 consists of the C2, C4, and C6. Remove all cards from the group by sending the command [RMG5]. The system will return the following feedback:

[G5=0]

REMOVE ALL GROUPS

Remove all the members from every group, effectively deleting all groups.

Command Format: [RMG*]

Example:

G5 consists of C2, C4, and C6. G2 consists of C1, C2, C3, C4, and C5. Delete all the groups by sending the command [RMG*]. The system will return the following feedback:

G1-G8: EMPTY

24. [RD]

This command reads and then displays the members in a group.

Command Format: [RDGk]

Gk = Group ID (k = # from 1-8)

Example:

C2, C4, and C6 make up G5. Read the member data for G5 by sending the command [RDG5]. The system will return feedback as follows:

[G5=C2C4C6]

The feedback shows G5 and then the cards that make up G5. In this case, G5 includes C2, C4, and C6.

7.3 SUMMARY OF COMMANDS

Basic Commands

- 1) [VER] Display firmware version
- 2) [C] Display card status
- 3) [CnS] Save card settings
- 4) [...S] Save command setting
- 5) [CLR] Reset card to default settings
- 6) [TEST] Test internal memory ICs
- 7) [HELP] Display available commands

Feedback Commands

- 8) [FBD] Enable/disable feedback delay
- 9) [?] Display system cards
- 10) [?C] Display card information
- 11) [STA1] Enable auto feedback
- 12) [STA0] Disable auto feedback

Card Control

- 13) [ON] Select input
- 14) [AUTO] Enable/disable auto-switching
- 15) [AMODE] Select stereo or mono

ID Commands

- 16) [RSI] Reset Card IDs to defaults
- 17) [SIDn] Set all Card IDs
- 18) [SIDnCi] Set one Card ID
- 19) [SID+] Set all Card IDs to an offset
- 20) [RSN] Display card slot number

Group Commands

- 21) [WR] Add card(s) to a group
- 22) [RMC] Remove card(s) from group
- 23) [RMG] Delete group
- 24) [RD] Display group members

7.4 MENU MODE

Menu Mode commands allow virtually the same functionality as programming commands. Unlike the programming commands in the previous sections, menu commands prompt the user to select from a list of available options. The system then responds based upon selections made by the user.

The menu-driven commands are only available with MultiTasker systems that have the following front panel firmware:

690-0122-015 = Version 015 or later.
690-0123-004 = Version 004 or later.
690-0124-018 = Version 018 or later.

Send the command [VER] to the system and the feedback will include the following:

690-0122-015 690-0123-004 690-0124-018

Check the last three digits against the numbers above to determine if Menu Mode is available.

7.4.1 MENU COMMAND DEFINITIONS

Refer to section 7.2 for details on functions. Following is a cross-reference between menu mode and programming commands.

MENU	COMMAND
Auto Switch	[AUTO]
Input	[ON]
Audio Mode	[AMODE]
Save	[CnS]
Reset	[CLR]
Version	[VER]
Status	[C]
Help	[HELP]

7.4.2 USING MENU MODE

Do NOT enter any characters except those relating to the current menu or sub-menu. If you press the ENTER key after entering a letter or digit, the original list of systems will be displayed.

1. In order to enter Menu Mode, the system needs to be connected to a computer running RS-232 control software.
2. In the Terminal Window, press the ENTER key on the keyboard.
3. The system checks all MultiTaskers on the RS-232 bus and displays a list of available systems.

Example: 1: U1
 2: U2
 3: U3

4. Enter the ID number of the desired system. In the example above, enter a "1" for the MultiTasker with unit ID 1.

5. The system then interrogates all the cards available in its enclosure and displays a list of available cards.

Example: 01: MT103-122
 02: MT103-123
 04: MT104-130

6. Enter the 2-digit ID and a menu for the card will be displayed. In the example above, enter "04" for the **MT104-130**.
7. The system will prompt for selections specific to the selected card.
8. Read each menu carefully, and continue selecting keys as prompted for further functions. (Example prompt: "Key=")

7.4.3 MENU TYPES

1. MAIN MENU

The first menu displayed after selecting the card is the Main Menu. This menu provides access to the key functions related to the card. Press the key representing the menu item for access and a sub-menu will appear.

2. SUB-MENUS

Each menu item will display either a sub-menu, or a list of options. Press the key corresponding to the desired choice.

7.4.4 MT104-130 MENUS

Following are the menus available to the **MT104-130**. The first menu is the Main Menu only. The second listing is an expansion of the menu items available.

The expanded menu contains values that indicate the current setting or value of a parameter. The value is usually in parentheses, or otherwise indicated at the top of a sub-menu.

Some menu settings act as toggle features. For example, the auto-switch mode menu displays only one option. Pressing 1 will change the value displayed in parentheses and the menu option. In short, pressing 1 repeatedly will toggle auto-switch mode off and on.

MT104-130 MAIN MENU

- 1: AUTO SWITCH MODE (OFF)
- 2: INPUT 2
- 3: AUDIO MODE (MONO)
- 4: SAVE CONFIGURATION
- 5: RESET CONFIGURATION TO DEFAULT
- 6: VERSION
- 7: STATUS
- 8: HELP
- ESC: GO BACK

MT104-130 EXPANDED MENUS

- 1: AUTO SWITCH MODE (OFF)
AUTO SWITCH MODE (OFF)
 - 1: ONESC: GO BACK
- 2: INPUT 2
INPUT 2
 - 1: INPUT#1
 - 2: INPUT#2ESC: GO BACK
- 3: AUDIO MODE (MONO)
AUDIO MODE (MONO)
 - 1: STEREOESC: GO BACK
- 4: SAVE CONFIGURATION
SAVE CURRENT CONFIGURATION?
 - 1: YES
 - 2: NOESC: GO BACK
- 5: RESET CONFIGURATION TO DEFAULT
RESET CARD TO FACTORY DEFAULT?
 - 1: YES
 - 2: NOESC: GO BACK
- 6: VERSION
This selection displays the card firmware version and then redisplay the Main Menu. It is equivalent to the [VERCn] command.

7: STATUS

This selection displays the card status and then redisplay the Main Menu. It is equivalent to the [Cn] command.

8: HELP

*This selection displays a list of commands available for the **MT104-130** along with a brief description. It is equivalent to the [HELP] command.*

ESC

This selection returns you to the parent menu with the listing of all cards.

7.4.5 MENU MODE EXAMPLES

All Menu Mode examples assume an **MT104-130** is installed in slot 4 of unit ID 1.

NOTE: The communication software you use may echo each character as it is typed when entering numeric values (not selecting menu items). For example, entering a value of 03 may appear as 0033 on the screen.

1. Select Auto-Switching

Follow the keystrokes below to select auto-switch mode.

Enter	List available systems
1	Select unit ID 1
04	Select MT104-130 in slot 4
1	Select AUTO SWITCH MODE
1	Toggle mode from off to on
ESC	Return to the MAIN Menu

2. Select Stereo Mode

Starting from the **MT104-130's** Main Menu, set the audio output for stereo mode.

3	Select AUDIO MODE
1	Toggle mode from mono to stereo
ESC	Return to the MAIN Menu

3. Display Card Status

Starting from the **MT104-130's** Main Menu, follow the keystrokes below.

7	Display card status
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TROUBLESHOOTING GUIDE

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We have carefully tested and found no problems in the supplied **MT104-130** unit. However, we would like to offer the following suggestions:

8.1 LEDs ARE OFF

Cause 1: No power to the card.

Solution 1: Make sure the card is plugged all the way into the enclosure. If an LED is still not on, see Cause 2.

Cause 2: The card is not initialized.

Solution 1: Turn the system power off and then back on again. If one of the LEDs is still not on, please call ALTINEX at (714) 990-2300.

8.2 UNIT DOES NOT AUTO-SWITCH

Cause 1: The card is not in auto mode.

Solution: Set the card to auto-switch mode using the [AUTO] command from the previous section. If the card does not auto-switch, see Cause 2.

Cause 2: The signal is not active or is improperly formatted.

Solution 1: Remove the input signals from the switcher. If the Input 2 LED is off, call ALTINEX at (714) 990-2300. If the Input 2 LED is on, see Solution 2.

Solution 2: Connect a properly formatted computer video signal to Input 1. If the switcher does not switch to Input 1, see Solution 3.

Solution 3: Bypass the switcher and connect the output of the source directly to the display. If the display is good, then call ALTINEX at (714) 990-2300.

8.3 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 signal is bad or missing.

Solution 1: Make sure the switcher output is connected to the TP receiver. If there is still no display, see Solution 2.

Solution 2: Remove both inputs to the switcher and connect the active signal from the source to Input 2. If there is still no display, see Solution 3.

Solution 3: Bypass the switcher and connect the output of the source directly to the monitor. If the display is good, then call ALTINEX at (714) 990-2300. If there is still no display, see Cause 3.

Cause 3: The cable connections are wrong.

Solution: Make sure the cables are properly connected. Also, make sure that the continuity and wiring are good. If there is still no display present, see Cause 4.

Cause 4: The display has a problem.

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

ALTINEX POLICIES

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9.1 LIMITED WARRANTY/RETURN POLICIES

Please see the ALTINEX website at www.altinex.com for details on warranty and return policies.

9.2 CONTACT INFORMATION

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