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**TRITON TURBO XT**

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**BRIDGE BOX**  
**USERS MANUAL**

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# **WELCOME TO THE IBM CONNECTION**

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Congratulations, you have just expanded your computing power to include thousands of IBM compatible programs and hundreds of hardware add on items for your new Triton Turbo XT.

This IBM connection was designed to give you 100% TI 99/4A compatibility and 100% IBM compatibility. This connection, or Bridge Box, allows you to run all of your current TI 99/4A software and use all of its existing hardware. It also allows you to hook up the Triton Turbo XT to your 4A and use all of the software and hardware that is available for IBM PCs and XTs. So now you have the best of both worlds!

This manual will guide you through the simple hookup steps and explain how the 4A keyboard emulates an XT keyboard. You'll be up and running in minutes.

For information on using your new Triton Turbo XT please see the "Turbo XT User's Manual"

# PARTS LIST

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Your Triton Turbo XT comes with the following items, but before you hook it all up, please see the following four pages in this manual for proper hook up and proper dip switch settings (inside the Bridge Box).

- 1 - TRITON TURBO XT COMPUTER  
Contains a 4.7 / 8 MHz Motherboard with 256K of Ram, 1 Double-Sided Double-Density Disk Drive and controller, a CGA card (Color Graphics Adapter) and one Parallel Printer port.
- 1 - TRITON BRIDGE BOX  
Plugs into the side of your 99/4A (or existing stand alone peripherals) and it contains the switching circuits and the XT keyboard emulation software. Note: If you have a TI Peripheral Expansion Box, remove the side cover from the Bridge Box to plug in your Flex Cable Interface.
- 1 - SHORT 5 PIN DIN 99/4A VIDEO CABLE  
Plugs into the back of your 99/4A where your monitor or TV used to plug in and into the jack labeled **4A VIDEO** on the back of the Bridge box.
- 1 - LONG (6ft) 5 PIN DIN KEYBOARD CABLE  
Plugs into the back of the Triton Turbo XT and into the jack labeled **XT KEYBOARD** on the back of the Bridge Box. Note: This cable has two different 5 Pin Din plugs on it, one for the XT and one for the Bridge Box.
- 1 - LONG (6ft) RCA JACK XT VIDEO CABLE  
Plugs into the back of the CGA card in the XT and into the jack labeled **XT VIDEO** on the back of the Bridge Box.  
Note: The top RCA jack on the CGA card is for Monochrome (B&W), The lower RCA jack is for Color and the 9 pin D jack is for an RGB Monitor.
- 1 - 9 VOLT POWER SUPPLY  
Plugs into the jack labeled **POWER** on the back of the Bridge Box.

Your existing RF Modulator or Video Cable (to your monitor or TV) will plug into the jack labeled **TO MONITOR** on the back of the Bridge Box.

# **WELCOME TO THE IBM CONNECTION**

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This IBM connection was designed to give you 100% TI 99/4A compatibility and 100% IBM compatibility. This connection, or Bridge Box, allows you to run all of your current TI 99/4A software and use all of its existing hardware. It also allows you to hook up the Triton Turbo XT to your 4A and use all of the software and hardware that is available for IBM PCs and XTs. So now you have the best of both worlds!

This manual will guide you through the simple hookup steps and explain how the 4A keyboard emulates an XT keyboard. You'll be up and running in minutes.

For information on using your new Triton Turbo XT please see the "Turbo XT User's Manual"

# **INSTALLING THE BRIDGE BOX**

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The following steps will guide you through proper installation of your new Triton Turbo XT and Bridge Box.

1. Turn OFF ALL POWER.
3. If you have a TI Peripheral Expansion Box remove the side cover from the Bridge Box and SEE APPENDIX B for information on setting the CRU Base for the Bridge Box.
4. Plug the Bridge Box into the side of your 99/4A. It can be plugged in before or after any existing stand alone peripherals that you might have. I.e., Speech Synthesizer, Memory Expansion, etc.
5. If you have a TI Peripheral Expansion Box plug the Flex Cable Interface into the side of the Bridge Box or the last peripheral hooked into the side of the Bridge Box.
6. Unplug your monitor or RF modulator cable from the back of the 99/4A and plug it into the jack labeled TO MONITOR on the back of the Bridge Box.
7. Locate the short 5 pin din cable. A 5 pin din cable has the same style of ends on it as your monitor or RF modulator cable. Plug either end of this cable into the video jack on the back of your 99/4A. Plug the other end into the jack labeled 4A VIDEO on the back of the Bridge Box.
8. Locate the long (6ft) 5 pin din cable. One end of this cable plugs into the jack labeled XT KYBRD on the back of the Bridge Box. The other end plugs into the back of the Turbo XT. The jack for the Turbo XT is located in back, in the middle and towards the bottom, of the case. This is where a keyboard normally plugs in.

**NOTE:** The ends are different on this cable. One end has the pins configured the same as all the other 5 pin din cables. This is the end that plugs into the Turbo XT. The other end has the pins spread out a little more. This is the end that plugs into the back of the Bridge Box.

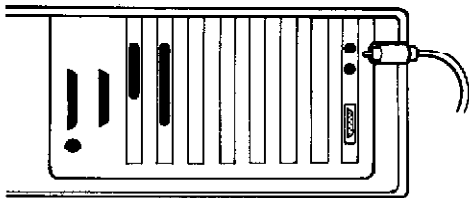
## **TI LOGO USERS PLEASE NOTE**

If you use TI Logo or TI Logo II please see Appendix B to change the default power up mode of the Bridge Box to 4A mode.

## **INSTALLING THE BRIDGE BOX Cont.**

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9. Locate the long (6ft) RCA cable, the only cable remaining. Plug either end of it into the jack labeled XT VIDEO on the back of the Bridge Box. Plug the other end of it into one of the RCA jacks on the back of the CGA Card (Color Graphics Adapter) depending on your monitor and usage of the XT as follows:



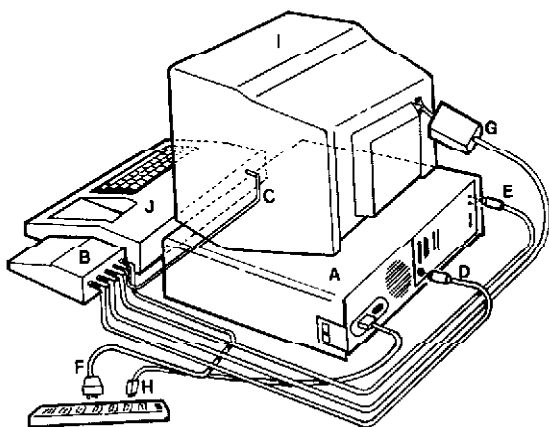
**TOP RCA JACK (Monochrome)** for Black and White, Monochrome or Color monitors. This is recommended for heavy use on the XT in 80 column Mode with text oriented programs, it will give you much better text displays on your composite monitor and/or TV set.

**LOWER RCA JACK (Color)** for Color monitors. We recommend using this jack **ONLY** for graphics and games. Word processing, spread sheets, data bases etc. are much more readable with the monochrome jack.

10. Plug in the 9 Volt Power Supply cable into the jack labeled **POWER** on the back of the Bridge Box and plug the power supply into your power source. We recommend using a power strip with multiple outlets and an ON/OFF switch. This allows you to easily turn on your whole system with a single switch.
11. You are now all set to start it up. If you are not plugged into a power strip, power up your system as follows:
1. All Peripherals including the Bridge Box.
  2. Your Monitor and Triton Turbo XT Personal Computer.
  3. Your 99/4A Computer.

## **INSTALLING THE BRIDGE BOX Cont.**

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### **BRIDGE BOX HOOK-UP**

- A Triton Turbo XT Personal Computer
- B Bridge Box
- C 2 Foot Video Cable
- D 6 Foot Keyboard Cable
- E 6 Foot Video Cable
- F 9V Power Supply
- G RF Modulator or Monitor Cable (not included)
- H A/C Power Cord
- I Television or Monitor (not included)
- J TI-99/4A Home Computer (not included)
- K Multiple Outlet Surge/Noise Protector (not included)



# TRITON TURBO XT BRIDGE BOX

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The Triton Turbo XT Bridge Box was designed to allow you to use your 4A monitor and keyboard for both your 99/4A and your new Triton Turbo XT. This Bridge Box has the following 5 lights on it.

4A XT ALT OPT1 OPT2
---------------------

These lights indicate the following:

**4A** - When this light is lit, you are in 4A mode. The keyboard is the standard 4A keyboard and the monitor will display 4A programs.

**XT** - When this light is lit, you are in XT mode. The 4A keyboard will emulate the IBM keyboard and the monitor will display XT programs.

**ALT** - This light is only used in XT mode. It is turned on and off by pressing **FCTN CTRL** in XT mode. When this light is lit, it indicates that the CTRL key has been changed into an XT ALT key.

**OPT1** - This light is only used in XT mode. It is turned on and off by pressing **FCTN SHIFT** in XT mode. When this light is lit, it indicates that the number keys have been changed into:

*Del Ins End PgUp Home PgDn Tab Scr1 Esc PtScr*

All of the other keys on the keyboard act normally.

**OPT2** - This light is only used in XT mode. It is turned on and off by pressing **FCTN ENTER** in XT mode. When this light is lit, it indicates that the number keys have been changed to the XT Function Keys:

*F1 F2 F3 F4 F5 F6 F7 F8 F9 F10*

All of the other keys on the keyboard have also been changed to their face characters (i.e. [ ] \_ ? ' " { | \ ` and the cursor keys instead of ABCDEFG etc.)

When the OPT1 and OPT2 lights are both lit, the number keys across the top of the 99/4A keyboard will emulate the XT keyboards 10 key pad. This was done to allow access to these keys since the 10 key pad on an XT keyboard returns different key codes than the 1-0 keys across the top of an XT keyboard.

# CHANGING MODES

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During power up on the 99/4A, the Triton Turbo XT Bridge Box checks two things. First, the position of the 5th dip switch for default power up mode (ON = XT mode and OFF = 4A mode). And second, is FCTN CTRL ENTER (mode change) held down? If it is, then power up in the non-default mode.

NOTE: The 5th dip switch is set to ON (default XT mode) by the factory.

## DEFAULT SWITCH SET TO XT MODE

---

### 4A TO XT MODE

1. Press FCTN = (Quit). The 99/4A will go through power up and automatically switch to XT mode.
2. If you are in TI-Basic or Extended Basic just type in CALL XT and press ENTER.

### XT TO 4A MODE

*(MAKE SURE TV SCREEN IS SET RIGHT)*

1. Press and hold down FCTN CTRL ENTER until the TI Title Screen disappears. This will switch modes and cause the 99/4A to go through power up. If you do not hold down FCTN CTRL ENTER long enough you will be placed back in XT mode, since the default switch is set to XT mode.

## DEFAULT SWITCH SET TO 4A MODE

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### 4A TO XT MODE

1. Press FCTN CTRL = (Quit), take your finger off the = key while you continue to hold down the FCTN and CTRL keys. Next, press down the ENTER key, hold it for about 1 second and then let up on the FCTN CTRL and ENTER keys. This allows the 4A to go through power up, at which time the Bridge Box sees that you are holding down FCTN CTRL ENTER so it changes to XT mode.

NOTE: IF you do not move your finger quickly enough from the = key to the ENTER key, or, if you do not hold down FCTN CTRL ENTER long enough, you will end up back in 4A mode because of the setting of the 5th dip switch.

2. If you are in TI-Basic or Extended Basic just type in CALL XT and press ENTER.

### XT TO 4A MODE

1. Press and release FCTN CTRL ENTER. The mode will switch and you will be presented with the 99/4A's TITLE SCREEN.

# THE KEYBOARDS

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## THE 4A KEYBOARD

Whenever the Bridge Box is in 4A mode (4A light lit) the keyboard works just like it always has in the past. In this mode, the Bridge Box is not doing anything with the keyboard or the 99/4A computer, so, it will not interfere with any of your existing software or hardware.

This mode also automatically turns off the ALT, OPT1 and OPT2 lights since they are only used in XT mode.

Remember: THE BRIDGE BOX IS NOT IN CONTROL OF THE KEYBOARD IN THIS MODE. To switch to XT mode from this mode you must either go into Basic or Extended Basic and type in CALL XT or press FCTN = (Quit) to switch modes.

## XT KEYBOARD EMULATION

Whenever the Bridge Box is in XT mode (XT light lit) the 99/4A keyboard emulates a standard XT keyboard. This is done through software and hardware control inside the Bridge Box and your 99/4A computer. In this mode the 48 key 99/4A keyboard with the help of OPT1, OPT2 and ALT modes emulates a 96 through 101 key XT keyboard.

The OPT1, OPT2 and ALT lights on the Bridge Box indicate which mode the 99/4A keyboard is in as follows:

### ALL LIGHTS OFF

Keyboard is the Standard Keyboard as described on page 9.

### ALT LIGHT ON - (Fctn Ctrl)

The CTRL key is changed to an XT ALT key.

### OPT1 LIGHT ON - (Fctn Shift)

Keyboard is in OPT1 mode, DELETE, INSERT etc. active, as described on page 10.

### OPT2 LIGHT ON - (Fctn Enter)

Keyboard is in OPT2 mode, F1 through F10 active, as described on page 11.

### OPT1 & OPT2 LIGHTS ON - (Fctn Shift Fctn Enter)

Keyboard is in OPT1 & OPT2 mode (10 key pad emulation) as described on page 13.

The following pages describe each of the keyboard modes and contain keyboard diagrams that indicate the active keys.

# THE STANDARD KEYBOARD

When the OPT1 and OPT2 lights are off in the XT mode, the keyboard is very close to a standard 99/4A keyboard. The only changes are a few of the FCTN keys at the top of the keyboard and the addition of the ATL key. This is the XT keyboard mode that you will be using the most.

DEL	INS	END	PG UP	HOME	PG DN	TAB	SCRL	ESC	BKSP	Fctn
!	@	#	\$	%	^	&	*	(	)	+
1	2	3	4	5	6	7	8	9	0	=
Q	W	E	R	T	Y	U	I	O	P	- /
A	S	D	F	G	H	J	K	L	:	ENT
SHIFT	Z	X	C	V	B	N	M	<	>	SHIFT
ALPHA LOCK	ALT CTRL									FCTN

STANDARD KEYBOARD

In this standard mode (OPT1 and OPT2 OFF), pressing an S gives you an S, P gives you a P, etc. Pressing FCTN E, S, D or X will give you the UP, LEFT, RIGHT and DOWN arrow cursor control keys, just like before. FCTN 1 gives you a DELETE, FCTN 2, an INSERT, FCTN 3 emulates the XT's END key, etc. This keyboard is VERY similar to the 99/4A keyboard layout that you are used to. All of the keys act like they do in 4A mode with the few exceptions of the FCTN keys at the top of the keyboard.

In this mode, and in all XT keyboard modes, pressing FCTN CTRL will toggle the CTRL key between an ALT key (ALT light lit) and a CTRL key. This allows you to access such keystrokes as ALT C or ALT / etc. ALT keystrokes are not used very often but they are required for some of the keyboard macro programs such as, Superkey, Prokey etc. They may also be used by a few of the XT word Processing programs.

## THE OPT1 KEYBOARD

The OPT1 keyboard is enabled by pressing FCTN SHIFT. When the OPT1 light is on and the OPT2 light is off, in the XT mode, the keyboard is still very close to a standard 99/4A keyboard. In this mode the number keys have been changed to their equivalent FCTN keys, i.e. 1 is now DELETE, 2 is INSERT etc.

DEL	INS	END	PG UP	HOME	PG DN	TAB	SCRL	ESC	PTSCR *	+ =
Q	W	E	R	T	Y	U	I	O	P	/ -
A	S	D	F	G	H	J	K	L	: ;	ENT
SHIFT	Z	X	C	V	B	N	M	< ,	> .	SHIFT
ALPHA LOCK	ALT CTRL									FCTN

OPT1 KEYBOARD

By changing the number keys into the DEL, INS, END etc. keys you now have access to keystrokes such as SHIFT DEL or CTRL DEL or ATL DEL etc. These keystrokes may be used in some of the XT Word Processing programs.

Two other changes are also made to the keyboard in the OPT1 mode. First, the /- key has been changed to -/. This allows you to access the - without having to press SHIFT first. This was done to give you access to CTRL - and ALT - which may be used by some of the keyboard macro programs such as Superkey and Prokey. Secondly, the 0 key has been changed into PTSCR \*. This is the XT's Print Screen \* (asterisk) key.

To use the Print Screen key, place the keyboard into OPT1 mode and press SHIFT 0. This is the same as SHIFT PRINT SCREEN on the XT keyboard and it will dump the entire TEXT contents of the screen to the default printer that is hooked up to your Turbo XT. Pressing CTRL 0 (CTRL PRINT SCREEN) will send ALL screen text that is displayed after pressing these keys to the printer until it is pressed again.

To turn off OPT1 mode simply press FCTN SHIFT again. Or, you can press FCTN SPACE which will turn off OPT1 and OPT2 modes.

## THE OPT2 KEYBOARD

The OPT2 keyboard is enabled by pressing FCTN ENTER. When the OPT2 light is on and the OPT1 light is off, in the XT mode, the keyboard is changed considerably. In this mode, the number keys have become the XT's F1 through F10 function keys. Also, the face values, what used to be FCTN keystrokes, are now active on the 4A keyboard without pressing FCTN first.

F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	GREY +
		↑	[	]		-	?	'	"	GREY -
	↓	↓								ENT
LEFT SHIFT	\	↓							RIGHT SHIFT	LEFT SHIFT
ALPHA LOCK	ALT CTRL								FCTN	

*OPT2 KEYBOARD*

This mode allows you access to F1 through F10, SHIFT F1 through SHIFT F10, CTRL F1 through CTRL F10 and ALT F1 through ALT F10. The F1 through F10 keys may be used by a wide variety of XT programs.

This mode also allows you direct access to such keys as ? [ ] { | and the arrow keys. These are the keys that require you to press FCTN first in the standard mode. For example, in the standard mode if you want a \ you press FCTN Z. In the OPT2 mode you only need to press Z. This allows keystrokes such as CTRL \ or ALT \ which, once again, are only used by a few of the keyboard macro programs so you will mainly be using F1 through F10 from this mode.

The OPT2 mode also includes the XT's grey + and grey - keys. These are the + and - on the XT's 10 key pad and they return a different keystroke value than the + and - at the top right of the standard keyboard. As before, these are only required for a few of the keyboard macro programs.

The last item in the OPT2 keyboard is the RIGHT SHIFT key (. period key). This was added for a few of the XT game programs such as pinball, which uses the LEFT and RIGHT XT shift keys for paddles. The LEFT SHIFT key is still the regular SHIFT key.

## THE OPT1 & OPT2 KEYBOARD

The OPT1 & OPT2 keyboard is enabled by pressing FCTN SHIFT FCTN ENTER to turn on both the OPT1 and the OPT2 lights. In this mode the number keys emulate the XT's ten key pad with its NUM LOCK on. The rest of the keyboard is like the standard keyboard.

DEL 1	↖ 2	PG DN 3	↕ 4	5	↘ 6	HOME 7	↗ 8	PG UP 9	INS 0	=
Q	W	E	R	T	Y	U	I	O	P	- /
A	S	D	F	G	H	J	K	L	:	ENT
SHIFT	Z	X	C	V	B	N	M	<	>	SHIFT
ALPHA LOCK	ALT CTRL								FCTN	

OPT1 AND OPT2 KEYBOARD  
(1-0 EMULATE 10 KEYPAD)

The OPT1 & OPT2 mode will not be used very often. It was added to allow access to the ten key pad keys on the XT keyboard. These keys return different keystroke codes than the 1 through 0 at the top of a standard XT keyboard.

They will mainly be used to access the XT's alternate character set. An XT contains 256 predefined characters with the characters above the lower case Z being mostly foreign characters (& & &), etc. and the border graphics characters (┌ ┐ └ ┘), etc.

To access these characters, most programs require you to use the following keystrokes. First, toggle the CTRL key to the ALT key by pressing FCTN CTRL (ATL, OPT1 and OPT2 lights on). Now, to access, say character 204 (┌), you press and hold down the ALT key, and then press 2 0 4, and then let up on the ALT key. This will place the ┌ character on your screen. This is true of ANY character value. For example, ALT 6 7 will give you a C or ALT 1 3, will give you a carriage return (ENTER), etc.

The XT's 10 key pad also doubles as the cursor keys and the Page Up, Page Down, Home, End, Delete and Insert keys when the XT's NUM LOCK is off or when it is on but you press SHIFT first. So, if you press SHIFT 1 in OPT1 & OPT2 mode you will get a DELETE just like an XT keyboard does.

## **ADDITIONAL KEYBOARD INFORMATION**

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The various XT keyboard modes are harder to describe than they are to use. After you have used them a few times, we believe that you will find them quite easy. And, you always have your Turbo XT Function Key Strip for a quick reference.

Here are a few last notes on the keyboards:

1. Use **FCTN CTRL SPACE** (alpha reset) in XT mode **IF**, and **ONLY IF**, the Alpha lock is down and the XT is putting lower case letters on the screen. **FCTN CTRL SPACE** executes a keyboard reset which turns off **ALT**, **OPT1** and **OPT2**. It also toggles the XT's internal **CAPS LOCK** condition. This is a minor problem with the various BIOS' available. Some BIOS' do not execute a keyboard reset after the memory check is complete. The memory check wipes out the **CAPS LOCK** condition. You can also make this same problem occur on an XT keyboard if you hold down the **CAPS LOCK** key during power up.
2. Turning on **OPT1** and **OPT2** (**FCTN SHIFT FCTN ENTER**) will send a **NUM LOCK** to the XT. Turning off either **OPT1** or **OPT2** or turning them both off (**FCTN SPACE**) will send a **NUM LOCK** release. This is only needed for some diagnostics and keyboard checking programs. 99% of the time you will not have to worry about it since the Bridge Box automatically sets and releases **NUM LOCK** for you as it is needed.
3. Some programs, such as Pinball, require you to use the right and left shift keys on the XT keyboard. Unfortunately, the right and left shift keys on the 99/4A keyboard are the same key. To get around this design problem, the Bridge Box will give you a right and a left shift key when the **OPT2** light is lit.

Left Shift is the standard shift key

Right Shift is the . (period) key

4. Turning off your Triton Turbo XT computer after you are in XT mode will cause the Bridge Box to switch back to 4A mode. If the default power up switch is set to XT mode the Bridge Box will then automatically switch back to XT mode.



## **GENERAL INFORMATION**

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1. The ONLY items shared between the 99/4A and the XT are the monitor and 4A keyboard.
2. Yes, an XT keyboard CAN BE added to the Triton Turbo XT at any time.
3. Yes, a TTL RGB monitor can be added to the Triton Turbo XT at any time. (Note: By adding a TTL RGB monitor and XT keyboard you will end up with a complete Turbo XT clone and the Bridge Box will no longer be needed.)
4. The Bridge Box was designed to allow for concurrent processing by the Turbo XT. For example, you can go into XT mode, start up a piece of software and then switch back to 4A mode and the XT will continue to run. This can NOT be done with 4A mode since the keyboard and 99/4A computer are dedicated to emulating the XT keyboard.
5. You can use a printer switch box to share printers and modems. In order to allow concurrent processing by the XT, the printers and modems were not automatically shared or switched by the Bridge Box. This way you can keep them hooked up to the XT, via your switch box, while you are in 4A mode.
6. The memory and disk drive in the XT is for the XT. The memory and disk drive(s) in your 4A system are for the 4A. The two units DO NOT share memory or disk drives. This is necessary to allow concurrent processing by the XT.

**APPENDIX A - TROUBLE SHOOTING****99/4A WILL NOT POWER UP****NO LIGHTS LIT ON THE BRIDGE BOX**

Check 9V power supply to Bridge Box. With your 99/4A TURNED OFF and the Bridge Box plugged into the side port with its 9V power supply turned on, you should have the 4A, ALT, OPT1 and OPT2 lights lit.

**XT LIGHT LIT**

The Bridge Box is in XT mode which SHUTS OFF the 99/4A video and leaves you with a blank screen until the XT boots up or until you press and hold FCTN CTRL ENTER to switch back to 4A mode.

**4A, ALT, OPT1, OPT2 LIGHTS LIT WITH 99/4A TURNED ON**

Check the CRU Base setting to make sure the Bridge Box is not conflicting with another of your peripherals. If it is not conflicting make sure the contacts on your TI Peripheral Expansion Box cards are CLEAN. (During testing we noticed that dirty Flex Cable connections and/or RS232 card connections could cause this situation).

**CAN NOT SWITCH BACK TO 4A MODE**

If you do not press and hold down FCTN CTRL ENTER to switch back to 4A mode, when the default power up dip switch is set to XT mode, you will end up right back in XT mode. Press and hold down FCTN CTRL ENTER (from XT mode) until the Title Screen disappears and you will be in 4A mode.

**MONITOR IS NOT VERY CLEAR IN XT MODE**

Try using the top RCA jack on the XT's CGA card for monochrome output (see page 6). We have found that this gave us the best image on both color TV's and Monitors. If you have an RF modulator hooked up to your TV, try using channel 4 instead of channel 3. We have found that this also helps sometimes (don't forget to change the channel switch on the RF modulator).

**LOWER CASE WITH ALPHA LOCK DOWN IN XT MODE****OR UPPER CASE WITH ALPHA LOCK UP IN XT MODE**

Press FCTN CTRL SPACE to reset the alpha lock and keyboard.

If you are having problems that are not covered in this manual and you need further assistance call 1-800-227-6900. We will be more than happy to help.

## **APPENDIX B - DIP SWITCH SETTINGS**

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There are five dip switches inside the Triton Bridge Box. These dip switches control the default power up mode (XT or 99/4A) and will control the Bridge Box activation in relation to your other peripherals.

### **CRU BASE SETTING**

These dip switches have been set at the factory to a default CRU base of 1900 and a default power up mode of XT. The CRU base determines where the Bridge Box memory resides in relation to the other peripherals you might have. The factory setting of 1900 should work fine for 99.9% of the 99/4A systems.

To quickly test this setting, simply plug the Triton Bridge Box into the side of your 99/4A or existing stand alone peripherals, i.e. Speech Synthesizer, Memory Expansion, etc. If you have a TI Peripheral Expansion Box, remove the side cover from the Bridge Box and plug in your flex cable. Next plug in the 9 Volt Power supply for the Bridge Box. At this time you do not need to hookup the other cables, LEAVE YOUR MONITOR OR TV PLUGGED INTO YOUR 99/4A.

Next, turn on the power to your peripherals, Bridge Box and 99/4A (in that order, unless they are all on one power switch). You should now see a plain black screen because of the default XT power up mode. Now press and hold down FCTN CTRL ENTER until you are past the TI Title screen and the 4A light on the Bridge Box comes on. At this time you should see the TI Menu screen or the 9900 Disk Controller Color Bar screen if you have a Corcomp disk controller without the MG prom upgrade for it. If this is true then the factory setting for CRU base 1900 is OK for your system. If it is not true, turn off the power and open up the Bridge Box so you can change the CRU Base. You might try a setting of 1800 or 1A00 instead (see the chart on the next page), and then retest the Bridge Box as outlined above.

### **DEFAULT POWER UP MODE XT/4A**

The Bridge Box has been set at the factory with a default power up mode of XT. This means that whenever you turn on your 99/4A or whenever you press FCTN QUIT the Bridge Box will automatically switch into XT mode. To switch back to 99/4A mode simply press and hold down FCTN CTRL ENTER until you are past the 99/4A Title Screen.

### **TI LOGO or TI LOGO II USERS**

Change the default power up mode to 4A by turning OFF (Open) dip switch number 5 (see chart next page). This will allow you to use the logo commands of SAVE and RECALL without ending up in XT mode.

# APPENDIX B - DIP SWITCH SETTINGS

CRU BASE	USE	DIP SWITCH NUMBER			
		1	2	3	4
1000	Ram Disk Card .....	off	off	off	off
1100	Disk Controller Card .....	off	off	off	on
1200	.....	off	off	on	off
1300	RS232/1 - RS232/2 - PIO/1 .	off	off	on	on
1400	.....	off	on	off	off
1500	RS232/3 - RS232/4 - PIO/2 .	off	on	off	on
1600	.....	off	on	on	off
1700	.....	off	on	on	on
1800	.....	on	off	off	off
1900	Bridge Box Factory Setting.	on	off	off	on
1A00	.....	on	off	on	off
1B00	.....	on	off	on	on
1C00	.....	on	on	off	off
1D00	Triple Tech Card .....	on	on	off	on
1E00	Foundation Memory Card ....	on	on	on	off
1F00	P-Code Card .....	on	on	on	on

## DEFAULT POWER UP MODE

Switch 5 off = Power up in 4a mode

Switch 5 on = Power up in XT mode

ON = Closed or On

OFF = Open or Off

# **WARRANTY**

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## **ONE YEAR LIMITED WARRANTY**

Triton Products Company warrants the TRITON TURBO XT Bridge Box against any defect in materials and workmanship for a period of one year from date of purchase.

This warranty does not cover any damage caused by accident, misuse, abuse or negligence such as failure to follow operating instructions.

In the event your TRITON TURBO XT Bridge Box and/or Personal Computer fail to give you satisfactory service within the warranty period, Triton Products Company will make arrangements for the repair of the Bridge Box and/or Personal Computer at NO CHARGE for replacement parts and/or labor.

## **RETURNS AND REPAIRS**

Please Call 1-800-227-6900 to obtain an RMA number and the proper shipping address.

Please DO NOT send any equipment back to us without first obtaining an RMA number.

# ADDENDUM

## DIP SWITCH SETTINGS

The Bridge Box Dip Switches are set at the factory for a CRU Base of 1900 and with the default power up mode of XT. Whenever you turn on your 4A, with these settings, the bridge box will automatically switch to XT mode. To switch back to 4A mode press:

### FCTN CTRL ENTER

And Hold Them Down Until You Are Past The TI Title Screen

If you use *TI Logo* or *TI Logo II* change the default power up mode to 4A. This will allow you to save and load Logo programs without ending up in XT mode.

## KEYBOARD TUTORIAL

Item 7 of the System Support Software (purchased separately) is a Keyboard Tutorial. This tutorial was written for a standard XT keyboard so, the keyboard layout is completely different than the 99/4A keyboard. Also, we have discovered that this software DOES NOT properly track the position of the Num Lock key. This can lead to a few difficulties when running this program with the Bridge Box since, the Bridge Box AUTOMATICALLY handles the Num Lock for you.

If you run this tutorial, press the keys listed below in the right hand column when the tutorial asks you to press the keys listed in the left hand column. This will allow you to easily get through this tutorial.

Asks For	On The 4A You Press
Space Bar	- Space Bar
Return	- Enter
Backspace	- FCTN 0
Caps Lock	- Alpha Lock
Num Lock	- FCTN Enter FCTN Shift (Opt1 & Opt2 ON)
Right Shift	- FCTN Shift (Opt1 OFF Opt2 ON) . (period) - Press FCTN Shift (Opt1 & Opt2 back ON)
Up Cursor	- FCTN E
Down Cursor	- FCTN I
Left Cursor	- FCTN S
Right Cursor	- FCTN D
Delete	- FCTN Enter (Opt2 OFF Opt1 ON) Shift 1
<b>SCREEN CHANGES TO NEXT SCREEN</b>	
Space Bar	- Press FCTN Space Bar (turns OFF Opt1 & Opt2)
ESC (Escape)	- FCTN 9
Tab	- FCTN 7
Left Shift	- Shift
CTRL	- CTRL
ALT	- FCTN CTRL (Alt ON) CTRL
F1	- FCTN Enter (Opt2 ON) 1
F10	- 0
<b>SCREEN CHANGES TO LAST SCREEN</b>	
NOTE:	- Press FCTN Space Bar FCTN CTRL to turn OFF Opt1, Opt2 and Alt This screen shows CTRL ALT DEL for Re-boot of the XT. On the 4A keyboard XT Re-boot is FCTN CTRL -