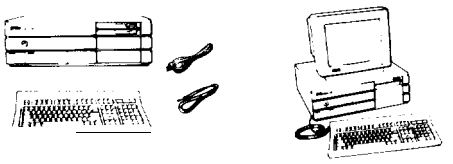


Computer Specifications

CPU	80286 microprocessor, 6MHz, 8MHz, 12 MHz selectable clock speeds; real address (8086 compatible) and protected virtual address (multi-tasking or multi-user) modes 24-bit address & 16-bit data bus
MATH CO-PROCESSOR	80287-8 support (option) Co-processor clock speed selectable (up to 8MHz)
RAM	640KB RAM on main system board (15.5MB RAM max. with memory expansion cards)
ROM	64KB, Selectable EPROM pairs
FLOPPY DISK CONTROLLER	Supports two drives maximum with multiple formats; 5¼ double-density (360KB). 5¼ high-density (1.2MB), and 3½" (720KB); controller installs in I/O expansion slot
HARD DISK CONTROLLER	Supportstwo drives maximum with multiple formats. installs in I/O expansion slot
I/O EXPANSION SLOTS	Nine total: seven with 16-bit bus and two with 8-bit bus. seven available in base configuration
SPEAKER	Internal with volume control
CLOCK/CALENDAR **RAM**	64 Bytes of CMOS RAM for real-time clock, calendar. and system configuration with battery backup
KEYBOARD	Detachable, 3 position, 101 sculpted keys, 58 key QWERTY configuration, 12 function keys. enhanced AT style
KEYLOCK **SWITCH**	Security keylock for cover and keyboard
POWER SUPPLY	Switching type, fan cooled, worldwide 115/230VAC, 192W, +5Vdc, +12Vdc, -5Vdc. -12Vdc
MASS STORAGE	Five half height devices maximum
Standard	5 25 half height lloppy drive; 1.2MB storage capacity
Optional	5 25 half height floppy drive; 1.2MB storage capacity
Optional	5.25 hall height floppy drive; 360KB storage capacity
Optional	5.25 lull height hard disk drive; 40MB storage capacity
INTERFACES	
Standard	Centronics® compatible port
Standard	RS-232C serial Interface port
ENVIRONMENTAL REQUIREMENTS	
Temperature	
Operating range	41 to 104° F (5 to 40° C)
Storage range	22 to 158 F (-5 to 70° C)
Humidity	
Operating range	10% to 80% non-condensing
Storage range	10% to 90% non-condensing

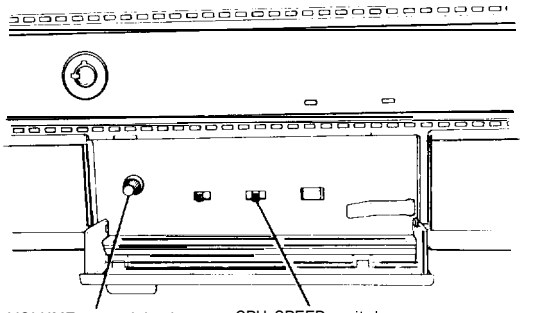
PHYSICAL CHARACTERISTICS

	CPU	Keyboard
Width	19.6 m.	19.3 I .
Depth	17.4 I .	7.7 in
Height	6.6 in.	1.8 in.
Weight	31.9 lbs.	3 9 lbs.

POWER REQUIREMENTS
115VAC, (+15%, -20%); 60Hz, 4A
230VAC. (±15%). 60Hz, 2.5A

OPTIONS

Display Adapters	Monochrome Display Adapter Color Graphics Adapter Multi-Mode Graphics Adapter Enhanced Graphics Adapter
Monitors	Monochrome Display (720 x 350 dots) Color Display (640 x 200 dots) Enhanced Color Display (640 x 350 or 640 x 200 dots automatically selectable)
Mass Storage	360KB 5¼" Floppy Drive 1.2MB 5¼" Floppy Drive 40MB Hard Disk Drive



Switch Settings

There are no DIP switches on the Equity III +. However, there is a MONITOR SELECT switch, a CPU SPEED switch and a VOLUME CONTROL on the front of the unit in the lower left hand corner.

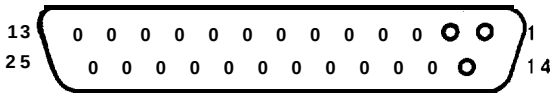
Monitor Select

Switch Setting	Monitor
MONO	Monochrome monitor
COLOR	Color, composite, EGA, and VGA monitors

The CPU SPEED switch selects between 6 MHz, 8 MHz, and 12 MHz. When the computer is running at 6 MHz the power light is red, at 8 MHz, the light is orange, and at 12 MHz, the light is green.

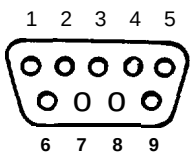
Connector Pin Assignments

Parallel Port Connector



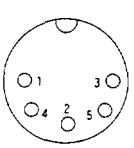
PIN NO.	SIGNAL NAME	DIRECTION	DESCRIPTION
1	– STROBE	O	
2	DATA0	O	Printer Data Bit 0
3	DATA1	O	Printer Data Bit 1
4	DATA2	O	Printer Data Bit 2
5	DATA3	O	Printer Data Bit 3
6	DATA4	O	Printer Data Bit 4
7	DATA5	O	Printer Data Bit 5
8	DATA6	O	Printer Data Bit 6
9	DATA7	O	Printer Data Bit 7
10	– ACK	I	Acknowledge
11	+ BUSY	I	Printer Busy
12	+PE	I	End of Paper
13	+ SLCT	I	Printer Select
14	– AUTOFT	I	Auto Feed
15	– ERROR	I	Printer Error
16	– INIT	I	Printer Initialize
17	– SLCTIN	I	Printer Select In
16	GND		Ground
19	GND		Ground
20	GND		Ground
21	GND		Ground
22	GND		Ground
23	GND		Ground
24	GND		Ground
25	GND		Ground

Serial Port Connector



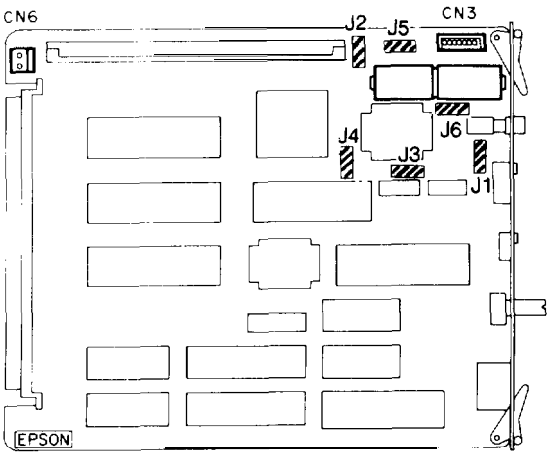
PIN NO.	SIGNAL NAME	DIRECTION	DESCRIPTION
1	CRDET	I	Data Carrier Detect
2	RXDT	I	Receive Data
3	TXDT	O	Transmit Data
4	DTR	O	Data Terminal Ready
5	SG	–	Signal Ground
6	DSR	I	Data Set Ready
7	RTS	O	Request to Send
8	CTS	I	Clear to Send
9	RI	I	Ring Indicator

Keyboard Connector



Pin Number	Signal Name
1	Clock
2	Data
3	Not Connected
4	Ground
5	+5 VDC
–	Ground

Jumper Settings



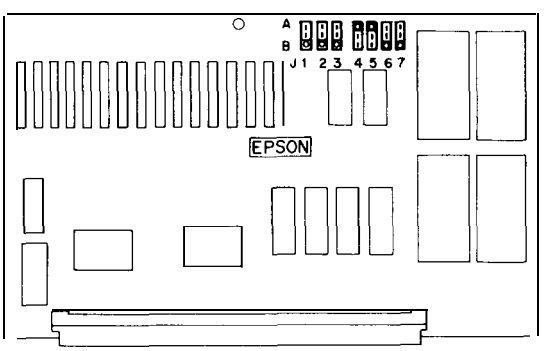
Main Circuit Board

Jumper 1 2 3 4 5 6	Function
A	Prohibited
B	* Set CPU clock (6/8/12 MHz)
A A	Prohibited
B A	Use CPU clock for NPX clock
A B	* Use 8 MHz clock for NPX clock
B B	Prohibited
A	* 2 wait cycles for EPROM (note 1)
B	1 wait cycle for EPROM (note 1)
A A	* **4 wait cycles (note 2)**
B A	3 wait cycles (note 2)
A B	2 wait cycles (note 2)
B B	**1 wait cycle (note 2)**

* Factory Settings

Notes:

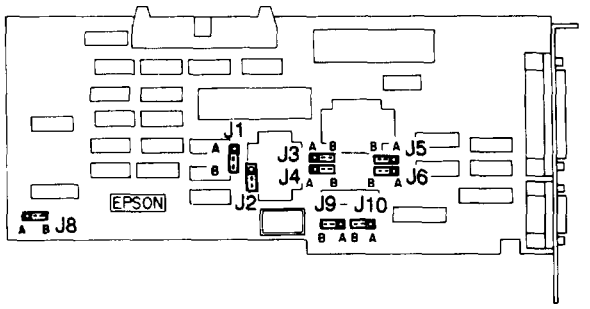
1. Selectable wait states only available at 12 MHz.
2. **Wait cycles for external 16-bit devices. These** selectable wait cycles are available at 12 MHz only.



Memory Board

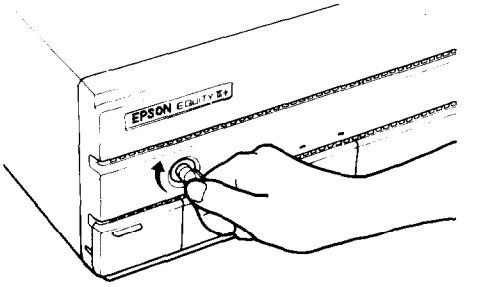
Jumper	Function
1 2 3 4 5 6 7	
A A A	* RAM 640KB
B A A	RAM 512KB
B B A	RAM 256KB
B B B	RAM OKB
A A	EPROM 21728 type
B B	* EPROM 27256 type
A A	* Select ROM sockets 24A and 24B
B B	Select ROM sockets 23A and 23B

* Factory Settings



I/O Port Addresses

Address	Function
000 – 01F	DMA Controller 1
020 – 03F	Interrupt Controller 1
040 – 05F	Timer/Counter
060 – 06F	Keyboard controller and Port B
070 – 07F	CMOS RAM and Non – Maskable Interrupt Mask
080 – 09F	DMA Page Register
OAO – 0BF	Interrupt Controller 2
OCO – 0DF	DMA Controller 2
0E0 -OFF	Numeric Coprocessor
1F0 – 1F7	Hard Disk Controller – Primary
278 – 27F	Parallel Port 1
2F8 -2FF	Serial Port 1
378 – 37F	Parallel Port 0
3BC -3BF	Parallel Port 2 (on some video boards)
3Fo – 3F7	Floppy Disk Controller
3F8 – 3FF	Serial Port 0



Multifunction Board

lumper	Function
I 2 3 4 5 6 7 8 9 10	
1 A	* Primary register set (AT FDC)
3 A	Secondary register set (AT FDC)
1 B	PC register set (FDC)
3 B	Disable FDC register set
A A A	* Primary parallel I/F, IRQ7
A B B	Secondary parallel I/F, IRQ5
B A A	Video adapter parallel I/F, IRQ7
B B	Disable parallel I/F
A A A	* Primary serial I/F, IRQ4
A B B	Secondary serial I/F, IRQ3
B –	Disable serial I/F
A	* AT compatible FDD I/F
B	Equity III FDD I/F
A	* Standard setting
B	Test mode of VCO

• Factory Settings

Keylock

The keylock on the front panel allows you to disable the keyboard and RESET button and lock the top cover of the main unit for security. The keyboard may be locked while the system is in operation. This disables the keyboard so no one can interfere with the current operation.

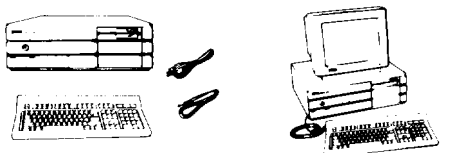
To lock the system, insert the key with the notch pointing left and turn it clockwise. You must press it in slightly when you turn the key. To unlock it, insert the key with the notch pointing up and turn the key counterclockwise. You can remove the key in either position.

DMA Channels

Channel	Function
0	Spare
1	Spare
2	floppy disk transfers
3	Spare **(Hard** disk drive)
4	Cascade of data from channel 0 - 3
5	Spare
6	Spare
7	Spare

Hardware Interrupts

CTLR1	CTLR2	FUNCTION
IRQ0		Timer Output 0
IRQ1		Keyboard
IRQ2		Reserved
IRQ3		Serial port 2
IRQ4		Serial port 1
IRQ5		Parallel port 2
IRQ6		Floppy disk interrupt
IRQ7		Parallel port 1
	IRQ8	RTC interrupt
	IRQ9	Reserved
	IRQ10	Reserved
	IRQ11	Reserved
	IRQ12	Reserved
	IRQ13	Coprocessor
	IRQ14	Hard disk controller
	IRQ15	Reserved



Computer Specifications

CPU	80286 microprocessor, 6MHz, 8MHz, 10MHz selectable clock speeds, real address (8086 compatible) and protected virtual address (multi-tasking or multi-user) modes 24-bit address & 16-bit data bus
MATH **CO-PROCESSOR**	80287-E support (option) Co-processor clock speed selectable (up to 8MHz)
RAM	640KB RAM on main system board (15.5MB RAM max with memory expansion cards)
ROM	64KB. Selectable EPROM pairs
FLOPPY **DISK** CONTROLLER	Supports two drives maximum with multiple formats, 5¼" double-density (360KB), 5¼" high-density (12MB), and 3½" (720KB); controller installs in I/O expansion slot
HARD DISK CONTROLLER	Supports two drives maximum with multiple formats, installs in I/O expansion slot
I/O EXPANSION SLOTS	Nine total, seven with 16-bit bus and two with 8-bit bus. seven available in base configuration
SPEAKER	Internal with volume control
CLOCK/CALENDAR RAM	64 Bytes of CMOS RAM for real-time clock. calendar, and system configuration with battery backup
KEYBOARD	Detachable, 3 position, 101 sculpted keys, 58 key QWERTY configuration, 12 function keys, enhanced AT style
KEYLOCK SWITCH	Security keylock for cover and keyboard
POWER SUPPLY	Switching type, fan cooled, worldwide 115/230VAC, 192W, +5Vdc, +12Vdc, -5Vdc. -12Vdc
MASS STORAGE	Five half height devices maximum
Standard	5 25 half height floppy drive; 1.2MB storage capacity
Optional	5.25 halt height floppy drive; 1.2MB storage capacity
Optional	5.25 half height floppy drive; 360KB storage capacity
Optional	5 25 full height hard disk drive; 40MB storage capacity
INTERFACES	
Standard	Centronics* compatible port
Standard	RS-232C serial Interface port
ENVIRONMENTAL REQUIREMENTS	
Temperature	
Operating range	41 to 104 F (5 to 40 C)
Storage range	22 to 158 F (−5° to 70° C)
Humidity	
Operating range	10% to 80% non-condensing
Storage range	10% to 90% non-condensing

PHYSICAL CHARACTERISTICS

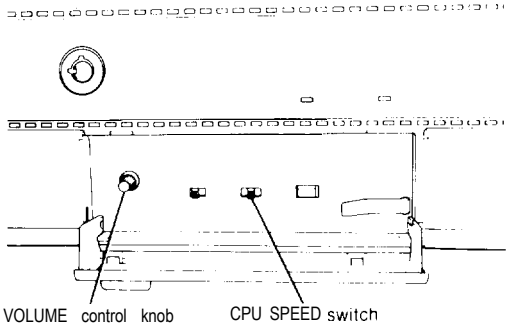
	CPU	Keyboard
Width	19.6 in.	19.3 in.
Depth	17.4 I.	7.7 in.
Height	6.6 I.	1.8 in.
Weight	31 9 lbs	3.9 lbs.

POWER REQUIREMENTS

115VAC, (+ 15%. -20%); 60Hz, 4A
230VAC, (± 15%). 60Hz, 2.5A

OPTIONS

Display Adapters	Monochrome Display Adapter Color Graphics Adapter Multi-Mode Graphics Adapter Enhanced Graphics Adapter
Monitors	Monochrome Display (720 x 350 dots) Color Display (640 x 200 dots) Enhanced Color Display (640 x 350 or 640 x 200 dots automatically selectable)
Mass Storage	360KB 5¼" Floppy Drive 1.2MB 5% Floppy Drive 40MB Hard Disk Drive



Switch Settings

There are no DIP switches on the Equity III+. However, there is a MONITOR SELECT switch, a CPU SPEED switch and a VOLUME CONTROL on the front of the unit in the lower left hand corner.

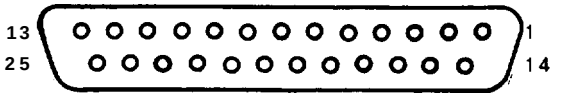
Monitor Select

Switch Setting	Monitor
MONO	Monochrome monitor
COLOR	Color, composite, EGA, and VGA monitors

The CPU SPEED switch selects between 6 MHz, 8 MHz, and 10 MHz. When the computer is running at 6 MHz the power light is red, at 8 MHz, the light is orange, and at 10 MHz, the light is green.

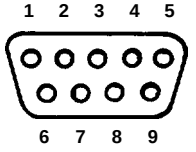
Connector Pin Assignments

Parallel Port Connector



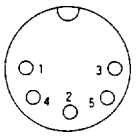
PIN NO.	SIGNAL NAME	DIRECTION	DESCRIPTION
1	- STROBE	0	
2	DATA6	0	Printer Data Bit 0
3	DATA1	0	Printer Data Bii 1
4	DATA2	0	Printer Data Bit 2
5	DATA3	0	Printer Data Bii 3
6	DATA4	0	Printer Data Btt 4
7	DATA5	0	Printer Data Bit 5
6	DATA6	0	Printer Data Bit 6
9	DATA7	0	Printer Data Bit 7
10	- ACK	I	Acknowledge
11	+ BUSY	I	Printer Busy
12	+PE	I	End of Paper
13	+ SLCT	I	Printer Select
14	- AUTOFT	I	Auto Feed
15	-ERROR	I	Printer Error
16	- INIT	I	Printer Initialize
17	- SLCTIN	I	Printer Select In
16	GND		Ground
19	GND		Ground
20	GND		Ground
21	GND		Ground
22	GND		Ground
23	GND		Ground
24	GND		Ground
25	GND		Ground

Serial Port Connector



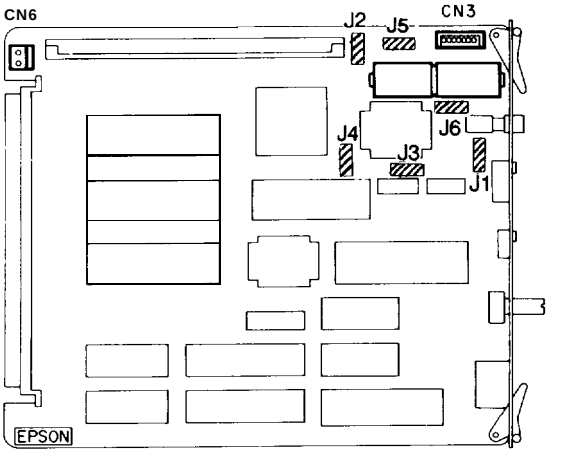
PIN NO.	SIGNAL NAME	DIRECTION	DESCRIPTION
1	CRDET	I	Data Carrier Detect
2	RXDT	I	Receive Data
3	TXDT	0	Transmit Data
4	DTR	0	Data Terminal Ready
5	SG		Signal Ground
6	DSR	I	Data Set Ready
7	RTS	O	Request to Send
a	CTS	I	Clear to Send
9	RI	I	Ring Indicator

Keyboard Connector



Pin Number	Signal Name
1	Clock
2	Data
3	Not Connected
4	Ground
5	+5 VDC
	Ground

Jumper Settings



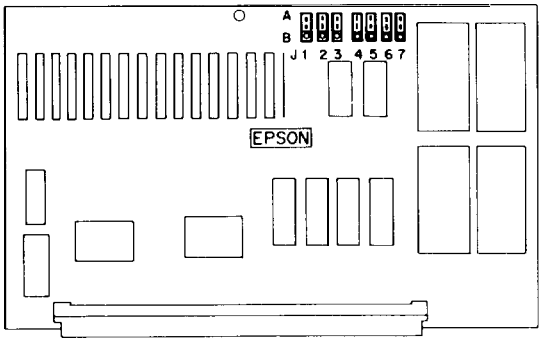
Main Circuit Board

Jumper 1 2 3 4 5 6	Function
A	* Set CPU clock (6/8/10 MHz)
B	Prohibited
A A	Prohibited
B A	Use CPU clock for NPX clock
A B	• Use 8 MHz clock for NPX clock
B B	Prohibited
A	* 2 wait cycles for EPROM (note 1)
B	1 wait cycle for EPROM (note 1)
A A	* 4 wait cycles (note 2)
B A	3 wait cycles (note 2)
A B	2 wait cycles (note 2)
B B	1 wait cycle (note 2)

* Factory Settings

Notes:

1. Selectable wait states only available at 10 MHz.
2. Wait cycles for external 16-bit devices. These selectable wait cycles are available at 10 MHz only.



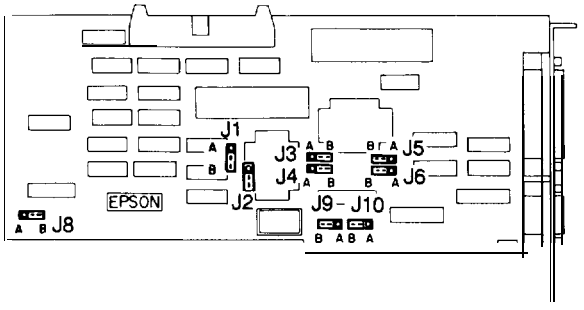
Memory Board

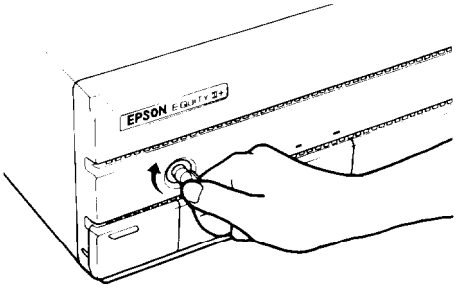
Jumper							Function
1	2	3	4	5	6	7	
A	A	A					* RAM 640KB
B	A	A					RAM 512KB
B	B	A					RAM 256KB
B	B	B					RAM OKB
			A	A			EPROM 21728 type
			B	B			* EPROM 27256 type
					A	A	* Select ROM sockets 24A and 24B
					B	B	Select ROM sockets 23A and 23B

* Factory Settings

I/O Port Addresses

Address	Function
000 – 01F	DMA Controller 1
D20 – 03F	Interrupt Controller 1
040 – 05F	Timer/Counter
060 – 06F	Keyboard controller and Port B
070 – 07F	CMOS RAM and Non – Maskable Interrupt Mask
080 – 09F	DMA Page Register
OAO-OBF	Interrupt Controller 2
0C0 – 0DF	DMA Controller 2
0E0 -OFF	Numeric Coprocessor
1F0 – 1F7	Hard Disk Controller – Primary
278 – 27F	Parallel Port 1
2F8 – 2FF	Serial Port 1
378 – 37F	Parallel Port 0
3BC – 3BF	Parallel Port 2 (on some video boards)
3F0 -3F7	Floppy Disk Controller
3F8 – 3FF	Serial Port 0





Multifunction Board

lumper										Function
	2	3	4	5	6	7	8	9	10	
\	A									* Primary register set (AT FDC)
3	A									Secondary register set (AT FDC)
\	B									PC register set (FDC)
3	B									Disable FDC register set
		A	A						A	* Primary parallel I/F, IRQ7
		A	B						B	Secondary parallel I/F, IRQ5
		B	A						A	Video adapter parallel I/F, IRQ7
		B	B						–	Disable parallel I/F
				A	A			A		* Primary serial I/F, IRQ4
				A	B			B		Secondary serial I/F, IRQ3
				B	–			–		Disable serial I/F
						A				* AT compatible FDD I/F
						B				Equity III FDD I/F
							A			* Standard setting
							B			Test mode of VCO

* Factory Settings

Keylock

The keylock on the front panel allows you to disable the keyboard and RESET button and lock the top cover of the main unit for security. The keyboard may be locked while the system is in operation. This disables the keyboard so no one can interfere with the current operation.

To lock the system, insert the key with the notch pointing left and turn it clockwise. You must press it in slightly when you turn the key. To unlock it, insert the key with the notch pointing up and turn the key counterclockwise. You can remove the key in either position.

DMA Channels

Channel	Function
0	Spare
1	Spare
2	Floppy disk transfers
3	Spare (Hard disk drive)
4	Cascade of data from channel O-3
5	Spare
6	Spare
7	Spare

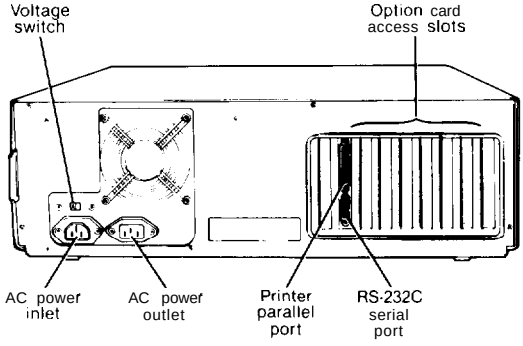
Hardware Interrupts

CTLR1	CTLR2	FUNCTION
IRQ0		Timer Output 0
IRQ1		Keyboard
IRQ2		Reserved
IRQ3		Serial port 2
IRQ4		Serial port 1
IRQ5		Parallel port 2
IRQ6		Floppy disk interrupt
IRQ7		Parallel port 1
	IRQ8	RTC interrupt
	IRQ9	Reserved
	IRQ10	Reserved
	IRQ11	Reserved
	IRQ12	Resewed
	IRQ13	Coprocessor
	IRQ14	Hard disk controller
	IRQ15	Reserved

Installation/Support Tips

Power

The Equity III+ has a power supply that is switchable between 115 V, for USA and Canadian use, and 230 V, for use in other countries. The voltage switch is located at the rear of the CPU between the AC inlet and the AC outlet (see figure below).



WARNING! The voltage is not changed between the AC inlet and the AC outlet. If the CPU is switched for 230 V in order to function in Europe, only peripherals certified for use at 230 V should be plugged into the outlet.

Installing Floppy Disk Drives

- When installing a floppy disk drive as drive B, remember to set the drive select jumper to the second position and attach the pass -through connector on the floppy drive controller cable to the drive, not the end connector.

- If the drive does not function normally, make sure that the drive type has been correctly selected in SETUP. Also check that any special drivers that may be necessary have been installed correctly.

Installing Hard Disk Drives

- It is recommended that a 16-bit AT -type hard disk controller be used in the Equity III + . If you must for some reason use an 8-bit XT-type controller, select drive type NONE in SETUP.

- If you are having difficulty in formatting the hard disk drive, try starting over with the Unconditional Format option in diagnostics.

Setup

- When installing an optional expanded memory board, do not list the memory under the memory expansion option in SETUP. That option is for EXTENDED memory ONLY.

- If you are installing an EGA or VGA card, select SPECIAL OPTIONS as display type in SETUP. This holds true even when you are using a color or monochrome monitor with these cards.

- When installing a hard disk drive, be sure to consult the drive type table (on page EQIII + -7) for the drive type which fits the drive you are installing.

Third Party Option Boards

- If you find that some third party option boards do not function properly in the Equity III+ at the higher speed, try setting the CPU speed back to 6 MHz or 8 MHz.

- When installing a memory expansion option board, make sure that it is a board capable of supporting the higher bus speed (10 MHz or 12 MHz) of the Equity III+. Some boards are rated for no higher than 8 MHz.

Software Problems

- When installing a copy- protected software package on the Equity III+, set the the CPU speed to 8 MHz. This has been found to have fewer conflicts with copy-protection. After the installation, the CPU can be switched back to the higher speed.

- If a software package does not appear to be compatible with the Equity III+, try switching the CPU speed to 6 MHz and/or 8 MHz before giving up. Some software packages (e.g., Microsoft Chart 1.01 and Think Tank 1.001) have been found to function only at 6 MHz and 8 MHz.

Hard Disk Drive Types

ROM BIOS Version 1.02

Drive type	Cylinders	Heads	Write precompensation	Landing zone (cylinder)	Capacity (MB)
1	306	4	128	305	10
2	615	4	300	615	20
3	615	6	300	615	30
4	940	8	512	940	62
5	940	6	512	940	46
6	615	4		615	20
7	462	8	256	511	30
8	733	5	—	733	30
9	900	15	—	901	112
10	820	3	—	820	20
11	855	5	—	855	35
12	855	7	—	855	49
13	306	8	128	319	20
14	733	7	—	733	42
15	—	—	—	—	
16	612	4	—	663	20
17	977	5	300	977	40
18	977	7	—	977	56
19	1024	7	512	1023	60
20	733	5	300	732	30
21	733	7	300	732	42
22	733	5	300	733	30
23	306	4	—	336	10
24-47	—		—	—	—

ROM BIOS Version 1.50 and Higher

Drive type	Cylinders	Heads	Write precompensation	Landing zone (cylinder)	Capacity (MB)
1	306	4	128	305	10
2	615	4	300	615	20
3	615	6	300	615	30
4	940	8	512	940	62
5	940	6	512	940	46
6	615	4	-1	615	20
7	462	8	256	511	30
8	733	5	-1	733	30
9	900	15	-1	901	112
10	820	3	-1	820	20
11	855	5	-1	855	35
12	855	7	-1	855	50
13	306	8	128	319	20
14	733	7	-1	733	42
15	0	0	0	0	0
16	612	4	0	663	20
17	977	5	300	977	40
18	977	7	-1	977	58
19	1024	7	512	1023	60
20	733	5	300	732	30
21	733	7	300	732	42
22	733	5	300	733	30
23	306	4	0	336	10
24	612	4	305	663	20
25	306	4	-1	340	10
26	612	4	-1	670	20
27	698	7	300	732	40
28	976	5	488	977	41
29	306	4	0	340	10
30	611	4	306	663	20
31	732	7	300	732	43
32	1023	5	-1	1023	43
33-42	0	0	0	0	0
43	1024	8	512	1023	69
44	830	10	512	a29	141
45	1024	5	512	1023	43
46	615	8	128	618	40
47	0	0	0	0	0

Product Support Bulletins

S-0004A	2/5/87	MRS-MO Board Update for the Equity III +
S-0006	3/13/87	Equity III + HDD Initialization Procedure
S-0008	4/3/87	Equity III + Enhanced CPU Speed Selection
S-0009	4/7/87	Equity III + Configuration with 3rd Party Options
S-0010	4/7/87	Equity I + /III + Worldwide Power Selection
S-0011	6/8/87	MS-DOS 3.2 Select Command Manual Error
S-0013A	7/29/87	Equity III + ROM BIOS Upgrade for Novell
S-0016	8/25/87	ARNET - IDEA - 3COM - SRCNET Certification
S-0018	9/16/87	SCO - Fox Research - Manzana Certifications
S-0019B	12/2/87	Equity/Apex Coprocessor Selection Guide
S-0021	10/22/87	Equity III + (12 MHz) Introduction
S-0025	11/19/87	Equity III + (12 MHz) Archive Utility
S-0026	11/19/87	Equity + Series Compatibility Certification
S-0030	12/10/87	Equity III + 10 MHz/12 MHz Differences
S-0031	12/14/87	Equity Series with Word and Serial Printers
S-0033	1/12/88	Equity II t /III t 40MB CDC HDD Information
S-0039	3/3/88	Equity Series Power Available and Consumption
s-0042	4/5/88	Equity III t Common Questions and Answers
S-0047A	6/12/89	Using Expanded Memory with Equity and Apex
S-0050	5/16/88	Equity Series With PLUS HARDCARD 20
S-0054B	5/4/89	Using Math Coprocessors with Equity and Apex
S-0061	10/12/88	Equity t Series Novell Netware Certifications
S-0062A	6/9/89	Equity Series Computers - ROM History

S-0072	3/16/89	Using ST251 and ST4095 HDDs in the Equity II + /III t
S-0073	3/17/89	Micron Technology Expanded/Extended RAM Boards
S-0080	4/19/89	Apex/Apex Plus/Equity Series Keyboards.
S-0088	7/12/89	Equity/Apex with the Sysgen OmniBridge and Bridge Feiler Drives
S-0091	8/11/89	Using High Capacity ESDI and SCSI HDDs with the Equity Series

Related Documentation

Q290A-AA		Equity III t Software Package. MS-DOS 3.2 and GW-Basic
A805011		Equity III + Software Package MS-DOS 3.3 Upgrade
M-TM-EQIII+		Equity III t Technical Manual
M-PM-EQIII+		Equity III t Programmer's Reference Manual
M-PL-EQ3+10/12	5/24/88	Equity III t 10 and 12 MHz Parts List
Y12699112300		Equity III t (12 MHz) User's Guide
Y12699100100		Equity III t (10 MHz) User's Guide
Y12699100200		Equity III t Diagnostics Manual