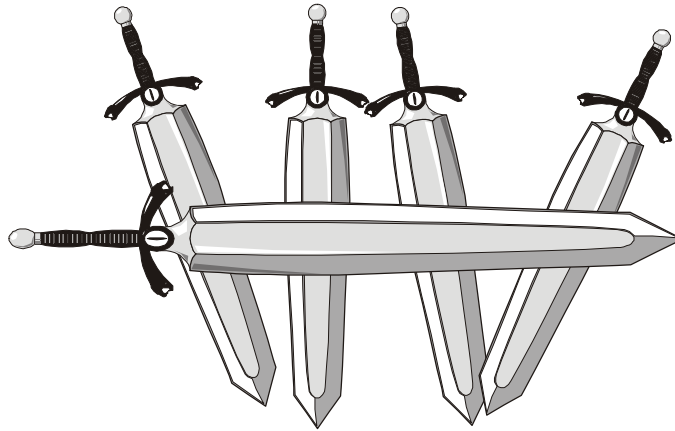# GAUNTLET DARK Legacy

CHAPTER

Wiring

| 👉	**NOTICE:** Information in this manual may change without notice. Midway Games West Inc. reserves the right to make improvements in equipment function, design, or components as progress in engineering or manufacturing methods may warrant.

EDGE CONNECTOR CHART

FUNCTION	WIRE COLOR	PIN	PIN	WIRE COLOR	FUNCTION
Ground	Black	A	1	Black	Ground
Ground	Black	B	2	Black	Ground
+5VDC	Red	C	3	Red	+5VDC
+5VDC	Red	D	4	Red	+5VDC
-5VDC	Yellow	E	5	Yellow	-5VDC
+12VDC	Orange	F	6	Orange	+12VDC
Key	N/C	H	7	N/C	Key
Coin Counter 2	Brown-Red	J	8	Brown	Coin Counter 1
Not Used	N/C	K	9	N/C	Not Used
Speaker -, Left	Brown-Gray	L	10	Red-Gray	Speaker +, Left
Speaker +, Right	Brown-White	M	11	Red-White	Speaker-, Right
Video Green	Yellow-Green	N	12	Yellow-Red	Video Red
Video Sync	Yellow-White	P	13	Yellow-Blue	Video Blue
Service Credits	White-Gray	R	14	Yellow-Black	Video Ground
Slam Tilt	Black-Green	S	15	Black-Blue	Test
Coin 2	Black-Red	T	16	Black-Brown	Coin 1
Player 2 Start	Violet-White	U	17	White	Player 1 Start
Player 2 U/D Bit 0	Violet-Black	V	18	White-Black	Player 1 U/D Bit 0
Player 2 U/D Bit 1	Violet-Brown	W	19	White-Brown	Player 1 U/D Bit 1
Player 2 U/D Bit 2	Violet-Red	X	20	White-Red	Player 1 U/D Bit 2
Player 2 U/D Dir Bit	Violet-Orange	Y	21	White-Orange	Player 1 U/D Dir Bit
Player 2 L/R Bit 0	Violet-Yellow	Z	22	White-Yellow	Player 1 L/R Bit 0
Player 2 L/R Bit 1	Violet-Green	a	23	White-Green	Player 1 L/R Bit 1
Player 2 L/R Bit 2	Violet-Blue	b	24	White-Blue	Player 1 L/R Bit 2
Player 2 L/R Dir Bit	Violet	c	25	White-Violet	Player 1 L/R Dir Bit
Not Used	N/C	d	26	N/C	Not Used
Ground	Black	e	27	Black	Ground
Ground	Black	f	28	Black	Ground
SOLDER SIDE			COMPONENT SIDE		

Joystick control wires that are not part of the main JAMMA Harness

Ground	Black	1	1	Black	Ground
+5V	Red	2	2	Red	+5V
Not Used	N/C	3	3	Not Used	N/C
Key	N/C	4	4	Key	N/C
Not Used	N/C	5	5	Not Used	N/C
Player 4 Start	Grey-White	6	6	Blue-White	Player 3 Start
Player 4 U/D Bit 0	Grey-Black	7	7	Blue-Black	Player 3 U/D Bit 0
Player 4 U/D Bit 1	Grey-Brown	8	8	Blue-Brown	Player 3 U/D Bit 1
Player 4 U/D Bit 2	Grey-Red	9	9	Blue-Red	Player 3 U/D Bit 2
Player 4 U/D Dir Bit	Grey-Orange	10	10	Blue-Orange	Player 3 U/D Dir Bit
Player 4 L/R Bit 0	Grey-Yellow	11	11	Blue-Yellow	Player 3 L/R Bit 0
Player 4 L/R Bit 1	Grey-Green	12	12	Blue-Green	Player 3 L/R Bit 1
Player 4 L/R Bit 2	Grey-Blue	13	13	Blue	Player 3 L/R Bit 2
Player 4 L/R Dir Bit	Grey-Violet	14	14	Blue-Violet	Player 3 L/R Dir Bit

MAIN CABINET WIRING DIAGRAM
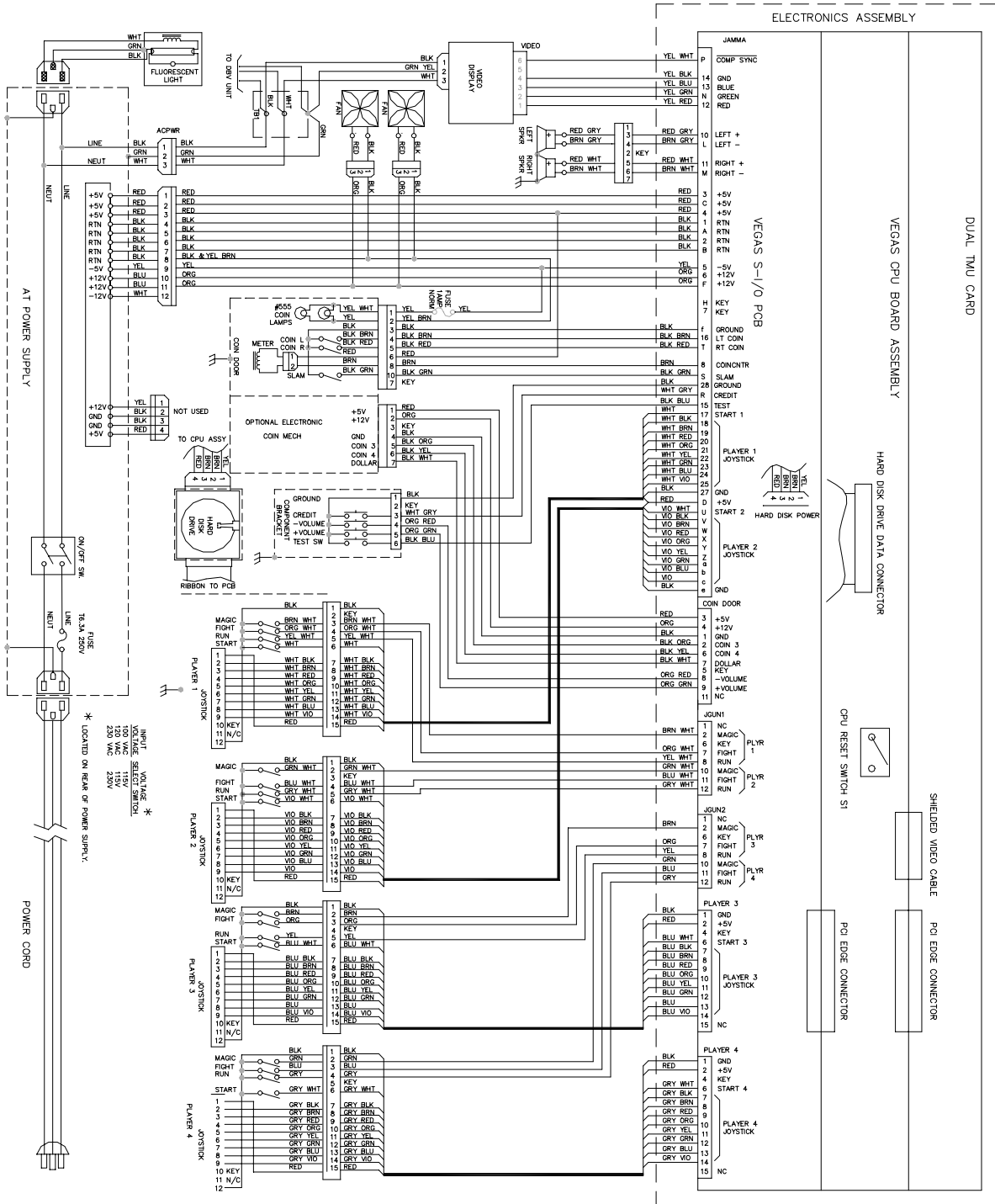
VEGAS CPU BOARD ASSEMBLY
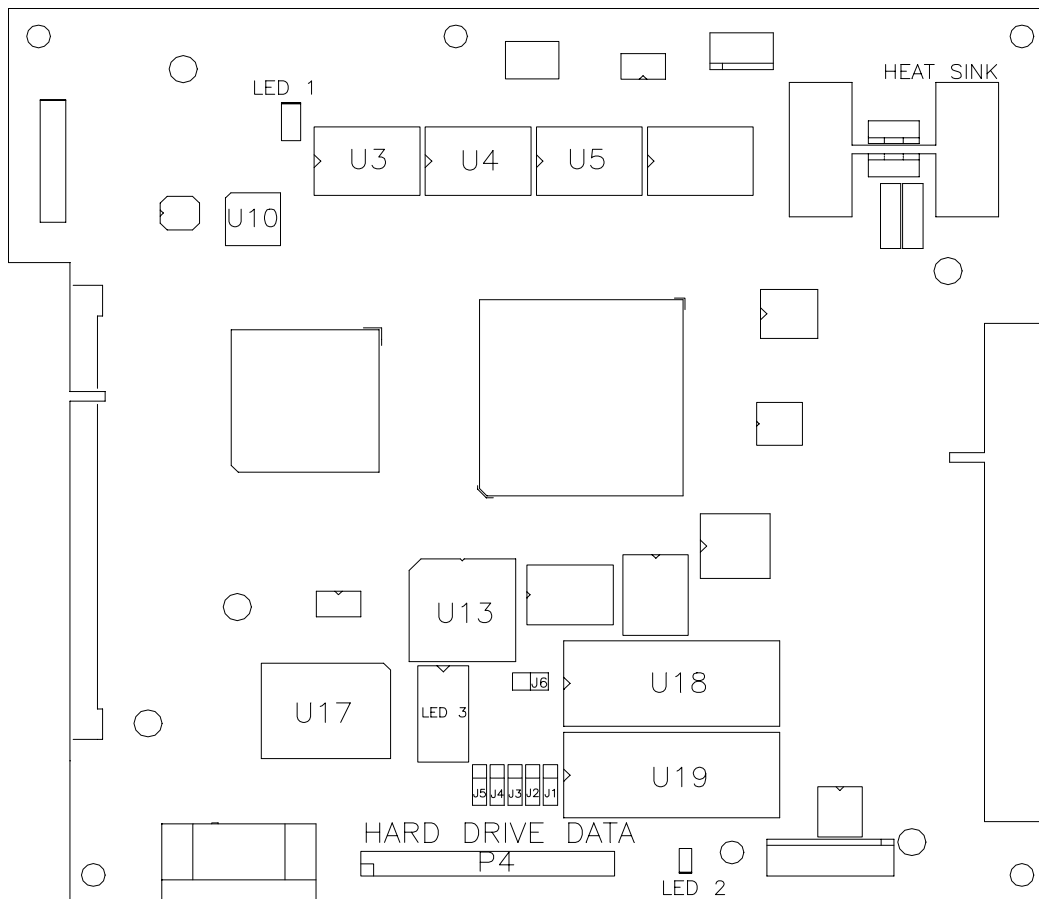
VEGAS CPU ASSEMBLY SWITCH

Designation	Location	Function	Positions	State	Meaning
S1	Edge near U4 and U5	Resets and Restarts Game	2	Off	Normal Operation
S1	Edge near U4 and U5	Resets and Restarts Game	2	On	Forced Reset

Note: This switch resets the CPU Board without turning the power off at the power supply.

VEGAS CPU BOARD ASSEMBLY JUMPER POSITION CHART

Designation	Location	Function	Meaning	Position	Default
J1 (Note 1)	Near U19 & Connector P4	CPU Boot ROM Type (U18)	EPROM	Pins 1 & 2	X
			Flash ROM	Pins 2 & 3	
J2 (Note 2)	Near U19 & Connector P4	CPU Boot ROM Size (U18)	1, 2, or 4Mbit flash ROM	Pins 1 & 2	X
			8 Mbit flash ROM	Pins 2 & 3	
J3 (Note 1)	Near U19 & Connector P4	CPU Boot ROM Type	EPROM	Pins 1 & 2	X
			Flash ROM	Pins 2 & 3	
J4 (Note 2)	Near U19 & Connector P4	CPU Boot ROM Size (U18)	2Mbit ROM	Pins 1 & 2	X
			1Mbit ROM	Pins 2 & 3	
J5 (Note 3)	Near U19 & Connector P4	Expansion Boot ROM Size (U19)	4Mbit ROM	Pins 1 & 2	X
			8Mbit ROM	Pins 2 & 3	
J6	Between U13 & U18	Boot Program Location	Boot from CPU ROM	Pins 1 & 2	X
			Boot from SIO ROM	Pins 2 & 3	

Note 1:   Set both jumpers J1 and J3 to EPROM or Flash ROM mode to use such devices.

Note 2:   These jumpers are independent

Note 3:   This jumper is independent of the CPU boot ROM size selected

## VEGAS CPU BOARD ASSY LED INDICATOR STATUS CHART

Designation	Location	Function	Color	State	Meaning
LED1 (Note 1)	Near U3 & U10	3.3V CPU Power Indicator	Red	Off	Insufficient Power
				On	Power OK
				Blinking	Power Fault
LED2 (Note 2)	Near U19 & Connector P4	Hard Disk Drive Activity	Green	Off	Not in use
				On	Locked Up
				Blinking	Normal disk activity
LED3 (Note 3)	Near U13 & U17	Indicator	Red	Off*	*See Note Below
				On*	
				Blinking* Sequentially	

Note 1   LED1 monitors CPU power (+3.3 Volts). If this LED is off or blinking, investigate processor circuits. If other LEDs are off or blinking at the same time, check the +5 Volt circuits or game power supply.

Note 2   LED2 flashes when hard disk operates during game play. It may light continuously during startup. If this LED lights continuously, there may be a fault with the hard disk drive, which may be locked up.

Note 3   LED3 initially indicates program start-up stages. It is a seven-segment alphanumeric display device. Under normal conditions, it displays a lowercase "b" or a sequentially blinking segment in an "O" pattern. During any of the self-test screens, it displays a "bouncing bar" resembling a hyphen ("-").

VEGAS SOUND I/O ASSEMBLY
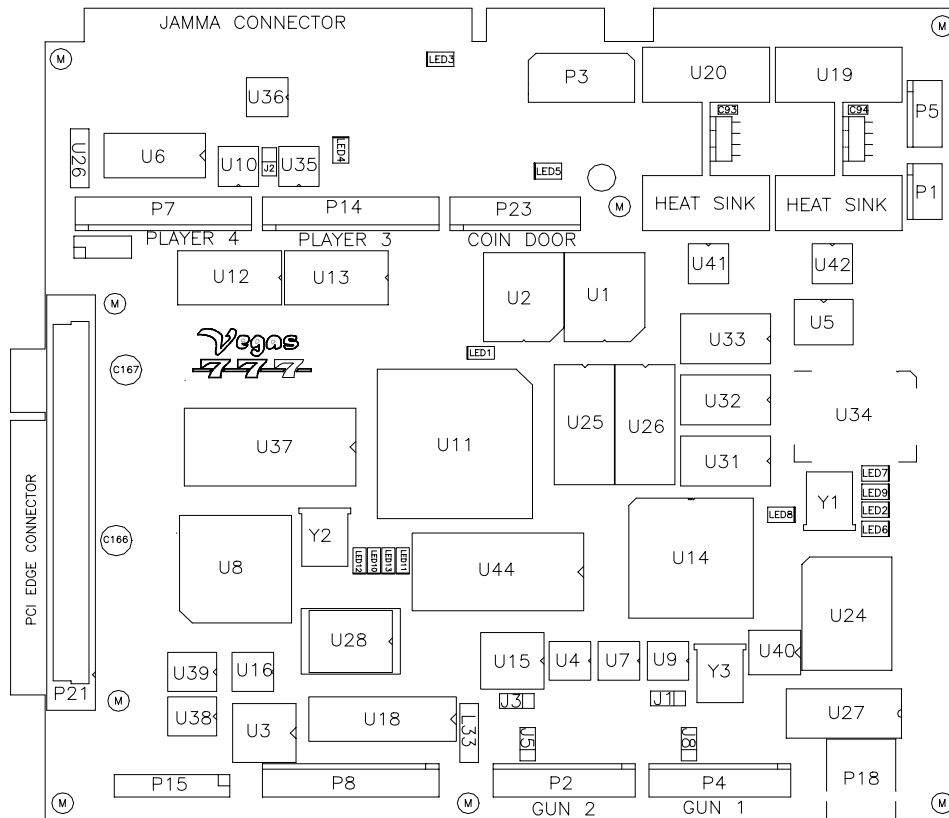
VEGAS SOUND I/O BOARD ASSY JUMPER POSITION CHART

Designation	Location	Function	Meaning	Position	State
J1 (Note 1)	Near U9 &	Gun 1 I/0	Input Mode	Pins 1 & 2	X
	Crystal Y3	Connector P2	Output Mode	Pins 2 & 3	
J2	Between U35 and U10	Video Sync	Positive Sync	Jumper Not Installed	X
J3 (Note 2)	Near U15	Gun 2 I/O Connector P4	Negative Sync	Pins 1 & 2	
			Input Mode	Pins 1 & 2	X
			Output Mode	Pins 2 & 3	
J4	None	None	Not Used	None	---
J5 (Note 2)	Between U15 &	Gun 2 I/O	Input Mode	Pins 1 & 2	X
	Connector P2	Connector P4	Output Mode	Pins 2 & 3	
J6	None	None	Not used	None	---
J7	None	None	Not Used	None	---
J8 (Note 1)	Between U9 &	Gun 1 I/O	Input Mode	Pins 1 & 2	X
	Connector P4	Connector P2	Output Mode	Pins 2 & 3	

Note 1   Set Gun 1 (P2) I/O port by setting both J1 and J8 jumpers to input or output mode.

Note 2   Set Gun 2 (P4) I/O port by setting both J3 and J5 jumpers to input or output mode.

VEGAS SOUND I/O BOARD ASSEMBLY LED INDICATOR STATUS CHART

Designation	Location	Function	Color	State	Meaning
LED1	Near U11	SIO Board Activity	Green	Off	No boot ROM
				On	SIO Board locked up
				Blinking	Power Fault
LED2	Near U34 Crystal Y1	Linking Connector Status	Green	Off	Not in use (no game linking)
				On	Normal Linked Operation
				Blinking	Link Fault
LED3	Near the Jamma Connector	-5V Power indicator	Red	Off	No power
				On	Normal operation
				Blinking	Power fault
LED4	Near U35 & Connector P14	+12V Power indicator	Red	Off	No power
				On	Normal operation
				Blinking	Power fault
LED5	Near Connector P23	+5V Power indicator	Red	Off	No power
				On	Normal operation
				Blinking	Power fault
LED6	Near U34 & Crystal Y1	CPU Linking Activity	Red	Off	Not in use
				On	CPU linking in progress
				Blinking	Normal operation
LED7	Near U34 & Crystal Y1	Linking Data	Red	Off	Not in use (no game linking)
				On	Sending data
				Blinking	Normal operation
LED8	Near U14 & Crystal Y1	Audio Activity	Yellow	Off	No sound boot ROM
				On	Locked up
				Blinking	Normal operation
LED9	Near U34 & Crystal Y1	Linking Receiving data	Yellow	Off	Not in use (no game linking)
				On	Receiving data
				Blinking	Normal operation
LED10	Near U44 & Crystal Y2	Audio activity	Green	Off	Not in use (no audio data)
				On	Receiving data
				Blinking	Normal operation
LED11	Near U44 & Crystal Y2	None	Red	Off	Not in use (normal)
				On	Circuit fault
				Blinking	Circuit fault
LED12	Near U44 & Crystal Y2	Interrupt activity	Yellow	Off	Not in use (no interrupts)
				On	Receiving data
				Blinking	Normal operation
LED13	Near U44 & Crystal Y2	Disk Activity	Yellow	Off	Not in use
				On	Processing data
				Blinking	Normal operation

VEGAS SOUND I/O ASSEMBLY DIP-SWITCH SETTINGS

Service technicians may change DIP-switches with AC power on. "*" indicates factory defaults.

DIP Switch U13		SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Display Comments on VT100	No Yes	Off* On							
Diagnostic Code Source	Hard Disk Drive EPROM		Off* On						
Not Used				Off* On					
Not Used					Off* On				
Not Used						Off* On			
Not Used							Off* On		
Not Used								Off* On	
Not Used									Off* On

DIP Switch U12		SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Monitor resolution	Standard Medium	Off On*							
Monitor Style	Video Game VGA		Off* On						
Joystick Type	8-Way 49-Way			Off On*					
Switch Condition	Normally Closed Normally Open				Off On*				
Vegas Sound I/O Board Version	Revisions 1 to 5 Revisions 6+					Off* On			
Not Used							Off* On		
Not Used								Off* On	
Not Used									Off* On

DC POWER SOURCE VOLTAGE LIMITS

Function	Range Limits	Color	Function	Range Limits	Color
Digital Circuits	+4.90 to +5.10V	Red	Coin Lights	-4.75V to -5.25V	Yellow
Audio, Lights	+11.5V to +12.5V	Orange	Auxiliary Power	-11.5V to -12.5V	Blue