AMADA MIYACHI AMERICA, INC.

02-14-18 Edit

Laser Model, Controller and Main PCB Compatibility
A-Series Lasers

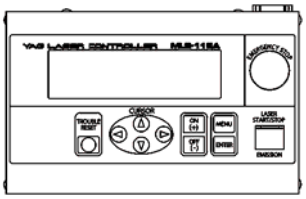
The tables below list the compatibility between Laser Model, Controller and CPU (Main PCB). A Laser will not function properly if the communication settings between the Controller and CPU are not properly set or if the Firmware set is incompatible. Any set-up/firmware incompatibility may cause an **E00 Communications** error. Refer to the *Firmware Compatibility* document for details on the *Main PCB* and *Controller* compatibility.

Laser/Controller/CPU compatibility:

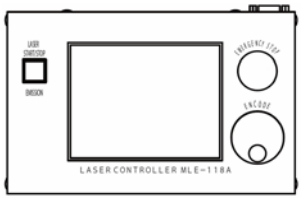
Laser Model	Controller	Transmission Mode	CPU (Main PCB)
LW2AG(E)[1]	MLE-115A-24	Half-duplex	ME-1925 A/B/C
LW5AG(E)	MLE-118A-00	Full-duplex	ME-1925 C
LW5AM(E)	MLE-115A-16	Half-duplex	ME-1925 A/B/C or ME-3023
LW5A(E)	MLE-115A-03	Half-duplex	
LW15A(E)	MLE-115A-03	Half-duplex	
LW25A(E)	MLE-115A-03	Half-duplex	
LW50A(E)	MLE-115A-01	Half-duplex	ME-1891
	MLE-115A-09	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW50AC(E)	MLE-115A-01	Half-duplex	ME-1891
	MLE-115A-09	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW70A(E)	MLE-115A-01	Half-duplex	ME-1891
	MLE-115A-09	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW70AC(E)	MLE-115A-09	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW150A(E)	MLE-115A-15	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW300A(E)	MLE-115A-06	Half-duplex	ME-1891
	MLE-115A-12	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW300AH(E)	MLE-115A-19	Half-duplex	ME-1958 A/B/C
	MLE-118A-00	Full-duplex	
LW400A(E)	MLE-115A-06	Half-duplex	ME-1891
	MLE-115A-12	Half-duplex	ME-1958 A/B/C or ME-3024
	MLE-118A-00	Full-duplex	
LW500A(E)	MLE-116A-01	Full-duplex	ME-1958 A/B/C or ME-3024
LW600A(E)	MLE-116A-01	Full-duplex	

Controller Options:

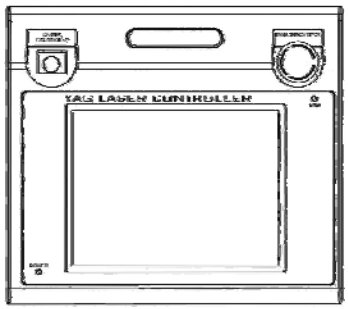
MLE-115A (monochrome screen):



MLE-118A (color screen):



MLE-116A (color screen):
LW500A(E)/600A(E) only



Note: All Laser Welders that use the ME-1891 Main PCB can be converted to operate on either the ME-1958 or ME-3024 Main PCB's. Refer to Manufacturing Specification MFG-281 for conversion details.

ME-1925 / ME-3023 CPU Settings:

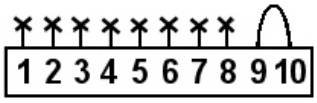
CPU (Main PCB)	Controller	Transmission Mode	SW6 Mode Switch	SW5-1 (optional)[2] Termination Resistor	SW4-5[3] Controller
ME-1925A	MLE-115A	half-duplex	N/A	N/A	N/A
ME-1925B *(01-15-07)*	MLE-115A	half-duplex	N/A	N/A	N/A
ME-1925C *(03-26-09)*	MLE-115A	half-duplex	Down	OFF	ON
	MLE-118A	full-duplex	Up	ON	OFF
ME-3023	MLE-115A	half-duplex	Down	OFF	ON
	MLE-118A	full-duplex	Up	ON	OFF

ME-1891 CPU Settings: ***none (half-duplex communication only)***

ME-1958 / ME-3024 CPU Settings

CPU (Main PCB)	Controller	Transmission Mode	SW4[1] Mode Switch	SW3-2 (optional)[2] Termination Resistor	CN27[3] Loop-Back	SW5-4[4] Controller
ME-1958A	MLE-115A	half-duplex	Down	OFF	Installed	N/A
	MLE-116A	full-duplex	Up	ON	Not-installed	N/A
	MLE-118A	full-duplex	Up	ON	Not-installed	N/A
ME-1958B *(01-15-07)*	MLE-115A	half-duplex	Down	OFF	Not-installed	ON
	MLE-116A	full-duplex	Up	ON	Not-installed	OFF
	MLE-118A	full-duplex	Up	ON	Not-installed	OFF
ME-1958C *(09-12-08)* **ME-3024**	MLE-115A	half-duplex	Down	OFF	Not-installed	ON
	MLE-116A	full-duplex	Up	ON	Not-installed	OFF
	MLE-118A	full-duplex	Up	ON	Not-installed	OFF

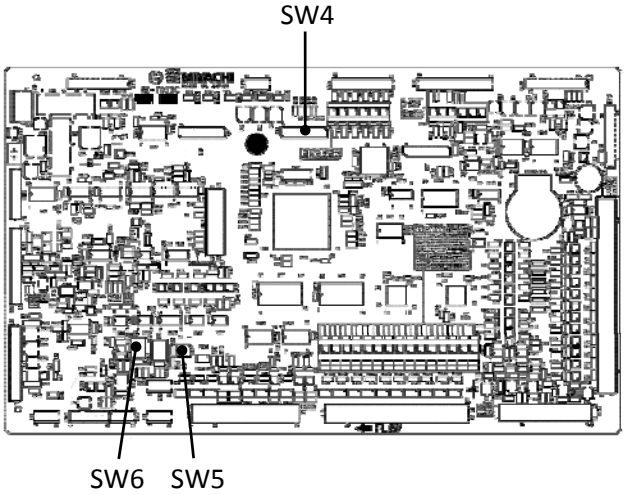
1. *SW4 is non-functional on the ME-1925A and ME-1925B Main PCB's.*
2. *Setting is optional. In noisy environments, the termination resistor should be used.*
3. *CN27 Loop-Back connector schematic (Shown in illustration on the right):*
4. *SW5 does not exist on the ME-1958A PCB.*



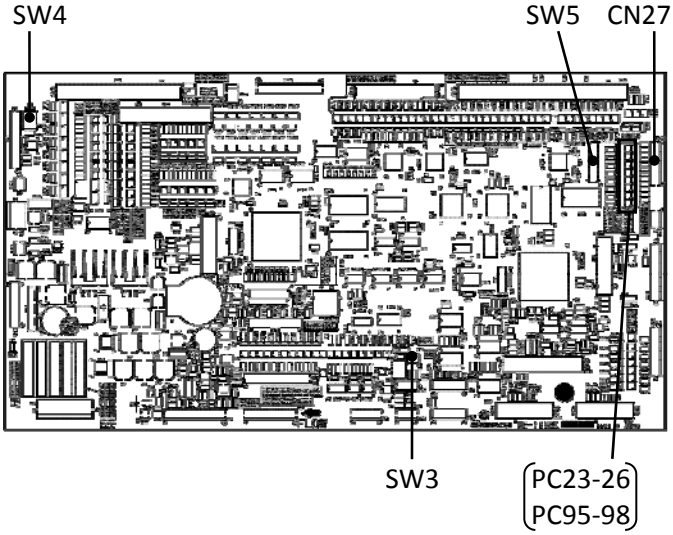
AMYA # 250-945 - Connector
AMYA # 700-272 - Pins

CN27 schematic

Component Layout:



ME-1925/ME-3023 Component Layout



ME-1958/ME-3024 Component Layout