



**Computer Weld  
Technology, Inc.**

**MWC™  
MODULAR WELD CONTROL**

**MWC™**

The microprocessor based Modular Weld Controller is the main control module and provides all control and communication functions and can program external motion control axis via the Local Area network (LAN) port. The controller can support up to four stepper motor controlled axis, using the MSC-1000™ Micro-Step Controller, and four DC servo controls, using the DMC-1000™ DC Servo Controller. The MWC™ provides all external Input / Output control interface and electrical connections to user supplied components. The MWC™ consists of two major control systems. The first is a Programmable Logic Controller (PLC) and the second is the Modular Weld Control (MWC™). The PLC is the main controlling element and provides the interface between the MWC™ and the external I/O functions. The PLC is configured by using the terminal serial port. The user can define up to 150 sequences that will be executed by the specified switch inputs. The MWC™ control provides all of the weld control functions and can be programmed for up to 40 weld schedules via the terminal serial port or remote pendant port.



The following parameters are programmable:

- Prepurge Gas Flow Time
- Ramp Down Time
- Pulse On Time\*
- Arc Start Parameter Time
- Crater Fill Time
- Pulse Off Time\*
- Arc Active Delay Time
- Wire Retract Time
- Background Wire Feed Speed\*
- Ramp Up Time
- Burn Back Time
- Weld Time (spot or manual)
- Post Purge Time

\* For Pulse TIG Applications

**FEATURES**

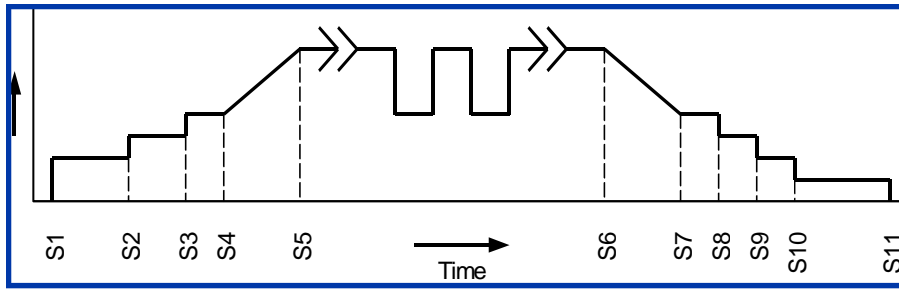
- User definable configuration
- RS-232 Serial Port
- Flexibility to adapt to most solid state equipment
- Ease of set up

**BENEFITS**

- 40 Weld Schedules and 150 PLC Sequences are user programmable
- Permits off-line programming, system configuration and remote control
- Permits user to employ existing equipment in many cases
- Welding Parameters displayed while welding
- Automatically recognizes installed peripheral devices

# MWC™ SPECIFICATIONS

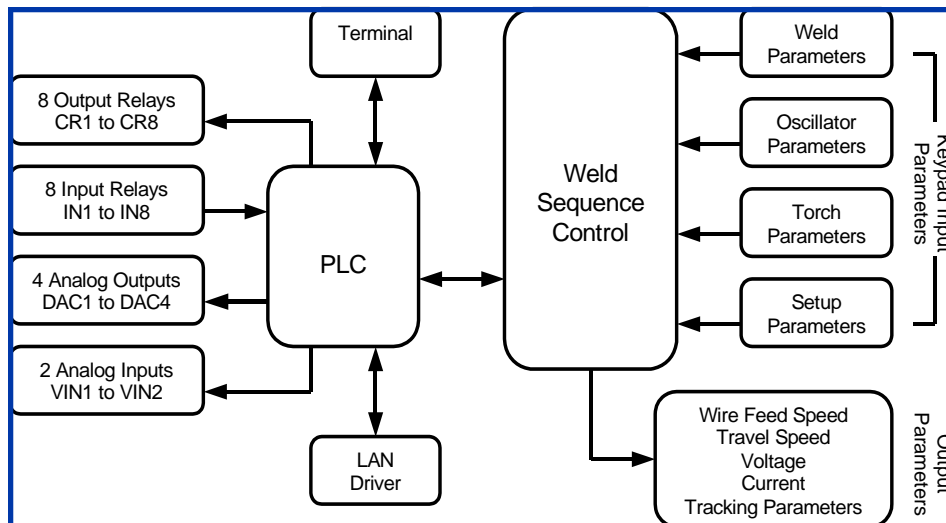
Weld Sequence Timed Events



Weld Sequence Events:

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| S1 = Cycle Start                     | S6 - S7 = Ramp Down Time             |
| S1 - S2 = Prepurge Gas Flow Time     | S7 - S8 = Crater Fill Parameter Time |
| S2 - S3 = Arc Start Parameter Time   | S8 - S9 = Wire Retract Time          |
| S3 - S4 = Arc Active Delay Time      | S9 - S10 = Burn Back Time            |
| S4 - S5 = Ramp Time                  | S10 - S11 = Post Purge Time          |
| S5 - S6 = Weld Time (spot or manual) |                                      |

MWC™ Control System Diagram



## MECHANICAL SPECIFICATIONS

- Dimensions:** 3.25" H x 13.25" W x 8.75" L (83mm x 337mm x 222mm)
- Weight:** 4.0 lbs. (1.8kg)
- Power Input:** 110 / 240 vac 50 / 60 Hz @ 8 amp
- Operating Temperature:** -10°F to +140°F (-23°C to +60°C)

Note: Specifications subject to change without notice.