



**Computer Weld  
Technology, Inc.**

# WSC-1000™ WELD SEQUENCE CONTROLLER

## WSC-1000™

The microprocessor based Weld Sequence Controller is comprised of a WSC-1000™ controller and a WRC-1000™ weld remote interface. The WSC-1000™ is the main control module and provides all control and communication functions and can program external motion control axes via the Local Area Network (LAN) port. The controller can support up to four stepper motor controlled axes, using the MSC-1000™ Micro-Step Controller, and four DC servo controls, using the DMC-1000™ DC Servo Controller. The WRC-1000™ provides all external Input / Output control interface and electrical connections to user supplied components. The WSC-1000™ consists of two major control systems. The first is a Programmable Logic Controller (PLC) and the second is the Weld Sequence Control (WSC). The PLC is the main controlling element and provides the interface between the WSC 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 WSC control provides all of the weld control functions and can be programmed for up to 40 weld schedules via the 16 key keypad or terminal serial 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

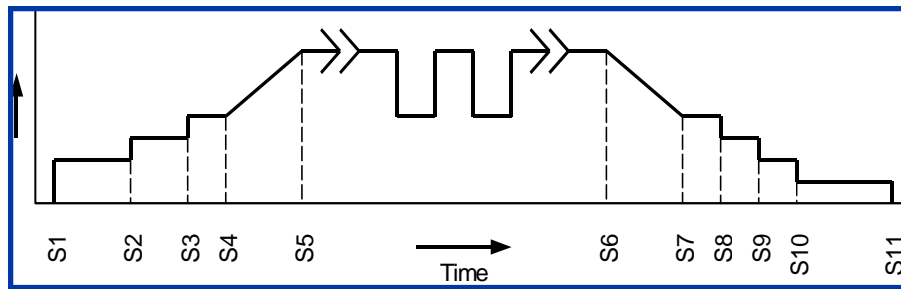
- User definable configuration
- RS-232 Serial Port
- Flexibility to adapt to most solid state equipment
- Front panel display
- Ease of set up

## 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
- Programming prompts displayed during set up
- Automatically recognizes installed peripheral devices

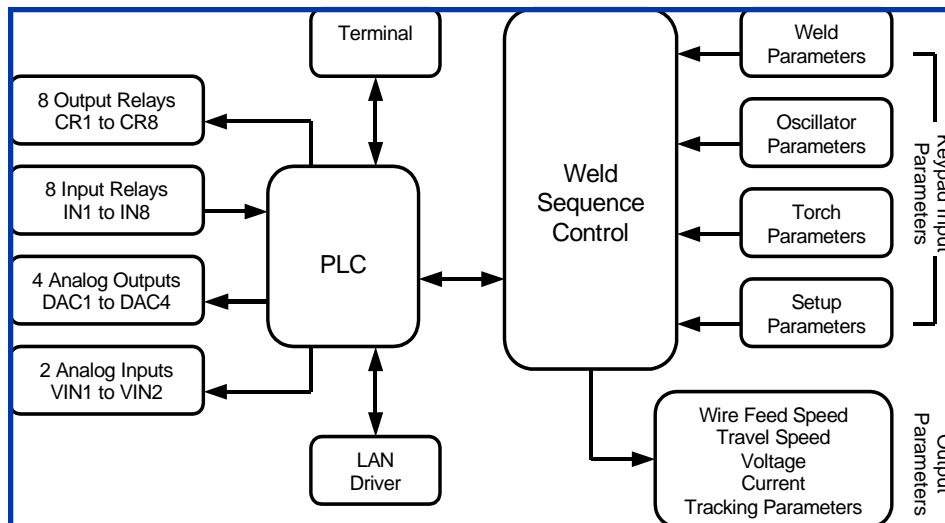
# WSC-1000™ SPECIFICATIONS

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) |                                      |



## MECHANICAL SPECIFICATIONS

### WSC-1000™ Weld Sequence Control

**Dimensions:** 4" H x 6.5" W x 11" L  
(102mm x 165mm x 280mm)

**Weight:** 5.5 lbs. (2.49kg)

**Power Input:** 110 / 240 vac 50 / 60 Hz @ 0.2kw

**Operating Temperature:** -10°F to +140°F (-23°C to +60°C)

### WRC-1000™ Weld Remote Control

**Dimensions:** 2" H x 6.5" W x 11" L  
(51mm x 165mm x 280mm)

**Weight:** 1.3 lbs. (0.589kg)

**Power Input:** 24 vac @ 1.0 amp (supplied by WSC)

**Operating Temperature:** -10°F to +140°F (-23°C to +60°C)

Note: Specifications subject to change without notice.