Jetline® 9700T Controller

Quick Specs

Applications
- Longitudinal seam welders
- Side beam track and carriage systems
- Powered turning roll drivers
- Welding positioners
- Welding lathes
- Weld head locators

Processes
- TIG (GTAW)
- Plasma arc welding (PAW)
- MIG (GMAW)
- Submerged arc welding (SAW)

Input Power
- 120 V (can be configured by end user for 240 V), 1-phase, 50/60 Hz

Power Cord
- Standard 120 V, 6 ft. (1.8 m) long

Dimensions (H x W x D)
- 8 x 10 x 6 in. (200 x 250 x 150 mm)

The 9700T Controller is our standard Jetline control and sequencer used on linear and circumferential welding equipment.

Jetline controllers are available to support a variety of applications with new systems and/or can be retrofitted to upgrade and extend the life of existing systems.

User-friendly front panel layout with large screen and graphic backlit display. Ability to display system status, travel speed, amperage and active outputs during operation.

Closed-loop control for exceptional accuracy and stability.

Microprocessor-based control technology.

Auto calibration. Simplified calibration process allows you to ensure accurate travel speed.

Unlocked and locked modes of operation allow management to decide if the operator can make changes to the setup of the control or variables during the weld.

Speed control and sequencer capabilities provide programmable speed control with travel start and stop delay times. In addition, provides a closing contact to initiate and extinguish the welding arc.

Automated stitch weld sequencing. 9700T Controller can be programed for stitch weld applications.

Modbus® provides enhanced control of compatible Dynasty® and Maxstar® power sources for a single point of programming.

Integrates with Jetline accessories including arc length controls, hot/cold wire feeders and oscillators.

Controller is warranted for three years, parts and labor.
**Specifications** *(Subject to change without notice.)*

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Processor</th>
<th>Display</th>
<th>Power Cord</th>
<th>Dimensions</th>
<th>Net Weight</th>
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</thead>
<tbody>
<tr>
<td>120 V, 1-phase, 50/60 Hz, 10 A</td>
<td>Microprocessor</td>
<td>Backlit, 4-line LCD</td>
<td>Standard 120 V, 6 ft. (1.8 m) long</td>
<td>H: 8 in. (200 mm) W: 10 in. (250 mm) D: 6 in. (150 mm)</td>
<td>14 lb. (6 kg)</td>
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<tr>
<td>240 V*, 1-phase, 50/60 Hz, 5 A</td>
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* Factory configured for 120 V, however user can reconfigure for 240 V.

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**Control Panel**

![Control Panel Diagram](image)

- 1. 4-line LCD Display
- 2. Emergency Stop
- 3. Start
- 4. Power (On/Off)
- 5. Adjustment Knob
- 6. Stop
- 7. Navigation and Jog Controls

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**Modes of Operation**

**Operator mode.** This is the mode used by the welding operator to run the unit. It permits travel speed, start and stop delays and weld time to be adjusted.

**Configuration mode.** This mode is used during the setup of the unit. It permits the setting of jog speeds, arc wait, weld direction, and other control boxes and features that are used in the system.

**Calibration mode.** In this mode, the closed loop can be turned on and off, the unit can be set for inch or metric units, and the calibration can be checked and set.

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**Program Options**

- Travel speed
- Diameter
- Touch refract (on/off)
- Arc Length Control lockout (with ALC only)
- Crater time (with MIG/SAW only)
- PTL (pneumatic torch lift)
- Weld sequence
- Delay arc
- Travel start delay
- End of weld (time, event or distance)
- Travel stop delay
- Return to home delay
- Finger release delay (Jetline seam welders only)
- Arc stop delay
- Seam tracker start/stop
- Skip weld configuration
- Step over (requires two 9700T controls and travel encoders)
- Stitch weld
Connecting the 9700T Controller to a Miller® Dynasty® or Maxstar® power source with Modbus capability provides full control of the power source remotely through the 9700T. In addition to standard 9700T controls, the Modbus provides the following setting controls from a single weld controller:

- Set polarity AC/DC (AC available on Dynasty power sources only)
- Ability to select AC wave shape (Dynasty units only)
- Pulse control and associated variables
- Preflow/postflow
- Control initial time/amperage upslope/downslope and final time/amperage
- Select HF or lift start
- View sequence status in real time
- Power source amperage is displayed on the 9700T while welding
- Disables front panel of the power source while welding

**TIG and MIG Setups**

**TIG setup.** The 9700T can be installed on new or existing Jetline longitudinal seam welders and circumferential welders. The 9700T integrates with the Jetline hot/cold wire feed systems, arc length control, Weldcraft TIG torches and Miller Dynasty or Maxstar power sources to provide a complete automated TIG welding solution.

**MIG setup.** The 9700T can be used for longitudinal or circumferential welding systems for MIG. The 9700T is combined with Tregaskiss automated MIG torches, Miller MIG power sources and Jetline circumferential and longitudinal seam welding systems to provide an automated MIG solution.
Arc Length Control (ALC)
Jetline arc length control maintains a constant preset arc length by controlling arc length via control of the arc voltage in TIG (GTAW) or plasma arc (PAW) welding applications.

Cold Wire Feeders
Jetline cold wire feeder is primarily used for automated TIG (GTAW) and plasma arc (PAW) welding to add “fill” to a weld joint.

Hot Wire Process
The hot wire process is used in applications where a high deposition of the filler wire is desired. It is used primarily with the TIG (GTAW) or plasma arc (PAW) welding process.

Mechanical Oscillator
Mechanical oscillator systems can be integrated into new Jetline systems, or sold as a bolt-on package for existing systems.

Magnetic Oscillator
Cyclomatic® magnetic arc controls can provide even heat distribution, prevent undercutting, eliminate excessive porosity, ensure sufficient penetration, and even out the weld puddle for TIG (GTAW) and plasma arc (PAW) welding.

Tactile Seam Tracking
Cyclomatic® tactile seam tracking systems provide accurate, repeatable weld joint tracking for automated MIG (GMAW), flux-cored (FCAW) and submerged arc (SAW) welding.