

# Skip-Line® Specifications: SC-12 Road Marking Vehicle Control System

## Preface

Specifying a complete Skip-Line® SC-12 Road Marking Vehicle Control System improves overall vehicle performance, while simultaneously reducing operator load with an intuitive interface. Contact your preferred OEM for further information.

## Skip Timer

- The skip timer control boxes shall use <full size mil-spec OR mid-sized IP67 rated> toggle switches.
- The skip timer control box shall use <sealed push-button OR thumb joystick> for menu navigation.
- The skip timer control box shall have a full color 4.3" user interface display.
  - The color menu system shall provide an animated preview of skip timer patterns, reflecting current settings and switch positions.
  - The color menu system shall provide guided calibration processes for distance and pump calibrations.
  - The color menu system shall have a descriptive information system to provide the operator with information about errors, warnings, and skip timer operation.
  - The color menu system shall provide a switch test menu, for in-field diagnosis of switch failure.
- The skip timer system shall communicate using CAN bus serial communications protocol.
- The skip timer system shall have an operating temperature range from 33°F to 140°F.
- The skip timer system shall have a storage temperature range of 10°F to 160°F.
- The skip timer output boxes shall directly drive all loads (air dusters, material guns, bead guns, double-drop bead guns, etc.), and shall have drive current ratings of five (5) amps per channel. All outputs shall be solid state.
- The skip timer output boxes shall have driver indicator LEDs for all driver outputs, to simplify diagnostics.
- The skip timer shall accept up to five pump stroke inputs.
- The skip timer shall accept motion signals from either a magnet-wrapped driveline collar, or from compatible transmission motion signals. All motion signal sources will maintain a 0.25" resolution during normal road marking operations.
- The skip timer system software shall be field upgradeable via USB drive.

- The skip timer system hardware shall be field upgradeable using hub expansions ports for adding more driver output boxes, sensor input boxes, or data logging equipment.
- The skip timer shall separately track skip and solid distance painted per gun, and paint consumption from pump strokes, into internal, non-volatile counters.
- **OPTIONAL**
  - The skip timer driver output boxes shall be placed near loads to reduce wiring and improve long-term system maintainability.
  - The skip timer control box shall provide symmetric and asymmetric marker layout functionality, and shall be compatible to receive pre-configured marker layout setup from a touch screen interface.
  - The skip timer system shall control electric linear actuator gun raisers, which shall be engaged directly by bi-directional, solid state H-bridge driver outputs. Relays shall not be accepted.
  - The SC-12 system shall manage all electronic control systems on the vehicle. Mixed PLC or other control systems shall not be accepted.
  - The skip timer control box shall provide specialized black patterns, including contrast (black between two lines), configurable length foreshadow (black before the start of the stripe), configurable length aftshadow (black after the end of the stripe), and fill gap (black for the entire length between stripes).
  - The skip timer shall be compatible with a remote switch for manual initiation of skips.
  - The skip timer shall track distances of defined patterns into separate advanced counter channels.
  - The skip timer shall provide contrast, fore-shadow, and aft-shadow black pattern options.
  - The skip timer shall provide flexible marker layout patterns that can accurately mark all marker details required by California <or other state, check with Skip-Line for compatibility>.