



As Reliable as the Sun

Silent Guardian Speed Limit Trailer User's Guide

with MegaTech Controller

Basic Operation:

Positioning

- 1) Check for proper positioning of sign panel by sighting through sight tubes toward location of approaching traffic.
- 2) Fully extend jack stands. Jack stands should be used anytime the unit is not attached to a tow vehicle.

- ⚠ **Chock wheels before detaching from vehicle.**
- ⚠ **Check for overhead wires and obstructions.**
- ⚠ **Keep hands clear of lifting mechanism at all times.**
- ⚠ **Do not stand under sign panel while raising or lowering.**
- ⚠ **For safer placement, shield unit behind a barrier or crash cushion.**

Operation

- 3) Raise sign panel to operating position and engage safety locking pins.
- 4) On MegaTech controller touch "Log In" button.
- 5) If required, enter a valid password and touch "OK".
- 6) Adjust Speed Limit to desired number.
- 7) Additional adjustments to time/days of week displayed can also be made, if required.
- 8) Touch "OK" button and return control console to stored position.
- 9) Close, latch and lock battery compartment cover.



MegaTech Controller

Transporting Checklist

- ☐ Blank the sign panel.
- ☐ Close and latch battery compartment cover.
- ☐ Secure battery compartment with padlock.
- ☐ Lower the sign panel on rear support. The cable should be slack.
- ☐ Secure all jack stands in retracted position.
- ☐ Secure all locking pins in appropriate positions.
- ☐ Connect and lock coupler onto tow vehicle.
- ☐ Retract and lock tongue jack in horizontal position.
- ☐ Install safety chains, crisscrossed under tongue.
- ☐ Connect stop and tail lights and check function.
- ☐ Periodically check tire pressure and coupler integrity
- ⚠ **Always transport trailer with tongue pitched down and facing forward.**

LED Display Module Replacement (P/N 781-251-617)

- 1) ***Sign case opens to the rear.*** Open sign case door and locate the six (6) 1/4-turn wing-head captive fasteners on the LED Display Module to be replaced.
- 2) Rotate each 1/4-turn fastener counter-clockwise 1/4-turn and carefully remove module from sign panel.
- 3) Remove power and data connectors from module by squeezing the two locking tabs and pulling the connector free.
- 4) Insert connectors into new replacement module until a click is heard.
- 5) Insert replacement module into sign panel.
- 6) Push and rotate all six (6) 1/4 turn captive fasteners clockwise until secure.
- 7) Close and latch sign panel door.
- 8) Restart control console if necessary.

General Maintenance

For flooded batteries only, check battery fluid level once each month. Add distilled water if level is below indicating ring.

- ⚠ **Avoid contact with battery fluid at all times. Should contact occur, flush with water and seek medical attention immediately.**
- ⚠ **No smoking or open flames near battery compartment!**

Lubricate pivot points and jack screw shafts every 3 months. Use a quality grade of chain lube.

Check tire pressure during regular maintenance. Correct pressure is 26 psi (200 kPa).

Clean sign panels and solar panels periodically as required.

Control Console Replacement (P/N MB-22-915)

- 1) Raise control console into operating position.



- 2) Disconnect all AMP-CPC, Ethernet, USB, and DB-9 serial connectors from back of control console.
- 3) Rotate the controller slide locks located just underneath the small flat supports with two rubber bumpers at the top of each track (normally covered by the control console lifting handles when controller is in stored position) outwards to open slide tracks.
- 4) Lift controller up and out of the slide tracks.

Reinstall control console by reversing procedure.



Phone: 610-391-8602

For complete Operation & Maintenance Manuals as well as diagrams, software updates and more please visit Product Support at: **www.solartechtechnology.com**

Fax: 610-391-8601 email: techsupport@solartechtechnology.com



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Basic Operation:

Positioning

- 1) Check for proper positioning of sign panel by sighting through sight tubes toward location of approaching traffic.
- 2) Fully extend jack stands. Jack stands should be used anytime the unit is not attached to a tow vehicle.

! Chock wheels before detaching from vehicle.

! Check for overhead wires and obstructions.

! Keep hands clear of lifting mechanism at all times.

! Do not stand under sign panel while raising or lowering.

Operation

- 3) Raise sign panel to operating position and engage safety locking pins.
 - 4) Press the "OK" button to activate the backlight on the LCD.
 - 5) Press the "OK" button again to enter the menu.
 - 6) Press the "OK" button to change/set the speed limit.
 - 7) Press the up and down arrows to adjust the speed limit.
 - 8) Press the "OK" button to confirm changes.
- (Additional changes can be made under Advanced Settings.)
- 9) Press the "OK" button to return to the main menu.
 - 10) Press "Home/Power" button to return to the main screen.
 - 11) Close, latch and lock battery compartment cover.

MicroTech Controller



Transporting Checklist

- ☐ Blank the sign panel: Press the "Home/Power" twice; from the System Power Menu, press the down arrow to "Sign Off", then press the OK button; Press OK to return to the menu; press the back button to get to the main screen.
- ☐ Close and latch battery compartment cover.
- ☐ Secure battery compartment with padlock.
- ☐ Lower the sign panel on rear support. The cable should be slack.
- ☐ Secure all jack stands in retracted position.
- ☐ Secure all locking pins in appropriate positions.
- ☐ Connect and lock coupler onto tow vehicle.
- ☐ Retract and lock tongue jack in horizontal position.
- ☐ Install safety chains, crisscrossed under tongue.
- ☐ Connect stop and tail lights and check function.
- ☐ Periodically check tire pressure and coupler integrity.

LED Display Module Replacement (P/N 781-251-617)

- 1) ***Sign case opens to the rear.*** Open sign case door and locate the six (6) ¼-turn wing-head captive fasteners on the LED Display Module to be replaced.
- 2) Rotate each ¼-turn fastener counter-clockwise ¼-turn and carefully remove module from sign panel.
- 3) Remove power and data connectors from module by squeezing the two locking tabs and pulling the connector free.
- 4) Insert connectors into new replacement module until a click is heard.
- 5) Insert replacement module into sign panel.
- 6) Push and rotate all six (6) ¼ turn captive fasteners clockwise until secure.
- 7) Close and latch sign panel door.
- 8) Restart control console if necessary.

General Maintenance

Check battery fluid level once each month.
Add distilled water if level is below indicating ring.
(N/A Gel-Cell batteries)

! Avoid contact with battery fluid at all times. Should contact occur, flush with water and seek medical attention immediately.

! No smoking or open flames near battery compartment!

Lubricate pivot points and jack screw shafts every 3 months. Use a quality grade of chain lube.

Check tire pressure during regular maintenance. Correct pressure is 26 psi (200 kPa).

Clean sign panels and solar panels periodically as required.

Control Console Replacement (P/N MB-22-907)



- 1) Locate the two (2) wing nuts behind the controller on back side of divider plate.
- 2) Loosen and remove wing nuts and corresponding carriage bolts.
- 3) Pivot controller towards front of battery box and lift tabs on bottom out of divider plate.
- 4) Before fully removing controller, disconnect all AMP-CPC, Ethernet, USB, DB-9 serial connectors, all power connectors, and antenna connectors from sides and bottom of controller.
- 4) Lift controller out of the battery box.

Reinstall control console by reversing procedure.



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