



**K&K Systems, inc.**  
Traffic Safety Products Manufacturer

# MB9757 PORTABLE CHANGEABLE MESSAGE SIGN

Our CMS Portable Message Sign Series features several enhancements. Conversion to surface mount components guarantees LED alignment and eliminates failure due to vibration fatigue. An improved driver chip gives better lighting intensity control as well as better overall performance. The high efficiency regulator provides a significant power savings. Furthermore, design improvements ensure product reliability by including a better ground plane for improved noise-immunity. It also has tinted vias to enhance survivability in hostile environments.

## FEATURES

- ▶ Multiple Programming Options
- ▶ Vibration Fatigue Prevention Design
- ▶ Power Saving Regulator
- ▶ Maintenance Free Batteries
- ▶ Long Lasting Battery Life
- ▶ Sealed Battery Box
- ▶ Single 120 Watt Solar Panel
- ▶ Meets MUTCD Standards
- ▶ Auto Dimming
- ▶ Super Bright LED Technology
- ▶ 360° of Rotation
- ▶ Durable Powder Coated
- ▶ (4) Adjustable Corner Jacks
- ▶ (1) Tongue Jack
- ▶ Heavy-Duty Aluminum Control Cabinet
- ▶ Sleek Frame Design

The MB9757 measures 97" x 57" and is mounted on a powder coated hydraulic style trailer. It provides messaging functionality to display predefined and custom messages in multiple lines of alphanumeric text and graphics via an on-board keyboard, Bluetooth tablet, or wirelessly using any internet connected device.

At K&K Systems, we constantly strive for innovation and standard for performance unmatched in the industry. While improvements may come at a higher initial cost, the result is an overall lower cost of ownership with less maintenance and repairs.



Tested and approved by third party organizations:



- NEMA TS2/TS4:
  - Temperature Testing -34c to +74c
  - Vibration and Drop Testing
- FCC Part 15 subpart B, Class B
- ESD IEC 6100-4-2-B & TS-4
- NEMA 3R Cabinet
- Wind Load Survival
- High Humidity Environment Survival (+53c, 95%RH)
- Salt Environment ASTM B-117
- Solar System Tested
- Built in Battery Backup with AC Systems

# MODEL #MB9757

## CMS SERIES

### TRAILER

**Width:** 68" fender to fender  
**Length with tongue:** 148.25"  
**Length without tongue:** 98.5"  
**Salt Spray:** 4,000 hours  
**Paint:** Powder Coat  
**Main frame:** 2"x 5"x 1/8"  
**Front/Rear Cross members:** 2"x 3"x 1/8"  
**Wheels:** 15"  
**Axle:** 3500 lbs double leaf spring  
**Fenders:** High-density polyethylene  
**Jacks:** (4) adjustable corner jacks & tongue jack with wheel  
**Tongue and Safety Chains:** 2" ball hitch; 1/4" safety chains with hooks

### SIGN DISPLAY

**Pixel Matrix:** 27x48 Pixel Arrangement  
**LED Module:** Each is 6x9 matrix  
**LED's Per Pixel:** 4  
**LED Type:** Agilent amber 592NM  
**Viewing Angle:** 30 degrees  
**Visibility:** Up to 1 mile  
**Hours:** 100,000 hour LED  
**Lines:** Displays text and graphics  
**Characters per line:** 8 characters  
**Character Height:** 12"  
*\*If one module fails, remainder of board is unaffected*

### DISPLAY ENCLOSURE

**Construction:** Extruded Aluminum 6063 alloy  
**Length:** 97"  
**Width:** 57"  
**Depth:** 6"  
**Paint:** Powder coat  
**Salt Spray:** 4,000 hours  
**UV Resistant:** 500 hours  
**Seal:** Weather resistant  
**Venting:** Vented top and bottom  
**Front face:** 1/8" Lexan UV matte finish  
**Raising and lowering of display:** Electro-hydraulic  
**Secondary raise and lowering:** Manual hand pump

### POWER AND CHARGING

**Batteries:** (4) 12 volt batteries for combined 440 amps  
**Battery Charger:** 120 Volt, 12V, 60 amp  
**Recharge:** 24 hours  
**On-board diagnostics to monitor:** Solar, battery, and load  
**Solar:** (1) 120 watt solar panel  
**Regulator:** Low voltage & high voltage disconnects built into CrossTalk

### WIRELESS CONTROLLER

**Wireless Device:** CrossTalk Controller  
**Bluetooth Programming:** Yes  
**Controller Display:** On-board tablet  
**Data Entry:** On-board tablet software  
*\*\*Auto Resume\*\* after power failure*  
**Control Cabinet:** Weatherproof aluminum construction

### OPTIONS

- ▶ Locking lug nuts
- ▶ Radar
- ▶ Pintle ring or bulldog hitch
- ▶ Electric or hydraulic brakes
- ▶ Custom Paint
- ▶ Outrigger Stability Supports
- ▶ Other Options available

### KEYBOARD CONTROLLER

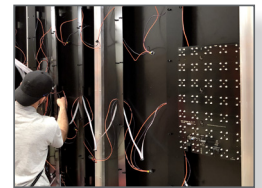
**Quick Message Selection:** Thumbwheel to quickly select between 16 user programmable messages.  
**Controller Display:** LCD  
**Data Entry:** Mini Keyboard  
**Memory:** Non volatile  
*\*Pre-wired to accommodate radar, cell modem, and PC*  
*\*\*Auto Resume\*\* after power failure*



The CrossTalk®, K&K's proprietary communication system, provides secure wireless functionality via cloud-based software.



Standard CMS units are equipped with an on-board keyboard for programming and NTCIP Compliance.



Robust aluminum composite slat stabilizes LED panels.



Gear style braking system secures the display angle.

Recessed mast/display mount allows for a secure and lower ride height while traveling.

Heavy-duty aluminum control cabinet with weather sealed door is durable and spacious.

Rubber blocks support the display for a stable and cushioned ride while traveling.

