Portable Changeable Message Sign
Quick Use and Reference Guide

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Quick Edit feature for
American Signal PCMS

- Press the BLANK switch inside the control cabinet to turn off the sign display.
- Press Q on the hand held (QUICK Edit)
- Enter an Extended- or Full-level password (default password is OWNER) and press enter
- At the next screen you will see P1 L1 which means Page 1 Line 1. Enter the desired text for your first line, then press enter to go to the next line (P1 L2). Enter the desired text for your second line, or press enter again to make blank lines. A maximum of 3 pages with 3 lines of text each can be entered using Quick Edit.
- Once all 3 pages have been created then the message is automatically saved in the next available CHANGEABLE message slot, and ACTIVATED on the sign.
- Press the BLANK switch inside the control cabinet to display the activated message.
- Note: The message will be formatted according to the default message settings (font size, alignment, on/off time, etc.). The default message settings can be changed in the ADMIN menu. Individual message settings can be changed in the MESSAGE menu.

Please see pages 9-11 of the Software Operations Manual for information on displaying messages through the menu commands.

Please see page 17 of the Software Operations Manual for more information on passwords.

Please see page 20 of the Software Operations Manual for more information on default settings.

YouTube programming video: https://www.youtube.com/watch?v=EP-8F5w3S48

If you have questions you can contact the Amsig Service Department at 770.448.6650 ext 3 or service@amsig.com.
### 3.5 Sequences Screen

The sequence screen allows the user to set multiple changeable and/or permanent messages to display in a sequence. This function is useful for the user to choose from the messages already programmed instead of manually entering each message. From the Messages menu scroll to Sequences, select ENTER and press [Enter].

- In the Sequences menu select ADD and press [Enter].
- Scroll and select desired message and press [Enter].
- Repeat this step until all desired messages have been selected.
- Added Sequences will be stored as new changeable messages.
- Once completed return to home screen, then select messages and press [Enter].
- Select Changeable Messages and press [Enter].
- Select the Sequence desired then select Active and press [Enter].
PCMS Power System Overview (- excerpt from Service and Maintenance Manual)

2.3 Solar Panel Assembly

The Solar Panels convert sunlight into electrical power (12VDC) to maintain the charge state of the Batteries. This re-charging of the Batteries allows the VMS to operate over a longer period of time before requiring landline (or generator) 120V charging. See Specifications section for more information on the Solar Panel.

3.4 Quick Re-Charge the Batteries

The Solar power supply system furnished with Amsig VMS includes multiple deep-cycle 6V Batteries which are uniquely able to withstand the deep discharges that occur periodically during normal operation. The system has been designed to provide sign operation over all of the usable state of charge level of the Batteries.

Depending upon several factors (i.e., length & duration of message displayed, the brightness level, the number of Solar Panels, the amount of available sunlight, the number of Batteries, the age of the Batteries and the ambient temperature), voltage level of the Battery pack can eventually drop below 11.2VDC (Default) and the VMS will stop operating. At that time (or sooner if desired), it will be necessary to recharge the Batteries with 120VAC (from a landline or generator). An abbreviated summary of steps to charge the Batteries with the provided 75A Charger are shown below:

- Turn the VMS system off at Main Power or Sign Display Switch. (Note: The system can be left on during charging, however, it will require more time to fully recharge the Batteries.)
- Bring 120VAC to Trailer and plug into covered Receptacle on right side of Pedestal Assembly
- For fully discharged Batteries, charge for a minimum of 72 hours. Batteries in a higher state of initial charge can be charged for less than 72 hours.
- When Batteries are fully charged, unplug 120VAC power source from Pedestal. Batteries are fully charged when the Specific Gravity with a temperature compensated hydrometer is 1.25±0.010.
MAINTENANCE CHECKLIST

BEFORE DEPLOYMENT

Check the battery voltage level of each sign before deploying it. If the batteries are not fully charged then charge the batteries with AC power until a full charge is achieved.

WEEKLY

Clear/clean solar panels on deployed signs. A push broom should be sufficient to clear off most debris or snow. Ice should be removed ASAP by applying warm water. Wipe off the cells with rags or paper towels if there is considerable buildup. Do not use industrial cleaner.

MONTHLY

Check the batteries. Make sure there is plenty of distilled water in every cell of every battery. Check the poles of the batteries for buildup - Coca-Cola scrubbed with a wire brush is a quick remedy for removing buildup; applying Vaseline to the poles is a good preventive measure.

SEASONAL STORAGE

Fully charge and fully deplete batteries while in storage. If the sign is in storage for longer than a month, take the following measures to insure optimal battery and sign performance:
   1. Blank the sign display.
   2. On a full battery charge, leave the sign unused for 30 days.
   3. Use the AC adapter to charge the batteries for 2 days.
   4. Repeat the 30/2 cycle for the duration of storage.

Letting the batteries die for an extended period of time may prevent them from holding a charge again. In a blanked state, the batteries may last longer than 30 days before running out of a charge, but we schedule the charging to coincide with regular monthly maintenance for user convenience. Also, when pulling a sign in from the field for either storage or maintenance the user may notice the mast is rusted and/or dry from being exposed to weather. DO NOT lubricate the mast to assist in the lowering process. If hydraulic operation is not possible for some reason, call our Service Department immediately.

Refer to sections 2.3, 3.4, and 4.3 of the Service and Maintenance Manual for detailed information.

YouTube maintenance video: https://www.youtube.com/watch?v=o2vs4vWJ2Bc

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Battery Service Instruction Guide:

A regular maintenance check of battery health and service serves to minimize the frequency of emergency maintenance events on the sign. American Signal Company recommends that when the sign is retrieved that the sign is serviced in a well-lit and well-ventilated area at a temperature between 60°F and 80°F. Before continuing any service, please use proper PPE for battery maintenance including acid resistant rubber gloves, apron, and safety glasses.

- Disconnect the battery pack from the sign using the battery switch.
- Clean the top of each battery with a mildly alkaline solution. Baking soda or soda ash mixed with water are preferred.
- Remove any residue with clean water.
- Ensure terminals are clean and that all terminal nuts are tightened to 100 in-lbs.
- Open the battery caps and ensure that the plates are submerged in acid. If the plates are not submerged add distilled water only until the plates are covered. Additional filling can result in the batteries boiling over during equalization.
- Close the battery caps.
- Charge the battery to full capacity.
- Open the caps on the battery.
- Add distilled water until the electrolyte level is ~1/4” from the bottom of the vent well. Over filling can result in the batteries boiling over during equalization.
- Close the battery caps.
- If any water was added or it has been over 1 month since the last equalization, perform an equalization on the batteries.
  - Equalization voltage: 15.2V
  - Duration: 3hrs minimum
- Open the battery caps
- Test the specific gravity with a hydrometer. A successful equalization will result in a specific gravity >1.265 in each cell with a variance between the cells less than +/-0.015.
- Close the battery caps.
- Reconnect the battery pack to the circuit using the battery switch.

For further information and in-depth instructions or service kit availability please contact your American Signal Company representative or our partners at US Battery. US Battery has a wonderful website that explains the above procedure in both written and video format. Just go to USbattery.com

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