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Tranco Services, DBA Kanawha Electric and Machine Company
141 Campbells Creek Drive
Charleston, WV 25306

DIVISION OF HIGHWAYS

Request for Quotation

Full Matrix Trailer Mounted Solar Powered Message Board

RFQ Number 7012EC05



VER-MAC PCMS-1500

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WV PURCHASING
DIVISION

Proposal Table of Contents

Table of Contents.....	2
Section I, Company Information/Contact Information.....	3
General Information, Kanawha Electric & Machine Qualifications.....	4
Section II, Bidder Preface Proposal.....	5
Purchasing Affidavit.....	6
Vendor Preference Certificate.....	7
Bidder's Evaluation Report.....	8

ATTACHMENTS:

- A: PCMS-1500 Technical Information
 - Enclosure One, Technical Brief
 - Enclosure Two, General Information and Options
 - Enclosure Three, Ver-Mac Touch Screen Controller
 - Enclosure Four, Ver-Mac Warranty Statement



Kanawha Electric & Machine Company

141 Campbells Creek Road Charleston, WV 25306
 PH 304-926-2650 1-800-649-4926 FAX 304-926-6623
www.tramcoservices.com

Company Information

Company Name:	Tramco Services, DBA Kanawha Electric and Machine Company
Office Address:	141 Campbells Creek Drive, Charleston, WV 25306
Remittance Address:	141 Campbells Creek Drive, Charleston, WV 25306
Phone Number:	304-926-2650
Fax Number:	304-926-6623
Principal Contact:	Stephen S. Kappa

Type of Company

Corporation:			
State incorporated in:	West Virginia	Date:	2000
President:	Mr. Thomas E. Sheppard		
Vice President:	Mr. Larry Ward Jr.		
Chief Financial Officer:	Mr. Wally Weddington		
Sole Proprietorship:	Sole Owner is Mr. Thomas E. Sheppard		
WV Vendor Number	707143136		



Kanawha Electric & Machine Company

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PH 304-926-2650 1-800-649-4926 FAX 304-926-6623
www.kemcoservices.com

Description: Kanawha Electric and Machine Company (KEMC) is an SBA registered Small Business that is also HUBZone certified. KEMC operates as an electrical apparatus repair facility, a mechanical apparatus repair and machine shop facility, certified welding facility and an authorized warranty repair and distribution center for premium brand electric motors, generators, light towers and solar/diesel powered message board products. Our electrical apparatus repair services includes AC & DC motors, generators, light towers, message boards and pump rewinding, refurbishing, redesign and testing of these components to specifications compliant with our ISO Quality Assurance Program. Our services cover a full range of electric motors, pumps and generators including light towers, message boards, random wound stators, rotors and armatures, form wound stators and armatures; synchronous stators and rotating fields; explosion proof motors; UL motors; MSHA approved motors; and submersible pump motors.

Strengths: KEMC services customers in seven states: West Virginia, Tennessee, Kentucky, Virginia, Ohio, Maryland and Pennsylvania. To better serve customer needs, KEMC maintains scheduled Emergency Response Teams 24 hours a day, seven days a week, and 365 days a year. Our Emergency Response Service ensures that experienced help and timely, dependable solutions are just a phone call away. Kanawha Electric and Machine Company is the only ISO 9001-2008 certified and registered electrical repair and rebuild facility on the east coast. Our ISO certified system governs every aspect of our service to our customers. KEMC is housed in a modern, three year old facility containing nearly 50,000 square feet. Kanawha Electric is an authorized Warranty Repair Center for Baldor Electric Motors, Generators and Light Towers, Magnum Generators and Light Towers, Wanco Light Towers and Message Boards and Ver-Mac Message Boards.

Experience: Kanawha Electric & Machine Company has been in continuous operation since 1937. Our employees are all highly trained and skilled associates with an average of over 20 years of service experience each. Our workforce incorporates requirements and standards acceptable to EASAQ rebuild specifications and SKF Electric Motor Rebuilder standards. Company machinist are trained on both CNC and manual machining equipment and commonly work with many exotic metals including Hastelloy, Titanium and Tungsten. Kanawha Electric and Machine Company is certified by the American Welding Society as a welding facility and is also certified by AWS to conduct welder certification training and welder certification testing.

Solving Your Electrical Apparatus, Generator, Message Board, Machining and Welding Challenges

- New electric motor & pump sales
- Motor & pump repair, rebuild, redesign
- Service & Warranty repair generators & light towers
- Service & Warranty repair message boards
- Repair of dewatering and trash pumps
- Authorized motor warranty repair
- Emergency response service
- Predictive onsite maintenance
- AWS certified welding facility
- AWS certified training and testing
- CNC and manual machining solutions
- Custom fabrication and machining

Company Data:

Company Code: 4E5H4 DUNS #: 005009774 HUBZone Certification # 43813, May 18, 2011

Primary NAICS Codes: 811310, 423610, 335312, 334416, 333131, 332999, 332721, 332710, 326291



Proposal Preface

Tranco Services, DBA Kanawha Electric and Machine Company, acknowledges that the specifications included in RFQ Number 7012ECO5, as may be amended by mutual agreement, are acceptable as operating conditions and further, that at the State of West Virginia's Purchasing Division option, this RFQ and Kanawha Electric's proposal will be binding on both parties, and may become an integral part of the contract as an exhibit.

This proposal is based on providing the Division of Highways, State of West Virginia, a Full Matrix Trailer Mounted Solar Powered Message Board, Model PCMS-1500, manufactured by Ver-Mac. The State of West Virginia may order additional optional equipment or features to the basic unit based upon a mutually agreed upon price which may be established at any time during the life of the contract. A complete list of all options available with the unit is outlined in the General Information Handout provided as Enclosure Two.

Kanawha Electric and Machine Company agrees to extend the price, terms and conditions of the Bid to County, School, and Municipal and other local government bodies and political subdivisions.

Questions regarding this Bid may be directed to Mr. Stephen Kappa, Government Programs Manager, at telephone 304-926-2650, fax 303-926-6623 or email kappa@solutionk.com

RFQ No. 7012EC05

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Tranco Services, DBA Kanawha Electric & Machine Company

Authorized Signature: Larry Ward, VP of Opns  Date: 17 Nov 2011

State of West Virginia

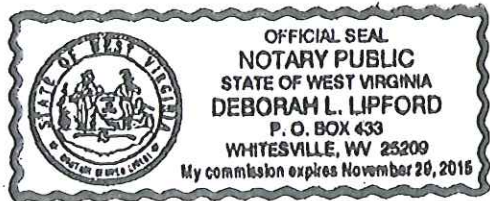
County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 17 day of November 2011

My Commission expires November 29, 2015

AFFIX SEAL HERE

NOTARY PUBLIC 



State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4. Application is made for 5% resident vendor preference for the reason checked:
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: LARRY WARD, VP of OPERATIONS

Signed: 

Date: 17 November 2011

Title: VICE PRESIDENT OPNS, TRAMCO SERVICES

DBA Kanawha Electric & Machine Company

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
EQUIPMENT DIVISION

BIDDER'S EVALUATION REPORT

PROCUREMENT SPECIFICATIONS FOR OPEN END CONTRACT
NO. 843-1-H

FULL MATRIX
TRAILER MOUNTED SOLAR POWERED MESSAGE BOARD

NOTE TO BIDDER: Procurement Specification No. 843-1-G, Paragraph 2.0 recommends the completion and submittal of this Report with your bid. Purpose of this Report is to enable the West Virginia Division of Highways Evaluation Committee to make full and fair evaluation of the bid. Addendums in order, along with a summary of exception as a separate attachment, should be with Bidder's Evaluation Report. FAILURE TO SUBMIT THIS REPORT, COMPLETE IN ITS ENTIRETY, MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

Reference Requisition No.: 7012EC05

Bidder's Name: Tranco Services, DBA Kanawha Electric & Machine Company

Address: 141 Campbells Creek Drive, Charleston, WV 25306

Telephone Number: 304-926-2650 Cell Phone: 304-549-3436

Years Bidder has been registered to do business with the State of West Virginia: 10 YRS.

Years Company has been an authorized dealer for proposed unit: 12 months YRS.

X3.2 Have you complied with all mandatory specifications? YES NO

X4.2 DELIVERY:

X4.2.1 Delivery date of completed representative unit: 28 Calendar Days After
Receipt of Purchase Agreement

X4.2.2 Delivery date of balance of completed units: 60 Calendar Days After Receipt of
Purchase Agreement

NOTE: Vendor should type Bidder's Evaluation Report

The "Bidder's Evaluation Report" is available for download on Purchasing's Web site at
www.state.wv.us/admin/purchase

X5.0 AWARD CRITERIA;

X5.1 Price per unit:

\$16,840 per unit

X6.0 SPECIFICATIONS - GENERAL

X6.1 Manufacturer, model, series, and date of manufacture of proposed unit:

Ver-Mac Full Matrix Sigh PCMS 1500

Is descriptive literature, fully describing proposed unit attached to your bid? YES NO

If not, why? _____

X6.2 Will the required number of service manuals, and complete parts list be delivered to the Equipment Division at Buckhannon upon completion of delivery of total units?

YES NO

Will the required Equipment Preventive Maintenance Form (Section X6.2 of Bidders Evaluation Report) be provided upon inspection of the pilot unit?

YES NO

X6.2
2-10-00

EQUIPMENT PREVENTATIVE MAINTENANCE QUESTIONNAIRE

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY BY SUCCESSFUL BIDDER OR MANUFACTURER'S TECHNICAL REPRESENTATIVE PRIOR TO DELIVERY OF PILOT MODEL TO THE WVD0H.

DESCRIPTION: Full Matrix Message Sign MAKE: Ver-Mac

MODEL: PCMS 1500 YEAR: 2011 PURCHASE AMOUNT: \$16,840

ENGINE: MAKE: NA Solar MODEL: NA FUEL TYPE: SOLAR POWER

HORSEPOWER: NA CYLINDER: NA ENGINE SERIAL: NA

COOLING SYSTEM CAPACITY: NA

BELTS: DESCRIPTION: PART NUMBERS:
NA NA

GVW: _____ AXLE CAPACITY: FRONT: _____ REAR: NA

TIRES: FRONT MAKE & SIZE: _____

REAR MAKE & SIZE: NA Height

DIMENSIONS OF UNIT: LENGTH: _____ WIDTH: _____ LENGTH: _____

VENDOR CONTACT PERSON: STEPHEN KAPPA PHONE: 304-926-2650

PARTS:

BATTERY MAKE: _____ MODEL: _____ CCA: _____
TOP OR SIDE POST: _____ DIMENSIONS: LENGTH _____ WIDTH _____ HEIGHT _____

SPARK PLUGS OR FUEL INJECTORS MAKE: _____ PART # _____

FUEL PUMP OR INJECTION PUMP MAKE: _____ MODEL: _____

ALTERNATOR MAKE: _____ PART #: _____

STARTER MAKE: _____ PART #: _____

TURBO CHARGER MAKE: _____ PART #: _____

TRANS. MAKE: _____ MODEL: _____ AUTO/MANUAL: _____

HYDRAULIC PUMP MAKE: _____ MODEL: _____

FILTERS	MAKE	PART NO.	LUBRICANT	MANUFACTURER TYPE
OIL	<u>NA</u>		ENGINE	<u>NA</u>
AIR INNER	<u>NA</u>		TRANSMISSION	<u>NA</u>
AIR OUTER	<u>NA</u>		POWER STEERING	<u>NA</u>
FUEL PRIMARY	<u>NA</u>		HYDRAULIC	<u>NA</u>
FUEL SECONDARY	<u>NA</u>		DIFFERENTIALS	<u>NA</u>
COOLANT	<u>NA</u>		BRAKE FLUID	<u>NA</u>
HYDRAULIC	<u>NA</u>		COOLANT	<u>NA</u>
OTHER	<u>NA</u>		OTHER	<u>NA</u>

X6.3 TRAINING:

Will training seminar be conducted on Preventive Maintenance, Operator and Mechanic Training
 YES NO

Will you conduct training with each purchase order against this open end contract?
 YES NO

Will training be conducted within 2 working days from the delivery of the pilot unit on the individual purchase order?
 YES NO

If NO, explain time frame _____

Will an Operator's Manual be furnished directly to Training Academy prior to the delivery of the pilot?
 YES NO

X6.4 If you are the successful vendor, will you furnish all training aids, i.e., videos, projectors, required in conducting the training?
 YES NO

X6.4.1 Will all manuals, booklets, etc. explaining preventive maintenance, operator procedures, and service schedule be delivered with each unit?
 YES NO
 If NO, explain _____

X6.5 WARRANTY AND SERVICE POLICY

Will the warranty and service you provide comply with all areas as stated in Section 6.5 of specifications
 YES NO

Is warranty literature attached?
 YES NO

Is a minimum two (2) year bumper to bumper basic parts and labor warranty excluding abuse and normal wear items included?
 YES NO

Describe:

See attached Warranty Statement _____

X6.5 WARRANTY AND SERVICE POLICY QUESTIONNAIRE

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY AND SUBMITTED WITH YOUR BID.

(If additional lines are needed, make copies of form.)

1. Define the terms of the standard warranty. If not offered, so state. (Attach copy)

See Standard Ver-Mac Warranty that is attached Ver-Mac Message Boards are warranted for a period of two years after being put into service.

2. Define warranty service to be performed at DOH facilities and warranty service to be performed at manufacturer's representative facility. List name and location of manufacturer's representative.

Tramco Services, DBA Kanawha Electric & Machine Company is Ver-Mac authorized Warranty and Repair provider in WV. Company is located at 141 Campbells Creek Drive, Charleston, WV 25306. Routine warranty and maintenance will be performed at the DOH facility by Kanawha Electric & Machine Company.

3. List locations for parts inventories that are within the State of West Virginia. Also, list availability levels, if known.

Repair and warranty parts will be maintained by Kanawha Electric at its shop facilities located at 141 Campbells Creek Drive in Charleston, WV. Replacement parts not carried in local inventory will be available from Ver-Mac within 24 hours by next day air delivery to Charleston, WV from Ver-Mac.

4. During the term of warranty, list the guarantee discount to manufacturer's published list price for parts that bidder will sell the parts to owner.

A.	Terms: Net 30	Manufacturer's published list price less:	<u>10</u>	% discount
B.	Terms: Net 60	Manufacturer's published list price less:	<u>0</u>	% discount
C.	Terms: Net 90	Manufacturer's published list price less:	<u>0</u>	% discount

5. During the term of warranty, will all manufacturers or engineering improvements be submitted to Division of Highways? X YES NO

6. During the term of warranty, list the guaranteed rates charged for repair to the unit.

A.	Shop Rate	\$ <u>87.00</u> per mechanic hour
B.	Travel Time Charge (Specify if one-way)	\$ <u>50.00</u> per mechanic hour <u> </u> ; port to port <u>Port to Port</u>
C.	Mileage Charge (Specify if one-way)	\$ <u>No Charge</u> per vehicle mile <u> </u> ; port to port <u> </u>
D.	Field Mechanic Rate	\$ <u>87.00</u> per mechanic hour
E.	Specify period of time that prices are in effect:	<u>From Bid Approval to Contract Expiration in Three Yrs.</u>
F.	Surcharge for miscellaneous items:	<u>NA</u> %

X6.6 EVALUATION COMMITTEE REQUIREMENTS

Is all component specifications, product literature, component models provided for Evaluation Committee bid determination? YES NO

X6.7 Will all parts, equipment, accessories, material, design and performance characteristics not specified herein, but which are necessary to provide a complete unit, be furnished with the unit and conform in strength, quality of material, and quality of workmanship to those which are advertised and provided to the market in general by the unit industry?

YES NO

X6.7.1 Are all parts and accessories adequate and regularly supplied as standard to be included except those which may be duplications of specifications herein, and except these by specification are not to be furnished?

YES NO

X6.7.2 Are all standard safety features that are required by Federal and State statutes of law included?

YES NO

X7.0 SPECIFICATIONS OF THE QUOTED UNIT:

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. **The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specification.**

Manufacturer: Ver-Mac Model: PCMS-1500

Is unit a trailer mounted Full - Matrix Message Board consisting of an optically enhanced L.F.D.'s. YES NO

Are the L.E.D.s minimum of a 30° vertical and 30° horizontal cone of visibility. YES NO

Is the full matrix panel powered by a bank of batteries in order to convey bright, distinctive messages to the traveling public YES NO

Are full matrix variable message boards tested by AASHTO's National Transportation Product Evaluation Program (NTPEP). YES NO

X7.1 Are batteries automatically recharged by a group of solar panels located at highest point on the unit? YES NO

X7.1.1 Is unit designed to have sufficient energy backup to operate for 30 days without any sun? YES NO

X7.1.2 Will solar panel generator recharge the battery bank at 2.5 hours sun to one (1) 24 hour period usage? YES NO

X7.2 Sign Panel Construction:

X7.2.1 Is sign panel aluminum constructed or fabricated with powder coated sheet metal and in a flat black finish YES NO

All exposed panels and seams are corrosion proof for a minimum of ten (10) years YES NO

With construction, are all panels/parts assembled as to prevent corrosion or to prevent dissimilar metal reaction for occurring YES NO

X7.2.2 Is sign panel frame a welded assembly and constructed of aluminum alloy channel or from steel panels powder coated in a corrosion proof manner for a minimum of ten (10) years YES NO

X7.2.3 What is length of sign panel 133 inches?

X7.2.4 Does face of sign incorporate measures to prevent fading from UV light, such as polycarbonate or lexan face with UV inhibitors incorporated YES NO

Is another method used? YES NO Has it been reviewed and approved? YES NO

X7.2.5 Does sign face have size to display three (3) separate lines of eight (8) characters YES NO

Size of characters: 18 inches tall and 12 inches wide?

Spacing of characters: 3 inches apart 3" between characters. No spacing between cards

X7.2.6 Does each character configuration contains 54 LED lamp pixels in six (6) element horizontal by nine (9) element vertical arrangement? YES NO

X7.2.7 Each pixel consists of 4 LED'S

X7.2.8 Message color: 590 nanometers

X7.3 Does sign have capability to display six (6) messages in sequence, with variable timing in 1/4 second increments under computer control? YES NO

- X7.3.1 Is arrow display and flashing caution functions included as part of the manufacturer's pre-programmed message sequences YES NO
- Will all arrow and flashing caution displays described in the current MUTCD provided YES NO
- X7.3.2 Are all abbreviations used in pre-programmed messages in compliance with the current MUTCD YES NO
- X7.3.3 Does the entire sign have capability to change all lines of message copy in not more than 100 milliseconds YES NO
- X7.3.4 Will sign be clearly visible a minimum of 4500 feet YES NO
- X7.3.5 Will sign legend be legible from a minimum distance of 1,000 feet under daylight conditions as determined by NTPEP for two non-traffic word message. YES NO
- X7.3.6 Will sign legend be legible from a minimum distance of 900 feet under night-time conditions as determined by NTPEP for a two non-traffic word message YES NO
- X7.3.7 Under variable light conditions, will the unit automatically adjust light source so as to meet the visibility requirements, without being too bright or too dim YES NO
- X7.4 Solar Message Board Support:
- X7.4.1 Will solar message board sign panel be supported on a telescoping upright member in order to permit raising the sign panel for operation and lowering for transport? YES NO
- Is the upright capable of 360 degrees rotation and to lock into any position to which it manually or electrically rotated YES NO
- X7.4.2 Raise and lower travel: 4 feet and accomplished by a hydraulic power pack YES NO
- X7.4.3 Bottom of sign 7 feet above ground level when in raise position
- X7.4.4 When transporting, will sign orient to the longitudinal axis of the trailer in a manner that effectively reduces aerodynamic drag during towing? YES NO
- X7.5 Power and Miscellaneous Equipment:
- X7.5.1 Is unit designed to accept two (2) power sources; one (1) being a battery bank consisting of four (4) size 4D, deep cycle, lead acid 12 volt DC batteries wired in parallel (or as designed to meet power/time requirements) YES NO
- X7.5.2 Does second power supply to have capability to accept existing 120 volt commercial electric service? YES NO

- X7.5.3 Batteries are recharged by a solar panel array producing 260 watts of power
- X7.5.4 Does unit have a built-in battery charger with minimum 25 amp per hr rating?
 X YES NO
- X7.5.5 Is battery bank housed in lockable heavy duty weatherproof battery boxes?
 X YES NO
- X7.5.6 Are the two (2) power sources enclosed in protective housing? X YES NO
- X7.5.7 Are batteries capable of being recharged by a commercial 110 volt battery charger?
 X YES NO
- X7.6 Control Requirements:
- X7.6.1 Is unit controlled in all functions by an on-board dedicated computer of solid state design and removable?
 X YES NO
- X7.6.2 Does unit have keyboard which user originated messages may be entered for display or storage?
 X YES NO
- X7.6.3 Does unit have an LCD display screen, where messages are reviewed before being displayed?
 X YES NO
- X7.6.4 Computer stores 258 programmed messages for display when called upon by user through keyboard
 X YES NO
- X7.6.5 Capability of storing 100 message sequences
- X7.6.6 Does unit maintain stored message list? X YES NO
- X7.6.7 Does unit provide password coding or key entry? X YES NO
- X7.6.8 Will unit provide control programming to present sequences messages under operator control through keyboard entry?
 X YES NO
- X7.6.9 Does unit provide control for moving arrow displays? X YES NO
- X7.7 Solar Panel Control Unit:
- X7.7.1 Is computer and power control unit housed in weather resistant, shock resistant lockable control box including lighting for night time operation?
 X YES NO
- X7.7.2 Does power control unit contain two (2) current meters; One (1) shows amperage generated with battery charger operating and one (1) indicates amperage generated from the solar panels be stored in battery bank?
 X YES NO
- X7.7.3 Does power control unit incorporate a PV regulator with thermal compensation for variances in ambient temperature to regulate the charge rate to the battery bank? X YES NO

X7.7.4 Does unit incorporate an automatic intensity control feature to keep L.E.D. lamp matrix intensity constant with a reduction in voltage? YES NO

X7.7.5 Does message unit provide a photocell to reduce lamp intensity at night eliminating blinding? YES NO

X7.8 Trailer:

X7.8.1 Is two (2) wheel trailer structurally adequate to serve as both platform for components? YES NO

X7.8.2 Are fenders made of steel and installed over each wheel? YES NO

X7.8.3 Is trailer equipped with hydraulic brake actuator system? YES NO

X7.8.4 Is unit equipped with four (4) crank type, HD industrial leveling jacks; one (1) installed on each corner of the trailer deck? YES NO

X7.9 Lighting:

X7.9.1 Does unit include LED taillights, stop lights, turn signals, license mount with light and all necessary reflectors? YES NO

X7.9.2 Are trailer electrical cable and connector (Cole Hersee Pt #12081 male or equal) compatible with towing vehicles installed? YES NO

X7.9.3 Is all trailer wiring encased in heavy duty hypalon type industrial wire looms clamped to underside of trailer structural tubing? YES NO

X7.9.4 Does unit have two (2) inch ball type trailer hitch 6000 pound capacity with double safety chains in accordance with SAE J684F installed? YES NO

X7.10 Hydraulic Power Pack:

X7.10.1 Does unit have 12 volt DC motor, pump, valve, reservoir, manual hand pump or approved equal? YES NO

X7.11 Message Cabinet Dimensions: (approximate)

X7.11.1 Length: 133 inches

X7.11.2 Height: 82 inches

X7.12 Central Processing Unit - CPU specifications (Minimum):

X7.12.1 Microprocessor Based 27.1 MHz YES NO

If No, you must specify _____.

- X7.12.2 Power requirements: 175 mA DC at 12 volts DC
- X7.12.3 Specify screen size: 3 character lines with 8 characters per line
- X7.12.4 Are interfaces (2) RS232 9 pin D connectors and documentation on port numbers and pins?
X YES NO

In addition, is one (1) USB port or one (1) ETHERNET Port with USB adaptor provided
X YES NO

- X7.12.5 Will application source code be delivered with unit
OR
held in escrow X YES NO
and provided to WVDOT in case company goes out of business? X YES NO

- X7.12.6 Will technical documentation for unit and for application programs be provided?
X YES NO

- X7.12.7 Features considered as standard equipment but not addressed:
-

- X7.12.8 Does unit comply with OSHA of 1979 and subsequent amendments? X YES NO

- X7.12.9 Will unit be painted manufacturers standard colors and materials X YES NO

- X7.12.10 Does unit meet guidelines for advertising? X YES NO

- X7.12.11 Will Manufacturer or Dealer provide training and training aids as specified? X YES NO

X7.13 Communications:

- X7.13.1 Will unit be guarded from any unwanted outside RF interference which would include but not be limited to VHF/FM receiver, 2 way radio receiver, cell phones etc. X YES NO

- X7.13.2 Is each PVMS controlled and monitored by its own sign controller directly from the control console inside the control cabinet on the trailer itself X YES NO

- X7.13.3 Is the PVMS sign controller able to receive instructions from and provide information to a computer containing PVMS control software compliant using NTCIP compliant communications modes X YES NO

X7.13.4 Remote Communications control via wireless communications with a remotely located computer
 YES NO

Does the system communications backbone, as well as all field modems or signal converters, provide the PVMS sign controller with a RS232 signal having a baud rate between 2,400 bps and 115,200 bps.
 YES NO

Is communications static IP based with a static IP based modem installed on the trailer
 YES NO

X7.13.5 Is local communications control accomplished via direct connection with a laptop computer that is connected directly to the sign control using a null modem connection and baud rate between 2,400 bps and 115,200 bps.
 YES NO

X7.13.6 Is local communications control available via a keypad and LCD interface
 YES NO

Are the features of additional or removal of message or message(s) from the PVMS list of playing messages, adjustment of luminosity to manual or automatic, and the monitoring of miscellaneous data like battery voltage, photocells reading, etc. included
 YES NO

State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4. Application is made for 5% resident vendor preference for the reason checked:
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: LARRY WARD, VP of OPERATIONS

Signed: _____

Date: 17 November 2011

Title: VICE PRESIDENT OPNS, TRAMCO SERVICES

DBA Kanawha Electric & Machine Company

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

RFQ No. 7012EC05

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Tranco Services, DBA Kanawha Electric & Machine Company

Authorized Signature: Larry Ward, VP of Opns Date: 17 Nov 2011

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 17 day of November 2011

My Commission expires _____, 20 _____

AFFIX SEAL HERE

NOTARY PUBLIC _____



- COMPANY PROFILE
- PRODUCTS
- SMART WORK ZONE
- NEWS & EVENTS
- SUPPORT

Select product

PCMS-1500

PORTABLE MESSAGE BOARDS

Our full matrix full size controller message signs offer full graphic capability, and are one hundred percent NTCIP-compliant and can be easily controlled by any NTCIP-compliant traffic management software. Our robust design, plug and play components, and energy efficient technology provide a sign that requires minimal maintenance and has a low cost to own.

[ASK FOR A QUOTE >](#) [PRINT](#)



TECHNICAL BRIEFS

DESIGN SPECIFICATIONS

OVERALL DIMENSIONS

- Overall length: 4470 mm (176')
- Overall width: 2184 mm (86')
- Display panel: 2083 mm x 3378 mm (82" x 133')
- Traveling height: 2946 mm (116')
- Operating height: 4572 mm (180')
- Weight: 1150 kg (2535lbs)

TEMPERATURE RANGE

- Operational: -40° to + 74°C (-40° to +165° F)
- Storage: -40° to + 85°C (-40° to +185° F)

ELECTRICAL INTERFERENCE

- The PCMS 1500 is not affected by any normal (standard) type of RF interference

RELATIVE HUMIDITY RANGE

- Operating 10% to 95% RH, non-condensing

TRAILER MATERIAL

- 51 mm x 152 mm x 3.175 mm steel tubing (2" X 6" X 1/8")
- Diamond plate catwalk mounted on display side of trailer to simplify maintenance.

CABINETS

- Aluminum sign and control cabinets
- Locked with padlocks,
- Plastic battery boxes
- Weather stripping seals each compartment against moisture

AXLE

- Single 1588 kg (3500-lb)

HITCH

- Heavy-duty hitch capacity with 72 mm (3") pintle eye
- *Optional: 51 mm (2") ball coupler*
- 1361 kg (3000-lb) maximum tongue load
- Heavy-duty safety chains with safety hooks meeting safety standards

TIRES & WHHEELS

- Tires: Load Range D 381 mm (15")
- Wheel Size: 381 mm (15")
- 6-stud tire rims
- *Optional: Anti-theft locking mechanism*

LEVELING JACKS

- Four-screw jacks, each rated at 907 kg (2000 lbs)
- *Optional: Tongue wheel jack*

TRAILER LIGHTS

- State-of-the-art halogen lighting as per USDOT standards and specifications
- Custom-made connections complying with customer specifications

LIFT MECHANISM

- Electro-hydraulic lift

SOLAR PANELS

SPEED OF MESSAGE CHANGE

- All three lines can be changed completely in less than 100 milliseconds with no visual disturbance.

LEGIBILITY

- Messages displayed are easily readable from more than 305 meters (1000 feet)

DISPLAY

- 590nm (± 2nm) amber-colored LEDs with viewing angle of 30 degrees (standard)
- LEDs have rated life of 100,000 hours
- Each amber-colored LED encased in an enhanced optical lens to maximize legibility from any distance (creating bolder characters)
- 4 LEDs per pixel in enhanced optical lens
- Each pixel shaded by a removable black plastic visor to minimize washout in direct sunlight
- Full matrix 762 mm (H) x 1219 mm (W) pixel screen (30 x 48)
- 3 lines of up to 8 characters per line
- A character is based on a 5 x 7 pixel of 457 mm (18")
- LED output adjusts automatically to ambient light conditions
- 100 brightness levels (1%-100% in increments of 1%)
- The display is enclosed in an aluminum cabinet and protected by a polycarbonate face with UV protection

KEYBOARD

- Full-size QWERTY keyboard
- Clear plastic weather protection cover

SOFTWARE

- Changeable messages (default 255) (*1-999)
- Permanent messages (default 258) (*1-999)
- Volatile messages (default 64) (*1-999)
- Changeable graphic pictograph (255)
- Permanent graphic pictograph (89)
- Permanent Font sizes (15)
- Custom Changeable Font sizes (*5)
- Auto font
- Per character font sizing
- Per character & line flashing
- Admin & User level password
- Auto brightness (photocell)
- Manual 0%-100% brightness levels (increments of 1%)
- Scheduling
- Scrolling
- Special dynamic data features trigger messages, display motorist speed, actual temperature, time & date & live countdown.
- Supports NTCIP 1203 v2
- Backward compatibility with NTCIP 1203 v1
- Support all new NTCIP 1203 v2 MULTI tags including optimization and combination <http://www.ntcip.org/>
- Graphics
- Protocol translation engine allows live conversion from legacy protocol to NTCIP
- Firmware acts as virtual hub, allowing concurrent per interface protocol
- Local communication settings
- Drop address and communication speed (PMPP)
- IP address, mask, gateway and port number for SNMP/UDP/IP transport setup

*Requires Factory Settings

ENCLOSURE ONE

- Various configurations of solar panels and batteries available
- High efficiency single-crystal silicon cells anti-reflection coated for improved efficiency

BATTERIES

- 6-volt 220 amp/hour deep-cycle batteries, wired to provide a 12-volt system
- Optional: Various batteries and configurations available

CONTROL PANEL**MENU DISPLAY (LCD)**

- Current usage and battery voltage
- Solar array current output (to the battery) and voltage
- Sign status (error detection)
- Current message display

CONTROLS

- Main power switch
- Raise / lower switch
- Can switch from laptop to cellular (local communication RS- communication 232)
- LCD Display
- Keyboard
- Charger switch

DISPLAY DIMENSIONS

- The total display area for full matrix display is 2032 mm high x 3606 mm wide (80"x 142")

PASSWORD PROTECTION

- Admin & User level password

PAINT

- State-of-the-art powder coating system
- « Highway safety orange » is the standard color used
- Optional: Other colors available to comply with different regulations or match client fleet standard
- Powder coating quality
- Certified UV protection paint
- Impact resistant
- Humidity resistant
- Salt spray resistant

MAINTENANCE

- Battery fluids should be checked and topped off at least once a month
- Solar panels must be free of dust and snow

WARRANTY

- 1-year warranty on complete trailer
- 2-year warranty on electronics
- 6-month manufacturer's warranty on batteries
- Limited warranty on solar panels varies from one manufacturer to another

TECH SUPPORT

- 24/7 technical support



PCMS-1500

PORTABLE MESSAGE BOARDS

Our full matrix full size controller message signs offer full graphic capability, are one hundred percent NTCIP-compliant and can be easily controlled by any NTCIP-compliant traffic management software. Our robust design, plug and play components, and energy efficient technology provide a sign that requires minimal maintenance and has a low cost to own.

STRUCTURE

Overall length: 4470 mm (176")
 Overall width: 2184 mm (86")
 Display panel: 2083 mm x 3378 mm (82" x 133")
 Panel construction: Aluminum
 Traveling height: 2946 mm (116")
 Operating height: 4572 (180")
 Weight: 2535 lb.
 Coupler: 3" pintle eye
 Axle/suspension: 3500 lb.
 Heavy-duty frame with extended guard rails for fender and axle protection
 Lockable control box

DISPLAY

Full matrix (30 x 48 pixels)
 Up to 3 lines of 8 characters per line
 4 LEDs per pixel in optical lens with 30° (standard) wide viewing angle
 18" character default font
 Display sign rotates 360 degrees
 Easy access and walk-way for maintenance
 Plug & play display modules
 On-site interface for self-error detection system and test pattern

PROGRAMMING

On-site using unit keyboard or laptop (RS-232 connection)
 Ethernet cross-over connections
 Easy three-step programming category
 High-speed remote programming from your PC with cellular option
 Ethernet port 10/100
 2x additional RS-232 ports

SOLAR POWER SUPPLY

Various configurations of solar panels and batteries available
 Solar regulator with battery surcharge protection

FEATURES

Changeable messages (255 Default) (*1-999)
 Permanent messages (258 Default) (*1-999)
 Volatile messages (64 Default) (*1-999)
 Changeable graphic pictograph (255)
 Permanent graphic pictograph (89)

Permanent Font sizes (15)
 Custom Changeable Font sizes (*5)
 Auto font
 Per character font sizing
 Per character & line flashing
 Admin & User level password
 Auto brightness (photocell)
 Manual 0%-100% brightness levels (increments of 1%)
 Scheduling
 Scrolling
 Special dynamic data feature trigger messages, displays motorist speed, actual temperature, time & date & live countdown
 NTCIP compatibility
 Easy integration to Software management
 Already Supported by: Delcan, IBI, etc.
 *requires factory settings

OPTIONS

3G modem, can support fiber-optic, radio communication
 Free access to our remote fleet management software Jamlogic2
 Radar
 Data logger (requires radar)
 GPS tracking
 Easy graphic LCD touchscreen
 Intelligent display sign with pixel detection
 Battery charger
 Laptop connection
 Adjustable pintle hitch
 2" coupler or 2 5/16" coupler
 120 volt AC connection
 Electric brakes
 Torsion axle
 Hydraulic Brakes
 Traffic camera
 Safety lock: Wheel, battery boxes, etc.
 Extra storage: Cones, Cable, Chain, etc.
 Spare tire
 Tongue wheel jack
 Contrast border (e.g., reflective)
 Tilt and Rotate solar panel rack
 Level (to stabilize sign)
 Beacon (e.g., 4 corners)

ENCLOSURE TWO

Ver-Mac Touch Screen Controller: Total Control at Your Fingertips

Touch screens are sensitive to pressure; the user interacts with the controller by touching images (icons) on the screen with either a finger or stylus-like object. With Ver-Mac's touch screen users interact directly with what is displayed on the screen, rather than indirectly through a keypad.

As with all Ver-Mac equipment, the touch screen is extremely rugged and reliable, and resistant to the harsh rough and tumble environment of the work zone.



Advantages:

- ❖ Intuitive- touch screen interface requires little or no training for the end user
- ❖ Simple to operate – a set of 'point and go' icons enables quick and easy entry of new commands
- ❖ Secure PIN= protected access – allows only authorised users or certain groups the appropriate level of access:
 - a. viewer – verification procedures only
 - b. guest – limited device operating functions
 - c. administrator – full access to device functions
- ❖ Backward – compatible with all existing Ver-Mac variable message signs and traffic signalling devices
- ❖ NTCIP Compliant

Standard Features:

- ❖ 7-inch Color LCD with Aluminum Frame
- ❖ One-click icon-based menu items
- ❖ Easy message display without laptop
- ❖ Soft keyboard can be displayed on screen for whenever text must be typed in
- ❖ On-screen library of pre-defined messages (over 100) and graphics (30)
- ❖ Full Message Editor functions (fonts, alignment, spacing etc)
- ❖ Multiple language capabilities – accepts text for VMS messages in up to 5 different languages, including Arabic and Hindi

TMG Touchscreen Controller



USER MANUAL

VER-MAC PUBLICATION N^o: UME-TOUCHSCREEN CONTROLLER - V1.0

ORIGINAL

PRINTED IN CANADA

ENCLOSURE THREE

TMG

Touchscreen Controller

VER-MAC Publication №: UME-TMG Touchscreen Controller -V1.0

Original

USER MANUAL

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TECHNICAL PUBLICATIONS

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LIST OF REVISIONS

The following table shows the revision history for this document

DATE	VERSION	RÉVISION
2010-09-07	1: 0	Original

MANUAL CHANGE INFORMATION

Customers should note that this User Manual is up to date at time of issue, but is not subject to automatic update.

For additional information concerning the latest changes to the TMG Touchscreen Controller and this document please consult our web site:

www.ver-mac.com

Technical Support

For help with any difficulties concerning the TMG Touchscreen Controller or this manual, please contact the Ver-Mac technical support team:

support@ver-mac.com

We also request that you notify us of any error or omission found in our publications



STATIC ELECTRICITY

CAUTION!

This system contains electronic parts that are highly sensitive to static electricity

Follow these simple rules to avoid any damage:

- 1. Always wear an antistatic wrist band when working on or near electronic components*
- 2. Avoid holding components and parts by their connectors.*

Table of Contents

Introduction	3
Using a touchscreen	3
User Profiles for the TMG	3
Getting started.....	5
Authentication and Login	6
HOME	8
Current message:.....	8
QuickPick:	8
ACTIVATE MESSAGE	9
Task scenario 1: <i>Selecting and displaying a message from either the Library or the Collection</i>	9
Task scenario 1:1 <i>Removing a message from the Collection (available to Admin. users only)</i>	10
BLANK SIGN	11
MESSAGE EDITOR	12
Task scenario 1: <i>Creating an all-text message (new)</i>	15
Task scenario 2: <i>Inserting a page with a graphic image into a message</i>	16
Task scenario 2:1: <i>Incorporating Special Tag information (Dynamic Data) in a message</i>	17
Task scenario 3: <i>Editing (modifying) an existing message</i>	18
OPTIONS:	19
SCHEDULE:	22
Task scenario 1: <i>Assemble a program of messages to display on the VMS unit</i>	23
Task scenario 2: <i>Modify/Alter an existing program/dayplan in the Schedule</i>	27
PARAMETERS	29

Tables and Illustrations

Table 1 : User Rights and Privileges	5
Table 2: Operations Buttons	5
Table 3: Edit Message menu	14
Table 4: Options	21
Table 5: Scheduling tips.....	22
Table 6: Procedure for Compiling Dayplan	24
Table 7: Periodicity procedures.....	26
Table 8: Parameters	31
Illustration 1: Select Security Level	6
Illustration 2: List of Guest Usernames	6
Illustration 3: Login.....	7
Illustration 4: HOME screen	8
Illustration 5a: Select Message (from Collection) screen	9
Illustration 5b: Select Message (fromLibrary) screen	10
Illustration 6: Edit Message screen	12
Illustration 7: Select Graphic	16
Illustration.8: Select Special Tag.....	17
Illustration.9: Multiple data input displayed on a single page.....	18
Illustration 10: Options screen	19
Illustration 11: Activate Schedule	28
Illustration 12: Parameters screen (<i>Admin</i> users).....	29

Introduction

Ver-Mac's TMG Touchscreen Controller for Signs is a compact microcomputer with an LCD touchscreen. It has been designed to allow easy programming of messages for display and for accessing built-in diagnostics and maintenance aids on Variable Message Signboard (VMS) units.

The TMG comes with a *library* of over 100 pre-defined messages and more than 30 graphic images. There is also on the Home screen a QuickPick *bank of images*.

The TMG has *multiple language capabilities*. The soft keyboard and fonts can be easily and rapidly adapted to input text (complete with accents) for VMS messages in different languages. These include Arabic and Hindi. However at the moment the interface is available only in English.

Using a touchscreen

You activate the functions of the TMG Touchscreen Controller by either touching the icons on the screen with your fingertip or a soft stylus-like instrument (e.g. the eraser tip of a lead pencil).

Never use sharp pointed plastic, and most definitely not a metal object.

Smudges and fingerprints can be removed with a fully coated lens cleaner and a soft cloth.

User Profiles for the TMG

There are three User profiles.

1. Viewer – allows a User to quickly check the status of the VMS unit
2. Guest – allows a User to blank the sign, quickly select and display a message from:
 - a) the QuickPick image bank
 - b) the Library (bank of permanent messages) *or*
 - c) the Collection (messages previously created for the particular VMS unit)

Guests also can:

- a) access Maintenance and run tests on the different hardware components of the panel, whenever necessary
 - b) personalize (change) their Password
 - c) start/stop Schedule mode
3. Admin. – has *full* set of rights and privileges



: *Before starting to use the TMG, you should consult Table 1 (below) and get to know the User Rights and Privileges that match your User profile*

USER RIGHTS AND PRIVILEGES - TMG Touchscreen controller			
	Viewer	Guest	Administrator
Log in/out			
Password			
HOME	<i>Limited Rights</i>	<i>Full Rights</i>	
Overview	Read Only		
QuickPick			
OPERATIONS	<i>No Rights</i>	<i>Limited Rights</i>	<i>Full Rights</i>
Activate Message	↑ ↓		
Library (pre-determined and unalterable messages for the VMS unit) <ul style="list-style-type: none"> View Access Sort Select 			
Collection (all previously created and changeable messages for the VMS unit) <ul style="list-style-type: none"> View Access Sort Select 			
Delete Message in Collection			
Blank Sign			
Message Editor			<i>Not available</i>
Full Message creation/modification rights			
Options			
Brightness: Auto/Manual Mode - select/set			
Maintenance: run test & check			
Pixel Test: run test & check			
Devices : check list of Active Devices			
Schedule: create/edit start/stop			
Edit graphic: create/alter/delete			
Parameters		<i>Two operations</i>	
Guest Management: access & set			
Change Admin Password: access & set			
Clock: access & set			
Language: select			
Network Communications: access & set			
Special Code: access & set			

Table 1 : User Rights and Privileges

Menu Structure and Operating Instructions

The table below shows the different Operations available on the TMG Touchscreen Controller:







OPERATIONS BUTTONS		
Icon	Name	Available Options
	HOME	displays: 1) Tool bar with today's date and icons for: Schedule operative (if applicable) and Log out, plus Battery indicator; 2) Operations buttons; 3) Message Preview 4) Operating state; 5) QuickPick; 6) Status bar
	ACTIVATE MESSAGE	gives access to: Message Sources: a) Library; b) Collection enables User to: i) Sort; ii) Select; iii) Activate; iv) Delete Message
	BLANK THE SIGN	removes the message currently displayed on the signboard
	MESSAGE EDITOR	gives access to: a) all Message Creation/Modification tools; b) Page Template; c) flexible Keyboard layout
	OPTIONS	gives access to: a) Brightness; b) Maintenance; c) Pixel Test; d) Devices; e) Schedule; f) Edit Graphic enables User to: i) check, ii) make adjustments to <i>and/or</i> iii) run tests on unit hardware
	PARAMETERS	gives access to <i>settings for the VMS unit</i> : a) Guest Management; b) Change Admin Password; c) Clock; d) Language; e) Network; f) Diagnostic; g) Special Code

Table 2: Operations Buttons

When you access the Home screen, the Operations buttons that display (or not) correspond to the privileges allocated to your User profile.

Getting started

- ❖ Make sure that the TMG Touchscreen Controller is connected to the VMS unit and switch the power **ON**.

When the main power switch is turned on, the system goes through a power-up and initialization procedure. This *takes less than 1 minute*, during which time a series of messages, «Initializing...» display very briefly on screen.

- ❖ When **Select Security level** displays, the start-up sequence is complete and the TMG is ready for use. If there has been no touchscreen activity for approximately 5 minutes, the TMG goes into sleep mode to conserve power and restore Password security.
- ❖ To re-establish your connection, you touch anywhere on the screen and then you have to log in once again

Authentication and Login

There are three levels of access corresponding to three User profiles within the TMG:

- a. **Viewer:** verification procedures only
- b. **Guest:** limited device operating functions (**password-protected*)
- c. **Administrator:** full access to device functions (**password-protected*)

Note: Passwords for the TMG must be numbers.

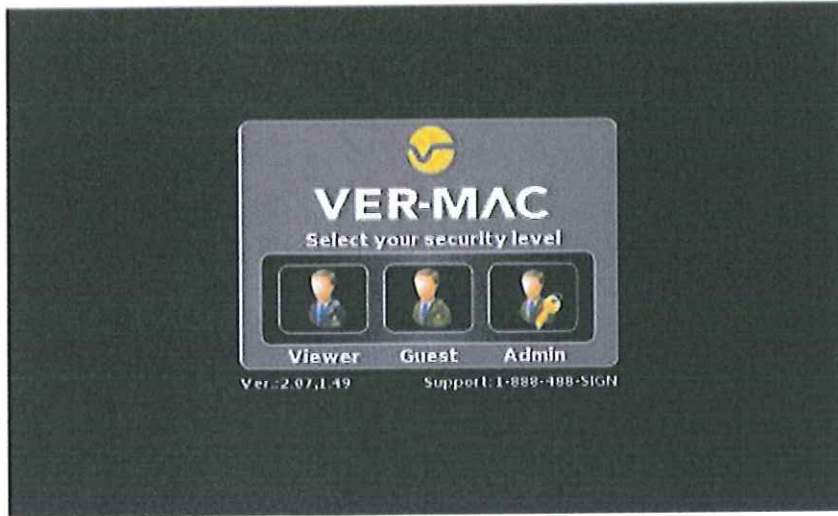


Illustration 1: Select Security Level

1. In the Security window (Ill.1 above) you first touch the appropriate icon to select the User type (Viewer, Guest, Admin) that matches your Security level

Note: If you are a Guest user, you also have to touch to select your Username from the list of users (Ill. 2 below) *before* you Login

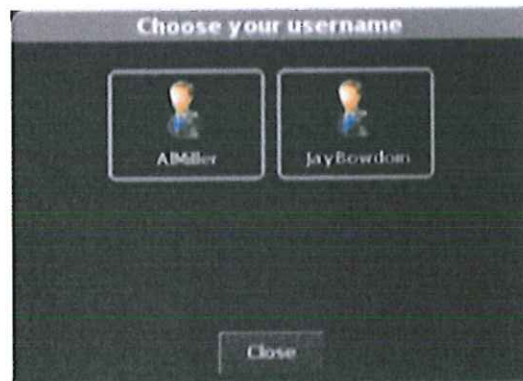



Illustration 2: List of Guest Usernames




Illustration 3: Login

2. In the next screen (Ill.3 Login above) touch and enter the numbers of your Password
3. When you have finished, touch , the Green checkbox, to confirm

If you have entered the wrong Password, an error message « Invalid password» displays and you return to **Security**, where you can start again.

After the first login, users can change and personalize their password (see **Change Password**)

- ❖ To log out, touch , the Log out icon, located top right in all Operations screens

HOME






Illustration 4: HOME screen

This screen displays when you have successfully completed Login. Here you can view the *current message* and the *actual operating state* of the VMS. Depending on your Security level, you can also select the area of Operations that you need.

Note: All Users access this screen following Login, but the display of Operations buttons varies

Current message:

- ❖ The message shown on the Preview is the message currently displayed on the VMS.
- ❖ The current message *never ends* unless you replace it by something else (i.e. you Activate  another message, or stop the current message and Blank  the sign, or a Schedule  starts).
- ❖ Messages that were Current do *not* restart automatically when a Schedule comes to an end.
- ❖ If you want what was the current message to restart, then you must be sure to program it into the Schedule.

QuickPick:

This feature contains the indications that are used most frequently on all signboards, no matter what their size.

- ❖ To select and display you *touch once* on the required indication
- ❖ Screen briefly shows message «Please wait...»

Your selection shows on Preview *and* displays on the VMS

ACTIVATE MESSAGE



For pre-existing messages stored in the Library or the Collection, and for images in the Graphic image bank:

*To select, touch it once
Then, to display, touch it once again*


Menu options in Select Message screen



From left to right: **Message Source** - Open Library (a) or Open Collection (b);
Sort: by Alphabetical Order (c) or by Order of creation (d) - most recent to oldest;
Delete Message (e)

Note: The menu option Sort applies to the Collection only. Messages in the Library are in Alphabetical order.
The menu option Delete Message is available only to Admin. Users

Task scenario 1: *Selecting and displaying a message from either the Library or the Collection*

1. From Operations buttons, touch , the Activate Message icon, and then the Select Message screen (below) displays

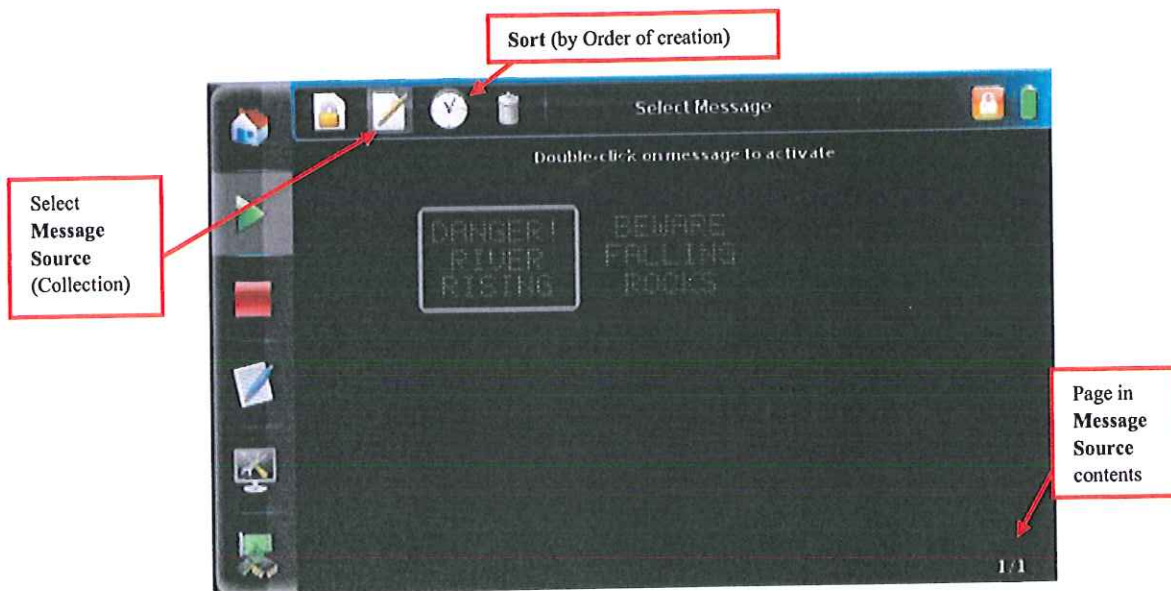


Illustration 5a: Select Message (from Collection) screen

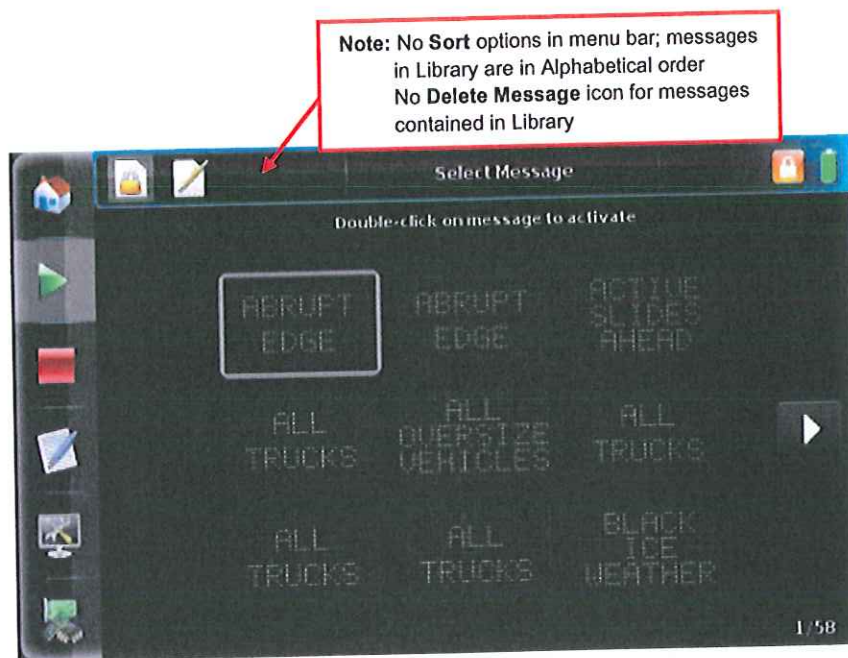





Illustration 5b: Select Message (fromLibrary) screen


2. To select the Message Source, touch the icon , Open Library *or* , Open Collection
Using the Forward/Back buttons, you can browse the messages
3. ***Touch a message once to select and view it in total***
Then ***touch it once more to display it automatically*** on the VMS
Message «Please wait...» appears briefly and then you are returned to Home screen
4. Your selected message is now displayed on the Preview for you to check before closing your session (touch ) *or* moving to other Operations (touch the appropriate button)

Note: You cannot close your session if any window is open on the screen


Task scenario 1:1 *Removing a message from the Collection (Admin. users only)*

This operation only removes the message from the Collection: it does not remove the message from the sign itself if it is the current message being displayed.

To remove the current message from the sign you must Blank Sign (see below)


- ❖ First touch to select the message you want to delete
- ❖ Then touch , the Delete Message icon,
You are asked to confirm that you want to delete: touch Yes button and message is removed
Touch No button and you return again to the Collection where you can select and delete other messages

BLANK SIGN

- ❖ From Home screen, touch , the Blank Sign icon
Message «Please wait...» appears briefly on the screen
Then the message that is presently displayed on the sign is removed
- ❖ The Preview also goes dark, indicating that the sign is now blank (no illumination)

Note: In HOME screen, the Blank Sign also stops the Schedule

MESSAGE EDITOR

When you need to create or alter a message touch , the Message Editor icon and screen (below) displays:

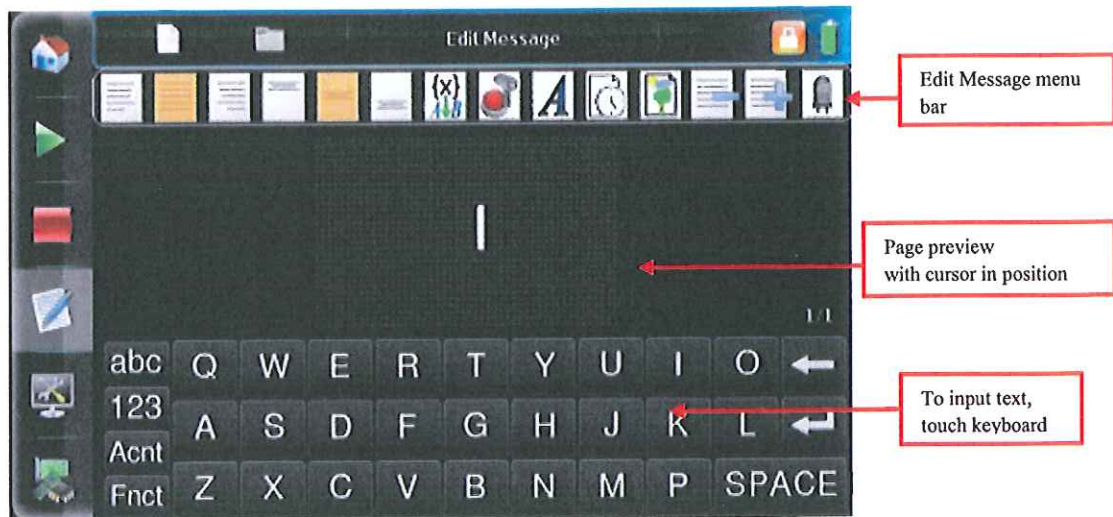









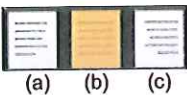

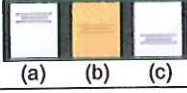






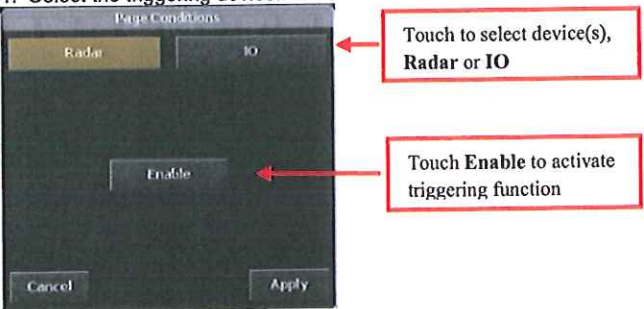
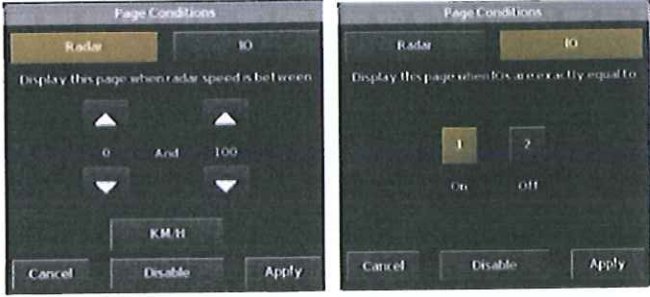


Illustration 6: Edit Message screen

Toolbar icons		Keys to change keyboard layout	
	New Message: displays blank Preview with cursor flashing in preparation for text input		Letters – All caps
	Access Message Sources for Edition: Select Message screen with the Collection displayed		Letters – All lower case
Keys for composing messages			Numerals
	Erase: the character <i>before</i> the cursor		Accent marks (other languages) For accented capital letters, double-click on Accent mark key
	Next line: moves cursor to the next line		Punctuation and other symbols

EDIT MESSAGE menu bar		
Functions	Icons	Procedure
Text Alignment:	 (a) (b) (c)	a) Align text along the Left margin of page b) Center text – margins both sides of page are equal c) Align text along the Right margin  To adjust, touch the line(s)
Page Layout:	 (a) (b) (c)	a) Align page to Top b) Center (positioned mid-page) c) Align page to Bottom
Insert Special Tag: message contains data that is changing and comes from outside source(s)		Provides four (4) kinds of data: Clock  , Temperature  , Calendar  , Radar Reading  <i>Information displayed changes automatically as updates become available.</i> [Note: You can combine Clock, Temperature and Calendar information so it all displays on a single page of message.]
Message triggered by: Radar and/or Input-Output Device		1. Select the triggering device:  2. Set Message Page display Conditions:  > Radar selected: a) touch numbers between ▲ ▼ arrows and enter the speeds with keypad b) touch to select speed measurement, KM/H or MPH c) touch Apply to confirm > Input/Output device selected: a) touch to activate, or not, the specific IO device(s) b) touch Apply to confirm the setting [Note: For IOs: you <i>must also set</i> the message to display under <i>normal conditions (no activated IOs)</i> . It can be a blank VMS.]











EDIT MESSAGE menu bar		
Functions	Icons	Procedure
Fonts		<p>[Note: You must adjust Font <i>line by line</i> for each page.]</p>  <ol style="list-style-type: none"> 1. Position cursor at end of a line of text on page of message and touch Font icon. Font window opens with this line in message highlighted 2. Move from line to line by touching the line(s) as you need to selecting Font (Forward/Back ◀▶ buttons) <i>and/or</i> Character and Line spacing (▲▼arrows) 3. When entire <i>page</i> is the way you want it, touch Apply
Timing - Page Display		<p>[Note: You must set Page timings separately for each page]</p> <ol style="list-style-type: none"> 1. Using ▲▼ buttons or <i>numeric</i> touchpad enter the Page time ON and Page time OFF (1 – 25 sec). 2. Touch Apply button when finished <p> To ensure a smooth change of pages in a multi-page message, Page time OFF should <i>always</i> be a lot shorter than Page time ON</p>
Graphics		From the Image bank, <i>select and insert</i> an image as a page in a message
Message structure		Add Page to / Remove Page from message you are creating/modifying
Line Blink time (0.5sec)		<ol style="list-style-type: none"> 1. To have <i>one line</i> of the message flash, touch the line <i>and</i> then Blink icon. 2. To have the message flash, repeat procedure for <i>each line</i>


Table 3: Edit Message menu

Task scenario 1: *Creating an all-text message (new)*



1. Access Edit Message screen (as in Illus. 6 above). The cursor should be flashing in position on a blank screen indicating everything is ready for you to compose your message.

 Preview already shows a message?
To clear it, touch  the New Message icon on the toolbar

2. Using the keyboard:
 - input the first line of text on the first page of your message
 - touch  to go to the second line and input the next line of text
 - do the same for the third line, if necessary
3. Adjust the *page* features (touch icons on Edit Message menu bar and follow the instructions)

If necessary add another page , (touch  icon) and repeat the process




4. When your new message is finished, touch 
By default this selects and lists your *new* message as #1 in the Collection of messages for the VMS unit

 You should now check that your new message is the way you want it.
If it is not, return to Edit Message (touch ) to make the changes.
Then repeat Step 3 above and continue the process

5. To display your newly created message on the VMS unit, *touch it once more*
Message «Please wait...» appears briefly, then you are returned to Home screen

Task scenario 2: *Inserting a page with a graphic image into a message*

Graphics require a whole page for each image. The graphic image page can be a message in its own right or can be a page inserted in a multi-page message.

1. In Edit Message screen touch  to open a blank message page (graphic is entire message *or* Page 1 of multi-page message)
or
touch  to open another page in multi-page message (graphic page is *insert*)
2. Now, instead of using the keypad and writing text, touch , the Insert Graphic icon on the menu bar and display the graphic image bank (below):

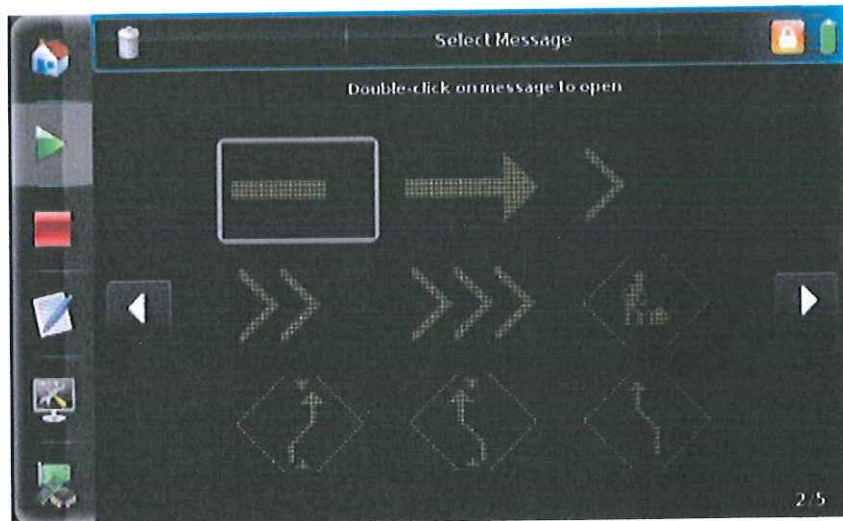



Illustration 7: Select Graphic

3. *Touch the image you want once to select it*
Then *touch* the selected image *again* to insert it on your page
4. You are returned to the Edit Message screen where you can create more pages for the message
or
follow Steps 4 and 5 above (touch , Activate Message etc.) in order to display the message

Task scenario 2:1: Incorporating Special Tag information (Dynamic Data) in a message

Proceed as in *Creating a new message* (above) and input any text you want to display *before* the information from an outside source (special tag)

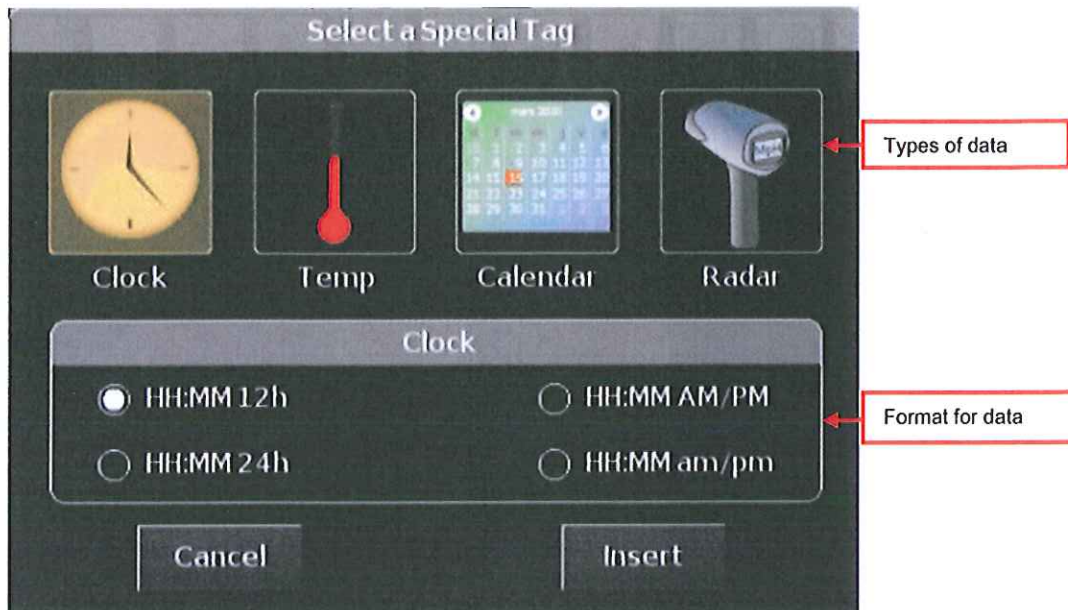



Illustration.8: Select Special Tag

- Position cursor where dynamic data is to display, touch , Special Tag icon and select the data type:

Clock (local time) ; Temperature ; Calendar ; Radar Speed Reading 

- In the window that opens, select the format for presenting the information and touch **Insert** button
- Proceed to adjust the *page* characteristics, etc (see Steps 3 to 5 of *Creating a new message* (above))

Important: Displaying a Radar speed reading (Special Tag) in a message is *not* the same as *triggering a page of message by radar* input






Depending on the size of the sign and the font used, you can opt to combine more than one type of data and/or formats on the same page (see Ill. 9 below). You *must* however select and set each data type and/or format separately.




Illustration 9: Multiple data input displayed on a single page

Task scenario 3: Editing (modifying) an existing message

1. Access Edit Message screen and touch , Open Collection to display all the available pre-existing messages
2. Sort the Collection (touch  or ) and *double-click to open* the message you want to edit(modify)
This returns you to the Edit message screen
3. According to what you want to do, touch the necessary function icon from the Edit Message menu bar,
Follow the instructions and make the change(s)
4. Then complete the process as outlined in Steps 4 & 5 of *Creating a new message* (above)

OPTIONS:

When you need to test or check the state of some or all of the hardware components of the VMS unit touch , the Options icon.

This opens the screen (below) where you touch and select the icons for the specific Option(s) you want to access:

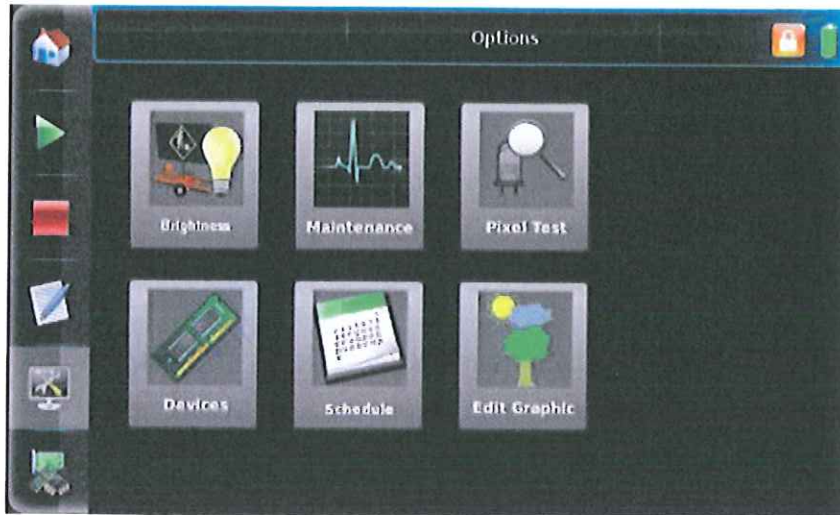

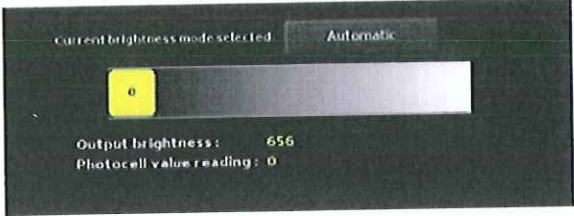

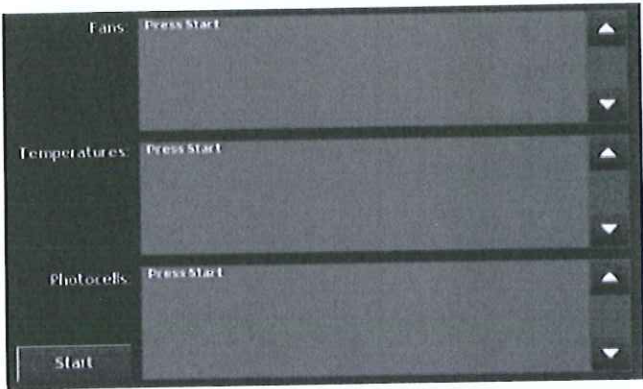

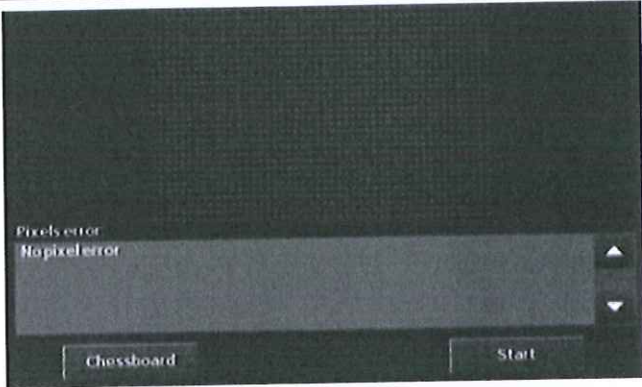

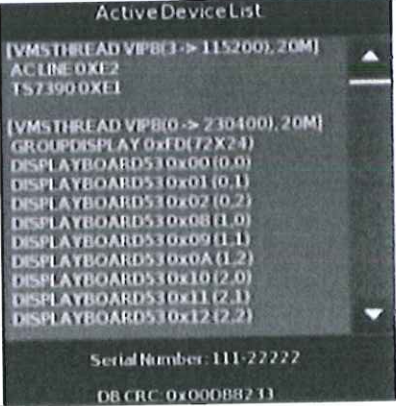


Illustration 10: Options screen

Note: *Schedule* and *Edit Graphic* are available to *Admin users only*

OPTIONS

Icon	Window that opens	Procedure
 <p>Brightness</p>		<p>Brightness:</p> <p>Select the mode (Automatic/Manual):</p> <ol style="list-style-type: none"> 1. Based on information from the photocells, Automatic adjusts brightness of the light emitted by the LEDs and displays the current reading. 2. User can adjust or set Brightness level by selecting Manual and using arrows
 <p>Maintenance</p>		<p>Maintenance:</p> <p>Touch Start button to run a check on the three (3) hardware components of the VMS that may affect its performance:</p> <ol style="list-style-type: none"> 1. Fans that aerate the sign case 2. Sensors that detect Temperature <i>inside</i> the VMS case 3. Photocell sensors that detect the ambient light conditions (the light conditions <i>outside</i> the VMS panel)
 <p>Pixel Test</p>		<p>Pixel Test:</p> <p>There are 2 types of test:</p> <ol style="list-style-type: none"> 1. Checks <i>all</i> pixels and locates (<i>x/y coordinates</i>) any that are faulty 2. To help you to <i>visually locate</i> a faulty pixel (stuck On/OFF), select Chessboard. This test focuses section by section.
 <p>Devices</p>		<p>Devices:</p> <p>This window lists all the peripheral devices that make up the VMS unit and are active.</p>


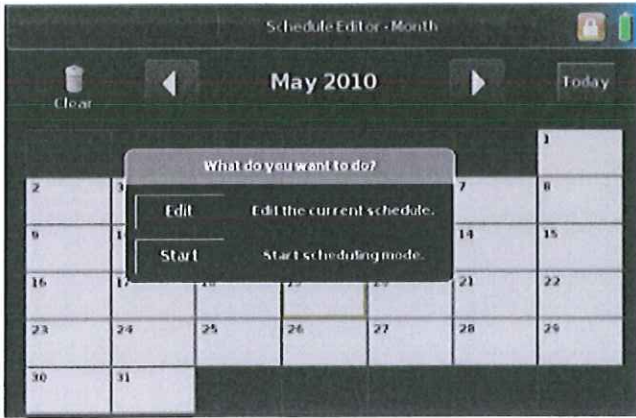

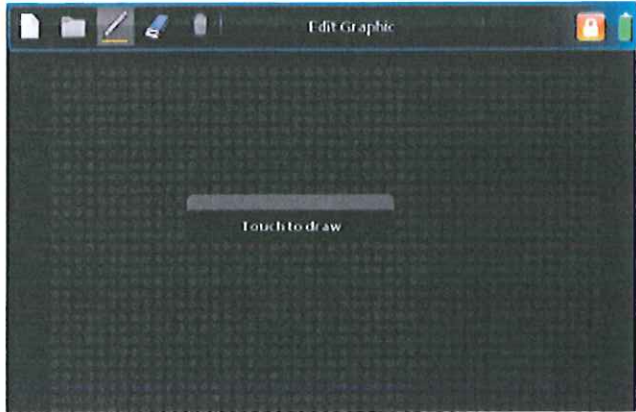








OPTIONS		
Icon	Window that opens	Procedure
		<p>Schedule: This function allows you to:</p> <ol style="list-style-type: none"> 1. Edit the current schedule (Edit button) 2. Assemble a program (short-term or long-term) of messages to run on the VMS (Edit button) 3. Activate schedule for the VMS unit(Start button) <p>[Note: If a scheduled message is <i>currently</i> running on the VMS unit, stopping the current schedule blanks the sign]</p>
	 <p>Note: This option is available to <i>Admin. only</i></p>	<p>Edit Graphic:</p> <p>This function allows you to:</p> <ol style="list-style-type: none"> 1. Draw a graphic yourself (touch  Pencil and/or  Eraser) 2. See your graphic take shape on both the sign panel and the  Preview as you draw (touch  On-panel preview). 3. Open a graphic from the Image bank , and Edit/alter it using  Pencil and/or  Eraser 4. Delete graphic (s) from Image bank (touch ) <p>[Note: Any alterations made to a graphic automatically apply to <i>all</i> messages in the Collection that contain the graphic]</p>

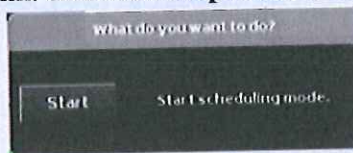
Table 4: Options

SCHEDULE:

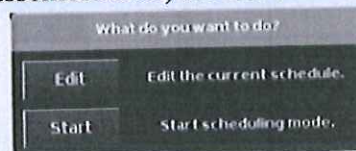
Note: Information in this section applies to Admin. users only



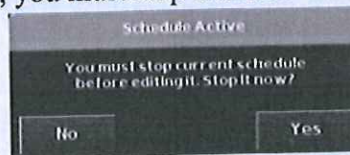
- ✓ Although both Guest and Admin. users can **Stop/Start** Schedule mode (below),




only Admin. users can **Edit** (assemble/alter) the Schedule.



- ✓ If a Schedule is already active, you must stop it before editing (assembling/altering).



- ✓ The start time of a time slot triggers the activation of its attached message.
A blank message ( button) is a message that shows as blacked-out VMS panel.
An *empty* time slot has no attached message; it continues to display the message that is attached to the previous time slot.
To program *dead time* (VMS is idle for a certain period) into a Schedule, you create a single program (a 24hour time slot with *blanked* message attached) and copy program for the necessary length of time.





- ✓ Schedules interrupt the *current* message. Therefore, if at the end of the Schedule, you want the VMS to return to the message displayed *before* the Schedule became operative; you must schedule its return.

- ✓ Once Schedule has been created, you can either delay its activation *or* activate it immediately.

Table 5: Scheduling tips


Task scenario 1: Assemble a program of messages to display on the VMS unit


Step 1: Select the *starting date* for the program/dayplan (see below)

	<p>To access Schedule Editor – Month, select OPTIONS → touch Schedule icon</p>
	<p>In the query box touch the Edit button</p>
	<p>On the <i>calendar</i>, locate and then touch to select the program <i>start date</i>. If necessary, use ◀▶ buttons to find month and year</p> <p>[Note: Calendar <i>always</i> opens at current month with today's date outlined in orange]</p>
	<p>When you touch the program start date, screen changes to Schedule Editor – Day in preparation for Step 2- Compile a Dayplan</p> <p>[Note: At this point Schedule Editor-Day window shows only a single empty highlighted time slot (00:00 –24:00)]</p>

Step 2: Compile Dayplan(s) — Schedule Editor–Day window

- The dayplan consists of a timetable and its associated messages for a 24 hour period. In the dayplan you set *when* and *what message(s)* display.
- A dayplan may contain only one message in one time slot, or many messages in many timeslots.
- You compile as many dayplans as you need to complete your Schedule

 **New** opens a new time slot – *always* at half-way point of remaining time

 **Clear** removes the selected time slot *and* its matching message from the Schedule but the message is *not* removed from the Collection

- The timetable covers the *full* day, from 00:00 to 24:00 (midnight)

- Each time slot that you add shows as a different color.
- Orange outline indicates the selected time slot and preview shows its matching message
- The ▲▼ arrows allow movement between time slots.

You build the time slots for the timetable on the left of the window and you set the precise starting time of each time slot in **Time:** on the right.

Procedure for Compiling Dayplan	
	<p>1. Build timetable for the date indicated – open and set start time for time slot(s) one by one</p> <ol style="list-style-type: none"> open each time slot (touch New) set start time of time slot (Time section) <ol style="list-style-type: none"> use arrows or touch number (Hour/Minute) and use keypad
<p>Schedule Editor– Day window</p>	<p>2. Select and attach message(s) to time slot(s),</p> <ol style="list-style-type: none"> select time slot (▲▼arrows) touch appropriate button (Message:) <ol style="list-style-type: none"> from Library or from Collection or have no message display to attach selected message, touch it again
	<p>3. Touch and access Periodicity window in preparation for Step 3 - Establish pattern of repetition</p>
<p>Periodicity window</p>	

Table 6: Procedure for Compiling Dayplan

Step 3: Establish the pattern of repetition (*Periodicity* of dayplan)

Periodicity allows you to determine precisely *when, how often* and *for how long* a particular Dayplan repeats.

- First, select the *Basis of repetition* and proceed to complete the details of A–Frequency
- Then set the details relating to B–Duration and C–Copy (see below)

PERIODICITY Procedures		
A: Select Frequency of Dayplan Repetition		
Basis of Repetition	How often the dayplan repeats	Details of repetition
Daily		Select reoccurrence of dayplan: by number of days or on working days (Mon.-Fri.) only
Weekly		Select reoccurrence of dayplan: by number (▼▲) of weeks and on specific day(s)
Monthly		Dayplan reoccurs: on specific <i>date</i> every x number of month(s) or on a specific <i>day-type</i> according to its <i>position</i> in the month, every x number of month(s)
		<p>Select <i>position</i> → OK Select <i>day-type</i> → OK</p>
Yearly		Dayplan reoccurs <i>each year</i> : according to <i>calendar date</i> (number + month) or on a specific <i>day-type</i> according to its <i>position</i> in a particular <i>selected month</i>
		<p>Select <i>day-type</i> → OK Select <i>position</i> → OK</p>


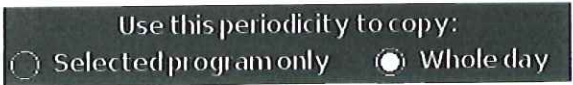


B: Select Dayplan Duration – how long Dayplan stays in effect	
	<p>Define the lifetime of the <i>dayplan</i></p> <ol style="list-style-type: none"> 1. set start date 2. set end <ol style="list-style-type: none"> i. never ends (default) ii. end date or iii. ends after x occurrences
C: Copy – what to include in Schedule	
	<ol style="list-style-type: none"> 1. Select program to include in Schedule <ol style="list-style-type: none"> i. whole day's program or ii. selected program (single time slot plus its message) 2. Add program to Schedule, touch 

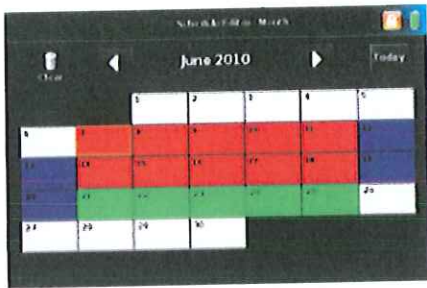
Table 7: Periodicity procedures

- If your Schedule is made up of more than one dayplan, you repeat the procedures above until you have filled up the whole Schedule and then check it on the calendar.

Note: If there are empty dates in the Schedule, the VMS unit continues to display the last message scheduled in the time slot immediately before the empty date(s).

Step 4: Check the schedule

- Touch  button (lower right corner of Schedule Editor–**Day** window) and return to Schedule Editor – **Month** window.
There the entire schedule is laid out: the present date (today) is outlined in orange; each dayplan is shown in a different color (see #1 below)
- To consult the dayplan for a particular date, you touch the date and open Schedule Editor – **Day** window at that date.



#1 Schedule (Complete): 06-07-2010 to 06-25-2010



#2 Schedule: dayplan for 06-22-20



Default repetition of a dayplan is every single day; default duration is «Never ends». Before adding the dayplan to the Schedule, double-check both of these important details

Task scenario 2: *Modify/Alter an existing program/dayplan in the Schedule*

Note: You cannot carry out this task if there is already a Schedule in effect

There are several options available:



- adjust a program within a dayplan or only part of the program for a particular date within the Schedule
- select date when you want to implement the changed program/dayplan
- select the relevant time slot and one of the option combinations shown below:

Modification options for time slot(s) and/or message(s)		
i.	In Time: change start time of time slot, (make time slot longer/shorter)	<p>PLUS</p> <p>a) keep attached message (do nothing)</p> <p>b) show no message (touch Blank)</p> <p>c) replace attached message (touch Select)</p> <p>→ Message source [Library or Collection]</p> <p>→ select message</p> <p>→ touch again to attach)</p>
ii.	Keep selected time slot (unchanged)	<p>PLUS</p> <p>a) show no message (touch Blank)</p> <p>b) replace attached message (touch Select)</p> <p>→ Message source [Library or Collection]</p> <p>→ select message</p> <p>→ touch again to attach)</p>
iii.	<p>Remove both the time slot AND its attached message (touch Clear)</p> <p>Note: This action extends the previous time slot and its attached message display It does <i>not</i> blank the sign!</p>	

1. Adjust the entire dayplan for a particular date in Schedule
 - i. repeat the step(s) and option combinations (see above) for some or all timeslots and messages in the dayplan
2. Adjust the Periodicity (touch **Periodicity...** and alter the settings) to reflect the repetition pattern of your new program/dayplan (when, how often and for how long)
 - i. if changed program/dayplan is a one-off, be sure to select
 - a) ends on same date
 - or
 - b) ends after 1 occurrence
 - ii. if your changed dayplan is to replace all or part of the pre-existing Schedule or to extend pre-existing Schedule, be sure to
 - a) adjust repetition pattern *plus* end date/number of occurrences to reflect the change(s), effectively overwriting the pre-existing Schedule *and*
 - b) select program/whole day to copy to the Schedule

Task scenario 3: *Activate Schedule*

Note: Activate Schedule cancels all other Schedules

1. Select  OPTIONS → select  Schedule → Schedule Editor–Month window.
2. In query box «What do you want to do?», touch **Start** button

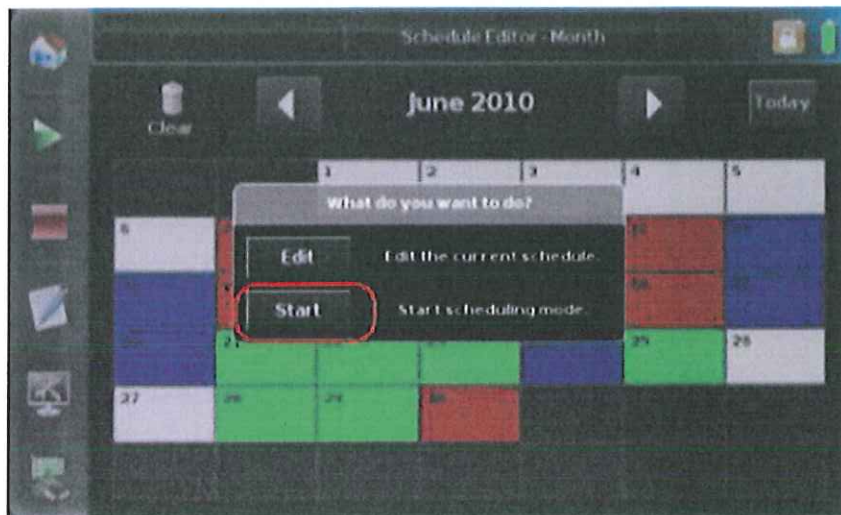




Illustration 11: Activate Schedule

3. You are returned to Home screen where the icon  shows in the top right corner of screen indicating that a Schedule is operative.

PARAMETERS

Parameters are certain settings and invisible aspects of the VMS which can affect the actual state of the panel and/or its operations.

To access this information and display the Parameters screen (below), touch the icon 

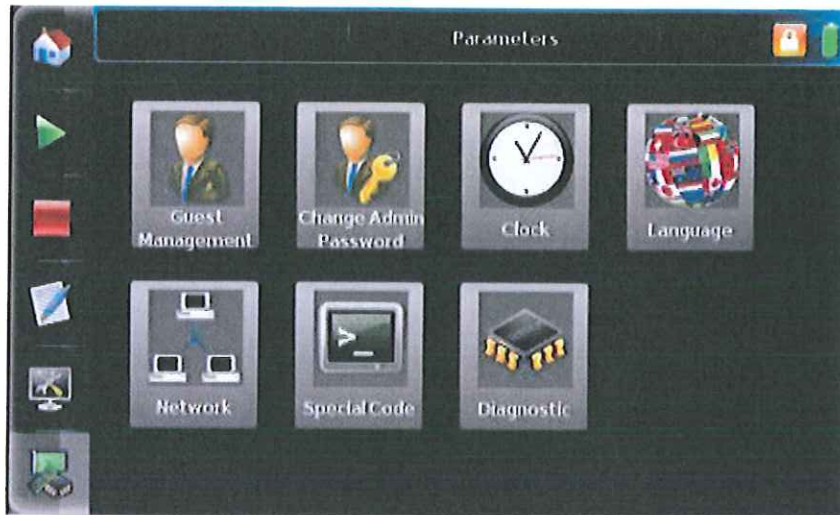









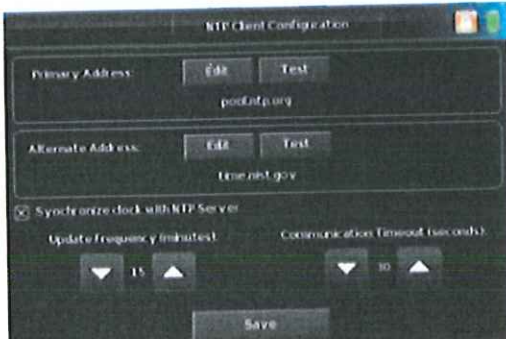


Illustration 12: Parameters screen (*Admin users*)

Guest users can also access the Parameters screen

- to change their own password and /or
- to change the Language.

These are the only Parameter operations available to Guest users.

PARAMETERS		
Icons	Screen that displays	Procedure
 <p>Guest Management</p>		<p>1. Add a Guest user – touch New, input Name and confirm ; input Password and confirm </p> <p>2. Edit Name <i>and/or</i> Password of Guest User – select from list, input changes and confirm </p> <p>3. Remove Guest user from list - select Name , touch Delete and confirm(Yes/No)</p>
  <p>Change Admin Password</p> <p>Change Guest Password</p>		<p>Procedure to Change Admin Password or to Change Guest Password is similar to password entry at Login.</p> <p>Messages confirm the new settings</p>
 <p>Clock</p>	 <p>Clock configuration (manual)</p>  <p>Clock configuration (NTP Client)</p>	<p>Manually setting the system Clock:</p> <ol style="list-style-type: none"> 1. Select time zone that matches the <i>geographic location</i> of the VMS <i>unit</i> 2. Manually adjust the <i>present</i> Date and Time by touching numbers in rectangles and entering changes (keypad <i>or</i> ▲▼ arrows) 3. Touch Apply button <p>Configuration of system clock (NTP Client)</p> <ol style="list-style-type: none"> 1. Select the time zone for the unit (as above) and Apply <p>In NTP Client Config. screen</p> <ol style="list-style-type: none"> 2. Check Synchronization option (as below) 3. Adjust Frequency and Timeout (▲▼ buttons) 4. Touch Save button <p>[Note: To counter clock time drift, Ver-Mac recommends the use of an NTP server]</p>


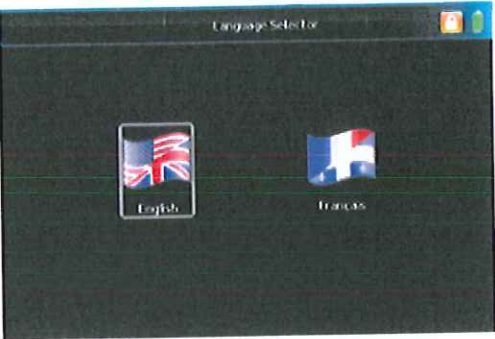

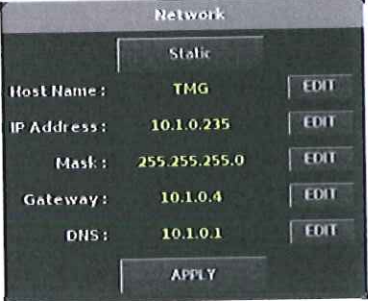



 <p>Language</p>		<ol style="list-style-type: none"> 1. Touch icon to select the language you want to use 2. Message «You need to reboot the controller to see changes» 3. Power OFF the controller and wait a few seconds before rebooting (Power ON)
 <p>Network</p>		<ol style="list-style-type: none"> 1. Touch(DHCP /Static IP) to select Type 2. Touch EDIT to access keyboard /keypad to input changes 3. Touch , to confirm 4. Touch APPLY
 <p>Special Code</p>	<p>This function is reserved for adding additional features as instructed and guided by Ver-Mac Support</p>	<p>Input coded information using the keypad</p>
 <p>Diagnostic</p>	<p>With assistance from Ver-Mac support, this aids in debugging any problems that cannot be resolved otherwise</p>	<p>Note: Under normal circumstances <i>users do not need to access this operation</i></p>

Table 8: Parameters



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Warranty Statement

(Updated August 2011)

Signalisation Ver-Mac warrants all their newly manufactured traffic control equipment to be free from defects in material and workmanship. This warranty applies only to Ver-Mac manufactured components.

- All non-electronic components manufactured by Signalisation Ver-Mac, are warranted for a period of twelve (12) months from the date of delivery to the original purchaser.
- Electronic components manufactured by Signalisation Ver-Mac, are warranted for a period of twenty-four (24) months from the date of delivery to the original purchaser.

Limitations and Exclusions

Coverage under this warranty is limited to components manufactured by Signalisation Ver-Mac and maintained and operated within the limits of the normal usage for which the component was designed.

In the case of electronic components, this warranty is contingent upon the following two conditions:

1. That the equipment has been connected to a power source of the correct voltage and amperage.
- and
2. That the equipment has been used in a manner considered normal usage.

Signalisation Ver-Mac does not warrant any of its equipment, or parts thereof, against depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow operating instructions, misuse, lack of proper protection during storage, collision or accident.

Under no circumstances shall this Warranty extend to:

1. Any Ver-Mac equipment or part thereof, which has been modified, repaired, or altered in any way, in any establishment other than Signalisation Ver-Mac's own factory.

ENCLOSURE FOUR

Signalisation Ver-Mac Warranty Statement

2. Any Ver-Mac equipment or part thereof, which has been modified, repaired, or altered in any way without the express written consent of Signalisation Ver-Mac.
3. Any and all other components of Ver-Mac products which are warranted separately by the respective manufacturers of said components.
4. Any and all replacement parts not supplied by Signalisation Ver-Mac.
5. Repair to or replacement of any equipment or component parts where the loss or damage is caused by or arises from natural calamities or unforeseeable events.

Repair and/or replacement

Repair or replacement of any equipment or component part shown to be defective, shall always be at the discretion of Signalisation Ver-Mac and shall be carried out at its factory, unless agreed to otherwise by prior arrangement with Signalisation Ver-Mac.

- Signalisation Ver-Mac shall not be held liable for any and all costs incurred by the owner in the carrying out of authorized repairs.
- Signalisation Ver-Mac shall not be held liable for reimbursement of any indirect or incidental expenses incurred in either the removal of defective equipment or component(s), nor in the installation of replacement parts.

Claim procedure

- In order to make a claim under the terms of this warranty, the owner of the equipment must first establish that the equipment has been installed, maintained and operated within the normal limits of its intended usage.
- Defective equipment or component parts for repair or replacement must always be returned to Signalisation Ver-Mac along with an RMA number obtained beforehand from Customer Service at Signalisation Ver-Mac.

Do not return equipment or component parts without prior authorization and the requisite RMA.