Warranty statement.

Sound Projections Six Year Limited Warranty.

The Voice Machine VM-2 is warranted to be free of defects in materials and workmanship for a period of 6 years from the date of original purchase, subject to the following conditions:

- This warranty excludes defects caused by normal wear, abuse, shipping damage or failure to use product in accordance with instructions. All warranty service must be performed or authorized by Sound Projections. Any service or modifications performed without authorization from Sound Projections may void this warranty.

- The Lithium Iron Phosphate (LFP) rechargeable battery in the VM-2 model is warranted for a period of 3 years.

- Wireless microphone options are warranted for a period of 2 years.

- Prior to returning your system for repair and/or warranty service, please contact our customer service department at the address below for a Return Authorization (RA) number.

Sound Projections
1815 W. 205th Street, Suite 103
Torrance, California 123501
(310) 618-9619
www.soundprojections.com

560-0033 Rev A, VM-2, 12/13

User Guide
Voice Machine VM-2

Welcome

Congratulations on purchasing a portable sound system from Sound Projections. Our products combine superior design with quality components and rugged construction. We're proud of the products we manufacture, and appreciate the confidence you've shown by choosing us.

Please take a few minutes to read this user guide. Our products incorporate many unique features, and your knowledge of them will enhance the performance of your system.

John Munroe, President
and the entire staff at Sound Projections

Unpacking

System inspection and inventory.

Check the unit carefully for damage which may have occurred during transit; contact the freight carrier immediately should you find damage.

Save the shipping carton and packing materials.

The shipping box was designed to ship your unit safely.

Contents

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Specifications for VM-2

Rated power output ....50 watts continuous

Max SPL...127 dB

Frequency response.......................................350 Hz - 10 kHz

Wireless system (optional) ....Shure 123 channel auto-scan

Battery life...8-14 hours typical

....recharge time: 7 hours (from empty)

Power requirements ....110/230 VAC - 50/60 Hz, 75 watts max

Dimensions (HWD)...15.35 x 11 x 12″

Weight ....15 pounds

Inputs..(1) mic level, balanced, XLR
(1) line level, 1/4″ phone, Hi-Z

Outputs ....(1) line level, 1/4″ phone

....(2) spkr out to VM-2C Companion Speaker

Specifications and models subject to change without notice

Important safeguards

CAUTION AVIS
RISK OF ELECTRIC SHOCK
DO NOT OPEN
RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR

CAUTION: To reduce the risk of electric shock, do not remove the cover. No user-serviceable parts inside. Refer servicing to qualified personnel.

ATTENTION: Pour eviter les risques de choc électrique, ne pas enlever le couvercle. Aucun entretien de pièces intérieures par l'usager. Confier l'entretien au personnel qualifié.

WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

AVIS: Pour eviter les risques d'incendie ou d'électrocution, n'exposez pas cet article à la pluie ou a l'humidité.

Explanation of graphical symbols.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.

The exclamation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Explication des symboles graphiques.

Le symbole éclair avec point de flèche à l'intérieur d'un triangle équilatéral est utilisé pour alerter l'utilisateur de la presence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'elétrocution.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est employé pour alerter les utilisateurs de la présence d'instructions importantes pour la fonctionnement et l'entretien (service) dans le livret d'instruction accompagnant l'appareil.

Getting started.

The Voice Machine VM-2 was designed with you in mind - easy to use and loaded with features, you'll need only a few minutes to set up and begin operation. This user guide is full of valuable information — please read it!

Charge the battery

The VM-2 is shipped with the battery fully charged. If stored for more than 3 months before your initial use, plug it in to top-off the battery. See "Charging the battery," pg 5.

1. Set up the PA system in front of your audience.

Proper set-up is important. For best sound distribution, elevate the unit 5-8 feet on a speaker stand at a distance of least 20-30 feet from the closest listener.

Connecting a VM-2C Companion Speaker.

For expanded crowd coverage, connect one or two VM–2C unpowered companion speakers to the speaker out jacks on the rear panel of the Voice Machine.

spkr out

> Note: The speaker output is designed specifically for use with the Voice Machine VM-2C companion speaker and SC50-2W or SC100-2W cable — DO NOT use other type external speakers or damage may result!

2. Plug a microphone or audio source into an input jack.

Connect a microphone, metronome or other playback source to the matching input jack; turn down the corresponding volume knob before turning on the VM-2. (See "Choosing an Input" on pages 6-7 for more information on input selection.)

mic in   line in   wireless 1   wireless 2
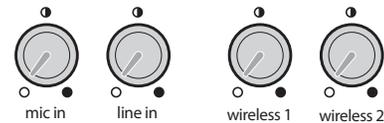
If using the optional wireless microphone system, use the corresponding knob to control the volume.
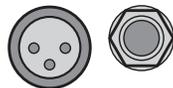
> **Caution**: The Voice Machine can generate very high sound pressure levels which could be dangerous to listeners in close proximity to the front horn. Do not turn the volume up high or press the siren button when listeners are nearby. In addition, do not place the microphone close to the speaker during operation which can cause a high pitched squeal known as feedback.

Using siren.

Press the red button to use the "siren" feature, which automatically emits a loud, alternating two-frequency siren-like tone."

siren

> **Caution**: Siren feature can produce very high and possibly harmful sound pressure levels to listeners directly in front of the Voice Machine. Never activate this feature or operate at full volume with listeners close to the VM-2 system and any VM-2C companion speakers connected to it.

Replacing the fuse.

> **Warning!** Replace fuse with same type and rating as indicated on panel.

1. Remove power cord plug from panel mounted AC receptacle

2. Pry fuse carrier away from receptacle with small screwdriver

3. Remove fuse to be replaced.

4. Install new fuse

5. Insert fuse carrier with new fuse back into receptacle

6. Plug power cord back into AC receptacle

install fuse
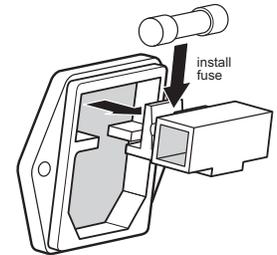
Dual wireless system set-up.

Follow these steps to set-up a Sound Machine with two wireless systems:
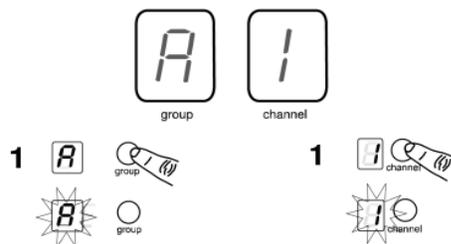
1. Turn the sound system "on", and turn all transmitters "off".

2. Perform Automatic Group Scan on the first receiver (see page 11).

3. Turn the first transmitter "on."

4. Perform Transmitter Setup to match transmitter to receiver (see page 11).

Leave the first transmitter on. Repeat for steps 2-4 for the second system

Manual Frequency Selection Receiver

Group (letter)

1. Press and release the **group** button to activiate the display. Press the **group** button again and the display flahes.

2. While the display is flashing, press the **group** button again to advance to the desired group setting.

Channel (number)

If channel needs to be changed, follow the same procedure using the **channel** button instead of the **group** button.

To activate the newly-selected group or channel, simply wait until the number stops flashing.

Receiver locking feature.

With receiver on, simultaneously hold the group and channel button. The display flashes rapidly. To unlock, repeat.

- When locked, the display flashes rapidly if any key is pressed.

- To unlock the channel: Hold the channel button until **both** numbers flash (approximately 5 seconds).

---

3. **Turn power switch ON to the "1" position (plug in power cord for AC operation).**

   Observe LED indicators to confirm battery level and power.

   Battery Power: The green light indicates the battery is at or near full charge and ready to use. The yellow light means 30-60% usage remains, and red means less than 30% remains and that the battery should be charged before use (see below).

   AC Power: When plugged into an AC power outlet, the green LED will stay on constantly as the system is being powered from the AC line (not the battery). Occasionally, when playing loudly, the LED's may flicker between green and yellow - this is normal.
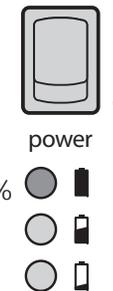
4. **Adjust the volume level.**

   Increase the volume of the input being used to desired level (be sure the microphone or input source is turned on!)

Charging the battery.

While it is not harmful to store your VM-2 with a partially discharged battery, charging after each use will ensure maximum operating time for your next event. We also recommend charging if the battery has been completely run down or before placing into storage. Optimum charging is achieved when the battery is charged between 0 and 40 degrees centigrade (32-104 Deg F). If the outdoor environment is unusually warm or cold, bring the unit indoors before charging.

Charging the battery.

Turn the system "off" and plug the cord into a standard AC outlet to charge the battery. The system automatically begins charging, indicated by the yellow charging LED. When the green full LED illuminates, the battery is fully charged and the unit is ready for use or storage.

The typical time to recharge an empty battery is 7 hours.

Choosing an input.

mic in

line in
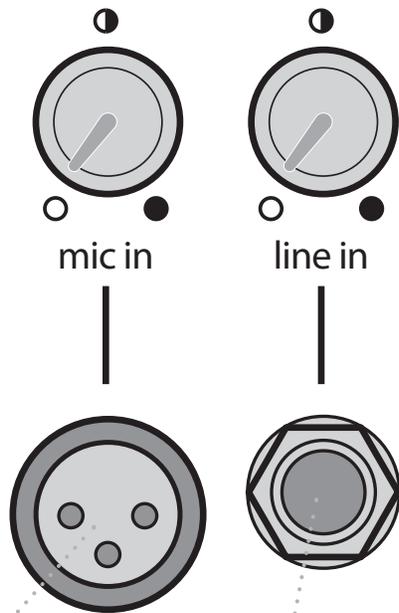
Plug a microphone with an XLR connector into mic input. The knob above the jack controls the volume level.

The mic input is balanced and low impedance for superior hum rejection. Best performance will be obtained with a MIC-HH1 or equivalent dynamic low impedance microphone with XLR connector.

When using long mic cables, use a balanced microphone to help prevent hum and interference.

Plug a line-level source with a 1/4" phone plug (cd player, metronome, music instrument, etc.) into the line input. The knob above the jack controls the volume level.

The line input is an unbalanced Hi-Z line level input.

Use shielded cable to avoid hum or interference.

To daisy-chain two sound systems together for greater crowd coverage, connect the line output from one system into the line input of the other.

Each transmitter and receiver pair must be the same frequency, or channel. The Shure wireless system uses transmitter setup to synchronize the transmitter and receiver channels.

Note: transmitting devices such as cellular phones may interfere with wireless audio transmissions. Keep transmitters and receivers away from these and other potential sources of interference.

Single wireless system set-up.
1. Automatic Group Scan: Press and release the group button on the receiver. This scans for a clear channel and sets the receiver to that channel.
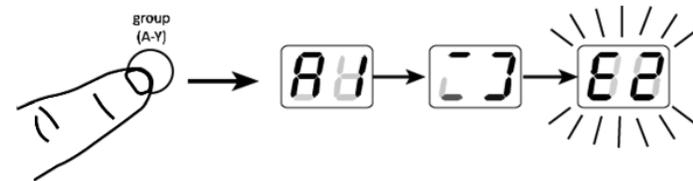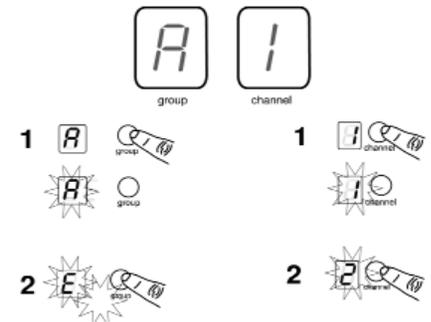

2. Transmitter Setup: Transmitter group and channel must be manually set to match the receiver.

Group (letter)

1. Press and release the **group** button to activiate the display. Press the **group** button again and the display flahes.

2. While the display is flashing, press the **group** button again to advance to the desired group setting.
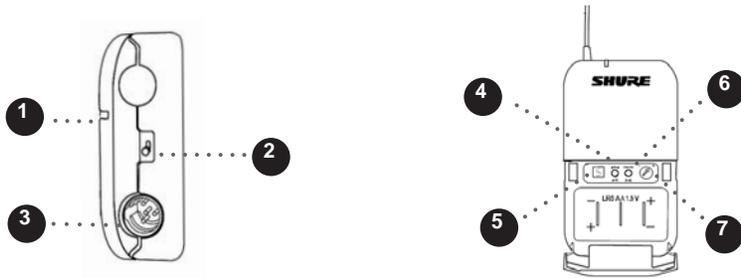
Channel (number)

If channel needs to be changed, follow the same procedure using the **channel** button instead of the **group** button.

After manual setup, the transmitter alternately displays the group and channel setting for about two seconds.

Transmitter Locking Feature

Turn the transmitter on. Hold the group button, then press the channel button for approximately 2 seconds. The LED indicator rapidly flashes red when locked. Repeat to unlock.

Operating the body-pack mic/transmitter.

LED Indicator	Status
Green	Ready
Rapidly Flashing Red	Controls locked
Solid Red	Battery power low (less than 1 hour remaining*)
Flashing Red and shuts off	Batteries dead (change batteries to power on transmitter)

*For alkaline batteries only. For rechargeable batteries, solid red means the batteries are dead.

1 Indicator LED for Power and battery status

2 Power switch: Toggles power on or off.

3 4-Pin Microphone Input Jack.

4 Group Button: Changes group Setting

5 LED Display: Displays group and channel setting.

6 Channel Button: Changes channel setting.

7 Audio Gain Adjustment: Rotate to increase or decrease transmitter gain.
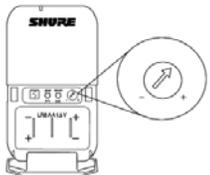
Changing batteries.

Install 2 new AA alkaline batteries in the transmitter for best results; expected life is approximately 14 hours.

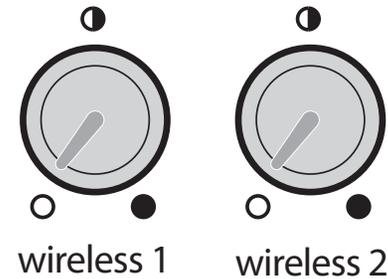When the transmitter light 1 glows red, replace the batteries.

Adjust Gain Settings:

Rotate the audio gain adjustment to increase (+) or decrease (-) the gain until desired level is reached.

For instruments, turn gain to minimum setting. For headsets, increase gain as desired.

wireless 1   wireless 2

line out   spkr out   spkr out

Connect line output to the line input of another Voice Machine to daisy-chain them together.

The line output is an unbalanced, line-level and composite signal of the sound system inputs.

Connect the speaker outputs to VM-2C companion speakers to expand coverage.

Wireless system operation.

The Voice Machine VM-2 is available with single or dual built-in Shure wireless receivers. The instructions on the following pages describe how to set-up and operate the receiver units and wireless transmitters.

Operating the optional wireless mic system.

The built-in wireless receiver(s) turn on automatically when the Voice Machine is turned "on." Plug the antennas onto the mating connecotors on the VM-2 as follows: line up the pins, push inward and rotate clockwise a quarter turn until they snap in place. Orient the antennas up and out at a slight angle (see photo); single wireless options will have two antennas, dual wireless will have four. Also, note the location of the wireless mic volume controls on the Voice Machine's rear panel.
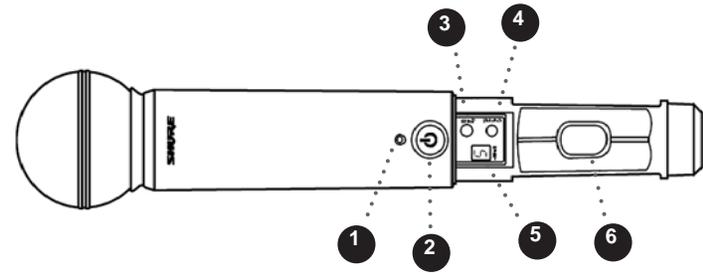
one wireless mic   two wireless mic
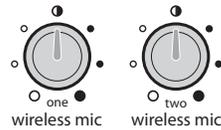
Features and controls of the built-in wireless receiver.
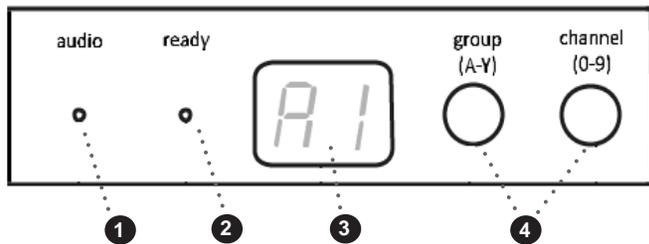
1   **audio** LED: Indicates strength of incoming audio signal: green for normal, amber for strong, red for peak.

2   **ready** LED: Green light indicates wireless system is receiving signal.

3   Channel number readout: See "Signal System Setup" on page 11.

4   **Group and Channel Buttons**

     Scan: Push and release **Group Button** to scan for an open group and channel.

     Manual: Push and hold **Group Button** to select a group. Push **Channel Button** to select a channel in the current group.

Operating the handheld wireless mic/transmitter.

LED Indicator	Status
Green	Ready
Rapidly Flashing Red	Controls locked
Solid Red	Battery power low (less than 1 hour remaining*)
Flashing Red and shuts off	Batteries dead (change batteries to power on transmitter)

*For alkaline batteries only. For rechargeable batteries, solid red means the batteries are dead.

1   Indicator LED for Power and battery status

2   Power Button: Press and hold for 2 seconds to turn "on" (LED green), press and hold again to turn "off."

3   Group Button: Changes group setting.

4   Channel Button: Changes channel and gain setting.

5   LED Display: Displays group and channel setting
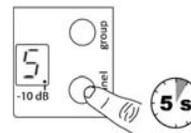
6   Battery Compartment

Changing batteries.

Install 2 new AA alkaline batteries in the transmitter for best results; expected battery life is approximately 14 hours.

When the transmitter light **1** glows red, replace the batteries.
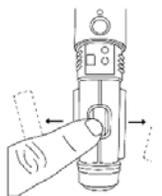
Adjusting Gain Settings.

Hold the channel button **4** for 5 seconds. A dot appears on the lower right-hand corner of the LED display, which indicates -10db gain setting has been activated.

To change back, hold channel button agiain for 5 seconds until dot disapears.