

Warranty statement.

Sound Projections Six Year Limited Warranty.

The Voice Machine VM-1 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 sealed lead acid rechargeable battery in the VM-1 model is warranted for a period of 2 years.
- Wireless microphone and MP3 player options are warranted for a period of two 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.

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22130 South Vermont Avenue, unit E
Torrance, California 90502
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560-30 Rev A, VM-1pgx, 02/09



User Guide

Voice Machine VM-1 with pgx wireless



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

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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.

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Specifications for VM-1 with pgx.

Rated power output.....	50 watts continuous
Max SPL.....	127 dB
Frequency response.....	350 Hz - 10 kHz
Wireless system (optional)	Shure 90 channel auto-scan
Battery life.....	6-12 hours typical
.....	recharge time: 6 hours (from empty)
Power requirements	110/230 VAC - 50/60 Hz, 75 watts max
Dimensions (HWD).....	15.35 x 11 x 12"
Weight	17 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-1C Companion Speaker

Specifications and models subject to change without notice

Important safeguards



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 éviter les risques de choc électrique, ne pas enlever le couvercle. Aucun entretien de pièces intérieures par l'utilisateur. Confier l'entretien au personnel qualifié.

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

AVIS: Pour éviter les risques d'incendie ou d'électrocution, n'exposez pas cet article à la pluie ou à 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 présence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'électrocution.



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-1 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-1 is shipped with the battery fully charged. If stored for more than two weeks before 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-1C Companion Speaker.

For expanded crowd coverage, connect one or two VM-1C unpowered companion speakers to the speaker out jacks on the rear panel of the Voice Machine.



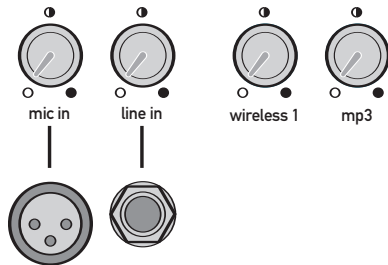
spkr out



Note: The speaker output is designed specifically for use with the Voice Machine VM-1C companion speaker and SC50-2W 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-1. (See “Choosing an Input” on pages 6-7 for more information on input selection.)



If using the optional wireless microphone system, use the corresponding knob to control the volume.

Note: See separate instructions for operation of the MP3 player.



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-1 system and any VM-1C companion speakers connected to it.

MP3 player operation.

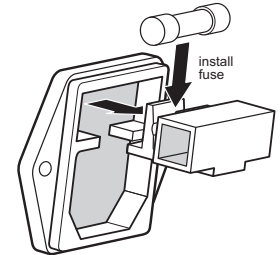
See separate instructions for operation and features of the MP3 player.

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



Dual wireless system set-up.

Follow these steps to set-up a Voice Machine with two wireless systems:

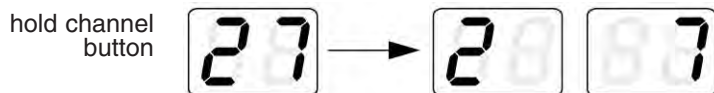
1. Turn the sound system “on”, and turn all transmitters “off”.
2. Perform Automatic Frequency Selection on the first receiver (see page 11).
3. Turn the first transmitter “on.”
4. Perform Automatic Transmitter Setup (see page 11).

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

!! **Note:** Be sure that only one transmitter’s IR port is exposed when synchronizing a system.

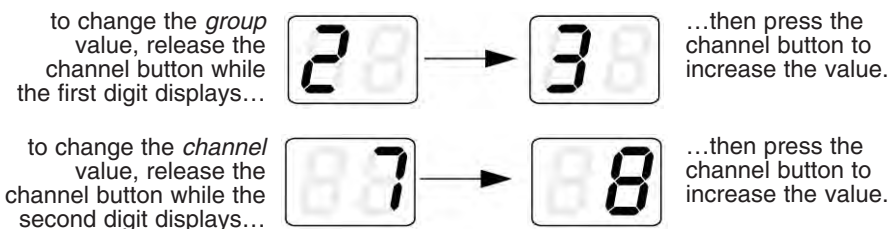
Manual Frequency Selection (receiver only)

To manually select a group or a channel, press and hold the channel button. The display alternates between the group number and the channel number.



Releasing the channel button while either number is displayed makes that displayed number flash. Then, *press* the channel button while the number is flashing to increase the setting by one.

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

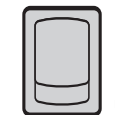


Receiver locking feature.

The wireless receiver has a locking feature which prevents accidental channel changes.

- To lock the channel: Hold the channel button until **both** numbers flash (approximately 10 seconds).
- 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!)

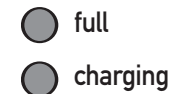
Charging the battery.

- !! For maximum operating time, charge the battery after EVERY use.

The performance of the built-in battery will be greatly improved if the system is charged completely after each use — storing the unit in a partially-discharged condition will reduce the service life of the battery. (The Voice Machine may be left plugged into an AC outlet during storage for optimum results.)

Charging the battery.

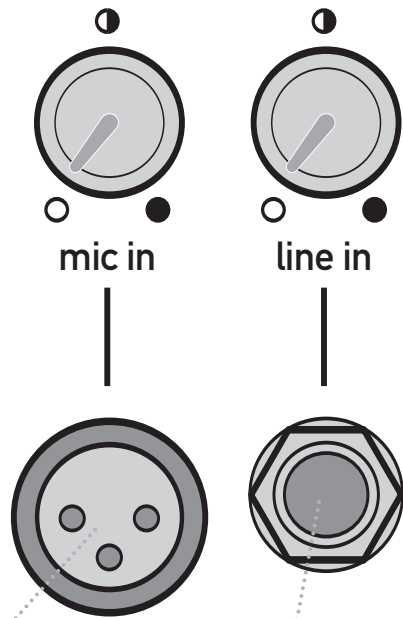
Turn the power switch off (“0” position), then plug the cord into a standard AC outlet to charge the Voice Machine battery. The unit automatically begins charging, indicated by the yellow “charging” LED.



When the green “full” LED lights steady, the battery is 90% charged and may be used immediately or left plugged in another 1-2 hours to top-off the battery before use or storage.

The typical time to recharge an empty battery is 6 hours.

Choosing an input.



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.

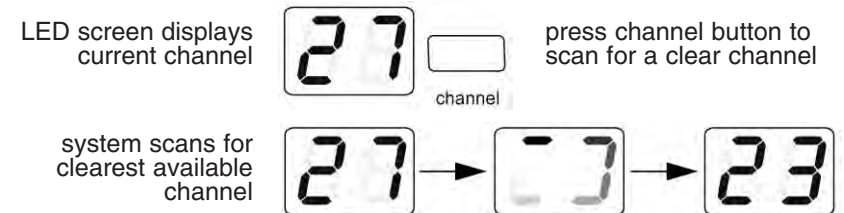
Wireless system set-up.

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.

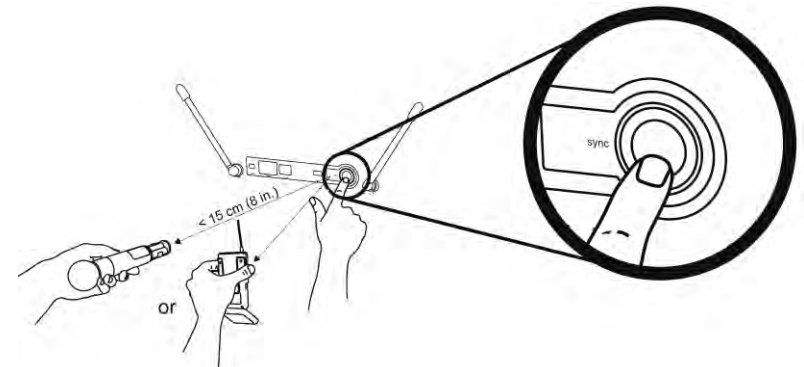
Note: transmitting devices such as cellular phones may interfere with wireless audio transmissions. Keep transmitters and receivers away from these and other potential sources of interference.

Single wireless system set-up.

1. Automatic Frequency Selection: Press and release the channel button. This scans for a clear channel and sets the receiver to that channel.

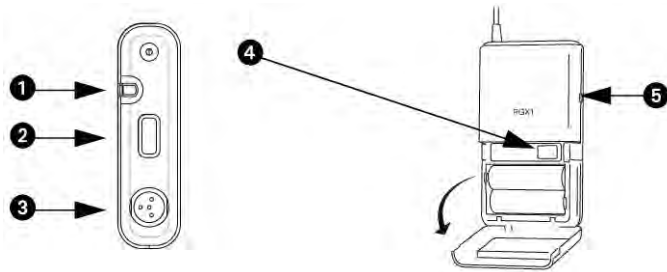


2. Automatic Transmitter Setup: Turn transmitter "on". Open the transmitter's battery compartment to display the infrared (IR) port (see pages 9 and 10). With the transmitter IR port exposed to the wireless receiver, press and release the **sync** button until the red light stops flashing on both receiver and transmitter.



When the receiver's ready light glows green, the system is ready for use. Close the transmitter battery compartment.

Operating the body-pack mic/transmitter.



- 1 Indicator LED for Power / Infrared (IR) / Mute

Green	Ready
Flashing green	Controls locked (see "locking feature" pg 9)
Amber	Mute on
Flashing red	IR transmission in process
Glowing red	Battery power low
Pulsing red on startup	Batteries dead (transmitter cannot be turned on until batteries are charged)
Pulsing red after synchronization	Frequency group incompatible; check transmitter group.

- 2 On-Off / Mute switch: Press and hold to turn "on" (LED green), press and hold for 2 seconds to turn "off." To mute or unmute, press and release.
- 3 4-Pin Microphone Input Jack.
- 4 IR port: Receives infrared beam to synchronize frequencies.
Note: When using multiple systems, only one transmitter IR port should be exposed at a time.
- 5 Gain adjustment switch (see instructions below)

Changing batteries.

Install 2 new AA alkaline batteries in the transmitter for best results; expected life is approximately 8 hours.

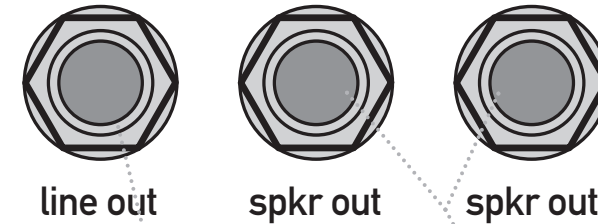
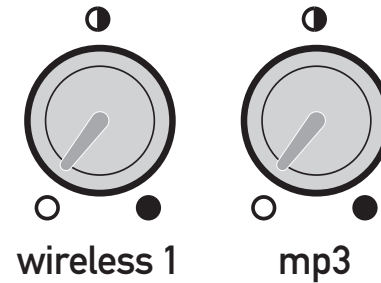


When the transmitter light 1 glows red, replace the batteries.

Adjusting gain.

Three gain settings are available:

- **mic:** low-output microphone.
- **0:** high-output microphone, guitar
- **-10:** Use only if audio is distorted due to high input level.



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-1C companion speakers to expand coverage.

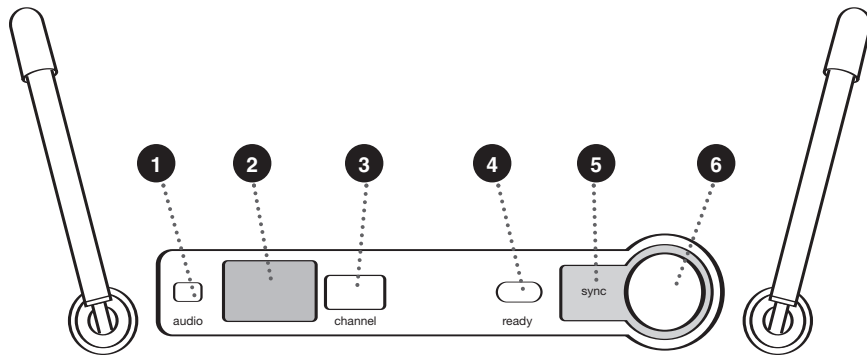
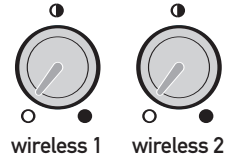
Wireless system operation.

The Voice Machine VM-1 with pgx wireless is available with single or dual built-in Shure 90-channel 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.

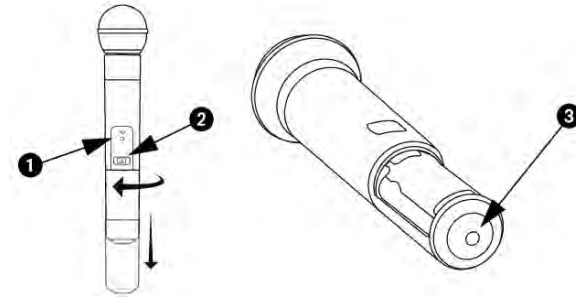
The built-in wireless receiver(s) turn on automatically when the Voice Machine is turned “on.” Raise the paired left/right antennas up and out at a slight angle; single wireless options will have two antennas, dual wireless will have four. Also, note the location of the wireless mic volume controls on the Voice Machine’s rear panel.



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 **Channel number** readout: See “Single System Setup” on page 11.
- 3 **channel** button: See “Single System Setup” on page 11.
- 4 **ready** LED: Green light indicates wireless system is receiving signal.
- 5 **Infrared (IR)** port: Broadcasts IR signal to transmitter.
- 6 **sync** button: Press and release to synchronize transmitter and receiver frequencies.

Operating the handheld wireless mic/transmitter.



1 Indicator LED for Power / Infrared (IR) / Mute

Green	Ready
Flashing green	Controls locked (see “locking feature” below)
Amber	Mute on
Flashing red	IR transmission in process
Glowing red	Battery power low
Pulsing red on startup	Batteries dead (transmitter cannot be turned on until batteries are charged)
Pulsing red after synchronization	Frequency group incompatible; check transmitter group.

- 2 **On-Off / Mute** switch: Press and hold for 2 seconds to turn “on” (LED green), press and hold again to turn “off.” To mute or unmute, press and release.

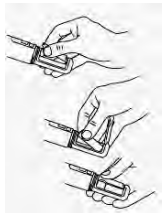
- 3 **IR** port: Receives infrared beam to synchronize frequencies.

Note: When using multiple systems, only one transmitter IR port should be exposed at a time.

Changing batteries.

Install 2 new AA alkaline batteries in the transmitter for best results; expected battery life is approximately 8 hours.

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



Transmitter locking feature.

The transmitter (handheld and body-pack) has a locking feature which prevents accidental muting or turning off during performance.

- To lock the controls: With the transmitter “off”, hold the power button ϕ down until the green LED flashes (approximately 5 seconds).
- To unlock the controls: With the transmitter “on”, hold the power button ϕ down until the green LED flashes (approximately 5 seconds).