

Installation, Operation and Maintenance Manual

# **AudioSteam®**

mr.steam® | Feel Good Inc.

## IMPORTANT SAFETY INFORMATION

#### **READ ME FIRST:**

- 1. Read and follow all instructions within this technical manual.
- 2. Heed all warnings, cautions, notices, and important notes.
- 3. Save this technical manual and leave with the homeowner.

### ABOUT WARNINGS, CAUTIONS, NOTICES, AND IMPORTANT NOTES:

As you follow the instructions in this technical manual, you will see four types of callouts: **WARNINGS**, **CAUTIONS**, **NOTICES**, and **IMPORTANT NOTES**. This blocked information is important for the safe and efficient installation, maintenance, and operation of the AudioSteam. These callouts are described as follows:

**AWARNING** Indicates a potentially hazardous situation, which, if not avoided, may result in death or serious injury.

**A CAUTION** Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

**NOTICE** Indicates a situation, which, if not avoided, may result in property damage.

**IMPORTANT NOTE** Indicates information that is especially relevant to a problem-free installation.

#### **SAFETY INSTRUCTIONS:**

To prevent personal injury and or product damage, please read the following important safety instructions carefully before installing the AudioSteam:

- Do not install the AudioSteam near any heat sources.
- Clearance and minimum distance between the AudioSteam and the surrounding structure are not specified as long as they are sufficient so that the ambient temperature around the apparatus does not exceed 140 °F (60 °C).
- Do not defeat the safety purpose of the polarized and/or grounding type plug. A polarized plug has two blades, with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and at the point where the cord exits from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- All servicing to be performed by qualified service personnel. Servicing is required when the AudioSteam
  is damaged in any way, including when the power-supply cord or plug is damaged, liquid is spilled into
  or objects fall into the AudioSteam, AudioSteam is exposed to rain or moisture, the AudioSteam does
  not operate normally, or the AudioSteam dropped.
- Do not disassemble or alter the AudioSteam in any way.
- Clean the AudioSteam with a dry cloth only. Beware of the application of some products commonly used against corrosion (such as WD-40® family products), as some industrial oils can have negative chemical reactions and damage the housing materials of the AudioSteam. Any other materials that may come in contact with the AudioSteam must be carefully evaluated under end-use conditions for compatibility.

**These instructions are for use by qualified service personnel only.** To reduce the risk of electric shock, do not perform any servicing, other than that contained in these instructions.

**NOTE:** All information in this technical manual is based on the latest product information available at the time of publication. Sussman-Automatic Corporation reserves the right to make changes at any time without notice.

## **IMPORTANT SAFETY INFORMATION** (cont.)

## **A** WARNING

Before installing or connecting the AudioSteam, please read the following:

- To prevent a shock hazard, do not disassemble or alter the AudioSteam.
- To prevent overtemperature shutoff and equipment damage, do not use foam to insulate the AudioSteam.
- To prevent a shock hazard, turn power off before servicing or changing any cable connections in the AudioSteam.
- To prevent electric shock hazard and/or water damage to the AudioSteam, all conduits must be plugged with the included foam blocks.
- To prevent a shock hazard do not install the AudioSteam in a location where it can get wet.
   Audiosteam must be installed in a dry, indoor location.
- AudioSteam must be disposed of separately in accordance with local waste disposal legislation.



## **A** WARNING

- Risk of electric shock. Do not leave compartment door open.
- Risk of electric shock. Replace components only with identical components.
- Prevent electrocution. Do not connect any auxiliary components (for example cable, additional speakers, headphones, additional audio/video components, etc.) to the system.
- These units are not provided or intended to be connected to an outdoor antennae; to prevent electrocution only use the supplied antennae and install it in accordance with these instructions.
- Opening or removing covers may expose you to dangerous voltage or other risk of injury. All servicing to be performed by qualified service personnel.
- When the power supply connections or power supply cord(s) are damaged; if water is entering
  the audio/video compartment or any electrical equipment compartment area; if the protective
  shields or barriers are showing signs of deterioration; or if there are signs of other potential
  damage to the unit, turn off the unit and refer servicing to a qualified service personnel.
- This unit should be subjected to periodic routine maintenance (for example, once every 3
  months) to make sure that the unit is operating properly.
- Product must be disposed of separately in accordance with local waste disposal legislation.

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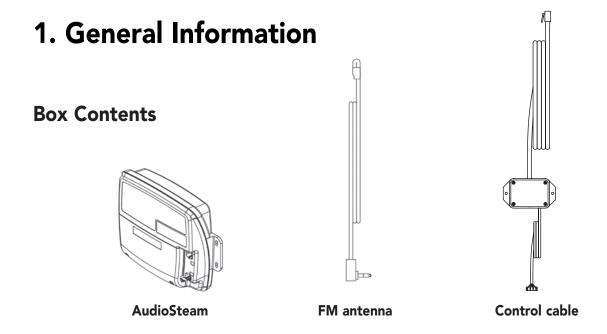
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# INSTALLER INSTRUCTIONS



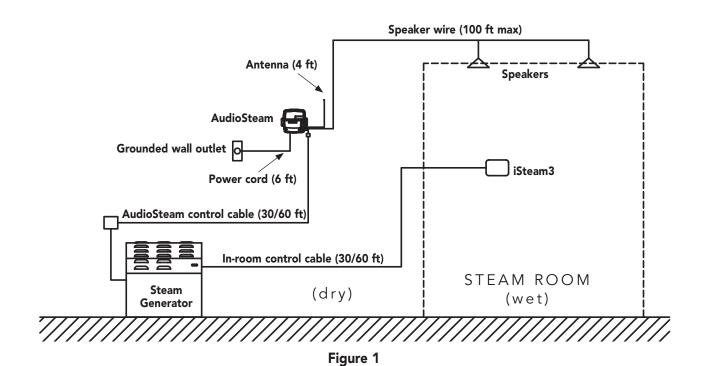
**IMPORTANT NOTE:** Audio@Home does not include the FM antenna or Control Cable.

## **AudioSteam General Installation**

**Figure 1** shows how the AudioSteam interconnects with the steam generator, iSteam3, and audio speakers.

**Figure 2** shows how to use the AudioSteam as a standalone system within your steam room (i.e., if your steam room does not use iSteam3).

**IMPORTANT NOTE:** AudioSteam only integrates with iSteam3.



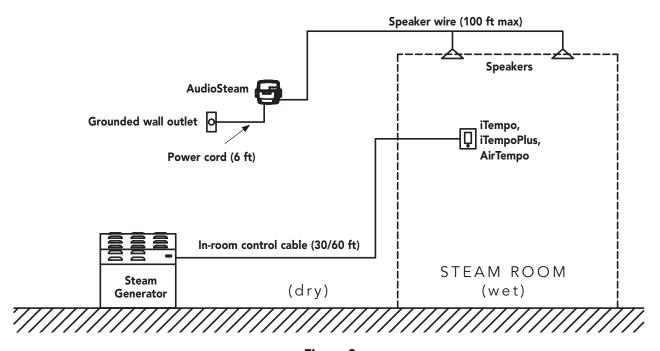


Figure 2

# 2. Installing AudioSteam

## **AudioSteam Dimensions**

Figure 3 shows the face-on dimensions of AudioSteam.

Figure 4 shows the side-view dimensions of AudioSteam.

**AWARNING** Shock hazard. Do not place the control box in a location where it can get wet.

## Locating and Installing AudioSteam

To prevent water from getting inside the device, AudioSteam should be mounted on two stable vertical surfaces (e.g., studs) as shown in **Figure 5**.

Using screws and washers, firmly attach AudioSteam using the upper mounting holes, one at a time, on each side of the unit. Repeat the process for the lower mounting holes (**Figure 5**).

**NOTICE** A clearance of at least 0.75" (19 mm) is required to ensure free heat circulation at the back of the unit.

## **IMPORTANT NOTES**

- The following materials (not included) are recommended to install AudioSteam:
  - Four #10 screws of appropriate length with round, truss, or pan head.
  - Four washers with 0.5" outer diameter x 0.0625" thickness (12 mm outer diameter x 1.5 mm thickness).
- 2. To prevent overtemperature shutoff and equipment damage, do not use foil insulation in front of AudioSteam.
- 3. Place AudioSteam far from any electrical noise source, such as variable speed controls and motors, to prevent interference that will affect audio quality.
- 4. In the event of an overtemperature condition, AudioSteam automatically reduces the volume to protect the amplifier from damage.
- 5. To prevent overtemperature shutoff, do not locate in an attic or other location where ambient temperature may reach 140 °F (60 °C).

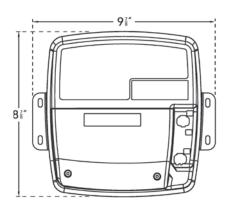


Figure 3

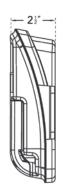


Figure 4

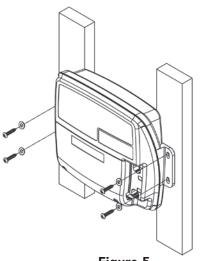


Figure 5

# 3. Connecting AudioSteam

## **Connecting AudioSteam**

To connect AudioSteam to the steam generator, perform one or more of the following connections:

- Connect the FM antenna (included) and auxiliary cord to AudioSteam.
- Connect speakers and subwoofer to AudioSteam with speaker wire.
- Connect AudioSteam to the steam generator's motherboard or daughterboard with the AudioSteam control cord.
- Pair a Bluetooth-enabled device to AudioSteam.

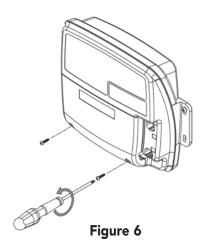
## **WARNING**

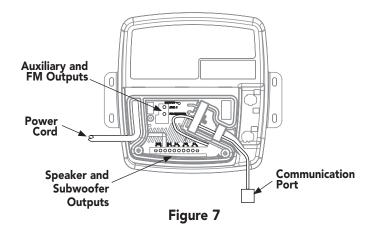
- To reduce the risk of electric shock, do not remove the screws on the back of AudioSteam. No user-serviceable parts inside. Refer servicing to qualified service personnel.
- To prevent electric shock, do not connect AudioSteam to main power supply while the cover is removed.
- AudioSteam does not come with speakers and speaker wiring. The connection between AudioSteam and the speakers must be "Class 2 Wiring" and installed by qualified personnel.

## Removing the AudioSteam Cover

#### To remove the AudioSteam cover:

- Using a Phillips-head screwdriver, remove the two cover screws from the front of the AudioSteam (Figure 6), and remove the cover from the unit.
- Connect the outputs of AudioSteam as shown in Figure 7.
- Remove the two foam block inserts from the inner wiring channels and set aside (Figure 8).





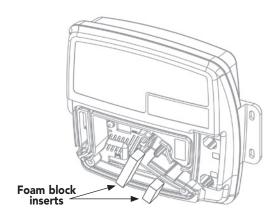
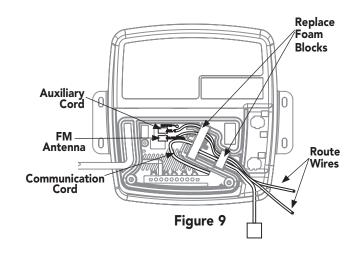


Figure 8

# **Connecting the FM Antenna and Auxiliary Cord**

- 1. Plug the included FM antenna into the antenna output and route the wire through the strain relief channel as illustrated (**Figure 9**). For best reception, fully deploy the antenna in a vertical orientation outside of the AudioSteam housing.
- 2. Connect a 1/8" (3.5 mm) stereo audio cord (not included) to the auxiliary output, and route the cable through the strain relief channel as illustrated (Figure 9). Connect the free end of the audio cord to a mobile device or digital music player.



## **Connecting Speakers and Subwoofer**

1. Connect individual speaker wires — or a 10-pin MATE-N-LOK adapter with attached wires — to the speaker outputs. Refer to Figure 10 and Figure 11 for connector identification.

#### **IMPORTANT NOTES**

- If you use individual speaker wires, the recommended socket crimping contact is an AWG 14-20 (TE Connectivity part number 350550-3).
- If you use a 10-pin MATE-N-LOK adapter with attached wires, the required housing connector is a 10-position Universal MATE-N-LOK (TE Connectivity part number 926302-3).
- **2.** Route the wires through the molded relief channel. Connect the speaker wires to suitable speakers and subwoofer.

**IMPORTANT NOTE:** To avoid interference do not run speaker wires in the same conduit as or adjacent to power wiring.

Wire Size	Maximum Length
22 AWG	11 feet
20 AWG	19 feet
18 AWG	31 feet
16 AWG	48 feet
14 AWG	80 feet
12 AWG	119 feet
10 AWG	196 feet

- Replace the foam block inserts (Figure 9).
- **4.** Secure the cover using the two cover screws.

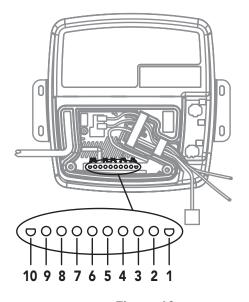


Figure 10

CONNECTION	IDENTIFICATION	COLOR
1	Front Left speaker (+)	White
2	Front Left speaker (-)	White/Black
3	Front Right speaker (-)	Grey/Black
4	Front Right speaker (+)	Grey
5	Rear Left speaker (+)	Green
6	Rear Left speaker (-)	Green/Black
7	Rear Right speaker (-)	Purple/Black
8	Rear Right speaker (+)	Purple
9	Subwoofer (+)	Blue
10	Subwoofer (-)	Blue/Black

AudioHome only uses positions 1, 2, 3 & 4

Figure 11

# Connecting AudioSteam to the Steam Generator

To operate the AudioSteam via iSteam3, you must connect the AudioSteam (**Figure 12**) to an internal connector in the steam generator.

## **A** WARNING

**Shock hazard.** Power must be disconnected at the main electrical supply before removing the steam generator cover. For information about the steam generator, refer to the installation, operation, and maintenance manual supplied with the steam generator (also found at www.usbathstore.com

- **1.** Remove the steam generator cover, and remove knockout on steam generator.
- 2. Plug the control cable into the AudioSteam as shown.
- 3. Connect the control cable directly to the steam generator's circuit board (**Figure 13**), **OR** if an additional accessory is installed in the steam generator, connect the control cable to the supplied daughterboard.
- **4.** Plug the AudioSteam power cord into a 120V grounded electrical outlet.
- **5.** After the AudioSteam has been powered, supply power to the steam generator.

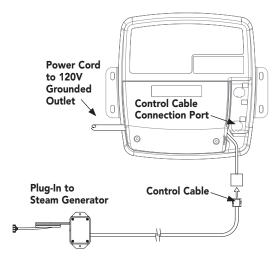
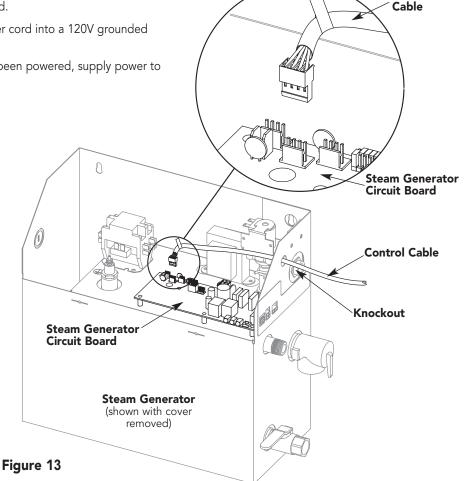


Figure 12

Control



All drawings are for illustrative purposes only.

## Pairing a Bluetooth-Enabled Device

Before playing a Bluetooth-enabled device via iSteam3 (see "Operating AudioSteam" on Page 17), you must pair your device to AudioSteam.

## To pair a Bluetooth-enabled device to AudioSteam:

- **1.** Ensure that the mobile device is in range of AudioSteam, and that it is powered on and Bluetooth is turned on.
- 2. Open the Bluetooth settings on your device.
- 3. Select AudioSteam in the list of discoverable Bluetooth devices.
- 4. When prompted, enter the following passcode: 5555.
- **5.** Once the pairing is complete, select **AudioSteam** on your mobile device to connect to AudioSteam.

#### **IMPORTANT NOTES**

- If the device moves out of range and loses connection, it should reconnect automatically with AudioSteam (without having to go through the pairing process again) when moved within range.
- AudioSteam will store up to eight devices in its memory. If one of the last three paired devices is in range and has Bluetooth turned on, it will automatically connect to AudioSteam.
- If multiple devices are within range and have already been paired with AudioSteam, priority will be given to the device that was first detected in the AudioSteam memory.

# 4. AudioSteam Specifications

ENVIRONMENTAL RATINGS		
Operating temperature:	-4 °F (-20 °C) to 140 °F (60 °C)	
Storage temperature:	-22 °F (-30 °C) to 185 °F (85 °C)	
Humidity:	70% max	
Water resistance:	IPX5	

MECHANICAL	
Weight:	3.6 lb (1.64 Kg)
Dimensions (W x H x D):	9.81" x 2.58" x 8.88" (249 mm x 65 mm x 226 mm)

LINE INPUT	
Input voltage:	100-240VAC 50/60Hz

4
1
Class D
25 Wrms , 50 W peak
50 Wrms , 100 W peak
4-8 Ohms
2-4 Ohms
0.015% at 1 W (1 KHz)
0.015% at 1 W (100 Hz)
5 Hz to 20 KHz F
10 Hz to 200 Hz
1 2 5 4 2 5

AUXILIARY INPUTS	
Maximum number of inputs:	1
Connection type:	1/8" (3.5 mm) stereo jack
Maximum voltage:	2.2 Vpp
Impedance:	100 Kohms

FM RECEIVER	
Frequency band:	87.5 MHz to 107.9 MHz
RF sensitivity:	2.2 μV
Harmonic distortion:	0.1% @ 1 KHz
Frequency response:	30Hz @ 15 KHz
FM decoder:	Stereo Multiplex
Antenna type:	1 m (39") cable
Antenna connector:	1/8" (3.5 mm) stereo jack

BLUETOOTH RECEIVER		
Frequency band:	2400 MHz to 2483.5 MHz	
Transmit power:	Class 2, 4 dBm	
Bluetooth version:	Bluetooth v4.1	
Antenna type:	Modular integrated	
Profiles supported:	A2DP, AVRCP	

APPLICABLE STANDARDS
UL 60065
CAN/CSA-C22.2 No. 60065-03
EN 60065
AS/NZS 60065

AudioSteam is compliant with the Radio Equipment Directive (RED)







# 5. Regulatory Statements

## FCC Compliance Statement

#### Contains Transmitter Module FCC ID: A8TBM23SPKXYC2A

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

#### **FCC RF Exposure Statement**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

## **IC Compliance Statement**

### Contains transmitter module IC: 12246A-BM23SPKXYC2

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

#### **RSS-102 RF Exposure Statement**

This equipment complies with Industry Canada radiation exposure limits set forth for an uncontrolled environment.

# HOMEOWNER/END-USER INSTRUCTIONS

## 6. About AudioSteam

AudioSteam offers you the perfect means to bring music into your steam room. AudioSteam is compatible with numerous audio sources:

- Connect to a mobile device or digital music player using the auxiliary audio input.
- Connect to a mobile device via Bluetooth.
- Tune in to an FM station using the AudioSteam's integrated FM receiver.

AudioSteam can connect to four speakers and one subwoofer.

AudioSteam lets you control music from the iSteam3 interface, or may be used as a standalone device.

#### **IMPORTANT NOTES**

- If a Bluetooth-connected device moves out of range and loses connection with AudioSteam, it should reconnect automatically with AudioSteam (without having to go through the pairing process again) when moved within range.
- AudioSteam will store up to eight devices in its memory. If one of the last three paired devices is in range and has Bluetooth turned on, it will automatically connect to AudioSteam.
- If multiple devices are within range and have already been paired with AudioSteam, priority will be given to the device that was first detected in the AudioSteam memory.

# 7. Operating AudioSteam

Using iSteam3, you can control your AudioSteam-connected mobile device or music player from within your steam room. Control your digital music player (e.g., Apple iPod), mobile device, or FM stations, all from the simple AudioSteam interface.

**NOTICE** 

AudioSteam only interfaces with iSteam3.

## **IMPORTANT NOTES**

- For complete instructions on operating the iSteam3, refer to the iSteam technical manual (see www.MrSteam.com).
- To control a Bluetooth-enabled device from iSteam3, you must first pair the device to the AudioSteam. See "Pairing a Bluetooth-enabled device" on page 12 for instructions.

## To Operate AudioSteam using iSteam3:

- 1. Boot iSteam3 and wait for the iSteam3 home screen to appear.
- 2. To turn on AudioSteam (Figure 14), tap the music icon (A), and then tap the MUSIC button (B).
- 3. Tap the **SETTINGS** icon (**A** in **Figure 15**).
- **4.** A list of available playback devices will appear (**Figure 16**). Tap the desired device (**A**), and then tap the **PLAY** icon (**B**). To disconnect an active Bluetooth device, tap the **DISCONNECT** button (**C**).
- **5.** To control FM radio (**Figure 17**):
  - a. Slide the **VOLUME CONTROL** left or right to control volume (A).
  - b. Tap the **MUTE** button to mute all sound (**B**).
  - c. Tap the  ${f FORWARD}$  and  ${f BACK}$  buttons ( ${f C}$  and  ${f D}$ ) to scan FM stations.

# 7. Operating AudioSteam (cont.)

- 6. To control an auxiliary-connected or Bluetooth-connected device (Figure 18):
  - a. Slide the **VOLUME CONTROL** left or right to control volume (A).
  - b. Tap the **MUTE** button to mute all sound (**B**).
  - c. Tap the FORWARD and BACK buttons (C and E) to select a track in the device's playlist.
  - d. Tap the **PLAY** button (**D**) to play or pause the track.
- 7. To turn off AudioSteam (Figure 19), tap the POWER icon (A), and then tap the MUSIC button (B).







Figure 14

Figure 15

Figure 16







Figure 17

Figure 18

Figure 19

# 8. Troubleshooting

- 1. No Music Icon on iSteam3
  - a. Disconnect power to the AudioSteam and the Steam generator.
  - b. Ensure the communication cables are plugged in correctly (See page 10)
  - c. Power up the AudioSteam
  - d. Power up the steam generator

# 9. AudioSteam Warranty

To view or download the **MrSteam® Accessory Warranty** and register your product, go to: www.usbathstore.com



Feel Good Inc.

Products, information and specifications are subject to change without notice.

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