

Grandstream Networks, Inc.

GMD1208

Desktop Wireless Microphone

User Guide



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CAUTION

Changes or modifications to this product not expressly approved by Grandstream, or operation of this product in any way other than as detailed by this guide, could void your manufacturer warranty.

WARNING

Please do not use a different power adaptor with devices as it may cause damage to the products and void the manufacturer warranty.



FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

RF Exposure Statement

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



ISED Warning

This device complies with Innovation, Science and Economic Development Canada License exempt RSS standard(s). 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 of the device.

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device is compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance.

Le présent appareil est conforme

Après examen de ce matériel aux conformité ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et compliance d'acquérir les informations correspondantes.

For CE:

	Frequency Range	Transmit Power
Bluetooth	2402~2480MHz	3.60dBm
BLE	2402~2480MHz	3.80dBm
2.4G Radio	2402~2480MHz	5.41dBm



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DOCUMENT PURPOSE

This document describes how to set up the GMD1208 and link it to a host device as well as understanding the LED status indicators.

This guide covers following topics:

- [Product Overview](#)
- [Getting Started](#)
- [Deployment Scenarios](#)
- [Connection Modes](#)
- [Connecting the GMD1208](#)
- [Using the GMD1208](#)
- [Understanding LED Indicators](#)
- [GMD1208 Functionalities](#)
- [Maintenance](#)
- [Experience the GMD1208](#)



CHANGE LOG

This section documents significant changes from previous versions of GMD1208 user manuals. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

Firmware Version 1.0.1.31

- This is the initial version.



WELCOME

Thank you for purchasing Grandstream GMD1208 Desktop Wireless Microphone. This User Guide describes the basic concept and tasks necessary to use and configure your GMD1208. This document covers the topics of microphone environment setups, start the device and the relevant operations like reset and upgrade. Please visit <http://www.grandstream.com> for additional information.

GMD1208 is an extension microphone companion device for Grandstream audio and video conference products such as GAC25x0 and GVC32x0 series to increase the overall audio coverage range. With ultrasound pairing, long talk time, proprietary 2.4G/BLE dual mode and error-resilient long-distance transmission, GMD1208 brings mobility and flexibility to your powerful conference solutions with ease. Each GMD1208 unit supports 360-degree full band quality voice pickup, within a radius of 26 feet (8 meters) for the best user experience. GMD1208 features a multifunctional touch key works just like your Bluetooth headphone, a LED indicator for status notifications, a well-designed wired/wireless charging base, all these user-friendly features make GMD1208 an ideal choice for organizations that need optimal microphone placements with ultra-wide room coverage and crystal-clear audio quality.



PRODUCT OVERVIEW

Feature Highlights

The following table contains the major features of the GMD1208:

Table 1: GMD1208 Features in a Glance

 <p>GMD1208</p>	<ul style="list-style-type: none"> • Capacitive touch mute button with LED • 1500mA built-in Li-ion battery • Micro-B port for charging, BYOD microphone and upgrading • Low power indicator • Bluetooth v2.1+EDR protocols • Proprietary 2.4GHz wireless technology • Ultrasound pairing technology • High quality audio coding with error tolerance • Built-in 8 omni-directional MEMS with 26 feet/~7.9 meter pickup range
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GMD1208 Technical Specifications

The following table resumes all the technical specifications for the GMD1208.

Table 2: GMD1208 Technical Specifications

MIC	8 omni-directional
Maximum connection distance	Up to 26 ft./~7.9 meters pickup range In 2.4G mode: up to 66 ft./~20 meters. In Bluetooth mode: up to 33 ft./~10 meters.
Audio Features	ANS, AGC/DRC, Anti-howling, Noise shield
Audio Codec	Opus
Mode Switch	Proprietary 2.4GHz, Bluetooth
Bluetooth	Bluetooth 2.1+EDR Rate: 1 Mb/s for BR, 3Mb/s for EDR
Cascade Ability	Up to 2
Auxiliary Ports	Micro-B USB port
LED	1x tri-color LED for status indication 1x dual color LED for mute status indication 1x dual color LED for power indication
Power & Green Energy Efficiency	Universal power adapter included Input: 220V, Output: 5V, 1A 1500mAh Lithium-ion battery, 150h standby time and 12h talk time

Physical	Unit Dimension: 105(mm)×105(mm)×16.9(mm) ; Unit Weight: 131.4g Package Dimension:185(mm)×137(mm)×60(mm); Package Weight: 330.5g
Environmental	Operation: 0°C to 40°C Storage: -10°C to 60°C, Humidity: 10% to 90% Non-condensing
Package Content	1x GMD1208 microphone, 1x USB cable, 1x Power supply, 1x quick installation guide, 1x GPL license
Compliance	FCC: Part 15 (CFR 47) Class B; UL 60950 (power adapter); Part68 (HAC) CE: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1, EN62479, RoHS RCM: AS/ACIF S004; AS/NZS CISPR22/24; AS/NZS 60950; AS/NZS 4268 IC: ICES 003, RSS 247, CS 03, RSS 102

GETTING STARTED

This chapter provides basic installation instructions including the list of the packaging contents and information for obtaining the best performance with the GMD1208.

Equipment Packaging

Table 3: Equipment Packaging

GMD1208
<ul style="list-style-type: none"> • 1xGMD1208 microphone • 1x USB cable • 1x Power Supply (5V,1A) • 1x Quick installation guide • 1x GPL License

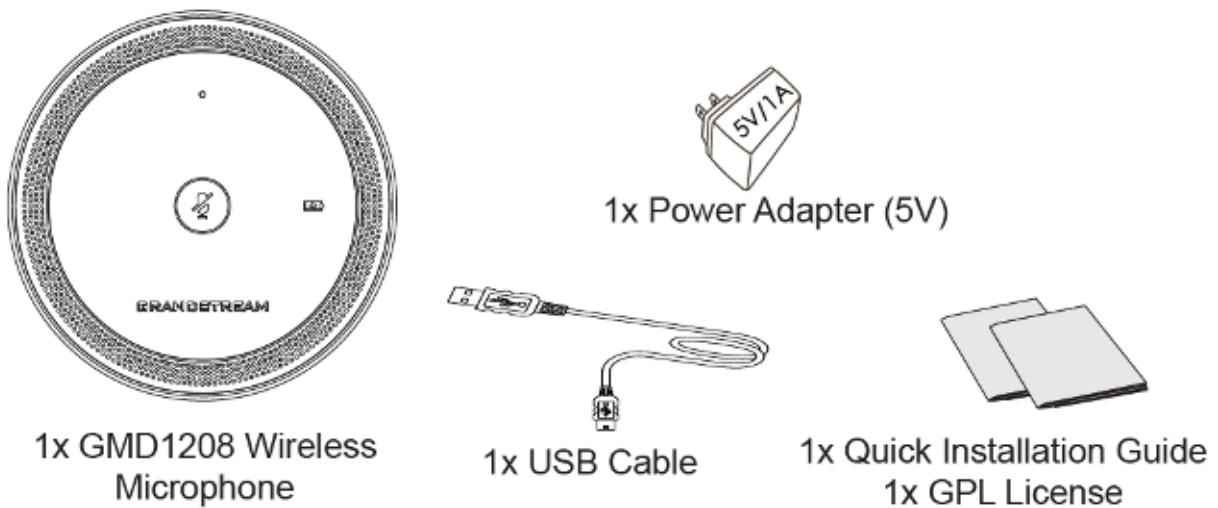


Figure 1: GMD1208 Package Content

Note: Check the package before installation. If you find anything missing, contact your system administrator.

Product Description

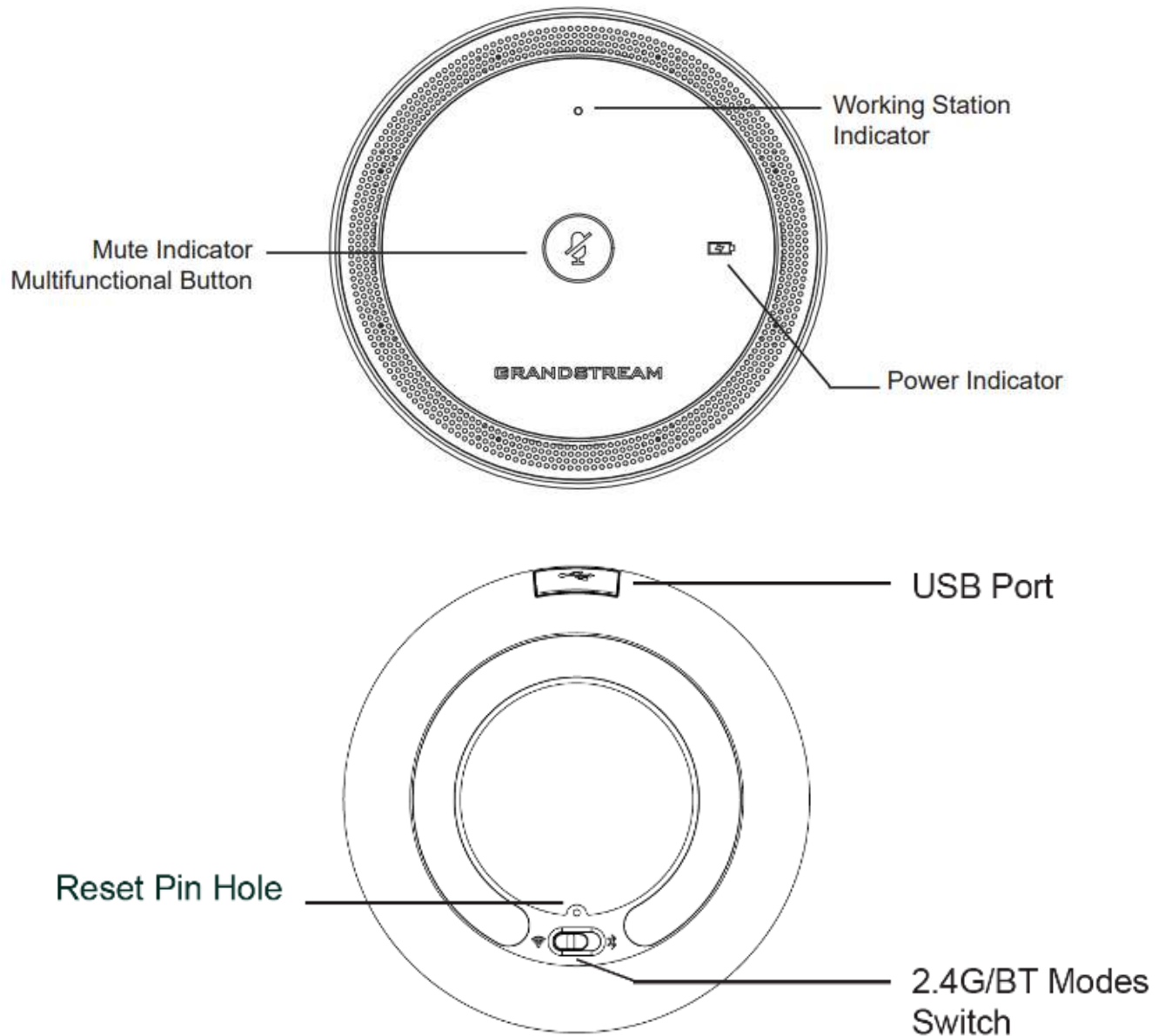
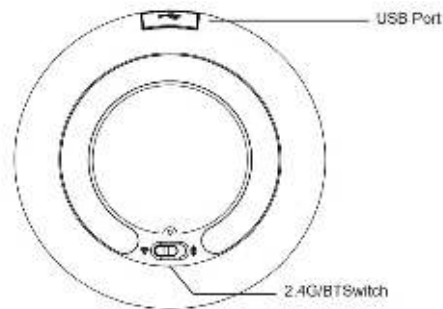


Figure 2: GMD1208 front and back view

Note: Please make sure to set up the correct mode (2.4G or BT) for the microphone. Then, refer to [CONNECTION MODES] section on this document to learn and understand the related LED indicators.

GMD1208 Wireless interface: 2.4G / BT

To select 2.4G or Bluetooth connection modes, switch using the key on the back of the unit.



Notes:

- 2.4G connection mode can be used with GVC3220 only.
- Bluetooth can be used with majority of devices supporting Bluetooth.
- For more details, refer to [CONNECTION MODES] section.

Powering up/off the GMD1208

Power on

Touch and hold multifunctional button for 1 second when the device is off.

Notes:

- The mute indication will be flashing fast in green during boot up.
- If the GMD1208 was not successfully paired either in 2.4G mode or in BT mode for 10 minutes. The mute indicator and working indicator will blink red fast 3 seconds before power off to save energy.

Power off

- **Forced shutdown:** Touch and hold the multifunctional button for 10 seconds.
- **Normal shutdown:** Touch and hold the multifunctional button for 5 seconds.

Notes:

- All the GMD1208 indicator lights turn off.
- It functions as restart when USB is connected.

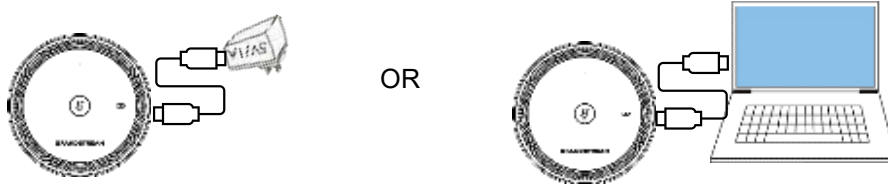
Restarting the GMD1208

Touch and hold the mute key for 10 seconds and then re-touch and hold the mute key for 1 seconds.




Charging the GMD1208

Plug the GMD1208 to the power source via USB cable and provided power supply (or other power source).



The power indicator will show the charging status as described below:

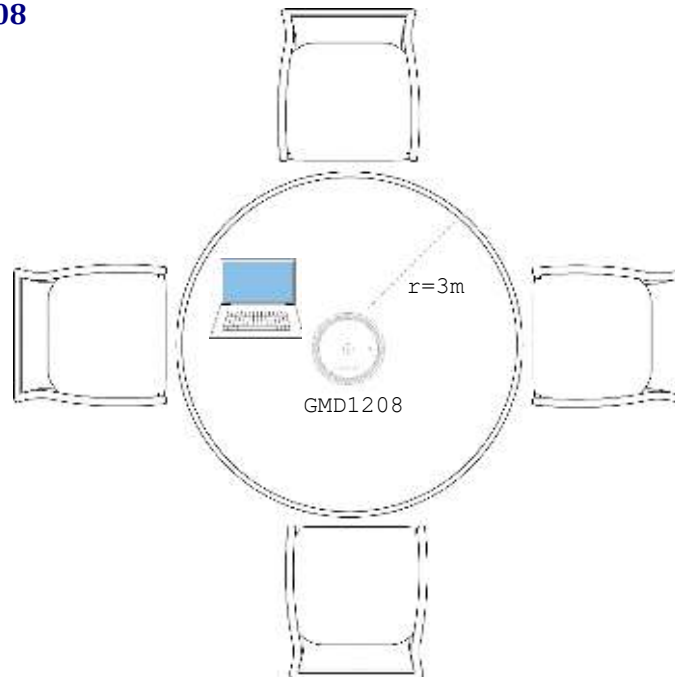
Table 4: Charging Status

LED Indicator	Status	Description
Power Indicator 	Green Slow flashing	Charging
	Green solid	Fully charged
	Red slow flashing	Power less than 30%

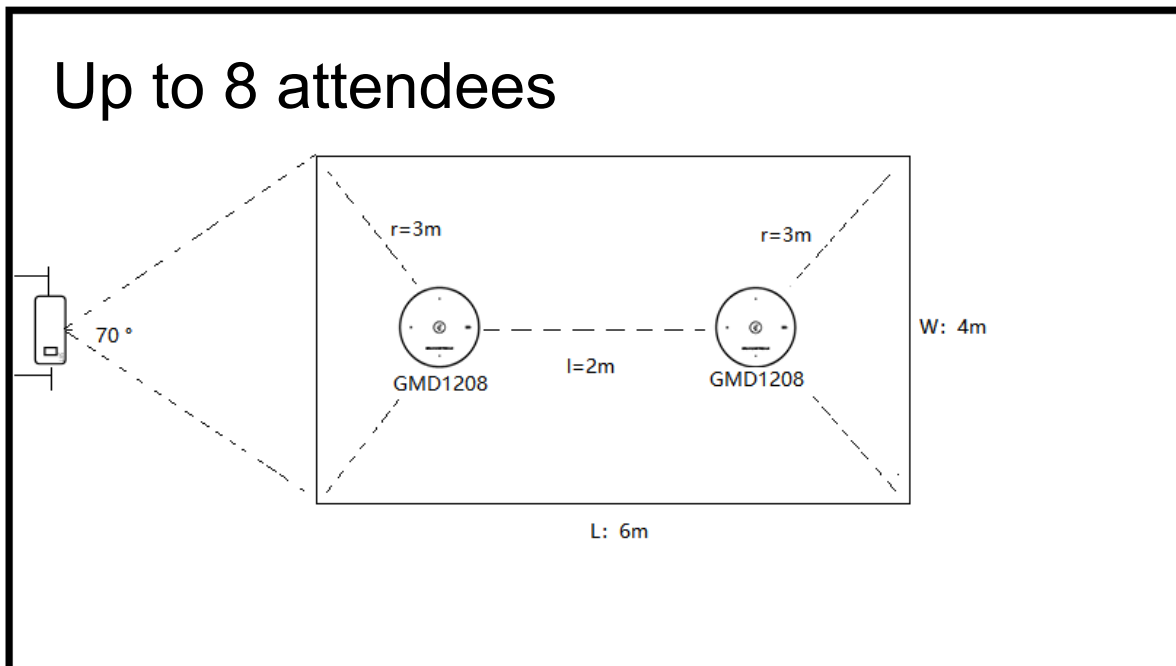
DEPLOYMENT SCENARIOS

Professional usage: Small Meeting Room

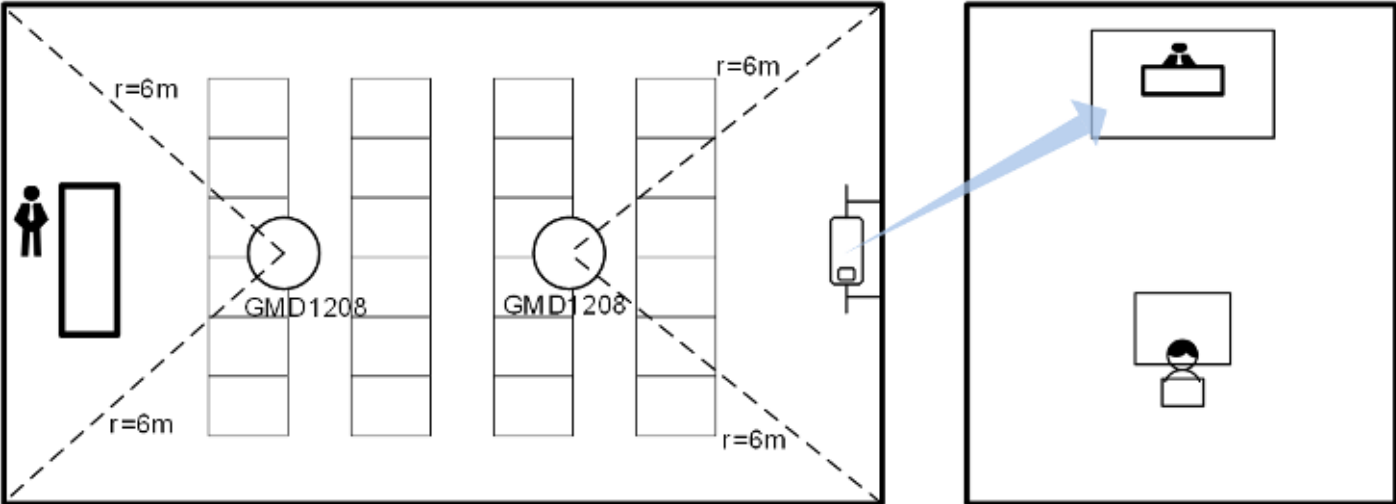
Using single GMD1208



Using two GMD1208 connected to GVC3220



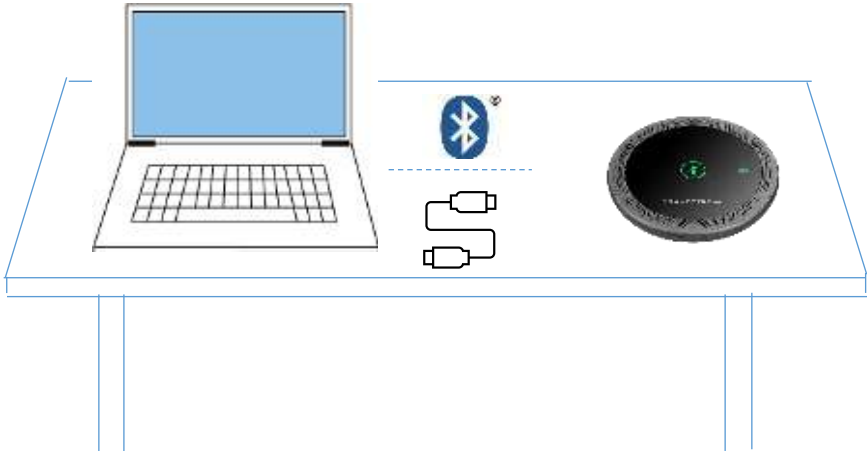
Education Usage: Remote Classroom



Teachers in school

Students at home

Personal Usage



CONNECTION MODES

The GMD1208 can be connected as microphone via following modes:

2.4G Mode

The 2.4G (ultrasound pairing technology) can be exclusively used with GVC3220 Ultra HD Multimedia Conferencing System.



Figure 3: GMD1208 connected to GVC3220

Notes:

- GVC3220 can connect up to 2x GMD1208 wireless microphones at the same time.
- When GVC3220 works with GMD1208, the max distance between them is 66 feet / ~20 meters.

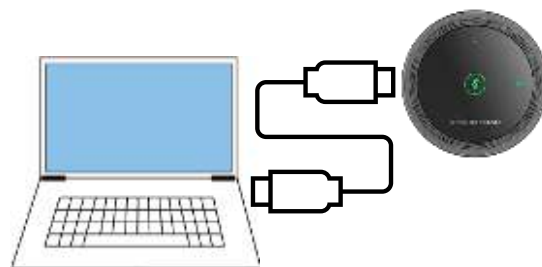
BT Mode (Bluetooth Mode)

BT Mode (Bluetooth® Mode) can be used with host supporting Bluetooth® technology.



UAC Mode

UAC Mode can be used to connect GMD1208 to laptop via USB cable.



CONNECTING THE GMD1208

Connecting GMD1208 to GVC3220 (2.4G)

Pairing Steps

Follow the steps below for a successful connection:

1. Choose 2.4G Mode using the switch on the back of the GMD1208.
2. Touch and hold multifunctional button for 1 second to power up the GMD1208.
 - During this time, the Working Station Indicator should be solid green (2.4G mode), and Mute indicator should be fast blinking green.
 - Once powering up, the GMD1208 Working Station Indicator will be fast blinking in green to indicate that the device is ready to pair.
3. On GVC3220 interface, go to **Settings** → **Basic** → **Wireless Microphone** page.



Figure 4: Wireless Microphone Disconnected

4. Users can press the YELLOW shortcut button to show detailed pairing instructions. Below is the instructions screen:

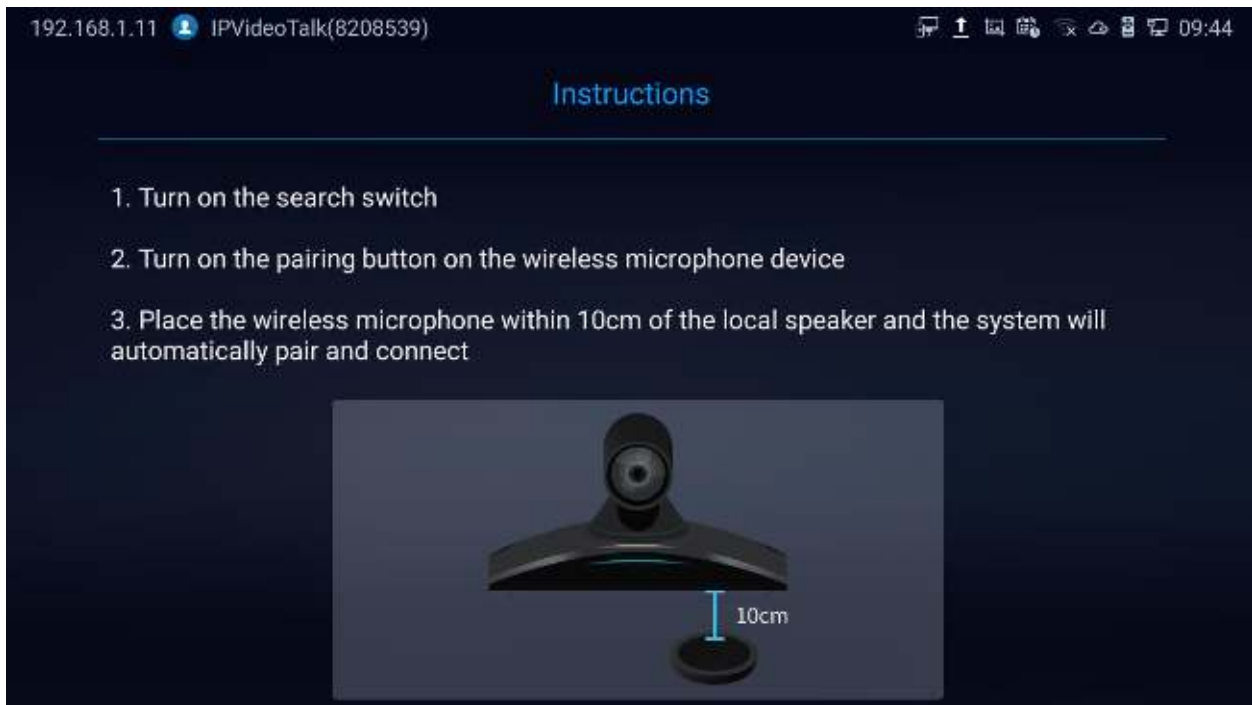


Figure 5: Wireless Microphone - Instructions

5. Follow the instructions. By bringing the GMD1208 close to the speaker of GVC3220 (within 10cm), they will finish pairing and connect automatically.

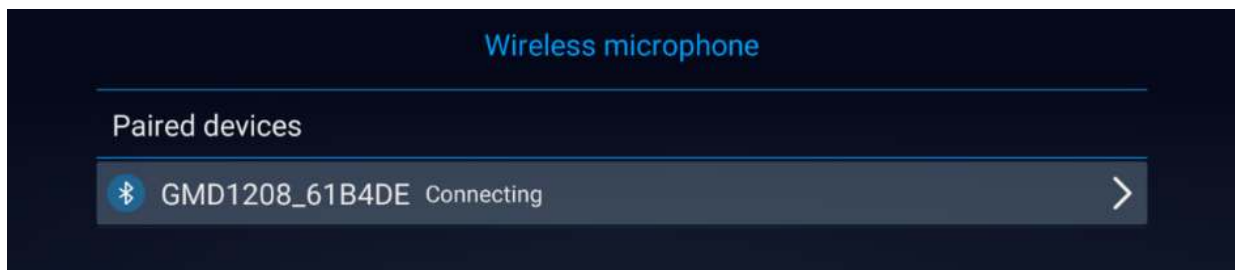


Figure 6: Wireless Microphone Connecting

Successful Connection

The Working Station Indicator will be solid green when the connection is successful.

Notes:

- When not connected, pressing the mute button will not switch between mute and unmute.
- Before the call is established, the mute indicator will not light up. Pressing the mute button will not switch between mute and unmute.
- After the call is established, the mute light will be slow blinking green. Press the mute button now to mute (solid green) and unmute (solid red) the device.

Pairing Timeout

The Working Station Indicator slow blinking in red indicates that you have exceeded the timeout and should re-start the pairing process.

Note: After the pairing times out, press and hold the mute key for 3s to switch back to the pairing state.

Unpaired

The Working Station Indicator will blink in green slowly.

Connecting GMD1208 to Host (BT Mode)

Pairing Steps

1. Switch to BT mode. GMD1208 will enter pairing procedure automatically after bootup.
2. The Working Status Indicator flashing in blue meaning that GMD1208 is not paired yet.
3. Find and pair GMD1208 from the host end.
 - GMD1208 can be discovered as “**gmd1208+the last six digits of MAC address**”.
4. When paired, Working Status Indicator will be solid blue.

Successful Connection

The Working indicator LED will be solid blue once the GMD is successfully connected to the host device

Notes:

- Before the call is established, the mute indicator will not light up. And pressing the mute button will not switch between mute and unmute.
- After the call is established, the mute light will be slow blinking green. Press the mute button now to mute (solid green) and unmute (solid red) the device.

Unpaired

LED working indicator will blink in blue slowly.

Note: BT mode will not have timeout status



Connecting GMD1208 to Laptop via USB Cable (UAC Mode)

Connection Steps

1. Connect GMD1208 to PC with a USB cable.
2. Double touch the multifunctional button.
3. The mute indicator turns to green solid for successful connection.
4. The PC will be using GMD1208 as Microphone by default. You may need to select GMD1208 as default Input Device from your PC settings.

Notes:

- Once PC detects GMD1208 successfully, you can find GMD1208 name in device manager → audio/video controller. Only then, the mute button double click will be effective.
- You can only enter UAC or upgrade mode after connected via USB.
- To exit UAC mode, unplug the USB connection and it will enter the pairing state. The Working Station Indicator will be fast blinking green (2.4G mode) or fast blinking blue (BT mode).
- If GMD1208 has been paired before entering UAC mode, its Working Station Indicator will be slow blinking green (2.4G mode) or blue (BT mode).



USING THE GMD1208

2.4G Mode

Idle Status

- The Working Station Indicator will be solid green, with other indicators off.

Host incoming/outgoing call

- The Working Station Indicator will be solid green, with mute button blinking green fast.

Host in call

- **In unmuted status:** The Working Station Indicator will be solid green, with mute button blinking green very slowly.
- **In muted status:** The Working Station Indicator will be solid green, with mute button in solid red.

BT Mode

Idle Status

- The Working Station Indicator will be solid blue, with other indicators off.

Host incoming/outgoing call

- The Working Station Indicator will be solid blue, with mute button blinking green fast.

Host in call

- **In unmuted status:** The Working Station Indicator will be solid blue, with mute button blinking green very slowly.
- **In muted status:** The Working Station Indicator will be solid blue, with mute button in solid red.

UAC Mode

Idle Status

- The Working Station Indicator will be off, with mute button solid green and Power Indicator will be blinking green slowly (charging)



Host incoming/outgoing call

- The Working Station Indicator will be off, with mute button solid green and Power Indicator will be blinking green slowly (charging)

Host in call

- **In unmuted status:** The Working Station Indicator will be off, with mute button solid green and Power Indicator will be blinking green slowly (charging)
- **In muted status:** The Working Station Indicator will be off, with mute button in solid red and Power Indicator will be blinking green slowly (charging).

Mute/Unmute Call

Single touch Mute button to switch between mute/unmute status.

- When on mute, Mute indicator will be solid red.
- When not muted, Mute indicator will be blinking green slowly.



UNDERSTANDING LED INDICATORS

The GMD1208 LED indicators are located on the top part of the device. It can be used to notify the users with current status of the device. The priority of the indicator from high to low is shown below.

Table 5: GMD1208 LED Indicator Descriptions

Working Station Indicator (WKI)	Mute Indicator (MI)	Power Indicator (PI)	Status
Off	Off	Off	Sleep/Unconnected
Blue Slow Flashing	Off	Off	Pairing/Connecting in Bluetooth mode
Blue Solid	Off	Off	Working in BT mode
Blue Solid	Green fast flashing	Off	Booting in BT mode
Blue Solid	Green slow flashing	Off	Outgoing/Incoming call in BT mode
Blue Solid	Red Solid	Off	Call muted when in BT mode
Blue Solid	Green flashing intermittently	Off	Call unmuted in BT mode
Blue Solid	Off	Green slow flashing	Charging in BT mode
Blue Solid	Off	Green Solid	Fully charged in BT mode
Green slow flashing	Off	Off	Pairing / Connecting in 2.4G mode
Green Solid	Off	Off	Working in 2.4G mode
Green Solid	Green fast flashing	Off	Booting in 2.4G mode
Green Solid	Green slow flashing	Off	Outgoing/Incoming call in 2.4G mode



Green Solid	Red Solid	Off	Call muted in 2.4G mode
Green Solid	Green flashing intermittently	Off	Call unmuted in 2.4G mode
Green Solid	Off	Green slow flashing	Charging in 2.4G mode
Green Solid	Off	Green Solid	Fully charged in 2.4G mode
Off	Green Solid	Off	UAC mode
Yellow slow flashing	Off	Off	Factory reset
Green fast flashing	Green fast flashing	Green fast flashing	Upgrade
Red Solid	Red Solid	Red Solid	Upgrade failed
Red slow flashing	Off	Off	Ultrasonic pairing failed
Off	Off	Red slow flashing	Power less than 30%

GMD1208 FUNCTIONALITIES

The following table describes the GMD1208 functionality triggers description:

Table 6: GMD1208 Functionality Trigger Conditions

Functionality trigger conditions	Indicator status	Functionality
Touch and hold multifunctional button for 1 second when the device is off	Mute Indicator: Green fast flashing	Power up
<ul style="list-style-type: none"> • Forced shutdown: Touch and hold the multifunctional button for 10 seconds. • Normal shutdown: Touch and hold the multifunctional button for 5 seconds. 	Mute Indicator and Working Status Indicator flashing in red for 3 seconds before turning off	Power off
Touch and hold multifunctional button for 3 seconds when the device is working in 2.4G mode	Work Status Indicator: Green slow flashing	Start pairing in 2.4G mode
Touch and hold multifunctional button for 5 seconds with GMD connected to PC	All indicators start fast flashing in green	Switch into USB upgrade mode
Double touch the multifunctional button with GMD connected to PC	Mute Indicator: Green solid	Switch into UAC mode
GMD connected to PC with USB cable	Power Indicator: Green slow flashing	Charging
Single touch on multifunctional button in an unmuted call	Mute Indicator: Red solid	Mute
Single touch on multifunctional button in a mute call	Mute Indicator: Green flashing intermittently	Unmute
Press and hold the reset key for 7 seconds	Working Status Indicator: Yellow Slow flashing	Factory reset



MAINTENANCE

Upgrading the GMD1208

The GMD1208 microphone can only be upgraded on UAC mode (USB connection to PC/Laptop). Users should follow the steps below for a successful upgrade:

1. Connect the GMD to your PC/Laptop via USB using the provided cable. Then, press and hold the mute button for 5 seconds.
 - Make sure all of three green LEDs are solid light on, then release mute button.
 - PC should prompt “USB disk detected” as GMD1208, and then it will show up beside the available drives in your PC/Laptop as shown in below screenshot.

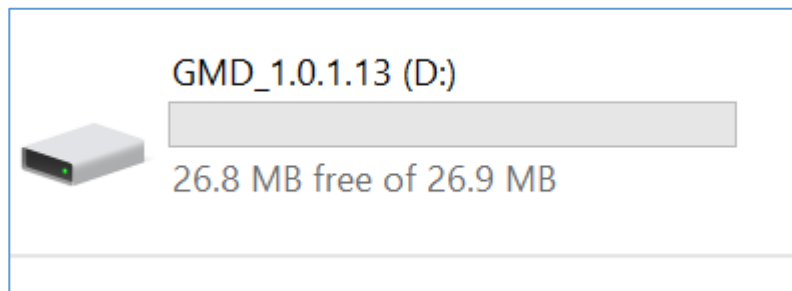


Figure 7: GMD1208 Windows Drive

2. Drag the firmware file to the USB folder (the firmware file name must be “**gmd1208fw.bin**”).
 - The GMD should detect the file and start the upgrade
 - During the upgrade, the GMD1208 will restart twice. After the GMD1208 restarts for the second time, the upgrade has been completed.
 - The GMD1208 drive will contain a file named "version.txt" showing the firmware version, As shown in below screenshot.

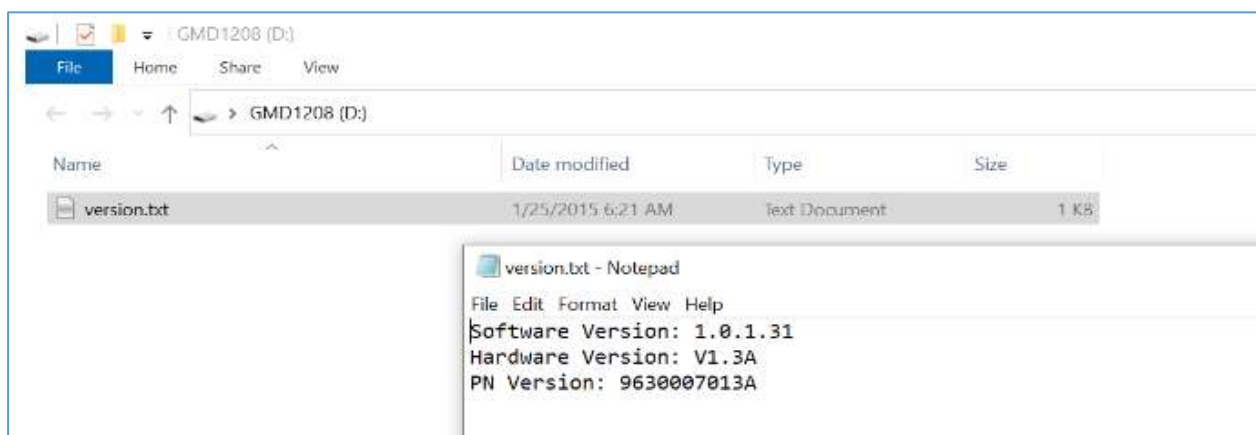


Figure 8: GMD1208 version.txt file



Note:

When the PC is running on Win 7, there is a possibility that there will be no USB disk prompt box. In this case, please proceed as follows:

- Go to **Windows → Device Manager → Universal Serial Bus Controller**.
- Unplug and re-plug the USB cable until the driver is detected when GMD is connected.
- Uninstall it and then retry the upgrade steps. This problem does not exist when the PC is using Win10.

Factory Reset the GMD1208

Users could restore factory default settings Using a small pin to press the button Reset button on the back panel of GMD1208 for more than 10 seconds to reboot and restore to factory reset.

- The Working Station Indicator will be flashing in yellow and then GMD1208 restarts.
- After the RESET, the Working Station Indicator LED light is solid green (2.4G) or solid blue (BT), and the mute light is fast blinking green.



EXPERIENCING THE GMD1208

Please visit our website: <http://www.grandstream.com> to receive the most up- to-date updates on firmware releases, additional features, FAQs, documentation and news on new products.

We encourage you to browse our [product related documentation](#), [FAQs](#) and [User and Developer Forum](#) for answers to your general questions. If you have purchased our products through a Grandstream Certified Partner or Reseller, please contact them directly for immediate support.

Our technical support staff is trained and ready to answer all of your questions. Contact a technical support member or [submit a trouble ticket online](#) to receive in-depth support.

Thank you again for purchasing Grandstream Enterprise Application phone, it will be sure to bring convenience and color to both your business and personal life.

