

USER GUIDE

# HiFi MICROPHONE



WGD00091

Document Revision: F

# Important Notice

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## Software and firmware updates

WatchGuard Video is committed to the continual testing and improvement of our software and firmware. As new revisions become available, these updates will be made available to your agency; fees may apply depending on your licensing agreement.

## Manufacturer contact information

WatchGuard Video  
Attn: Customer Service Department  
415 Century Parkway  
Allen, Texas 75013  
1-800-605-6734  
[customerservice@watchguardvideo.com](mailto:customerservice@watchguardvideo.com)

## Send us your suggestions

We want to hear from you. Tell us about your experience and how you are using the HiFi Microphone. We will do our best to accommodate any suggestions you may have in future revisions.

For U.S. customers, call Customer Service at 1-800-605-6734 or email us at [customerservice@watchguardvideo.com](mailto:customerservice@watchguardvideo.com) with your comments, questions, and concerns. International customers, please contact your local distributor.

## Trademark notices

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## FCC and IC notices

This equipment complies with Part 15 of the FCC rules and Industry Canada licence-exempt RSS standard(s). This equipment should only be used with the antenna supplied by WatchGuard Video. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Cet appareil est conforme à la Partie 15 des règlements de la FCC et Industrie Canada exempts de licence standard RSS. Cet appareil doit être utilisé uniquement avec l'antenne fournie par WatchGuard Video. Tout changement ou modification non expressément approuvée par le fabricant pourrait annuler l'autorité de l'utilisateur de faire fonctionner l'appareil.

This device complies with Part 15 of the FCC rules and Industry Canada licence-exempt RSS standard(s) subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept all interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la Partie 15 des règlements de la FCC et Industrie Canada exempts de licence standard RSS soumis aux deux conditions suivantes:

1. Cet appareil ne peut causer des interférences nuisibles.
2. Cet appareil doit accepter toutes les interférences reçues, y compris les interférences qui peuvent perturber le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, cet émetteur radio ne peut fonctionner à l'aide d'une antenne d'un type et maximum (ou moins) Gain approuvé pour l'émetteur par Industrie Canada. Pour réduire le risque d'interférence avec d'autres utilisateurs, le type d'antenne et son gain doivent être choisis afin que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

The radio transmitter IC:9073A-TRN400 and the base IC:9073A-CHG410 have been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not

included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

- Antenna type (radio transmitter): WatchGuard Video part number WGP01589 unity gain (0dBi), 50 Ohm impedance
- Antenna type (base): WatchGuard Video part number WGP01573 unity gain (0 dBi), 50 ohm impedance

Cet émetteur radio IC:9073A-TRN400 et la base IC:9073A-CHG410 ont été approuvés par Industrie Canada pour fonctionner avec les types d'antennes énumérés ci-dessous avec le gain maximal admissible et l'impédance d'antenne requise pour chaque type d'antenne indiqué. Types d'antennes ne figurent pas dans cette liste, ayant un gain supérieur au gain maximum indiqué pour ce type, sont strictement interdites pour une utilisation avec cet appareil.

- Type d'antenne (émetteur radio): WatchGuard Video part number WGP01589 unity gain (0dBi), 50 Ohm impedance
- Type d'antenne (base): WatchGuard Video part number WGP01573 unity gain (0 dBi), 50 Ohm impedance

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Les antennes pour cet émetteur doivent être installées en assurant une distance d'au moins 20 cm de toute personne et ne doivent pas être situées à proximité ni utilisées en conjonction d'autre antenne ou émetteur.

This device complies with Health Canada's Safety Code. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada's requirement. Information can be obtained at [http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio\\_guide-lignes\\_direct/index-eng.php](http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct/index-eng.php)

Cet appareil est conforme avec Santé Canada Code de sécurité 6. Le programme d'installation de cet appareil doit s'assurer que les rayonnements RF n'est pas émis au-delà de l'exigence de Santé Canada. Les informations peuvent être obtenues: [http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio\\_guide-lignes\\_direct/index-eng.php](http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct/index-eng.php)

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# Introduction

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- Welcome (**page 8**)
- About this document (**page 8**)
- Related documents and information (**page 8**)
- About the HiFi Microphone (HiFi Mic) (**page 9**)
- Technical specifications (**page 10**)
- Warranty information (**page 10**)

## Welcome

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Welcome to the WatchGuard Video *HiFi Microphone User Guide*. This guide is designed to walk you through the basics of using your HiFi Microphones (HiFi Mics) to help your WatchGuard Video 4RE DVRs collect quality audio evidence.

## About this Document

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The *HiFi Microphone User Guide* covers the basic parts of the HiFi Mic as well as its most common functions including:

- Synchronizing the transmitter (mic) and the base so the DVR can record audio
- Charging the mic
- Triggering a recorded event from the mic
- Putting the mic into Covert mode
- Setting up the mic to notify you when it has a change to its status



**Note:** *This user guide covers the basic use of the HiFi Mic. It is not a comprehensive manual for every possible action or situation you could experience with the HiFi Mic. If you have a question about the HiFi Mic that is not covered in the user guide, contact your WatchGuard Video representative.*

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## Related documents and information

For subjects related to the WatchGuard Video 4RE system that are not covered by the *HiFi Microphone User Guide*, see the following documents:

- *4RE In-Car DVR Quick Start Guide*
- *4RE In-Car DVR Installation Poster*
- *4RE In-Car DVR User Guide*



## About the HiFi Microphone

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The HiFi Microphone (HiFi Mic) is one of the WatchGuard Video components for transmitting audio to the 4RE DVR (digital video recorder) during the video recording process.

The HiFi Mic consists of two parts:



- **Base:** The base is the part of the HiFi Mic that is mounted in the vehicle and physically connects to the DVR and the antenna.
- **Transmitter (mic):** The mic is the part of the HiFi Mic that you attach to your apparel or duty belt.

The HiFi Mic performs the following major functions:

- Transmits audio
- Synchronizes the mic and the base so the DVR can record transmitted audio
- Charges the mic
- Triggers a recorded event
- Disables all mic lights and sounds for Covert mode
- Notifies you when it has a change in its status

## Technical specifications

The following table lists the technical specifications for the HiFi Mic:

Operating voltage	Transmitter: 4.2 VDC
	Base: 12 VDC
Frequency	900 MHz (902 – 928 MHz) – 52 channels, digital spread spectrum
Operating range	Over 1 mile in open line of sight
	<div><b>Important!</b> <i>Operating range differs according to the environment.</i></div>
Jacks	Transmitter: Lapel microphone jack
	Base: 8-pin RJ-45 for power, audio out, and trigger out
Battery	Capacity: Lithium-ion 4.2 VDC/1200mAh
	Charging time: 3 hours
	Stand-by time: 25 days
	Talk time: 8-12 hours
	<div><b>Note:</b> <i>Performance can degrade as the battery ages.</i></div>

## Warranty Information

WatchGuard Video, in recognition of its responsibility to provide quality systems, components, and workmanship, warrants each system, part, and component it manufactures first sold to an end user to be free from defects in material and workmanship for a period of **one-year** from the date of purchase. A defective component that is repaired or replaced under this limited warranty will be covered for the remainder of the original warranty period. Where defects in material or workmanship may occur, the following warranty terms and conditions apply:

## Warrantor

This warranty is granted by WatchGuard Video, 415 Century Parkway, Allen, TX 75013, Telephone: 972-423-9777, Facsimile: 972-423-9778.

## Parties to whom warranty is intended

This warranty extends to the original end user of the equipment only and is not transferable. Any exceptions must be approved in writing from WatchGuard Video.

## Parts and components covered

All parts and components and repair labor of the warranted unit manufactured and/or installed by WatchGuard Video are covered by this warranty, except those parts and components excluded below.

## Parts and components not covered

The limited warranty excludes normal wear-and-tear items such as frayed or broken cords, broken connectors, scratched or broken displays or consumable items such as batteries. WatchGuard reserves the right to charge for damages resulting from abuse, improper installation, or extraordinary environmental damage (including damages caused by spilled liquids) to the unit during the warranty period at rates normally charged for repairing such units not covered under the limited warranty. In cases where potential charges would be incurred due to said damages, the agency submitting the system for repairs will be notified. Altered, damaged, or removed serial numbers results in voiding this limited warranty. If while under the warranty period, it is determined that the WatchGuard Video system was internally changed, modified, or repair attempted, the system warranty will become null and void.

## Limited liability

WatchGuard Video's liability is limited to the repair or replacement of components found to be defective by WatchGuard Video. WatchGuard Video will not be liable for any direct, indirect, consequential, or incidental damages arising out of the use of or inability to use the system even if the unit proved to be defective. WatchGuard Video will not be responsible for any removal or re-installation cost of the unit or for damages caused by improper installation.

### Remedy

If, within the duration of this warranty, a unit or component covered by this warranty is returned to WatchGuard Video and proves to be defective in material or workmanship, WatchGuard Video shall (at its option) repair or replace any defective components or offer a full refund of the purchase price. Replacement of a defective component(s) pursuant to this warranty shall be warranted for the remainder of the warranty period applicable to the system warranty period.

### Shipping

During the first ninety (90) days of the initial warranty period, WatchGuard Video will provide a prepaid shipping label to return any defective unit for end users in the continental United States provided serial numbers are submitted with the request. In such event, contact WatchGuard's Customer Service Department to request a return material authorization (RMA) number. Failure to obtain and use a WatchGuard Video prepaid shipping label in the first ninety days (90) on the return shipment will result in the end user being responsible for shipping costs to WatchGuard Video. After the first ninety (90) days, the end user will be responsible for any shipping charges to WatchGuard Video. WatchGuard Video will return ship the product to a customer within the continental United States by prepaid ground shipping only. Any expedited shipping costs are the responsibility of the end user.

Customers that are outside the continental United States will be responsible for all transportation costs both to and from WatchGuard Video's factory for warranty service, including without limitation to any export or import fees, duties, tariffs, or any other related fees that may be incurred during transportation.

You may also obtain warranty service by contacting your local WatchGuard Authorized Service Center (ASC) for shipping instructions. A list of local ASCs may be obtained by contacting WatchGuard's Customer Service Department. Customers will be responsible for all transportation costs to and from the local ASC for warranty service.

### Extended warranty

Extended warranties may be purchased directly from WatchGuard Video. Any and all extended warranties must be purchased prior to the expiration of any previous warranty. Failure to purchase an extended warranty prior to the expiration of the warranty period will require the covered unit to be physically inspected at the facility of the manufacturer and any repairs necessary to bring the unit back to full working order must be performed prior to the issuance of any new warranty. The customer will be responsible for the cost of the inspection (equal to 1

hour of labor) plus the standard costs associated with any required repairs. Should you have any further questions regarding the WatchGuard Video limited warranty, please direct them to:

WatchGuard Video  
Attn: Customer Service Department  
415 Century Parkway  
Allen, Texas 75013

1-800-605-6734  
**[customerservice@watchguardvideo.com](mailto:customerservice@watchguardvideo.com)**  
**[www.watchguardvideo.com](http://www.watchguardvideo.com)**

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# HiFi Microphone

*In this section...*

- HiFi Microphone (HiFi Mic) overview (**page 16**)
- Using the HiFi Mic (**page 16**)
- Base features (**page 18**)
- Transmitter features (**page 21**)
- Display icons (**page 26**)
- Synchronizing the base and the transmitter (**page 29**)
- Charging the transmitter (**page 30**)
- Using two HiFi Mics in the same vehicle (**page 31**)

## Overview

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The WatchGuard Video HiFi Microphone (HiFi Mic) consists of two parts:

- Base ([page 18](#))
- Transmitter (mic) ([page 21](#))

The base is mounted inside the vehicle and holds the mic when you are not using it. The mic must be synchronized with the base in order for the DVR to record audio. This mic and base pairing allows the DVR to detect the mic and its audio transmission. For information on syncing the mic with the base, see *Synchronizing the Transmitter and the Base* on [page 29](#).



The base is commonly mounted on the headliner or center console.

During your shift, you can attach the mic to your apparel using an alligator clip or to your duty belt using a longer belt clip. For information about these and other accessories, contact your WatchGuard Video representative.

For most agencies, microphones are configured to be inactive (on but not recording) by default. Triggering a recorded event automatically activates all microphones. For information on triggering a recorded event from the HiFi Mic, see *Talk/Mute slide button* on [page 22](#).

## Using the HiFi Microphone

You use the HiFi Mic throughout your shift to help your 4RE DVR collect quality audio evidence.



## Beginning a shift

1. Remove the transmitter (mic) from the base and power it on (see *Power switch* on **page 25**).
2. Verify whether the mic is synchronized with the base in your vehicle (see *Status icons* on **page 27**).
3. If needed, sync the mic with the base (see *Synchronizing the Transmitter and the Base* on **page 29**).

## During a shift

4. As needed, trigger a recorded event from the transmitter (mic) (see *Talk/Mute slide button* on **page 22**).
5. As needed, mute the transmitted audio from the mic (see *Talk/Mute slide button* on **page 22**).
6. As needed, change the notification mode of the mic (see *Mode button* on **page 23**).
7. As needed, activate the mic's Covert mode (see *Mode button* on **page 23**).

## Ending a shift

8. Power off the transmitter (mic) (see *Power switch* on **page 25**).



**Note:** WatchGuard Video recommends that you power off the mic before you put it in the base to charge, but this step is not required.

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9. Place the mic in the base to charge (see *Charging the Transmitter* on **page 30**).

## Base

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The base is the part of the HiFi Microphone (HiFi Mic) that is mounted in the vehicle and physically connects to the 4RE DVR and the antenna. The base:

- Synchronizes with the transmitter (mic) so the DVR can record the audio the HiFi Mic transmits (see *Synchronizing the Transmitter and the Base* on **page 29**)
- Charges the mic while the mic rests in the base (see *Charging the Transmitter* on **page 30**)
- Holds the mic while you are not using it

Features on the base include:

- Status LEDs (**page 19**)
- DVR cable connection (**page 20**)
- Antenna connection (**page 20**)
- Contacts for charging and syncing with the mic (**page 21**)



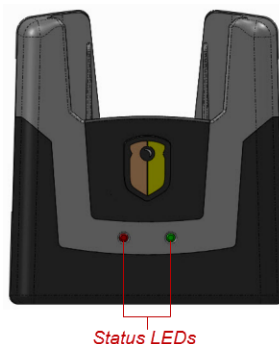
**Note:** A version of the base exists that only serves as a charger for the HiFi Mic. This version of the base is not used in the vehicle. For information about the charge-only base, contact your WatchGuard Video representative.

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## Status LEDs

The HiFi Mic has status LEDs on both the base and the transmitter (mic). You can use these LEDs in conjunction with the icons on the display to determine the status of the HiFi Mic.

On the base, the status LEDs are on the front, just under the WatchGuard Video shield symbol. The LEDs on the base can help indicate the status of certain functions of the HiFi Mic:



- **Synchronizing:** As the base syncs with the mic, both the red and green LEDs flash. Once the base and mic are synced, either the green LED turns on or the red LED starts flashing, depending on whether the mic is fully charged or begins to charge. For information about synchronizing the mic with the base, see *Synchronizing the Transmitter and the Base* on **page 29**.
- **Charging:** The red LED flashes while the mic is charging. When the mic's battery is fully charged, the red LED turns off and the green LED turns on. For information about charging the mic in the base, see *Charging the Transmitter* on **page 30**.
- **Normal operation:** When the base and mic are on and functioning normally, but not transmitting audio to be recorded, the green LED is on.
- **Recording:** When the audio transmitted from the mic is being recorded, the green LED is on. For information about triggering a recorded event from the HiFi Mic, see *Talk/Mute slide button* on **page 22**.
- **Muted:** When the mic is muted, the green LED flashes. For information about muting the HiFi Mic, see *Talk/Mute slide button* on **page 22**.
- **Turned off:** When the mic is turned off and not in the base, the red LED flashes.
- **Covert mode:** When the mic is in Covert mode, the LEDs on the base behave normally. Covert mode does not change the LED behavior on the base. For information on using the HiFi Mic in Covert mode, see *Mode button* on **page 23**.
- **Lost connection/out of range:** If the base loses connection to or is out of range of the mic, the red LED flashes until the connection is reestablished.

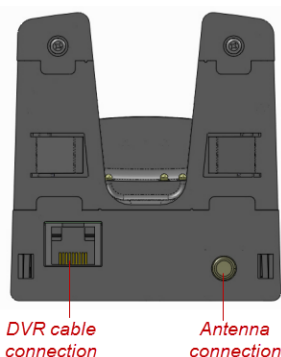
For information on the status LEDs on the mic, see *Status LEDs* on **page 24**; for information on the icons on the display, see *Display* on **page 26**.

## DVR cable connection

The DVR cable connection is on the back of the base. Connect the DVR system interface cable to this connection point.



**Note:** WatchGuard Video recommends that you use a short cable (3-foot) to connect the HiFi Mic base to the DVR. Keeping the cable short helps maintain audio quality.



## Antenna connection

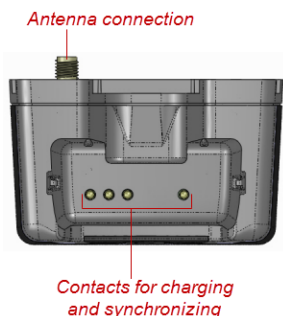
The antenna connection is on the back of the base. Connect the window-mount antenna to this connection point.



**Tip:** Finger-tighten the SMA connector when you connect the antenna to the base. Using hand tools can damage the connector.



**Note:** You should only use the 900 MHz antenna that you received from WatchGuard Video with the HiFi Mic. Using a different antenna can compromise wireless performance and audio quality.



## Contacts for charging and synchronizing

The contacts for charging the transmitter (mic) and synchronizing the mic with the base are inside on the floor of the base. These contacts physically line up with those on the bottom of the mic and make it possible for the base to charge and sync with the mic.



**Note:** This graphic shows the base from above, looking down into it.

## Transmitter

The transmitter (mic) is the part of the HiFi Microphone (HiFi Mic) that you attach to your apparel or duty belt. The mic:

- Transmits audio through the base for the DVR to record
- Mutes transmitted audio, as needed (see *Talk/Mute slide button* on **page 22**)
- Triggers the DVR to start recording, as needed (see *Talk/Mute slide button* on **page 22**)
- Communicates its status using the display and the status LEDs (for information about the icons on the display, see *Display* on **page 26**; for information on the status LEDs, see *Status LEDs* on **page 24**)

Features on the mic include:

- **Talk/Mute** slide button (below)
- Display (page 26)
- **Display Backlight** button (page 23)
- **Mode** button (page 23)
- Status LEDs (page 24)
- **Power** switch (page 25)
- External microphone jack (page 26)



## Talk/Mute slide button

The **Talk/Mute** slide button is on the front of the transmitter (mic). Once you have turned the mic on and synchronized it with the base, the **Talk/Mute** button has two functions:

- Triggers the DVR to begin a recorded event

If the DVR is not recording, slide the **Talk/Mute** button down and release it to trigger the DVR to begin a recorded event.



**Note:** If a recorded event is triggered on the DVR by something other than the HiFi Mic, the mic audio automatically begins transmitting to the DVR.

The mic indicates that it is transmitting audio using both an icon on the display (**Record** icon) and the status LEDs (green LED is on). For information on the icons on the display, see *Display* on page 26; for information on the status LEDs, see *Status LEDs* on page 24.

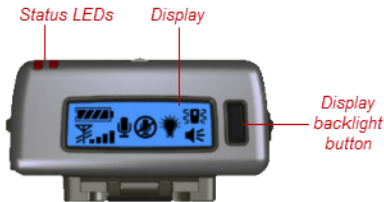


**Important!** You cannot stop a recorded event using the HiFi Mic. You can only stop a recording, even one triggered from the HiFi Mic, using the DVR display.

- Mutes the audio being transmitted to the DVR

If the DVR is recording, slide the **Talk/Mute** button down and hold it to mute any audio being transmitted to the DVR; no audio is recorded while you hold the **Talk/Mute** button down.

The mic indicates that its audio is muted using both an icon on the display (**Mute** icon) and the status LEDs (green LED flashes).



## Display

The display is on the top of the transmitter (mic). The display shows icons that indicate the current mic status (battery, connection, signal) and mode

(recording/muted, Covert, vibrate/beep/silent). For more information about the display and its icons, see *Display* on **page 26**.

## Display backlight button

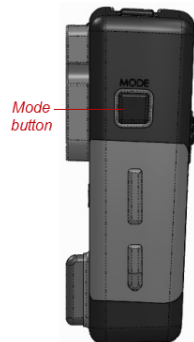
The **Display Backlight** button is on the top of the transmitter (mic), next to the display. When you press this button, the background of the display lights up, allowing you to see the display icons better, especially in low-light conditions. When you press the button, the display backlight turns on for ten seconds.

## Mode button

The **Mode** button is on the left side of the transmitter (mic), as you look at the front of the mic. The **Mode** button has two primary functions:

- Changes the notification mode

The notification mode is one of the ways the mic lets you know that its status has changed, for example, the battery is low or it has moved out of range of the base. You can set the notification mode to any one of four options:



- Vibrate and beep
- No notification
- Vibrate only
- Beep only

Press the **Mode** button twice within two seconds to change the notification mode. (Pressing it once turns the display backlight on.) As you continue to press the **Mode** button within two seconds, the notification mode cycles through the four options.

The mic indicates which mode is active using an icon on the display (notification icons). For information on the icons on the display, see *Display* on **page 26**.

- Activates (or deactivates) Covert mode

Covert mode disables the status LEDs and audio notifications on the mic so no light or sound comes from it without your action. In Covert mode, the display backlight only lights when you press the **Display Backlight** button.

Press and hold the **Mode** button for two seconds to activate (or deactivate) Covert mode.

The mic indicates whether it is in Covert mode using an icon on the display (**Covert Mode** icon). For information on the icons on the display, see *Display* on **page 26**.

## Status LEDs

The HiFi Mic has status LEDs on both the base and the transmitter (mic). You can use these LEDs in conjunction with the icons on the display to determine the status of the HiFi Mic.

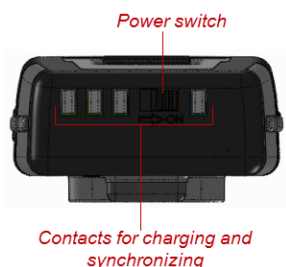
On the mic, the status LEDs are on the front top-right corner. The LEDs on the mic help indicate the status of certain functions of the HiFi Mic:

- **Synchronizing:** As the mic syncs with the base, both the red and green LEDs flash. Once the mic and base are synced, either the green LED turns on or the red LED starts flashing, depending on whether the mic is fully charged or begins to charge. For information about synchronizing the mic with the base, see *Synchronizing the Transmitter and the Base* on **page 29**.
- **Charging:** The red LED flashes while the mic is charging. When the mic's battery is fully charged, the red LED turns off and the green LED turns on. For information about charging the mic in the base, see *Charging the Transmitter* on **page 30**.



- **Normal operation:** When the mic and base are on and functioning normally, but not transmitting audio to be recorded, both of the LEDs are off.
- **Recording:** When the audio transmitted from the mic is being recorded, the green LED is on. For information about triggering a recorded event from the HiFi Mic, see *Talk/Mute slide button* on **page 22**.
- **Muted:** When the mic is muted, the green LED flashes. For information about muting the HiFi Mic, see *Talk/Mute slide button* on **page 22**.
- **Turned off:** When the mic is turned off and not in the base, both of the LEDs are off.
- **Covert mode:** When the mic is in Covert mode, both of the LEDs are off. For information on using the HiFi Mic in Covert mode, see *Mode button* on **page 23**.
- **Lost connection/out of range:** If the mic loses connection to or is out of range of the base, the red LED flashes until the connection is reestablished.

For information on the status LEDs on the base, see *Status LEDs* on **page 19**; for information on the icons on the display, see *Display* on **page 26**.



## Power switch

The **Power** switch is on the bottom of the transmitter (mic) between the contacts for charging and synchronizing. Slide this switch to power the mic on or off.



**Note:** WatchGuard Video recommends that you power off the mic before you put it in the base to charge.

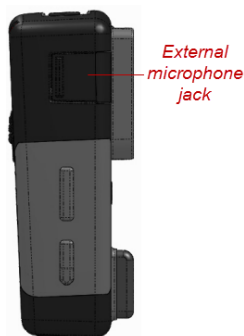
## Contacts for charging and synchronizing

The contacts for charging the transmitter (mic) and synchronizing the mic with the base are on the bottom of the mic. These contacts physically line up with those inside on the floor of the base and make it possible for the base to charge and sync with the mic.

## External microphone jack

The external microphone jack is on the right side of the transmitter (mic), as you look at the front of the mic. If you want to use the optional lapel microphone available from WatchGuard Video, you can connect it to the HiFi Mic using the external microphone jack.

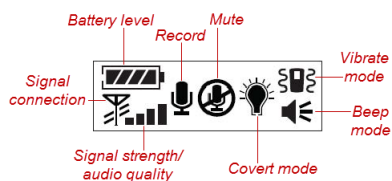
Open the external microphone jack cover and connect the lapel microphone cable at this point.



**Note:** The optional lapel microphone can be less susceptible to wind noise and help provide better quality audio. For information about the accessory lapel microphone that WatchGuard Video offers, contact your WatchGuard Video representative.

## Display



The display is on the top of the transmitter (mic). The display shows icons that indicate the current mic status and mode.




**Note:** This graphic only shows where on the display the icons can appear. Some of these icons will never appear on the display at the same time.

## Status icons

The status icons on the display indicate the battery, connection, and signal states.

- **Battery level:** The **Battery Level** icon is on the top left of the display and looks like a battery on its side. This icon indicates the charged level of the transmitter (mic) battery. When the icon shows the battery with all four bars , the battery is fully charged. When the icon shows less than four bars, one bar for example , the charge level of the battery is less than fully charged. (With the battery level icon showing only one bar, the battery charge is less than 25 percent.)



When the **Battery Level** icon shows only the outline , the battery is low; you should place the mic in the base to charge as soon as possible.



**Warning!** *If the battery outline begins blinking, the charge level has moved below normal operational limits; you should place the mic in the base to charge immediately.*

While the mic is charging, the bars in the **Battery Level** icon cycle on and off in series.

For information on charging the mic battery, see *Charging the Transmitter* on **page 30**.

- **Connection:** The **Connection** icon is on the bottom left of the display, just under the **Battery Level** icon, and looks like an antenna. This icon indicates the state of the connection between the base and the mic. When the icon shows only the antenna , the mic and the base are synced and have a fully established connection. When the icon shows the antenna with blinking diagonal bars across it , the mic and base connection has weakened.





**Caution:** *When the connection between the mic and the base weakens, the transmitted audio quality decreases.*

When the antenna and diagonal bars blink together, the mic and the base have lost their connection.



**Warning!** When the mic and the base lose their connection, no audio is transmitted to the DVR.

- **Signal strength:** The **Signal Strength** icon appears just to the right of the **Connection** icon and looks like a set of stair-stepped bars. This icon indicates the strength of the received signal from the base to the mic.

When the icon shows all four stair-stepped bars , the signal is strong. When the icon shows less than four bars, two bars for example , the signal is weaker.



**Note:** A weaker signal can cause lower quality audio to be transmitted to the DVR.

## Mode icons

The mode icons on the display indicate whether the transmitter (mic) audio is being recorded, which notification mode is active, and whether Covert mode has been activated.

- **Record:** The **Record** icon appears in the middle of the display, just to the right of the **Signal Strength** icon, and looks like an old-fashioned



microphone. The icon indicates that the transmitted audio is being recorded by the DVR. For more information, see *Talk/Mute slide button* on **page 22**.

- **Mute:** The **Mute** icon appears in the middle of the display and looks like a



circled **Record** icon with a slash through it. The icon indicates that audio is no longer being recorded by the DVR. For more information, see *Talk/Mute slide button* on **page 22**.



- **Covert mode:** The **Covert Mode** icon appears in the middle of the display, just to the left of the notification icons, and looks like a light bulb. This icon indicates whether Covert mode has been activated. When the



icon shows a darkened light bulb , Covert mode has been activated. When the icon shows a lit light bulb



, Covert mode has been deactivated. For more information, see *Mode button* on **page 23**.

- **Notification:** The notification icons appear in the top and bottom right corners of the display. There are two notification icons:
  - **Vibrate:** The **Vibrate** icon appears in the top right corner of the display and looks like a cell phone with squiggly lines on either side . The icon indicates that the mic vibrates to show a change in its status.
  - **Beep:** The **Beep** icon appears in the bottom right corner of the display and looks like the side view of a speaker with lines coming out of it . The icon indicates that the mic beeps to show a change in its status.

Both notification icons can appear together (the mic vibrates and beeps to indicate a status change), separately, or not at all (there is no notification of a status change). For more information, see *Mode button* on **page 23**.

## Synchronizing the Transmitter and the Base

---

The transmitter (mic) and the base in the vehicle must be synchronized before the DVR can record the audio that the mic transmits. The pairing that is created when the mic and the base sync with each other lets them identify each other's communication. (For information on the mic, see *Transmitter* on **page 21**; for information on the base in the vehicle, see *Base* on **page 18**.)

Mics that stay in the same vehicle from shift to shift remain synchronized with the base in that vehicle. If you move your mic between vehicles or take it from a pool of mics inside the agency, then you must sync the mic with the base in the vehicle before you can use it.



**Note:** *A version of the base exists that only serves as a charger for the HiFi Microphone (HiFi Mic). This version of the base is not used in the vehicle. For information about the charge-only base, contact your WatchGuard Video representative.*

---

The mic and the base in the vehicle sync automatically when you place the mic in the powered base for a few seconds. To sync the mic with the base:

1. Power the DVR on and verify it is ready to use.
2. Power the mic on (see *Power switch* on **page 25**).
3. Place the mic into the base.

The LEDs on the mic and the base flash and the mic beeps as the pair syncs.



**Note:** Once the mic and base are synced, either the green LEDs turn on (the mic is ready to use) or the red LEDs start flashing (the mic needs charging). For information on charging the mic, see *Charging the Transmitter* below.

---

4. Remove the mic from the base and verify their connection on the mic's display (see *Status icons* on **page 27**).

## Charging the Transmitter

---

The battery in the transmitter (mic) must be charged before you can use the HiFi Microphone (HiFi Mic). The base (either the vehicle base or the charge-only base) serves as the charger for the mic.

To charge the mic:

1. Power off the mic (see *Power switch* on **page 25**).
2. Place the mic in a base.



**Note:** WatchGuard Video recommends that you power off the mic before you put it in the base to charge, but this step is not required.

---

If the base is in the vehicle, the base syncs with the mic before the mic begins to charge. (For more information about syncing the mic and the base, see *Synchronizing the Transmitter and the Base* on **page 29**.) If the base is a charge-only base, usually used inside your office, the mic begins charging immediately.



**Note:** The version of the base that serves only as a charger for the HiFi Mic is not used in the vehicle. For information about the charge-only base, contact your WatchGuard Video representative.

As the mic charges, the red LEDs flash and the bars in the **Battery Level** icon on the display cycle in series. When the mic is fully charged, the green LEDs turn on and the **Battery Level** icon shows four bars. After 30 minutes, the mic is approximately 50 percent charged; the mic is fully charged after three hours.



**Note:** If you charge your mic in a charge-only base, you may need to resync the mic with the base in your vehicle when you want use it again.

## Charging in a vehicle with the ignition off

When you shut down your vehicle, the DVR shuts down with it. Because the HiFi Mic base is connected to the vehicle through the DVR, the base shuts down as well.

After ten minutes, the base powers back up and begins to charge the transmitter (mic). The base remains on for four hours to fully charge the mic, then the base shuts down.

## Using Two HiFi Microphones

For the most part, using two HiFi Microphones (HiFi Mics) in a vehicle is just like using one. If you use two HiFi Mics in the same vehicle, you need to implement two items to minimize potential interference:

- When you install the HiFi Mic antennas, install them horizontally in the upper right and upper left corners of the windshield, to keep them as far apart as possible
- If you are only using one of the transmitters (mics), dock the unused mic in its vehicle base

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# Best Practices and Troubleshooting

*In this section...*

- Best practices for
  - Installing the HiFi Microphone (HiFi Mic) (**page 34**)
  - Using the HiFi Mic (**page 34**)
- Troubleshooting HiFi Mic issues (**page 35**)

## Best Practices

---

The items in the following sections are considered WatchGuard Video best practices.



**Note:** *These best practices are meant to help you have the best experience possible with your HiFi Microphones (HiFi Mics); however, they are not required.*

---

### Installation best practices

Keep the following best practices in mind when you install a HiFi Mic in your vehicle:

- Use a short cable (3-foot) when you connect the HiFi Mic base to the DVR; keeping the cable short helps maintain audio quality
- Use the 900 MHz antenna that you received from WatchGuard Video with the HiFi Mic; using a different antenna can compromise wireless performance and audio quality
- Install the antenna horizontally in the upper right corner of the windshield (as you look out the windshield); this placement helps minimize potential interference
- If you use two HiFi Mics in your vehicle, install the antennas horizontally in the upper right and upper left corners of the windshield to keep them as far apart as possible; these placements help minimize potential interference
- Finger-tighten the SMA connector when you connect the antenna to the base; using hand tools can damage the connector

### Usage best practices

Keep the following best practices in mind when you use your HiFi Mic:

- Power off the transmitter (mic) before you put it in the base to charge
- If you have two HiFi Mics in your vehicle, but you are only using one of the mics, dock the unused mic in its vehicle base; the unused empty base can interfere with the HiFi Mic that is being used

# Troubleshooting

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If your HiFi Microphone (HiFi Mic) is not functioning properly, refer to the sections below for possible remedies.

## *If you have no reception...*

- Check that the power switch on the transmitter (mic) is on (see *Power switch* on **page 25**)
- Check that the mic battery is charged (see *Status icons* on **page 27**)
- Check the connection between the DVR and the base (see *DVR cable connection* on **page 20**)
- Check that the mic and the base are synced, have a good connection, and that the mic has a strong signal from the base (see *Status icons* on **page 27**)



**Tip:** If your HiFi Mic still has no reception after trying all of the above steps, contact WatchGuard Video Customer Service for further help.

---

## *If you have poor reception, static, or noise...*

- Check the location of the antenna (see *Installation best practices* on **page 34**)
- Check the antenna connection on the base (see *Antenna connection* on **page 20**)
- Check that the transmitter (mic) and the base are synced, have a good connection, and that the mic has a strong signal from the base (see *Status icons* on **page 27**)
- If you have two HiFi Mics in the vehicle, check whether one of them is unused and NOT docked in its base (see *Using Two HiFi Microphones* on **page 31**)



**Tip:** If your HiFi Mic still has poor reception, static, or noise after trying all of the above steps, contact WatchGuard Video Customer Service for further help.

---

*If the transmitter does not respond to or synchronize with the base...*

- Check that the transmitter (mic) battery is charged (see *Status icons* on **page 27**)
- Check the connection between the DVR and the base (see *DVR cable connection* on **page 20**)
- Check that the power switch on the mic is on (see *Power switch* on **page 25**), turn it off and back on, then try again to sync the mic and the base (see *Synchronizing the Transmitter and the Base* on **page 29**)



**Tip:** *If your mic still does not respond to or synchronize with the base after trying all of the above steps, contact WatchGuard Video Customer Service for further help.*

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