FOTRIC Smartphone Acoustic Imager

User ManualV3.0

About This Manual

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If any provision above conflicts with applicable law, the applicable law shall prevail.

Preface

Symbol Conventions

 **WARNING**	 **CAUTION**	 **NOTE**
Indicates a potentially hazardous situation that could result in death or serious injury.	Indicates a potentially hazardous situation that could result in injury or property damage.	Provides supplemental information or clarification regarding the main text.

Safety Information

This information is intended to ensure correct use of the product and prevent hazards or property damage. Read this manual carefully before using the product and retain it for future reference.

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For languages other than English, the content is translated by AI. In case of inadequate expressions, please refer to the English user manual.

1. Overview

1. Introduction

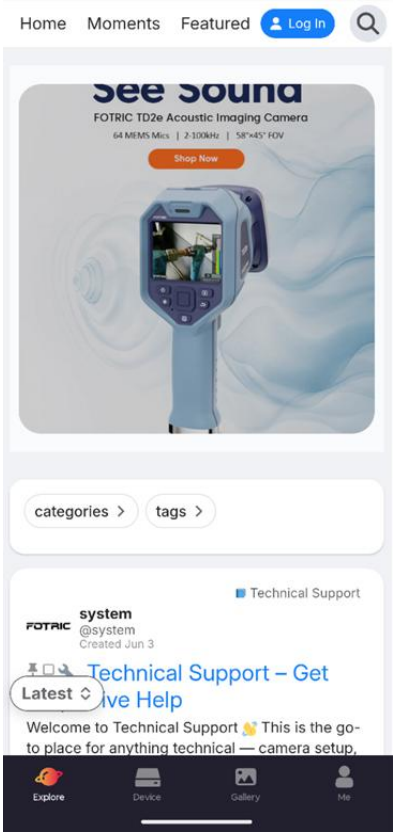
FOTRIC Genie App is an ultra-compact professional thermal and acoustic imaging application for Android smart devices. It provides real-time previews from temperature measurement devices, live viewing of visible-light and acoustic images, image capture, video recording, and image viewing.

2. Operating Environment

Mainstream smartphones running Android 12 or later.

3. Interface Overview

The main functions of FOTRIC Genie App include Explore, device connection, gallery management, and system settings.



4. Quick-Start Procedure

Preparation: Download FOTRIC Genie App from Google Play and grant the required permissions.

Step 1: Enable OTG data transfer in the phone settings, then connect the phone to the mobile acoustic imaging camera via USB.

Step 2: On the home screen, tap Device →Connect Device to open the live view.

Step 3: View the live acoustic image.

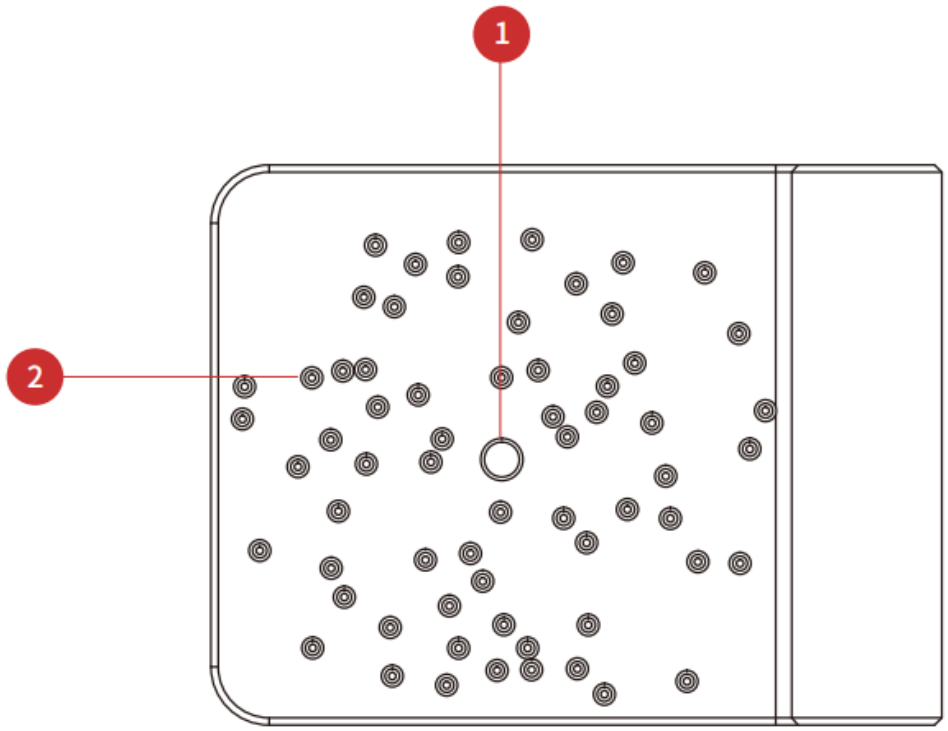
Step 4: Capture a single frame or record an MP4 video.
Step 5: View saved images or videos in the gallery.

5. About and Help

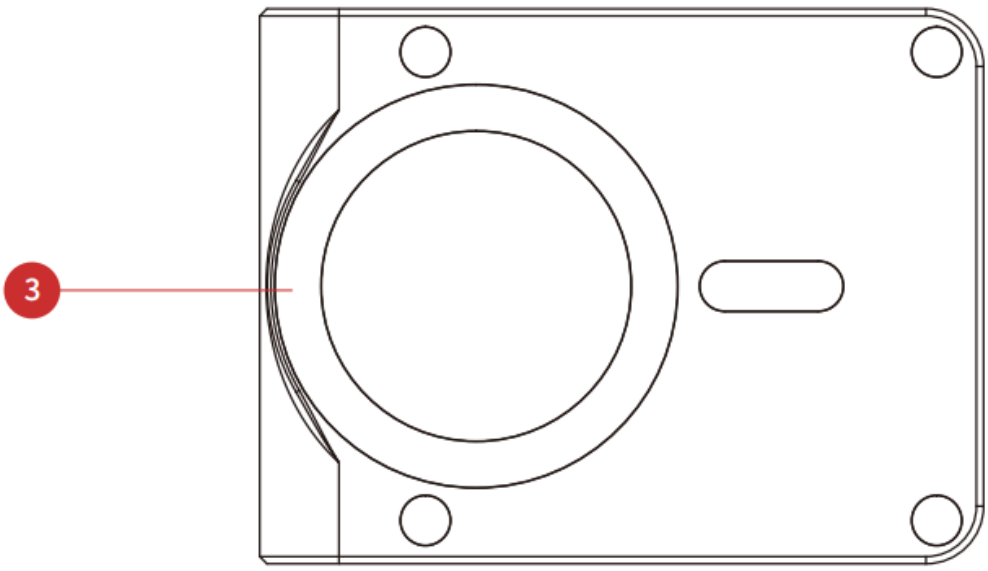
This manual provides instructions for operating FOTRIC Genie App on a smartphone.

2. Hardware Overview

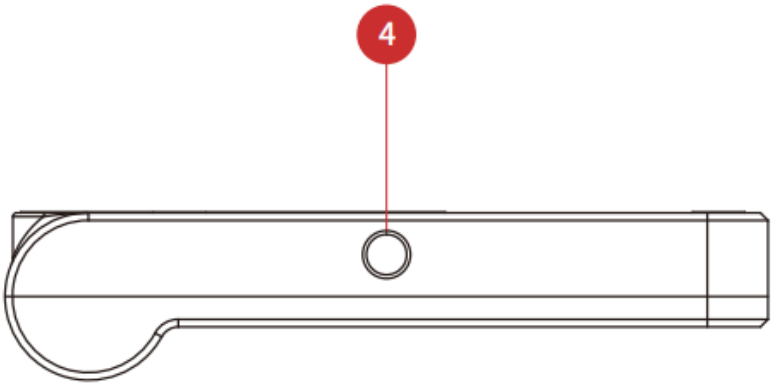
1. Front View



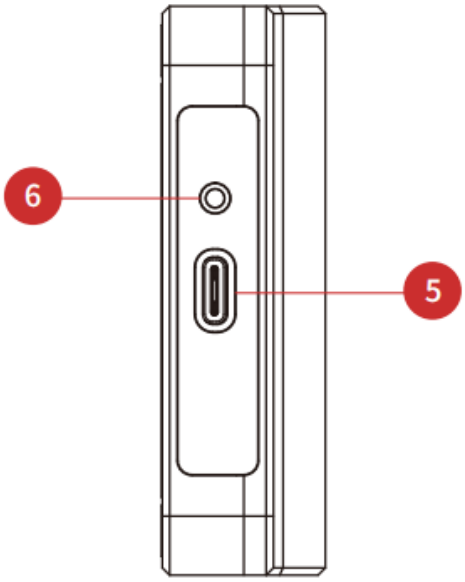
2. Rear View



3. Bottom View



4. Side View



5. Appearance

NOTE

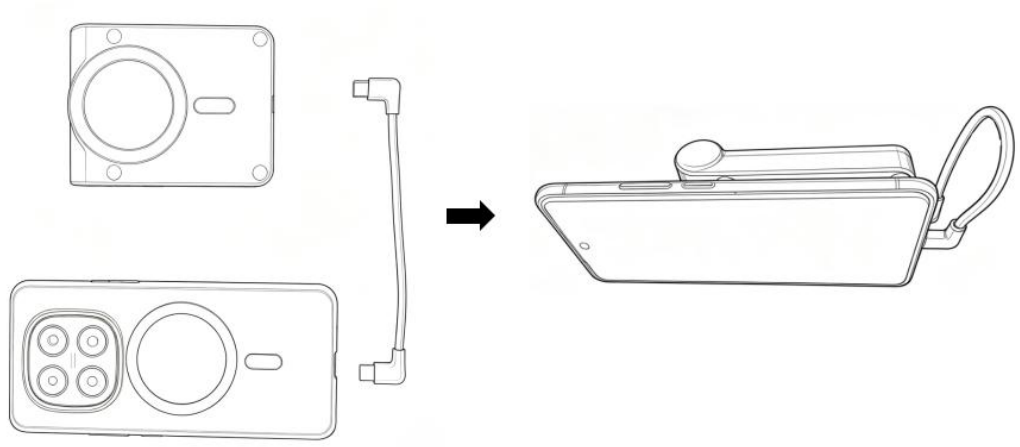
Device appearance may vary by model. Refer to the actual product.

Components and Interfaces

No.	Name	Function
1	Digital Camera	Visible-Light Camera for Acoustic Imaging
2	Acoustic Imaging Module	The microphone array captures acoustic data.
3	Magnetic Ring	Used for magnetic mounting.

4	Tripod Mount	Standard 1/4-20 UNC tripod mount
5	USB Type-C Port	Data port for data transfer
		Charging port for charging
6	Power Indicator	Power-on indication: Powered on: Solid
		Charging indication: Charging: Flashing. Fully charged: Solid.

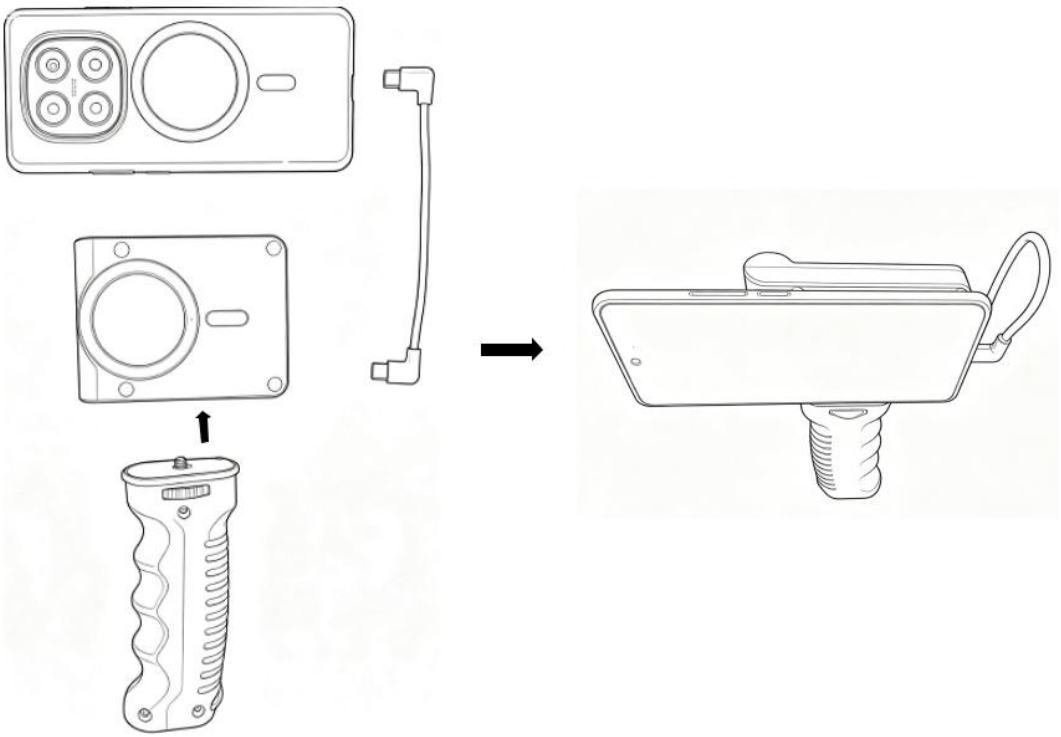
6. Device Installation



Procedure:

1. Secure the acoustic imaging camera to the phone's magnetic mount using the magnetic ring.
2. Connect the phone to the acoustic imaging camera's data port with a USB Type-C data cable for data transfer.

6.1 Alternative Installation (Handle Mounting)



Procedure:

1. Secure the acoustic imaging camera to the phone's magnetic mount using the magnetic ring.
2. Secure the acoustic imaging camera to the handle using the tripod mount.
3. Connect the phone to the acoustic imaging camera's data port with a USB Type-C data cable for data transfer.

7. Powering the Device On and Off

Insert the USB Type-C data cable to power on the device.
Disconnect the USB Type-C data cable to power off the devices.

8. Charging the Acoustic Imaging Camera

Before first use, or when the battery is low, charge the acoustic imaging camera using a DC 5 V power adapter (item 5in the Components and Interfaces table).

9. Connecting to the Mobile App

Download and install FOTRIC Genie from Google Play.

3. Device Management

1. Connection Method

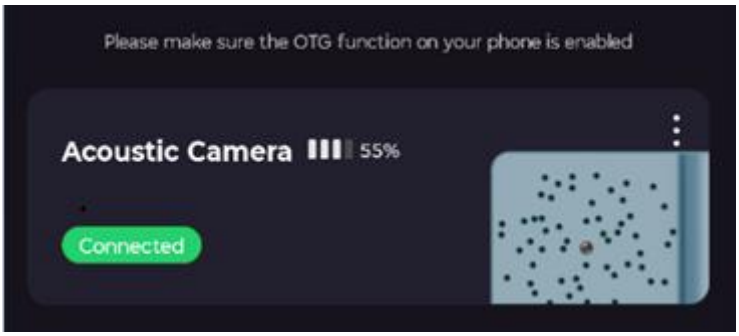
USB connection.

2. USB Connection

When a USB device is connected, the app automatically detects available devices and establishes a connection.

3. Device List

On the device details screen, you can rename the device, view device information (model, serial number, and firmware version), open the help documentation, or delete the device.



4. Acoustic Image Display

On the device's live preview screen, tap the  button to display the available function buttons, then configure the settings as required.



1. Sound Source Mode

Users may switch among Single Source, Multiple Sources, and Hologram modes.



2. Sound Pressure Level Display

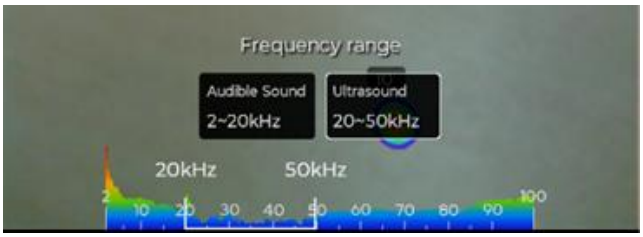
Display off; display on

3. Focus Mode

Enable acoustic focus to mask the surrounding area and display only the acoustic image within the focus area.

4. Frequency Range

Select the frequency range appropriate for the application: audible or ultrasonic.



5. Analysis Software

Use the AnalyzIR professional acoustic imaging analysis software to analyze captured images.

6. Adaptive Rotation

In live preview, when the phone's orientation lock is disabled, the display automatically adapts to portrait orientation changes.

7. Screen Rotation

In live preview, the screen can be rotated continuously in 90° increments. Tap the button on the live preview screen to rotate the display.

5. Capture Functions

1. Single-Frame Capture

On the live view screen, tap the photo button as needed to capture an image and save it to the phone.

2. MP4 Video Recording

MP4 video recording is supported in all image modes. On the live view screen, tap the video button, then tap the record button to begin screen recording. Tap the stop button to end recording and save the video to the phone. You can also capture single frames while recording an MP4 video.

3. Image Format

Images are saved in JPG format.

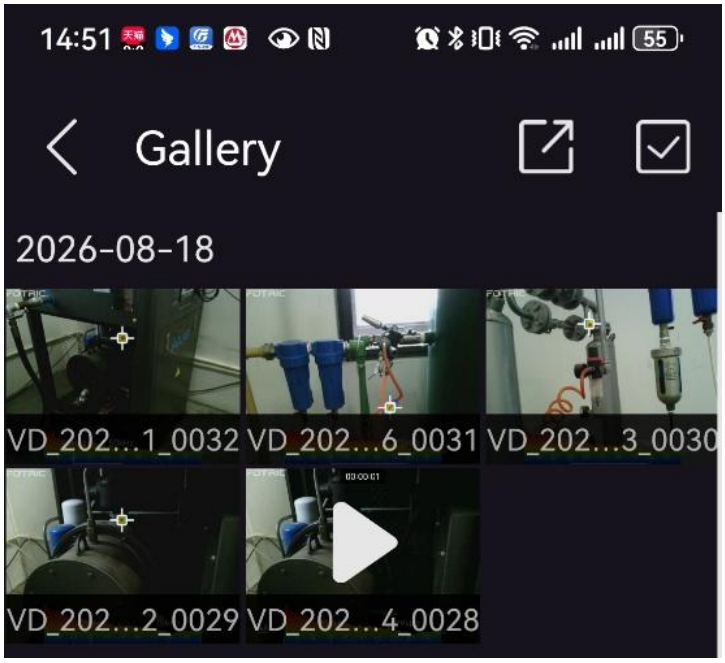
4. Video Format

Videos are saved in MP4 format.

6. Gallery Management

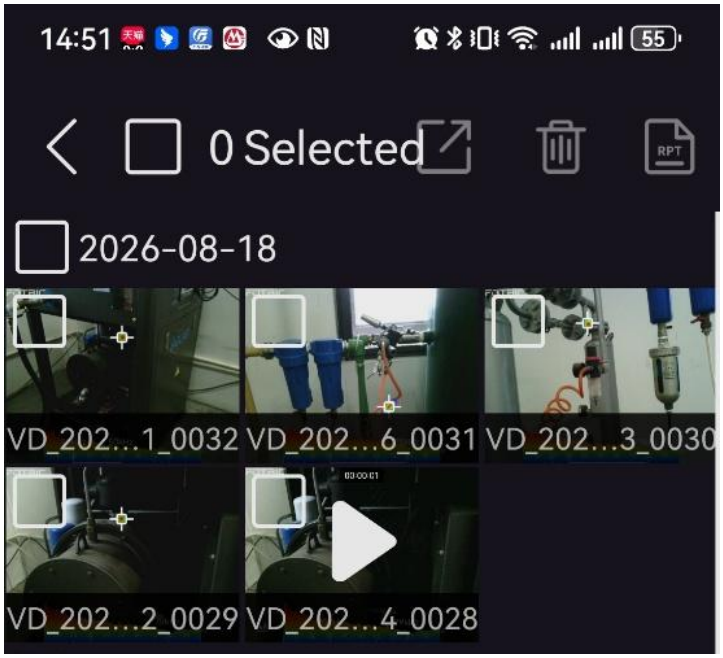
1. Local Gallery

Images and videos captured with the app are saved on the phone. Use the app gallery or the phone's photo gallery to view and manage all saved files.



2. On-Device Reports

Images in the gallery can be used to generate Word or PDF reports. Tap the button to enter multi-select mode, select the images, and tap the report button to generate a Word or PDF report.

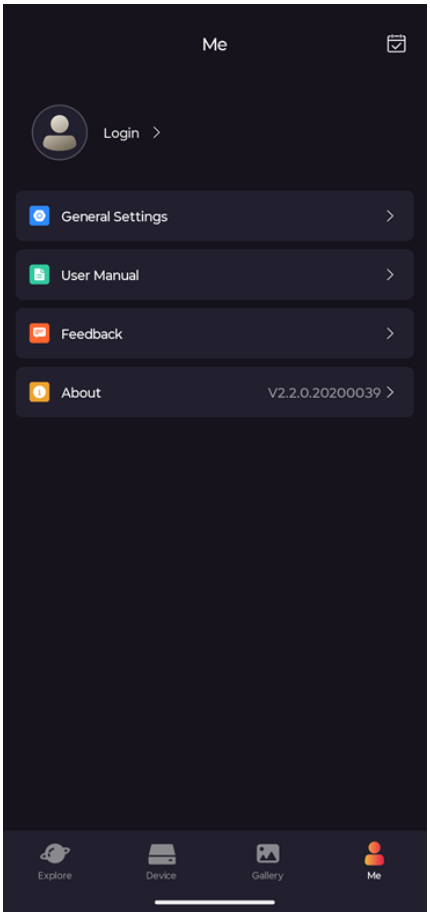


3. Sharing

Images, videos, and reports in the gallery can be shared using the system sharing function. Tap the Share button in the gallery to share an item.

7. System Settings

On the home screen, tap 'Me' to open the Settings screen:



1. General Settings: Set the temperature and distance units.

2. User Manual: View information about the product overview, quick start, hardware, device management, measurement and analysis, image display, capture functions, gallery management, system settings, and other features.

3. Feedback: View available feedback channels and related information.

4. About: View the software version and other information.