

Kitsune II

User Manual 2019



Kitsune at a Glance

Meet the most dynamic and innovative, wearable medical device.



This guide provides you the essential information you need to use Kitsune with Phrazer® Spirit.

Let's start with a look at the unique features

Kitsune is a wireless audio device that a patient can wear for private medical interactions, or that can be converted to group mode to provide a speaker experience or provide enhanced private ambient input for private authority interactions.



Private Mode

When worn over the ears, the soft closed-cell ear cups seal out ambient noise and help the patient clearly and comfortably hear the vital medical interactions on Phrazer. To place Kitsune over the ears, a patient gently pulls the cups forward from the back of the head. The cushioned back-band gently sits below the base of the skull for comfortable wearing both sitting up or laying down. Kitsune is antimicrobial, clean and safe. The audio stream is 'secure paired' to its Phrazer to assure privacy.



Group Mode

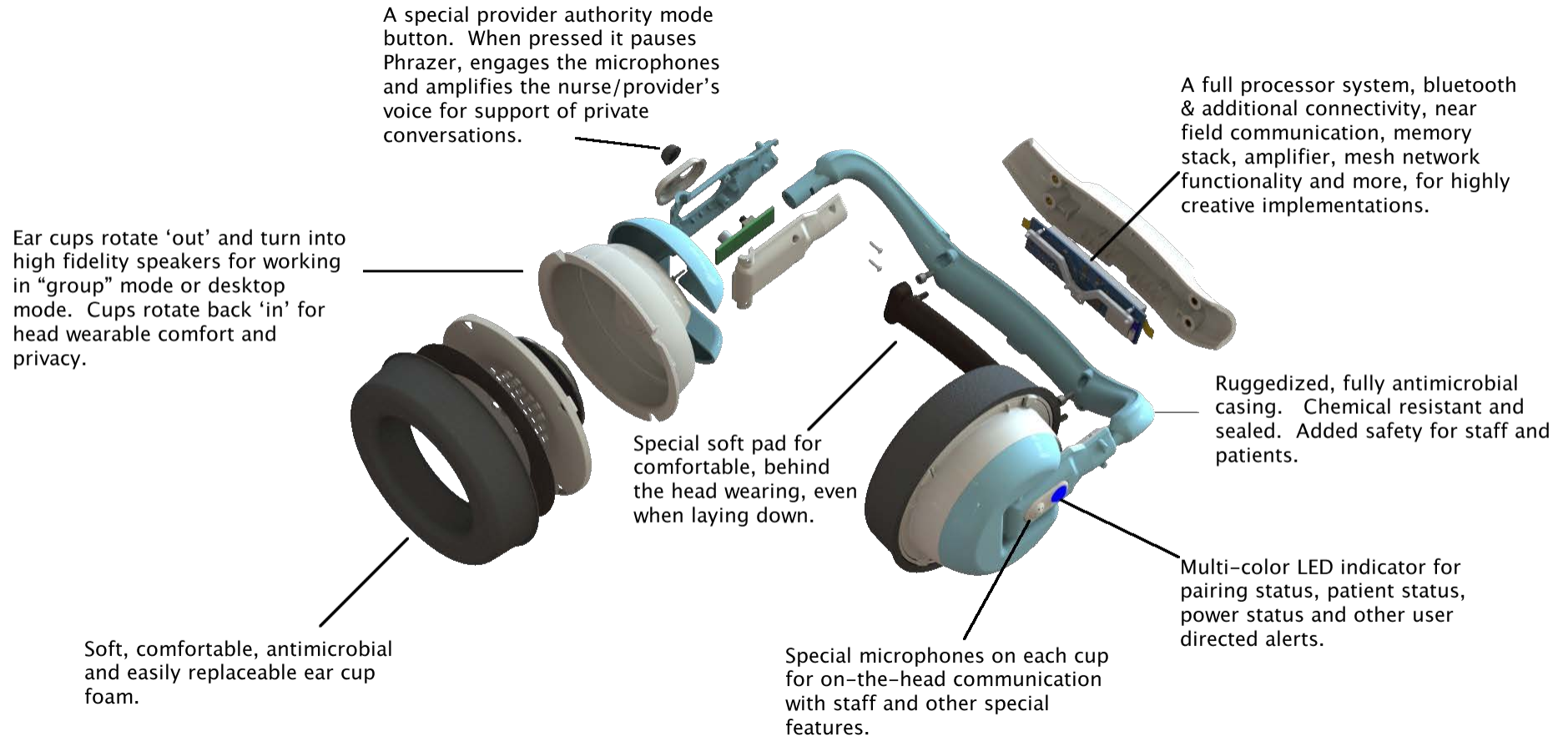
Kitsune "ShapeShifts" into HiFi speakers. To do this, remove it from the patient's head and place it on a flat surface. Then grasp each ear cup and tip it outward on its axle. When the cups transition to Group Mode there will be a gentle *snap* and the audio will automatically transition to speakers.



Authority Mode

There are occasions when a patient is interacting with Phrazer, privately wearing Kitsune, when a staff member needs to say something. Rather than having the patient pause Phrazer and remove Kitsune you may press the authority button. This button is located on the left ear cup. Gently pressing this button will pause Phrazer and initiate the on Kitsune microphones. This mode allows the caregiver to speak quietly but be easily heard.

Kitsune Exploded View



Kitsune Specifications

Bluetooth

Bluetooth 4.2, Class 2

Dual Mode: Bluetooth and Bluetooth Low Energy

Frequency Bands: 2,402 MHz to 2480 MHz

Operating Range: Maximum 20m to 30m

Output Power: Class 2 (BER/EDR) up to +4 dBm, BLE up to +10 dBm

Bluetooth Profiles Supported: A2DP, AVRCP

Near Field Communication (NFC)

13.56 MHz RFID Reader/Writer

Compliant with ISO/IEC 14443 A And B NFC Forum Device Types 1-4

Output Power +20 dBm (100mW) at 10cm

Functionality Pending Development

Run Time

Loudspeaker Mode: 8hrs

Headset Mode: 18hrs

Idle: 24hrs

Audio

Group Mode: Mono, Output Power up to 1W

Headset Mode: Stereo

Output Power: Up to 125mW

Environmental Hearing Mode: Stereo

Speaker Output Range: 400 Hz to 9000 Hz

Speaker Sensitivity: 90 dBA SPL at 10cm

Certifications

Bluetooth: 4.2 Audio Module - SIG Certified

Modular Approval: FCC and IC (Canada) - BT

Compliant: Part 15 of the FCC

Kitsune Package

Kitsune II



The Kitsune may come with the foam ear pads not connected. It is fully assembled and ready to use immediately (with the foam ear cups connected).

USB A to USB Micro B



This cable is used for charging Kitsune. This connects to any standard 5V port found on computers and many wall connectors.

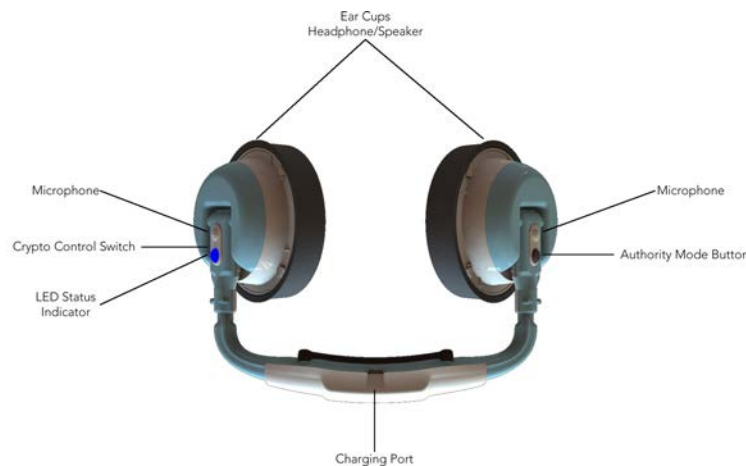
Foam Ear Cups



In the package will be either stretch-on or velcro-on ear cover foam. These are self-centering, detachable and cleanable covers. A separate package of ear foam inventory will be included separately.

Using Kitsune

- **LED** - Used to indicate the status of Kitsune (ON, OFF, pairing, charging, ect.)
- **Ear Cups** - Part that goes over the ears and emits sounds for the user
- **Crypto Control Switch** - Located under the LED; this changes the mode of Phrazer using the Crypto-Magnetic Key (i.e. ON/OFF)
- **Charging Port** - Micro-USB B used to charge Kitsune
- **Microphone** - This is used to pick up environmental sound and relay to the user
- **Authority Mode Button** - Once paired with a Phrazer it will enable environmental sounds around the user



Charging

Connect the micro USB to the Kitsune charge port. If Kitsune is charging the LED will pulse red slowly until fully charged. When fully charged the LED will be off. Charge times vary and take up to 2 hours for a full charge.

Kitsune does not fully turn off for security and pairing purposes so charging should be performed when not in use.

Powering On & Off



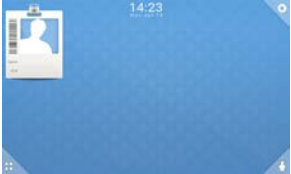
Kitsune does not have conventional power on and off buttons. To power it the specialized Phrazer Crypto-Magnetic Key must be put 1 inch over the hall effect switch. This is located right near the left side ear cup LED. When the power is off and it is disconnected from a charger, the Kitsune's LED will also be off. When started the LED will light.

LED Status

LED Color	LED Mode	Power	Headset State
Off	None	Off	In low power mode
Red	Solid	On	Low battery
	Pulsing	Off/On	Charging
	4-5 fast blinks	Off	Switched from on to off
Blue	Solid	On	Paired - Connected
	Blinking	On	Environmental audio mode
	Slow Blinking	On	Not Paired - Not Connected (On - Standby)
	4-5 fast blinks	On	Switched from off to on
Purple	Solid	On	Paired - Not connected
	Pulsing	On	Paired - Connecting
Red/Blue	Alternating: fade	On	Pairing
	Alternating: solid	On	Pairing mode - Ready to pair

Connecting to Phrazer

Step 1: Select Settings Tab



Step 2: Select Bluetooth



Step 3: Power Kitsune/ Pairing Mode



Step 4: Tap Kitsune to Phrazer



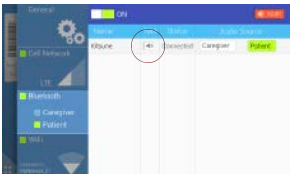
Step 5: Select Audio Stream



Step 6: Wait for LED to Turn Blue



Step 7: Test



Kitsune Full Pairing Procedures

Kitsune Previously Paired

1. To turn Kitsune on, slowly swipe the magnetic end of the CMK across the LED.

Note: LED should flash blue rapidly 5 times and then solid purple if paired previously.

2. Enter the settings menu and select the desired audio stream.

Note: LED will pulse purple until it connects to the audio stream then remain solid blue.

Note: It is good practice to test the audio from the settings menu on Phrazer once the LED is solid blue.

Kitsune Pairing - Full Process

1. To turn Kitsune ON, slowly swipe the magnetic end of the CMK across the LED.

2. Slowly swipe the end of the CMK across the LED a second time.

Note: LED should be alternating red and blue, to indicate Kitsune is in pairing mode.

3. Slide the back band of Kitsune across the right side of Phrazer to activate the pairing.

4. Press "Patient" to pair with the patient audio stream or "Caregiver" to pair with the caregiver audio stream.

Note: Once connected connect to the selected audio stream, LED will be solid blue. It is good practice to test the audio from the settings menu on Phrazer once the LED is solid blue.

Disconnecting Kitsune from an Audio Source - Via Phrazer

1. Tap and hold the audio source name that is currently green.
2. To reconnect to an audio source, tap the desired audio source name.

Note: The audio source that is connected to Kitsune will turn green.

Connect to a different audio stream with a Kitsune already connected

1. Tap the audio source name that is currently green to disconnect Kitsune.
2. To connect to an audio source, tap the desired audio source name.

Powering Kitsune ON/OFF

Powering ON

Note: Kitsune cannot be turned ON without the CMK.

1. Slowly swipe the magnetic end of the CMK across the LED; when done properly, LEDs will flash blue rapidly 5 times and Kitsune is turned on.

Powering OFF

Note: Kitsune cannot be turned OFF without the CMK.

2. Touch the magnetic end of the CMK to the LED for 3 seconds; when done properly, LEDs will flash red rapidly 5 times then turn OFF.

Kitsune in Market



In market use Kitsune performs well and patients prefer it over other equipment due to the versatile features. Patients use in in several modes, not just speaker and private mode.

Private engagement in the waiting room is the most common usage however closely behind is group mode in room.

For staff the automatic pairing and 'stay paired' features enable quick and easy handoff to the patient. The Authority Mode makes it simple and convenient for staff to integrate into CITE engagements and interact more freely with the patient. Encouraging meaningful inline engagement has a significant benefit for the patient and staff alike.

Patients and family members engaging on Phrazer together through use of Kitsune is one of the more vital benefits. Having shared engagements regarding medications, care plans, wound treatment and a variety informational and educational CITE engagements results in better compliance and comprehension of the medical experience. In market Kitsune is proving a game changer with vital, new benefits to care.

Kitsune: Concept & Marketing



The Meaning and Source of "Kitsune"

Pronounced "Kit - soo - nay" it is a word of Japanese origin meaning "The Fox".

GeaCom uses a culturally diverse global naming convention for its products. For example "Gea" in "GeaCom" is Greek and "Gichi" is American Ojibway. And with Kitsune as Asian in source you can note a 1/3 globe rotation for an 'around the world' naming method.

Kitsune is a product that converts or transitions in its form and function. In Korea and Japan there is a legend of a shape shifting creature known as the Kitsune. This legendary creature starts as nine tailed fox that is capable of shape shifting into other forms. As the legend goes, this creature wishes to become human and if it performs enough "good deeds" over the term of 100 years, it will be granted its wish.

Other Kitsune Capabilities

Kitsune has a full processor onboard, "near field" detectors, complete Bluetooth function and a robust memory stack. Advance features available include the following:

Near Field Communication (NFC)

Kitsune Near Field Communication systems allow for "bump" functionality. NFC "Bump" can be used to pair devices, to transfer files and it can be expanded to track NFC tags. NFC tags are small stickers with RF signals that Kitsune can read. These can be added to staff badges to track when staff members are near a specific Kitsune (in the room) or along hallways and corridors to track where patients are or help patients navigate.



Kitsune Multi-Path Realtime Messaging (MRM)

MRM solutions on Kitsune enables Phrazer to send simultaneous custom messages to caregiver stakeholders, to chart, to print, to utilities (such as medical sensors, room temp, etc) and to track location. The innovation capability with MRM combined with Near Field Communications through Kitsune and Phrazer opens vast horizons of process improvement and harmonization of patient, staff and system performance.



Terms & Meanings

CITE:

Pronounced Sight

Communication and Information Theory Empowered is the strongly validated science basis of the breakthrough methods GeaCom pioneers.

The experience for the patient is fully personalized and matched to their culture, language, gender and literacy. Precepts of **Communication Theory** and Evolutionary Biology are leveraged for trust, comfort, comprehension and compliance. The experience of the staff member is one of clear, meaningful data. **Information Theory** is employed to ensure that no "junk data" is passed and all information is accurate and actionable. The digital record, process adherence and economics are effected though and **empowered** by Phrazer systems.



communication | information | theory | empowered

Phrazer:

Pronounced Ff-Razer

Means, a member of the family or honorable member of the clan. It also means the most secure and advanced medical engagement solution in the world.

GeaCom:

Pronounced Gee - Ah - Kom

References both the Greek God of motivating energy and the eco-theory proposed by Dr. James Lovelock. It means the most innovative and motivated company seeking to improve health equity and process.

Gichi:

Pronounced Gih-Chee

The Ojibway word for great. A common reference is Gichi Gummi meaning Great Lake or Lake Superior. This is also the staff management solution for the Phrazer system.

CMK: Crypto-Magnetic Key

EMR: Electronic Medical Record

EHR: Electronic Health Record

MRM: Multi-Path Realtime Messaging

PHI: Private Health Information

HIPAA: Health Insurance Portability and Accountability Act

SBIRT: Screening for Brief Intervention and Referral to Treatment

NFC: Near Field Communication



Phrazer **Kitsune**®

Harmonizing Patient, Staff and System Performance!

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