

Portable Glensound HD Voice Mobile Phone

The Nomad is a dedicated Mobile Phone Hybrid with 7kHz HD Voice audio. It is used for live news and sport reporting or talkback situations. This new generation of Glensound phones allows flexibility across new 4G VoLTE networks around the world.



Multiple Networks

A 4G VoLTE mobile phone with features specifically for broadcast. Also features legacy 3G and 2G connectivity



High Quality Audio

The HD Voice system offers 7kHz mobile calls on compatible mobile networks using 4G VoLTE or 3G UMTS



Multiple Power Options

- Battery power from 6 x AA batteries (runtime up to 5 1/2 hours)
- DC input from 10-15V.
- USB C socket to allow USB power banks



Auto Answer and Auto Redial

The Nomad can be set to answer incoming calls automatically and to auto redial if a call is lost.



Output Compressor

An output compressor prevents any peak in the audio being sent onto the HD Voice network. HD Voice is very sensitive to peaks and the output compressor improves the quality of the audio received at the remote end.



Glensound Referee Input Compressor

Glensound's Referee compressor has been specially designed and updated over many years, specifically to cope with the excessive peaks often



Background Noise Suppressor

HD Voice features a background noise suppressor that greatly removes unwanted background noise.



Direct Line Output

A 3 pin XLR provides either a clean output of the incoming caller or a mix of incoming caller and operator.



Superior Reception

The Nomad has twin diversity aerials for improved reception and range when on the 4G VoLTE network.



Phonebook

Quick dial 10 number phonebook



Monitoring & Setup OLED Display

A high resolution OLED screen provides caller ID, signal strength, network, number dialled, metering and other setup information



Mic On/Off or Cough Button

A clear pushbutton is used to activate the mic, or can be set as a cough button



HD Voice Key Points

Glensound HD Voice - 7kHz Audio Bandwidth

Glensound HD Voice is an automatic feature available around the world on compatible mobile networks using 4G VoLTE or 3G UMTS. Connecting two Glensound HD Voice mobile phone hybrids in the same country, across a compatible 4G VoLTE or 3G UMTS network, will give a clear 7kHz of audio bandwidth.

HD Voice Is AMR-WB (Adaptive Multi Rate Wide Band)

Also known as G.722.2. This is the algorithm more commonly known as HD Voice. It offers significant advantages for broadcasters:

- Doubles voice bandwidth over 2G GSM to 50-7000Hz (2G narrow band speech codec is 300-400Hx
- 12.65 kbit/s or higher coding bit-rates provide high quality
- Gives a better lower frequency response, down to 50Hz (2G is 300Hz) for more natural sounding voices.

Glensound HD Voice when on 3G Does Not **Require The Data Network**

With HD Voice, The Nomad connects as a voice call, not a data call.

- Bandwidth is consistent once connected. With data connections, bandwidth varies during a connection, but on a HD Voice call it does not. Once you are connected your call quality will remain consistent.
- No extra call charges. As the network sees the connection as a voice call, there are no extra charges and no data usage as part of a data charging package.
- The Nomad will still operate at 7 kHz HD Voice even in busy locations where there is little available data - HD Voice doesn't need data!

Configurable To Operate On 2G GSM, 3G UMTS or 4G VoLTE

Calls can be locked to 2G, or 3G only with any calls made on HD Voice automatically dropping down to 2G when moving outside a 3G area without disconnecting the call. The Nomad also operates as a standard 2G mobile phone, and with advances in performance and noise reduction capabilities found on the Nomad, improvements in-call quality can still be heard.

Accommodates A Broader Range Of Audio Frequencies

Glensound HD Voice can accommodate a wider range of audio frequencies thus improving the overall call quality. This will aid ultimate clarity in noisy environments with reduced background noise from the background noise suppressor.

A Cost Effective Upgrade

Glensound HD Voice is one of the most cost effective upgrades that can be made to improve audio quality using mobile phones. This makes the Nomad great as a remote live reporting or talkback tool. When used in conjunction with the Lodge you have the perfect mobile hybrid package.





Tour

Front **Panel**



The illuminated on air button can be configured as latching, momentary or intelligent. The headphone volume and gain control for setting input level are carried out with the same control with the latter requiring a push. The levels are shown on the display. You can also set the input as Mic., Mic.+48V, or line level. The display also shows network status.

Rear **Panel**



There is single 3 pin XLR socket for the input. With a 6.35mm jack socket for headphone connection. The DC input is on the rear panel requiring an input of 10-15VDC. In addition to this the USB C socket allows for the use of a power bank. We've added a power switch to ensure your batteries stay fully charged when not in use.

Left **Panel**



On the left panel is the battery compartment. Two thumb screws release the panel and reveal the battery holder which takes 6 x AA batteries.

Menu

Detailed below are the option screens yof can access these with the cog button and control knob

Main Menu

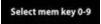


Shows the Connected network, Signal Strength, 2G, 3G or 4G and Current battery/power status

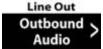


Silent Mode On/Off Switches off the external ringer. Still audible through headphones

Recall Number

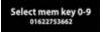


You can recall the last 10 numbers

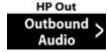


Line out can be set to: Outbound, Inbound or Mixed all via the rear mounted 3 pin XLR

Save Number



10 Number phonebook



Headphone out can be set to: Outbound, Inbound or Mixed, all via the 6.35mm jack

Mic Key Behavior



Latching Muted, Un-muted and Cough

HP End Stop

Headphone Min volume Off-10

Input Mode



Mic, Line, Phantom powered

Active Noise Cancellation On/Off



Specification

NETWORK

Frequency Bands

LTE-FDD:

B1/B2/B3/B4/B5/B6/B7/B8/B12/B13/B18/

B19/B20/B25/B26/B28 LTE-TDD: B28/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19

GSM: B2/B3/B5/B8 Certifications Carrier:

AT&T/ U.S. Cellular (America) * Deutsche Telekom (Europe)

Telus (Canada)

SPECIFICATIONS

2G AUDIO FREQUENCY RESPONSE

Telephone networks provide 300Hz to 3.4 kHz audio bandwidth

3G/4G HD VOICE FREQUENCY RESPONSE

HD Voice provides 50Hz to 7kHz audio bandwidth

ALGORITHM

HD Voice is AMR-WB (G722.2)

NETWORK COMPATIBILITY

Will operate on most mobile phone network and most SIM cards *

HD VOICE COMPATIBILITY

Will operate on any compatible HD voice networks

INPUTS AND OUTPUTS

Mic Input Connector

Neutrik balanced XLR

Neutrik balanced XLR

Headphone Out

6.35mm Jack Socket

Line in Level

0dBu

Dynamic Mic Line up

-46dBu

Phanthom Mic Lineup

-46dBu

Line Input Gain Range

+/- 15dB

Mic Input Gain Range Rate

+/- 15dB

Headroom @ Mic Line Up

30dB

Output Level

0dBu

Output Gain control

Fixed

Max Output Level

+18 dBu

POWER

Batteries

Removable battery compartment 6 AA cells Power level displayed on OLED screen

External DC Input

+10 to +15 VDC, 2.5mm barrel connector

USB

Type C connection

Power On LED

Bright Blue

AERIAL

AERIAL CONNECTOR TYPE

2 x SMA

AERIAL TECHNOLOGY

Diversity

RF OUTPUT POWER

2 Watts

PHYSICAL

182 x 140 x 47 mm (WxDxH)

Weight

585g

Mechanics

All aluminium construction, anodized and laser etched, powder coated sides

ENVIRONMENTAL

Operating Temperature

0 to +50 °C (32 to 122 °F)

Storage Temperature

-20 to +70 °C (-4°C to 158 °F)

Relative Humidty

0 to 95% non-condensing

INCLUDED ITEMS

Handbook

Available by download

Aerial

2 x small SMA aerials

*Please check with Glensound on network compatibility