



GS-MPI004HD



GS-MPI005HD

### Broadcasters' Mobile Phones

*A Range Of 2G and 3G (UMTS) Phones For Broadcast*

The GlenSound Broadcasters' Mobile Phones allows integration of 3.5kHz 2G and 7kHz 3G (UMTS) telephone calls into the broadcast chain. Three portable units and five subrack units elevate the mobile phone into a broadcast specification product for outside reporting, comms, or backup.

### Key Points

- GlenSound HD Voice offers 7kHz audio bandwidth (HD Voice units) on 3G (UMTS)
- Quad band GSM phone
- Complete RF shielding of all audio circuits to prevent interference in signal path
- XLR mic input with finely calibrated compressor / limiter circuit to avoid input clipping. (HD Voice units feature compressor indicator)
- 6.35mm headphone connection
- Individual send and return connections on XLR with independent level controls. Gives 100% separation of send and return circuits
- Tri-colour signal strength LED (HD Voice Units)
- Portable units operate on 4 x AA batteries, or via external plug top power supply



# Contents

---

## Mobile Phone Information, Range and Overview

- 4**     **HD Voice Information**  
An Introduction to HD Voice features
- 5**     **2G Features**  
Common features on all models
- 6**     **GS-MPI 2G Range Overview**  
The original GS-MPI Broadcasters' Mobile Phones
- 7**     **GS-MPI 3G Range Overview**  
Glensound HD Voice Broadcasters' Mobile Phones

## 2G Broadcasters' Mobile Phones

- 8**     **GS-MPI004**  
Portable Broadcasters' Mobile Phone
- 9**     **GS-MPI005**  
1U Rackmount Broadcasters' Mobile Phone
- 10**    **GS-MPI006**  
1U Rackmount Broadcasters Mobile Phone
- 11**    **GS-MPIFW**  
Broadcasters' Mobile Phone with Twin Four Wire/IFB
- 12**    **GS-MPIFW Block Diagram**

## Follow



<http://www.facebook.com/pages/Glensound-Electronics-Ltd>



<http://www.linkedin.com/in/glensoundelectronicsLtd>



<https://twitter.com/#!/GlensoundLtd>



<http://www.youtube.com/user/GlensoundElectronics>

## 3G (UMTS) Broadcasters' Mobile Phones

- 13**    **GS-MPI004HD**  
HD Portable Broadcasters' Mobile Phone
- 14**    **GS-MPI005HD**  
HD 1U Rackmount Broadcasters' Mobile Phone
- 15**    **GS-MPI007HD**  
HD 1U Rackmount Broadcasters Mobile Phone with Display
- 16**    **Remotes**  
Hardware and Software remotes for GS-MPIP005HD and GS-MPI007HD
- 17**    **GS-MPITBU**  
2G or 3G (optional) 1U Broadcasters' Mobile Phone and Digital TBU
- 18**    **RECCE HD**  
HD Portable Mobile Phone and Commentators Unit

## Accessories, Images and Specifications

- 19**    **GS-MPIAccessories**
- 20**    **GS-MPI004HD Images**
- 22**    **GS-MPIApplications**
- 23**    **Specifications**

### Online

<http://www.glen sound.co.uk>

[sales@glen sound.co.uk](mailto:sales@glen sound.co.uk)

### Contact

Glen sound Electronics Ltd  
6 Brooks Place  
Maidstone  
Kent  
England  
ME14 1HE

Tel: +44 (0) 1622 753 662  
Fax: +44 (0) 1622 762 330

## GlenSound HD Voice Features



**50Hz - 7kHz  
Bandwidth**

HD features

## GlenSound HD Voice Introduction to HD features



- **GlenSound HD Voice - 7kHz Audio Bandwidth**  
GlenSound HD Voice is available on many networks offering 3G(UMTS). Connecting two GlenSound HD Voice broadcasters mobile phones across a 3G (UMTS) network gives 7kHz of audio bandwidth.
- **Features 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 (50-7000Hz) (current 2g narrow band speech codec 300-3400Hz.)
  - 12.65 kbit/s or higher coding bit-rates provide high quality wideband audio.
  - HD Voice wideband codec produces superior results than the best narrow band codec (12.2 kbit/s).
- **GlenSound HD Voice Connects As A 3G (UMTS) Voice Call**  
The GS-MPI004HD connects as a 3G (UMTS) voice call, not a data call.
  - Bandwidth is consistent once connected. On data connections, bandwidth varies during a connection, on a HD Voice call it does not, so 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 the data package.
- **Configurable To Operate On 2G Or 3G (UMTS)**  
Calls can be locked to 2G or 3G (UMTS) only with any calls made on the 3G (UMTS) network automatically dropping down to 2G when moving outside a 3G (UMTS) area if required. The GS-MPI004HD also operates as a standard 2G mobile phone. Even so, improvements in call quality can be heard when operating on the 2G network due to advances in performance and noise reduction capabilities found on the GlenSound HD Voice systems.
- **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 due to reduced background noise.
- **Networks Available**  
HD Voice is network dependent. There are currently over 31 countries offering the HD Voice service, with additional countries being added regularly. Please look at the GlenSound website for the latest information.
- **Cost Effective Upgrade**  
GlenSound HD Voice is one of the most cost effective upgrades that can be made to improve audio quality.

## GS-MPI Broadcasters Mobile Phones 2G features on all models

2G  
Features On  
All Models



300Hz - 3.4kHz  
Bandwidth

2G features



- **Quad Band**  
The GS-MPIs contain a quad band mobile phone that will allow the unit to be used in most places of the world where standard GSM networks are available. If your own mobile phone works, the GS-MPIs will work too. The SIM card fits into a front panel slot and is recessed to avoid accidental removal during operation.
- **Broadcast Headphone Connection**  
There is a 6.35mm headphone socket for connecting a pair of headphones or a headset. The units are optimised for an impedance from 200 - 2000 ohms. As the MPIs will often be used in noisy environments, a high output level is available using a variety of broadcast headphones and headsets.
- **Independent Send & Return Audio Connections**  
GSM telephone balancing is offered with separate XLR audio connections for the send and return signal. The GS-MPIs offer 100% separation between the send and return paths. The send connection is on a balanced XLR (switchable with a mic input on the GS-MPI004). The return is on a balanced XLR and contains the return audio (caller) only. There is also an independent level control for the send and return audio.
- **RF Shielding Of Audio Circuits**  
A carefully designed RF shield isolates the audio circuits from all radio frequency interference. The GS-MPIs own RF does not interfere with its own audio circuits ensuring that typical GSM RF interference is never heard.
- **Auto Answer**  
There is a configurable auto-answer, from 'off' to 9 rings.
- **Memory Dialing**  
There are 10 memories for instant memory dialling of popular numbers.
- **Simple LED Status Indication**  
A red and green LED indicate network and call status.
- **SMA Aerial Connection**  
A standard SMA aerial connection is provided for the attached right angle antenna (GS-MPI004) or a separate extension aerial (all rack units).

2g features (all models)

The  
GS-MPI 2G  
Range



The GS-MPI 2G range have been specifically designed for the needs of a modern broadcaster. They are quad band GSM mobiles with broadcast specification input and output interfaces with full RF shielding of all audio circuits to ensure interference free audio. The digital nature of the system provides complete separation of the send and return circuits that each have a dedicated audio connection.

- **GS-MPI004**  
Portable Broadcasters' Mobile Phone - 2G



- **GS-MPI005**  
Rack Mount Broadcasters' GSM Phone - 2G



- **GS-MPI006**  
Rack Mount Broadcasters' GSM Phone With ISDN - 2G



- **GS-MPIFW**  
Rack Mount Broadcasters' GSM Phone With Twin Four Wire - 2G



2G range



## The GS-MPI 3G (UMTS) Range



3G (UMTS)

## GlenSound GS-MPI/HD 3G(UMTS) GlenSound HD Voice

GlenSound HD Voice offers the broadcaster facilities never before available. In the GlenSound Broadcasters' Mobile Phones, GlenSound HD Voice adds a significant audio quality increase to 7kHz. GlenSound make this new technology available in portable units for low cost remotes and immediate on-the-spot broadcasts from reporters. It is also available in a compact commentary mixer as a sports commentary unit. A studio unit with remote control and aerial extension options complete the line up.

- **GS-MPI004HD**  
Portable GlenSound HD Voice Mobile Phone



- **GS-MPI005HD**  
Rack Mount GlenSound HD Voice Phone



- **GS-MPI007HD**  
Rack Mount GlenSound HD Voice Phone With Display



- **GS-MPI005HD/REMD & GS-MPI005HD/REMS**  
Hardware and software remotes for rack mount GlenSound HD Voice Phones



- **GS-MPITBU**  
Broadcasters' Mobile Phone with Digital TBU



- **RECCE HD**  
Portable Commentary Mixer With  
GlenSound HD Voice Mobile Phone





Further images on pages 16 & 17

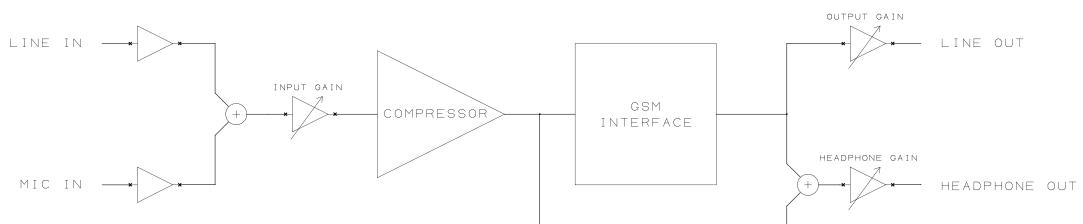
- Broadcast Microphone Connection**

There is an XLR socket for connection of dynamic handheld or headset microphones. The GS-MPI004 can therefore be used for interviewing with handheld microphones. The mic input is switchable with the line input.
- Compressor/Limiter**

As the GS-MPI004 will often be used for sports reporting where high input levels are common, the mic input contains GlenSound's dedicated compressor/limiter circuit that ensures incoming audio is always clear from distortion.
- Portable Belt Pack Case**

The GS-MPI004 is in a heavy duty belt pack style case. The exposed sides are nylon dipped for maximum resistance to damage. The case overhangs to protect all controls. A belt clip is included and the corners feature holes for shoulder straps or security fixings.
- Powering Options**

The GS-MPI004 operates from 4 x AA batteries in a convenient 'snap in' cartridge. Regular batteries are used so that an operator can easily obtain them and be ready to broadcast without having to wait for a unit to charge. High quality batteries give approximately 4 hours of continuous talk time. An optional DC plug top power supply is available.



GS-MPI004 Block Diagram



## GS-MPI005

### Rack Mount Broadcasters' Mobile Phone

GS-MPI005



- **One To Three Mobile Phones In A 1U Subrack**  
Our 1U subrack Broadcasters' Mobile Phone can hold between 1 to 3 GSM phone units. The extra phone modules can easily be added at any time. Unit pictured is with 3 phones in 19" rack mount.
- **Audio Inputs And Outputs**  
The rear panel accommodates the line input and output along with the SMA aerial connection. Headphone socket is front panel mounted per phone.
- **Extension T Bar Aerial Included**  
The rack mount versions of the Broadcasters' Mobile Phone' include a standard SMA aerial connection but with an extension T-Bar aerial on a 3m lead.
- **Built In Power Supply**  
Internal switch mode power supply is rated from 100v - 240v. This will power all three phones if fitted.



Rear of GS-MPI005 with 1 phone module fitted



**NB:**

The block diagram of the GS-MPI005 is the same as the GS-MPI004 on the previous page, but with a line input only.



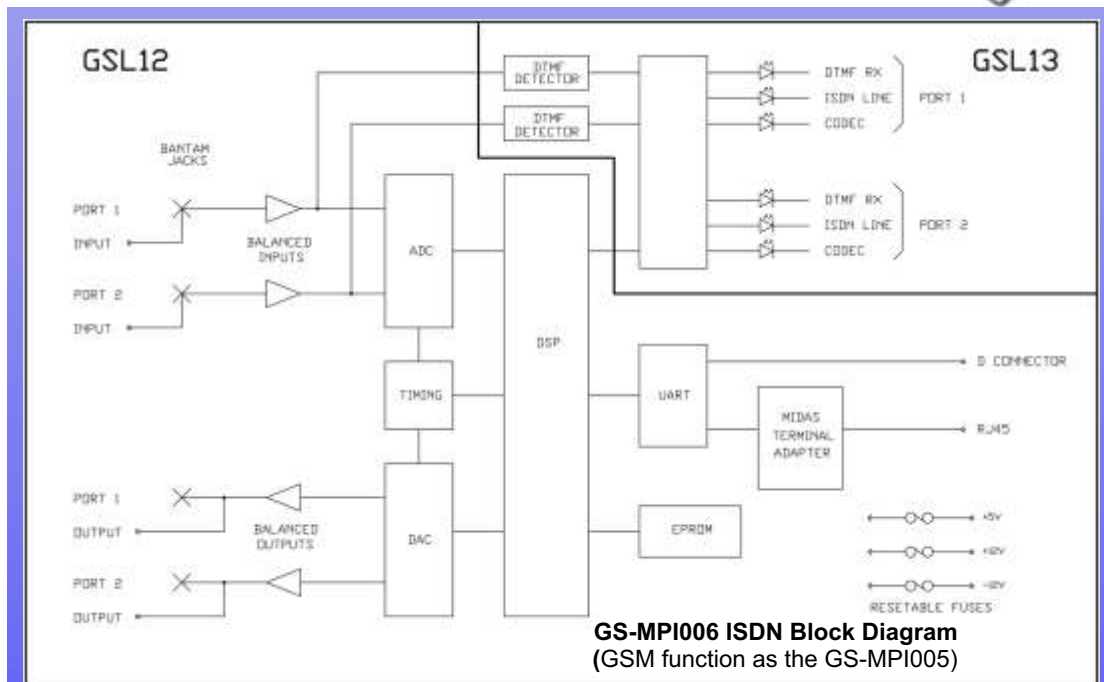
GS-MPI006



20 telephone



- Contains 2 x GS-MPI GSM Mobile Phones**  
Two separate GS-MPI GSM mobiles phones are included (19" rack mount).
- Contains 2 x ISDN Codecs**  
A single ISDN S bus connects the ISDN circuits to 2 separate G711/G722 codecs. The G722 algorithm offers the maximum in worldwide compatibility.
- Make And Receive Ordinary Telephone Calls Via ISDN(G711)**  
The G711 coding is the telephone standard allowing you to dial and receive calls from normal POTS telephone lines.
- Use ISDN Audio Circuits For Dialling And Control Using DTMF**  
The ISDN circuits are controlled via DTMF either from connected phone handsets or from an external DTMF remote (available separately).
- 'Talk To You' Function**  
ISDN status & instructions are given via an online spoken message, making dialling and investigating status simple.
- Remote Control Available Via RS232 On Front Panel 9 Pin D-Type**



## GS-MPIFW

### Broadcasters' Mobile Phone With Twin Four Wire/IFB

GS-MPIFW



20 telepho



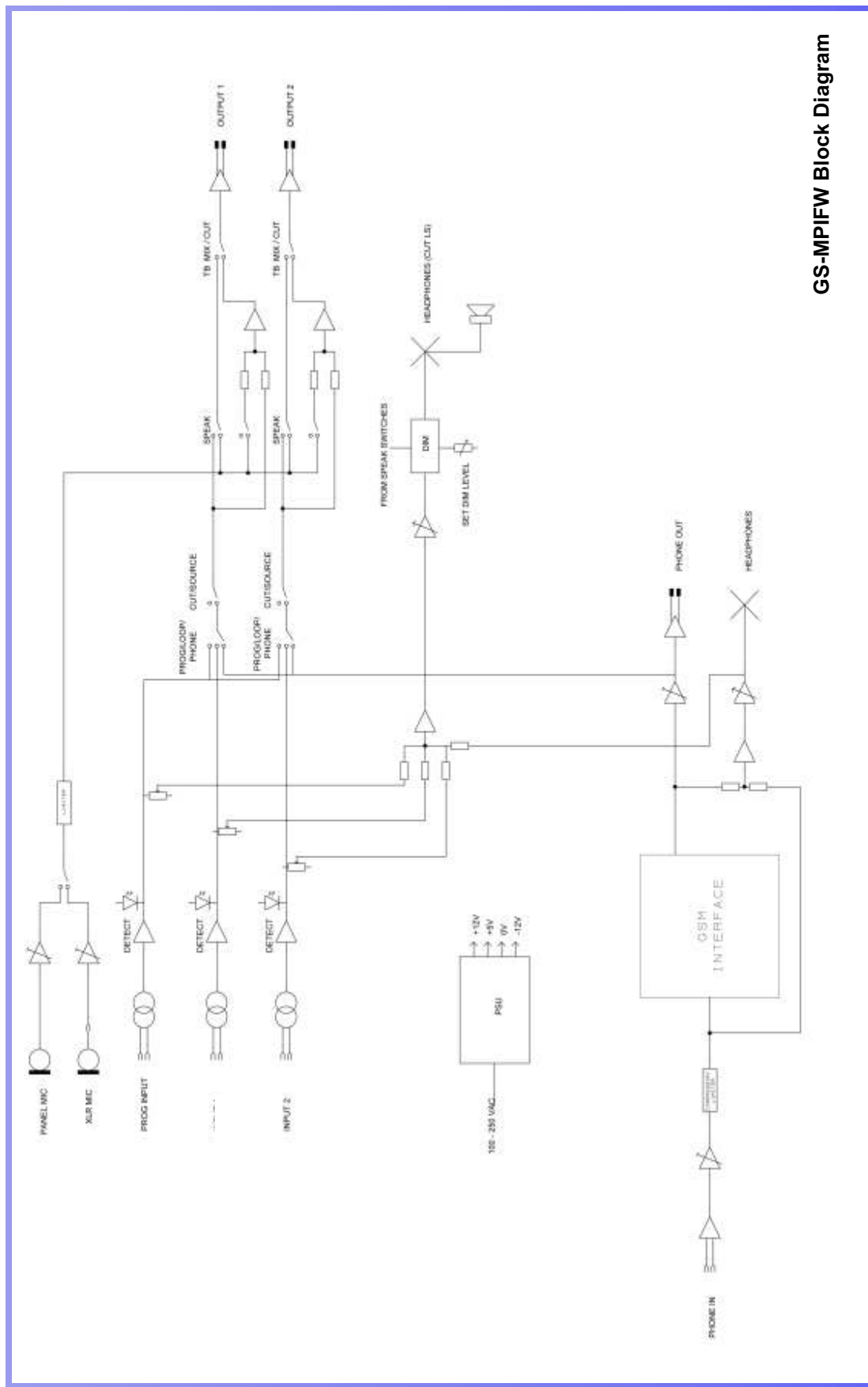
- **Single Broadcasters' Mobile Phone**  
A single GS-MPI module with the standard GSM features (19" rack mount).
- **Two x Four Wire/IFB Circuits**  
Each circuit can be used independently in four wire mode.
- **Versatile Four Wire Output Options (Programme, GSM, IFB)**
  1. An external programme input can be switched onto either four wire output.
  2. The incoming audio from the GSM call can be switched onto either four wire output.
  3. One circuit's four wire input can be switched to its output.
- **Interrupted Feed Back**  
When the talk button is pressed, the talk audio can either replace the selected output or mix over it (IFB).
- **LEDs & Loop Outputs**  
Green LEDs give visual indication of return audio and a D-type connector on rear with loops is active when talkback 1 or 2 are selected.
- **Two Position Speak Key**  
The speak keys are in push to talk mode when pushed down or latch when pushed up. There is a front panel mic or connection for external mic.
- **Front Panel Monitoring**  
There is a front panel speaker with a 6.35mm headphone socket that mutes the speaker when headphones are connected. Adjustable volume control. Programme, phone and four wire inputs are all mixed here for monitoring.



GS-MPIFW  
Block  
Diagram



2U telepho



GS-MPIFW Block Diagram

## GS-MPI004HD

### GlenSound HD Portable Broadcasters' Mobile Phone

GS-MPI  
004HD



#### GlenSound HD Voice Standard Features (all units)

- **7kHz Audio Bandwidth**  
On compatible 3G (UMTS) networks, calls connect using GlenSound HD Voice for 50Hz - 7kHz audio bandwidth.
- **Compressor Indicator**  
To assist with input gain level settings, there is an indicator LED showing if the compressor limiter circuit is active.
- **3G (UMTS) Signal Indication**  
There is an indication on the availability of a 3G (UMTS) network. This must be illuminated for a HD Voice call to be available.
- **Advanced Options**  
Engineer level options allow configuration of advanced options. The following can be adjusted;  
**1)** Auto switching from 2G to 3G (UMTS), **2)** Select 2G or 3G (UMTS) only  
**3)** Turn Echo Canceller ON or OFF, **4)** Turn Noise Compressor ON or OFF  
**5)** Turn Peak Compressor On or OFF
- **All The Features Of The Standard GS-MPI004**  
All the standard functions of the standard 2G GS-MPI004. This means that if there is no 3G (UMTS) signal available or the network does not offer HD Voice, then it will function as a normal quad band GS-MPI004.
- **Signal Strength Meter**  
A single tri-colour LED indicates signal strength - three signal levels, plus no signal available (Not GS-MPI007HD).

#### Network Availability

HD Voice (AMR-WB) must be available on the phone network for a GlenSound HD Voice call to connect. This is available in many countries around the world. Please check [www.glenSound.co.uk](http://www.glenSound.co.uk) for the latest details.

3G (UMTS)



**GS-MPI005  
HD**



- One - Three HD Voice Phones In A 1U Subrack**  
The 1U subrack Broadcasters' Mobile Phone can hold between 1 - 3 3G (UMTS) phone units. The extra phone modules can easily be added at any time. Unit pictured is with 2 phones in a 19" rack mount.
- Audio Inputs And Outputs**  
The rear panel accommodates the line input and output along with the SMA aerial connection. Headphone socket is front panel mounted per phone.
- Upgrade to N-Type Aerial**  
Aerial upgrade modification for HD units can add a N-type connector in place of the SMA connection. This will allow aerial placement up to 50m away.
- Extension T Bar Aerial Included**  
The rack mount versions of the Broadcasters' Mobile Phone include a standard SMA aerial connection with a 2.5m t-bar extension.
- Built In Power Supply**  
Internal switch mode power supply is rated from 100V - 240V. This will power all three phones if fitted.
- Option for 12V Powering**  
Upgrade the unit by adding a 12V DC external power input.
- Full Remote Control**  
Each phone can be controlled remotely using either the GS-MPI005HD/REMD desktop controller or by using the software (see page 16 for full details). This allows the subrack to be installed in the rack room and operated by a user in the studio.
- Plus All The Standard HD Voice Features As Mentioned On Page 13**



3G (UMTS)



## GS-MPI007HD

### HD Rack Mount Broadcasters' Mobile Phone with Display

GS-MPI  
007HD



- **One or Two Mobile Phones in a 1U Subrack**  
The GS-MPI007HD can hold either 1 or 2 3G (UMTS) phones. If supplied with only 1 phone, a second phone can be user retro-fitted at a later date.
- **Fully Featured Display**  
To enable easy identification of called numbers and setup, a back-lit graphical display is included for each phone.
- **Signal Strength Meter**  
The display includes a bargraph showing signal strength.
- **Audio Level Indication**  
Two 4 LED PPM's are included for each phone. One PPM indicates the audio level being sent to the phone and the other shows the level being received.
- **Full Remote Control**  
Each phone can be controlled remotely using either the GS-MPI005HD/REMD desktop controller or by using the GS-MPI005HD/REMS software (see page 16 for full details). This allows the subrack to be installed in the rack room and operated by a user in the studio.
- **Audio Inputs and Outputs**  
The rear panel accommodates the line input and output. A headphone socket is provided on the front of the panel for monitoring.
- **Aerial Connectors**  
As standard, a SMA aerial connector is fitted for each phone module. This can be changed for an N-Type if required. This will allow aerial placement up to 50m away if required.
- **Plus All The Standard HD Voice Features As Mentioned On Page 13**



3G (UMTS)



## REMOTES



### REMOTE CONTROLS

The GS-MPI005HD and GS-MPI007HD can be remotely controlled by either a hardware or a software remote control. Each mobile phone module is operated by one remote control (either hardware or software) where the user can:

- make and receive phone calls with the facility to log incoming and outgoing calls
- store important numbers
- see call duration
- record missed calls

Full set up of each module can be managed remotely, allowing the subrack to be installed in the rack room while remotely controlling each module via either the hardware or software controls.

#### GS-MPI005HD/REMD - Hardware Remote

- **Display**  
The remote has a display which shows the number that is being dialled and the set up options for the phone.
- **Data Connection**  
Data between the remote and the rack is on normal CAT5 cable with RJ45 connectors, using RS422.
- **Power Supply**  
Power for the unit is available on the RJ45 connector supplied by the rack. Alternatively, a local 5V DC input is available to power the unit, this input is via an USB connector.



#### GS-MPI005HD/REMS - Software Remote

- **Display**  
One application is required per module allowing calls to made and received. Software is for Windows machines.
  - Number of the sim card.
  - 2G or 3G indicator (depending on configuration).
  - Signal strength.
  - Fully configurable by ticking the desired settings.
  - Up to 100 number call history
  - Up to 600 contact phone book
- **Data Connection**  
Data between the remote and each module is via a standard USB or RS422 (using either a RS232 to RS244 converter or a USB to RS422 converter) connected between the rear of the module and the computer.





## GS-MPITBU

### Broadcasters' Mobile Phone and Digital TBU

## GS-MPITBU



- Two Connection Options In One Unit**  
 The GS-MPITBU features a digital TBU and a GlenSound Broadcasters' Mobile Phone. Both lines can be connected so that when there is the need for a quick change, a simple flick of the routing switch changes from TBU to mobile or vice versa.
- Digital Telephone Balancing Unit**  
 The TBU is a high quality digital unit offering excellent separation figures on analogue POTS lines.

Line connection is via a standard RJ11 connector to a fixed POTS line. A standard keypad is used on the front panel where a single on/off hook switch is used to dial and receive calls. A large red LED illuminates when connected and turns off when disconnected. A sounder provides indication of incoming calls which can be disabled via the switch for studio environments. Using presets, separate audio level controls for both the input and output of the TBU can be established.
- GS-MPI005 or GS-MPI005HD Module**  
 Either a GS-MPI005 or a GS-MPI005HD module can be installed into the sub rack with all the standard GlenSound Broadcasters' Phone features.
- Audio Routing**  
 Using a low profile 2 way switch located in the centre of the front panel, incoming and outgoing audio can be routed to either the POTS TBU or the mobile phone module.
- Audio Inputs and Outputs**  
 The common electronically balanced XLR input and output is located on the rear of the panel. A 6.35mm jack headphone socket is provided on the front of the mobile phone panel for listen only monitoring.
- Full Remote Control of Mobile Phone**  
 Should a GS-MPI005HD phone module be used, either the hardware or software remote can be used.
- Extended Aerial Option**  
 As standard, an SMA aerial connector is fitted on phone module for aerial location up to 3m away. This can be changed for an N-Type to allow aerial connections up to 50m away.
- Power**  
 Standard mains 100-240 Volts (or optional 12V PSU) is used to power all features of the sub rack.

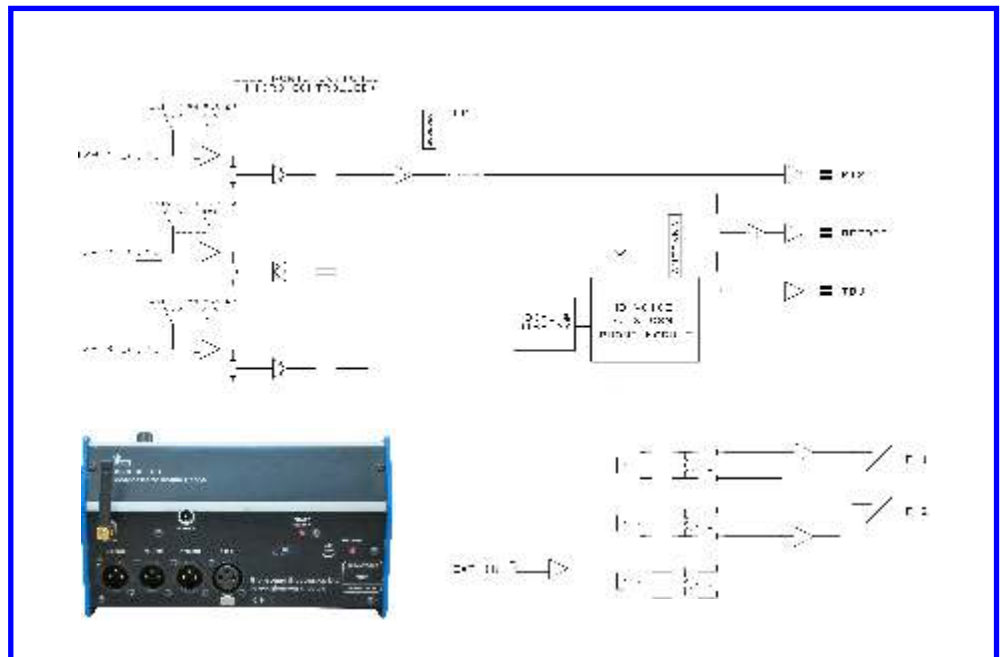


**RECCE  
HD**



30 RECCE

- GlenSound HD Voice Phone**  
The standard features of a GlenSound HD Voice phone are included. The dialler and display add the functions offered by the GS-MPI005HD/REMD.
- Battery Powered Portable Unit**  
The RECCE HD is a highly portable unit powered by 6 x 'C' cells.
- 3 Channel Mixer**  
An inbuilt 3 channel mixer allows up to 3 sources to connect to the RECCE HD. Each mixer input can accept either a mic or line level source.
- PPM**  
A 7 LED PPM clearly indicates audio levels being sent to the mobile circuit.
- Compressor / Limiter**  
A high quality compressor/limiter circuit is included to prevent overloading of the outgoing mobile circuit.
- 3 Input Headphone Amp**  
The internal headphone amp has 3 audio sources. These are the outputs of the RECCE, the incoming audio from the studio and a local 'EXT' input.
- Local Outputs**  
Balanced XLR outputs are available for connection to other equipment. The 3 outputs are 'Mix', 'Record' and 'Phone Out' (output directly from the phone module).



### Accessories All Models



#### Accessories

- **GS-MPI005/CASE**  
Additional hard plastic case for GS-MPI004 and GS-MPI004HD (One supplied with GS-MPI004HD as standard)
- **GS-MPI005HD 12V**  
12v DC power option on GS-MPI005HD



#### Aerials SMA

A SMA aerial comes as standard and is suitable for most applications.

- **GS-MPIHD/ATN1**  
Standard right angle stubby aerial with SMA connector (supplied as standard with GS-MPI004 and HD).
- **GS-MPIHD/ATN2** – Standard 2.5m t-bar aerial with SMA connector (supplied as standard with GS-MPI005 and HD).
- **GS-MPIHD/ATN3**  
Optional mag mount 3m aerial for use with SMA connectors.



#### Aerials N Type

If a signal cannot be found where the broadcasters' phone is to be located, a N-Type connector can be fitted to allow the use of an extended aerial up to 50m away from the mobile phone.

To allow for antenna connections over 3 metres from the rack mount Broadcasters' Mobile Phones, a 'N Type Antenna Upgrade Kit' is required. This consists of a bulkhead connector, male and female N type connector for the cable and the N Type mast mounting antenna, then add the length of the appropriate cable, either GS-MPIHD/NA1 (up to 25m) or GS-MPIHD/NA2 (up to 50m).

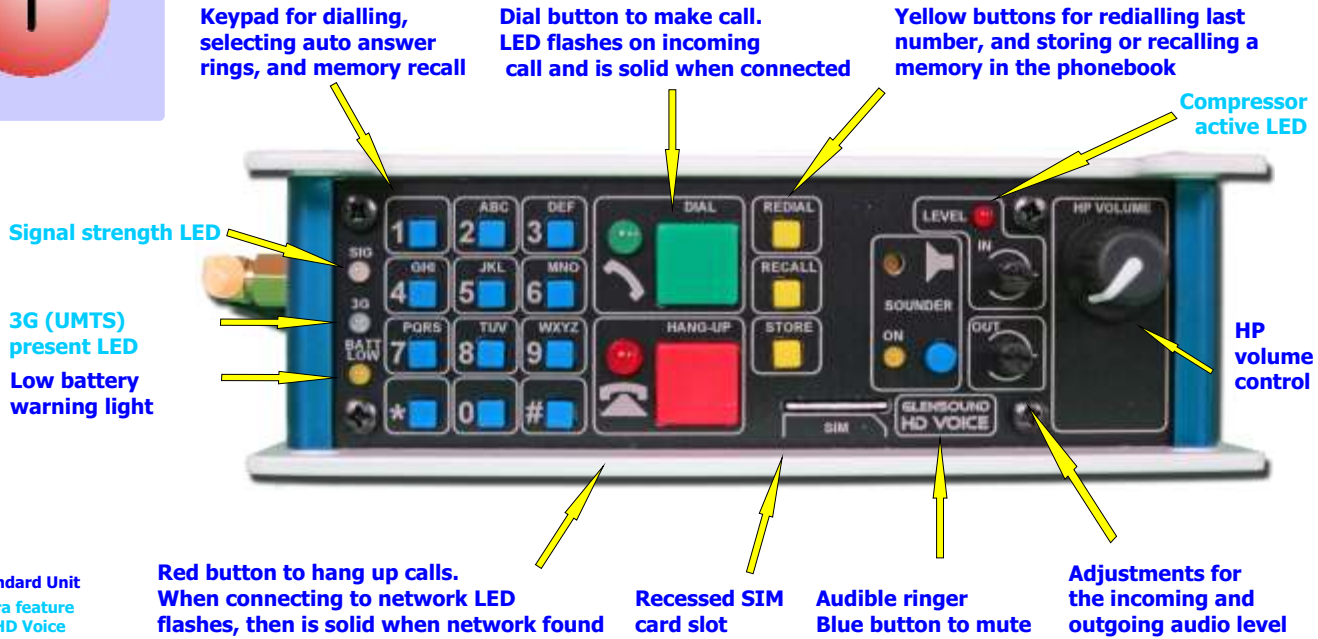
- **GS-MPIHD/NTC**  
Aerial upgrade modification for HD units to add N-type connector in place of SMA.
- **GS-MPIHD/ATNN**  
N-Type Antenna.
- **GS-MPIHD/NA1**  
Aerial cable option 1.  
Flexible cable giving 25m range.
- **GS-MPIHD/NA2**  
Aerial cable option 2.  
Semi-flexible cable giving 50m range.



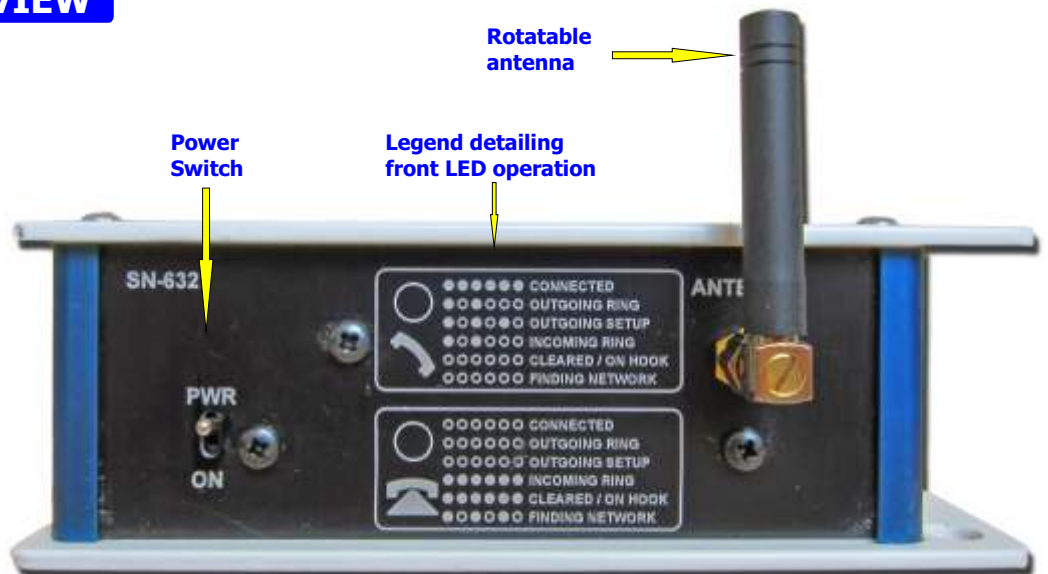
## GS-MPI004 HD Images



### FRONT VIEW



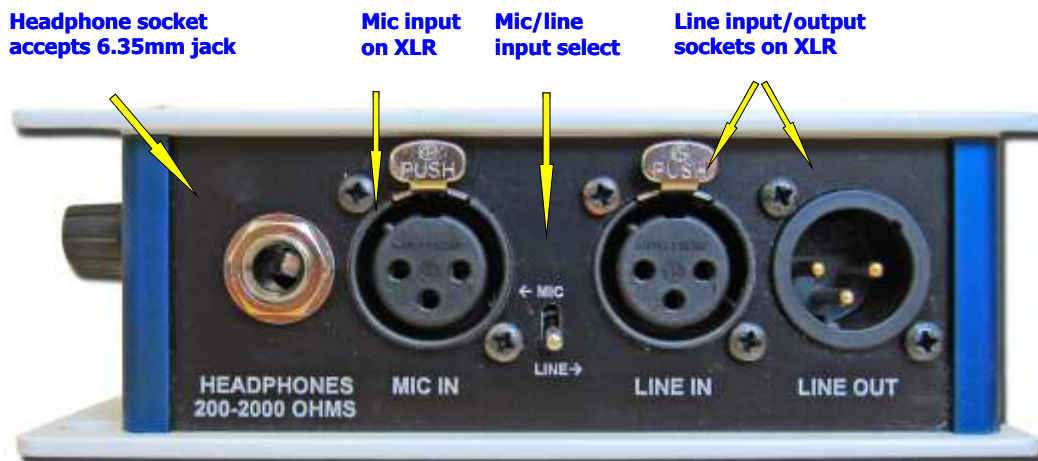
### LEFT SIDE VIEW



**REAR  
VIEW**



**RIGHT  
SIDE  
VIEW**



## Applications



gs-mpi range



### **GS-MPI004/HD**

*Portable Broadcasters' Mobile Phone*

- Sports and news reporters for quick, live interviews without the need to carry any heavy equipment.
- For outside broadcast reports in remote locations.
- A low cost back up. Should an outside broadcast line fail, the GS-MPI004/HD is a simple alternative.
- For use in remote applications where clean audio is required without RF interference.
- For TV news presenters IFB feeds.
- Direct contributions.

### **GS-MPI005/HD and GS-MPI007HD**

*Rack Mount Broadcasters' GSM Phone*

- For integrating a GSM line into an outside broadcast vehicle or studio.
- For use as an extra or backup talk back channel.
- Ideal as the phone in point for part-time or temporary studios to avoid the cost of permanent line connections.
- If 100% separation is required between send and return circuits as this is not possible on normal phone lines.

### **GS-MPI006/HD**

*Rack Mount Broadcasters' GSM Phone With ISDN/HD Voice*

- Space saving by putting multiple outside source comms channels (GSM & ISDN) into a 1U subrack. This is particularly relevant in outside broadcast vehicles.
- Back up talk back or broadcast channel with GSM should the ISDN fail.

### **GS-MPIFW**

*Rack Mount Broadcasters' GSM Phone With Twin Four Wire*

- A sensible mix of four wire system with the GSM phone for an outside broadcast vehicle.
- Backup for studios and OB vehicles.
- Provides simple talkback facilities for fly aways.
- For seamless integration of local talk back facilities to a remote studio.

### **GS-MPITBU**

*Broadcasters' Mobile Phone and Digital TBU*

- A low cost back up. Should an outside broadcast line fail, the GS-MPITBU offers two backup options in a single unit.
- For TV news/presenters/commentators IFB feeds.
- Suitable for applications with POTS and mobile phone connections

### **RECCE HD**

*HD Portable Mobile Phone and Commentators Unit*

- Sports and news reports and live events.
- For multiple commentators contributing to one programme.
- Ideal for very small self OP studios.
- Suitable for press rooms and contributors to programmes.

**Specifications**



**GENERAL SPECIFICATIONS**

**2G VERSIONS**

GS-MPI004  
GS-MPI005  
GS-MPI006

GS-MPIFW

GS-MPITBU

Portable belt pack style  
19 inch 1RU including 1 x GSM telephone  
19 inch 1RU including 1 x GSM telephone & twin G722/G711 ISDN codec  
19 inch 1RU including 1 x GSM telephone and 2 x IFB four wire circuits  
19 inch 1RU including 1 x GSM telephone and 1 x digital TBU

**3G VERSIONS**

GS-MPI004HD  
GS-MPI005HD and GS-MPI007HD  
RECCE HD

Portable belt pack style  
19 inch 1RU including 1 x HD Voice telephone  
1 x HD Voice telephone and 1 x three input commentary mixer

**AUDIO SPECIFICATIONS - ALL UNITS**

LINE IN / OUT CONNECTORS  
LINE INPUT LEVEL  
INPUT GAIN CONTROL FOR STANDARD UNITS  
INPUT GAIN CONTROL FOR HD VOICE UNITS  
HEADROOM  
OUTPUT LEVEL  
OUTPUT GAIN CONTROL  
MAX OUTPUT LEVEL (Line out with XLR)  
HEADPHONE SOCKETS  
HEADPHONE IMPEDANCE

Neutrik XLRs  
0dB  
+/- 10dB  
+/- 15dB  
26dB  
0dB  
+/- 10dB  
+13dBu  
6.35mm jack socket  
200-2000 ohms

**2G GSM SPECIFICATIONS**

AUDIO FREQUENCY RESPONSE  
QUAD BAND GSM FREQUENCIES  
NETWORK  
RF OUTPUT POWER  
AERIAL CONNECTOR TYPE

Telephone networks provide 300Hz to 3.4 kHz audio bandwidth  
850 MHz, 900 MHz, 1800 MHz, 1900 MHz  
Will operate on any mobile phone network, with any SIM card  
2 Watts  
SMA

**3G (UMTS) SPECIFICATIONS**

AUDIO FREQUENCY RESPONSE  
ALGORITHM  
RF OUTPUT POWER  
AERIAL CONNECTOR TYPE

50Hz to 7kHz in HD Voice mode  
HD Voice is AMR-WB  
2 Watts  
SMA (N-Type to special order)

**POWER**

GS-MPI004/HD - BATTERIES

4 x AA cells. When 'low battery' LED flashes there is approx. 30 minutes remaining  
+9 to +12 volts. 2.5mm barrel connector, centre +ve  
2 x D cells.

- EXTERNAL DC INPUT

RECCE HD - BATTERIES

GS-MPI005, GS-MPI006, GS-MPI007HD GS-MPIFW,

GS-MPITBU- INTERNAL SWITCH MODE POWER SUPPLY

100-240V 50-60Hz

**SPECIFIC SPECIFICATIONS**

**GS-MPI004/HD (PORTABLE GSM/HD VOICE)**

HEIGHT 45.7mm  
WIDTH 148.6mm  
DEPTH (Excluding Connectors) 138.4mm  
MICROPHONE INPUT Neutrik XLR  
MIC INPUT LEVEL -54 dB

**GS-MPI005/HD (RACKMOUNT GSM/HD VOICE)**

HEIGHT 1RU  
WIDTH 290mm (19")  
DEPTH (Excluding Connectors) 258mm

**GS-MPIFW (RACKMOUNT GSM WITH 4W)**

HEIGHT 1RU  
WIDTH 290mm (19")  
DEPTH (Excluding Connectors) 208mm  
FOUR WIRE CIRCUITS 2

**GS-MPI006 (RACKMOUNT GSM WITH ISDN)**

HEIGHT 1RU  
WIDTH 290mm (19")  
DEPTH (Excluding Connectors) 256mm  
ISDN Twin G722 and G711  
ISDN DIALLING DTMF via phone or external remote  
REMOTE RS232  
BUS TYPE S Connector

**GS-MPI007HD (RACKMOUNT WITH DISPLAY)**

HEIGHT 1RU  
WIDTH 290mm (19")  
DEPTH (Excluding Connectors) 258mm

GS-MPITBU

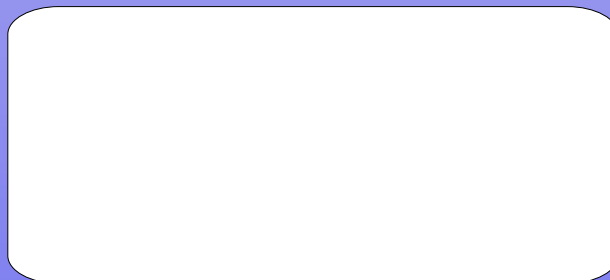
RECCE HD

Please contact GlenSound for details.  
Please contact GlenSound for details.





Your local dealer:



E & OE

**Glensound Electronics Ltd.**  
6 Brooks Place, Maidstone, Kent, ME14 1HE. UK  
Tel: +44 (0) 1622 753662 Fax: +44 (0) 1622 762330  
Email: [sales@glensound.co.uk](mailto:sales@glensound.co.uk) [www.glensound.co.uk](http://www.glensound.co.uk)

[sales@glensound.co.uk](mailto:sales@glensound.co.uk)