

Broadcast Equipment Manufacturers

Paste 201
Glensound Telephone balance Unit
Handbook



GLENSOUND ELECTRONICS LIMITED

# **Paste 201 HANDBOOK**



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## **Overview**

The Glensound Paste 201 is a line powered Telephone Balance Unit designed to interface to analogue telephone lines. It features built in metering and a 2:1 compressor to control levels sent to the line.

One balanced analogue input and one balanced analogue output is provided.

Provision has been made for a telephone handset for call set up.

The Paste 201 is available in a beltpack (Paste 201) or twin 19-inch 1U sub-rack mounted unit (Paste 201x2).



## **DECLARATION OF CONFORMITY**

Manufacturers

Name: Glensound Electronics Ltd

Address: 6 Brooks Place, Maidstone, Kent, ME14 1HE

Equipment

Model Number GS Paste 201 TBU

Description Telephone Balance Unit

Year of Manufacture 2011

## EMC DIRECTIVE 2004/108/EC

## Standards to which conformity is declared

Emissions EN 61000-6-3 Immunity EN 61000-6-1 Telephone Network ETSI ES 203 021

I the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

Signed

Full Name Gavin George Davis

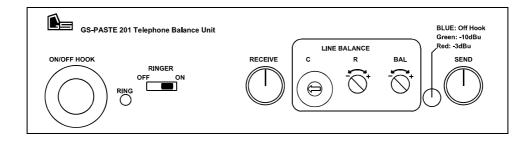
Position in Company Managing Director

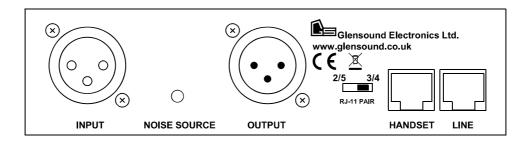
Date 31/03/2011

Place Maidstone Kent

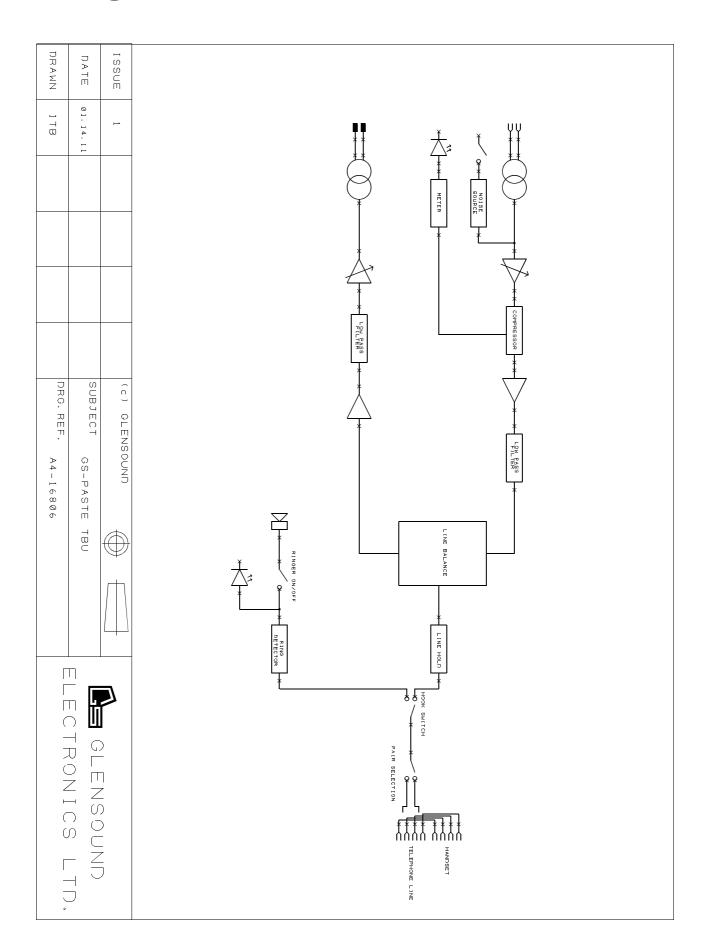
**Declaration of Conformity number DoC-1004** 

# **Panel Drawings**





# **Block diagram**



## **Description**

#### **Front Panel**

### **Metering / Status LED**

A single 3 colour LED provides level metering for the audio being sent to the telephone line.

Colour	Level on line / Status
Blue	Off hook and level < -10dBu
Green	> -10dBu < -3dBu
Red	>-3dBu

#### **Gain controls**

Two level controls allow +/-10dB of gain adjustment for send and receive signals.

### On hook / Off hook switch

An indicating push button provides on hook /off hook control.

### **Ring indication**

An internal sounder and a panel mounted red LED are provided to indicate an incoming call. The sounder may be switched off for silent operation.

## Ringer On / Off switch

When on the internal ringer will ring to indicate an incoming call. When off the unit will be silent

### Line balance controls

Three controls, Capacitance, Resistance, and Balance, are provided to match the Paste 201 to the impedance of the telephone line. A built in noise source is provided to aid adjustment.

### **Rear Panel**

#### **XLR Input connector**

Balanced audio input with a nominal line-up level of 0dBu. Maximum input level +18dBu

### **XLR Output connector**

Balanced audio output with a nominal line-up level of 0dBu. Maximum output level typically +6dBu on a typical line.

#### **Noise source**

Press for longer than 1 second to enable the built in noise source. Press again to disable the built in noise source.

#### **Line connector**

Connect a standard RJ-11 lead from this port to the telephone line.

## **Telephone connector**

Connect a telephone to this port to allow call dialling and set up. This is not required if the Paste 201 will only be used for receiving calls.

# **Operation**

## Making a call

Connect the Paste 201 to the telephone line and audio interfaces as required.

Connect a telephone to the 'handset' socket on the rear panel.

Dial the number required using the telephone.

Divert the call to the TBU by pressing the off hook button on the TBU. Place the telephone on hook.

Adjust the send level control so that the level LED is green.

Adjust the receive level control as required.

When the call has ended, hang up the TBU by pressing the on hook / off hook button.

## Receiving a call

To answer an incoming call press the on hook / off hook button.

## **Balancing the line**

To get the best side tone suppression performance from the Paste 201 it is necessary to match it to the impedance of the telephone line. This operation only need be carried out when the unit is first connected to a line, or when changing telephone lines.

Connect the Paste 201 to the telephone line, and a telephone to the phone connector on the rear panel.

Set the send level and line balance controls to mid range. Disconnect (or mute) the audio input to the paste 201.

Make a call from the telephone and transfer it to the Paste 201 and hang up the telephone.

Ask the called party to remain silent during this test.

Enable the built in noise source by pressing the push button on the rear panel. This sends noise to the line.

Listen to the audio received from the line and adjust the line balance controls for minimum noise. As you adjust the controls you should hear the tone of the noise change. What you are aiming for is a broad reduction in noise between 300 and 3000Hz. You will find that there is some interaction between the controls so it will be necessary to readjust each control in turn.

Once the line is balanced switch off the noise source, or hang up the call. The Paste 201 is now ready for use.