



GlenSound Talent Box Advanced Commentary

The GlenSound Talent Box is the next generation of single unit commentary systems. Digital in control with extended positions, gives each commentator their own remote control system. An ethernet link allows an engineer to remotely control incoming audio levels - a first for a single unit commentary box. Talent Boxes can also link for multiple commentator systems.

Key Points

- **GlenSound CMBus Allows Multiple Talent Boxes To Connect - Over 30 Commentators On A Single System**
- **Fully Digital Operation, Control, With AES I/O Option**
- **Commentator Extension Remotes**
- **Ethernet Remote Control Of Gains**
- **Five External Source Inputs For Monitoring**
- **Three Talkback Circuits With Config+ Button Operation**





Exclusive Features



Let's Talk Commentary

The GlenSound Talent Box builds on the success of the GS-CU001. The GS-CU001 has been the benchmark in single unit commentary for over a decade. During this time, we have listened to how you use commentary systems and worked with you on the worlds most important events. We have applied this information onto the foundation of the GS-CU001; this has resulted in the Talent Box.



- **Link Over 30 Commentators In A Single System Using CMBus**
A single Talent Box accommodates up to three commentators. In applications where you need more than three commentators for example, extra positions for a producer or guide, multiple Talent Boxes can be linked. CAT5 connections link the talkback, monitoring and programme output buses with multiple units simply by daisy chaining together if required. GlenSound have developed a 'current mixing system' (CMBus) that allows the inputs on any individual system to be mixed into the common main programme, talkback and monitoring buses whilst maintaining low noise.

The talkback and monitoring inputs only need to be connected to one unit for the CMBus to deliver them to the relevant outputs on all units. A main programme output can be taken from any or all of the individual units. Direct outputs are not carried on the CMBus and are available individually on each unit if required.



- **Commentary Positions And Talent Box Remotes**
There are three commentary positions, two main and a guest. The two main positions are fully featured with individual monitoring controls for each of the 5 inputs and individual talkback buttons on the 3 talkback circuits.

On the main unit, the guest position has its own programme 'on air' button but does not have access to any talk back buttons. There are two choices for monitoring by the third guest position. They can share the monitoring settings of either commentator A or C.



If it is required to space out your commentators, they can all be given a Talent Box Remote. With a Talent Box Remote the headphone levels, programme 'on air' button and talkback buttons are located in a separate box that connects to the main unit. Using the Talent Box Remote, the main Talent Box can be allocated out of the way with each commentator just having their own small remote. Using Talent Box Remotes also gives the guest position their own fully featured position with headphone level controls and talkback switches. Headsets connect directly to the main Talent Box in the normal way.



New Features



- **Remote Engineer Control of Gain Levels Via Ethernet**

An engineer can connect to the Talent Box via any internet connected PC. A built in web server allows an engineer to connect via a web browser using the Talent Box's IP address. The engineer can then adjust the mic/line input levels of all commentators. If mic/line gain adjust is disabled on the Talent Box itself, this means the engineer has complete control of gain levels and not the commentators.
- **Soft Headphone Switching**

At the top of each headphone monitoring position are two LEDs indicating the left and right ear of the headphones. There is a discrete push button control next to each headphone level control. For any given headphone level input, pushing this button will illuminate the LEDs at the top of the channel. Each subsequent press of this button adjusts the routing of the input between each side of the headphones - left ear only, both ears or right ear only. In this way, the commentator can get the exact balance of inputs that is required in his headphones.
- **Talkback Indication**

There are LEDs next to each talk back button, these will illuminate when the talkback button is pressed. There are also return talkback indicators (one for each incoming talkback), these indicators illuminate if incoming audio is detected on the talkback circuit.
- **Line Identification**

The Talent Box features a digital line ident. A message can be recorded to provide the connected line identification and let the studio end know the commentary position is live and ready to go.
- **AES I/O**

The Talent Box is available with all inputs and outputs as either AES or analogue.
- **Secure Access**

Key software configurations can be made tamper proof so the user cannot change any engineer settings.
- **Dual Channel International Sound**

The commentators can be provided with stereo international sound for monitoring. In modern broadcasts with multi-channel international sound broadcast to viewers or listeners, providing a stereo feed to the commentators allows them a more representative monitoring source for atmosphere and crowd audio.
- **Hardware and Software Configuration**

A bright back-lit display makes setting configuration easy.
- **Transformer or Electronically Balanced I/O**

As per the original GS-CU001, all audio I/O is available as electronically balanced or transformer balanced. A very high quality Lundhall transformer option is available on the mic and individual mic outputs.
- **Headphone Level Attenuation**

It is possible to set any headphone level control to have digital 'end stop' resistors. This prevents a user completely turning off the headphone source.

Alphanumeric Display For Configuration

Digital control of the Talent Box allows fine tuning of lesser used parameters and security settings within the software configuration.

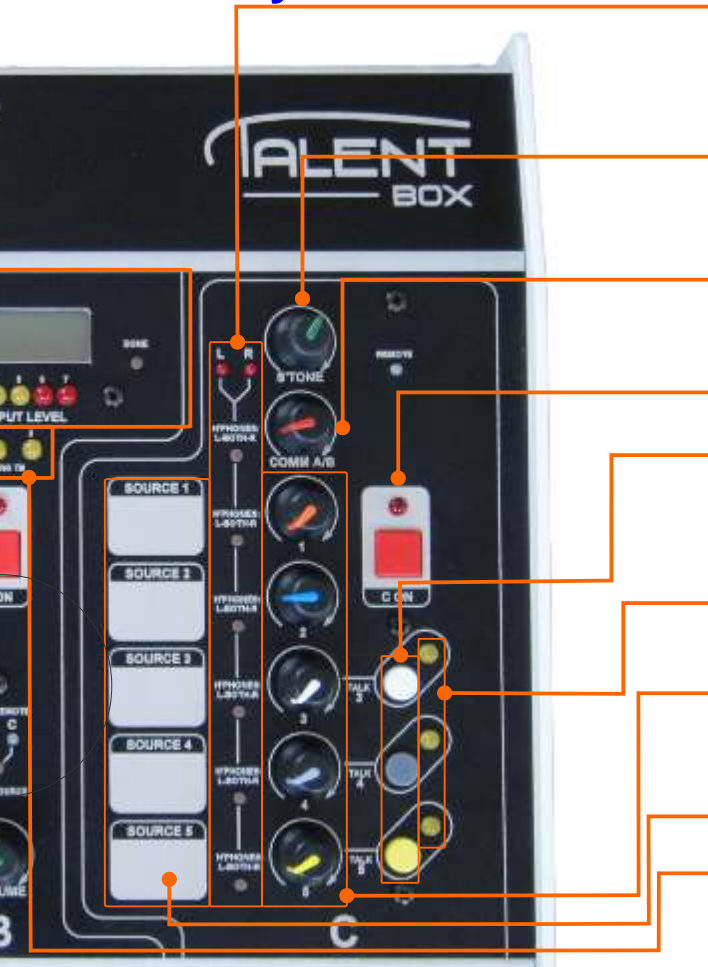


- TB Switch Mode**
 The operation of the talkback switch can be set in 1 of 3 different ways (per individual button):
 - Button is active only when held down (PTT)
 - Button latches on/off when pressed
 - Button latches with a short press or is PTT if held for longer (Lazy)
- Mic/Line Mute On Talk Back**
 When a talkback button is pressed, the mic can be muted (normal operation) or left on.
- Mic/Line On Air Button / Cough Button**
 The 'On Air' switch can be used in traditional mode to turn the mic/line on and off, or to be permanently on then muted when pressed (cough button mode). The 'On Air' button can also be permanently locked on.
- Bandpass Filter**
 A low and high frequency filter for the input to remove unwanted low and high frequencies (on/off).
- Direct Output Levels**
 The direct outputs for each individual mic/line input have selectable levels.
- Talk Back Output Levels**
 The talk back output levels can be independently adjusted to match external equipment.
- Limiter Mode**
 There is a configurable input and output compressor/limiter.
- Phantom Power**
 Selectable between off / +12V / +48V.
- Selectable Gain**
 The gain control can be set for mic or line input levels. If phantom power is turned on then the mic gain is automatically reduced.
- Stereo Monitoring**
 Two inputs can be linked to a single pot.
- PPM Meter**
 Underneath the display is a 7 segment LED PPM meter. This can display mic/line input level or the programme output level.



Commentator B Top & Front Panel

- Top Panel Controls**
 Commentator B Headphone Level Control.
- Monitoring Select**
 Select same monitoring as commentator A, commentator C.



Commentator A and C Controls

- **Headphone Input Switching**
LED indication and push button switches by volume controls selecting left ear/right ear/both ears.
- **Headphone Volume Adjust - Sidetone**
Incoming monitoring input. Sidetone is the volume of the commentators own voice.
- **Headphone Volume Adjust - Commentators**
Incoming monitoring input. Comms A/B is the mixed audio of the two other commentators.
- **Input Mic/Line On Air Button**
- **Talkback 'ON' 1 - 3 Buttons**
Separate LED to avoid obscuring on/off status while operating talkback push buttons.
- **Talkback Active Lights**
Illuminated when the talkback button is pressed.
- **Headphone Volume Adjust - External Inputs**
Plus sidetone (commentators own voice) and a mix of the other two commentators.
- **External Source Label Pads**
- **Audio Indicator Using 3 LEDs**
New link to incoming talkback indicator illuminates when incoming audio is detected.



Commentator B Top & Front Panel

- **Front Panel Inputs As A & C, Plus**
Aux input on a 3.5mm jack. This is mixed internally with the channel B balanced XLR input.

A & C Front Panel Inputs

- **6.35mm Headphone Socket**
- **Mic/Line Input On XLR**
- **Input Gain Trim ± 10 dB**
- **Input Select: Mic/Line & LED Indicator**
- **Phantom Power 'On' Switch & LED Indicator**





- **Mixed Outputs x 2**
Two identical outputs. A mix of the 3 mic/line inputs.

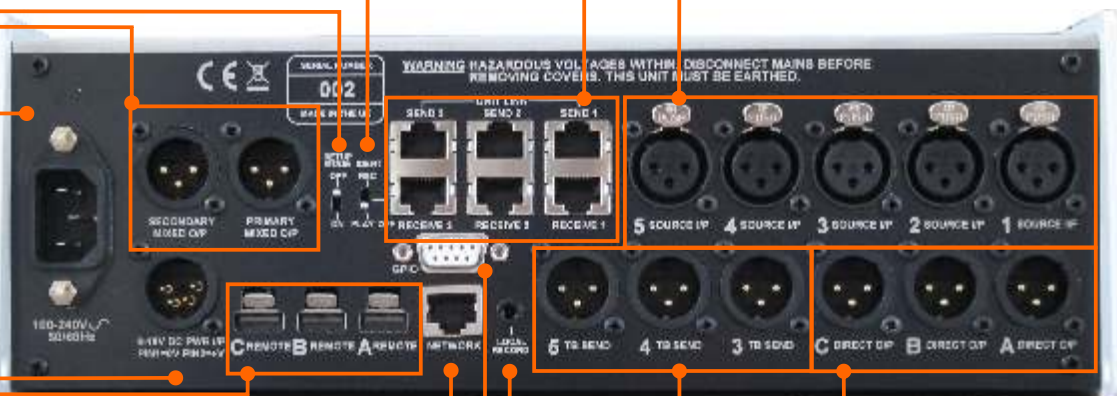
- **Setup**
Enables or disables front panel configuration.

- **Ident**
Three position switch to set for the recording or playing of the built in line ident.

- **Unit Link**
RJ45 connections for linking of multiple Talent Boxes.

- **Headphone Monitoring Inputs 1-5**
Inputs correspond to pots 1-5 on top panel.

- **Power Inlet (IEC)**
Switch mode power supply 100 - 240v.



- **GPIO Remotes**
9 pin D-type. The operation of these circuits can be user defined during setup.

- **Network Connection**
RJ45 socket for network connection and network control of all three input gain levels.

- **Remote Control Connections**
Individual locking USB socket for each commentator to connect an external hard wired remote control. Can also be used as a USB power source for a light or for recharging other devices. The locking connectors allow standard USB cables to be fully secured.

- **Direct Outputs**
Independent outputs of each of the three individual mic/line inputs.

- **Talkback Send Outputs**
The send outputs of the three talk back circuits.

- **Local Record**
Main programme mix output on 3.5mm jack socket.

- **DC Power Socket**
External DC power connection. Used to power the Talent Box either as a back up to the mains or if no mains is available.



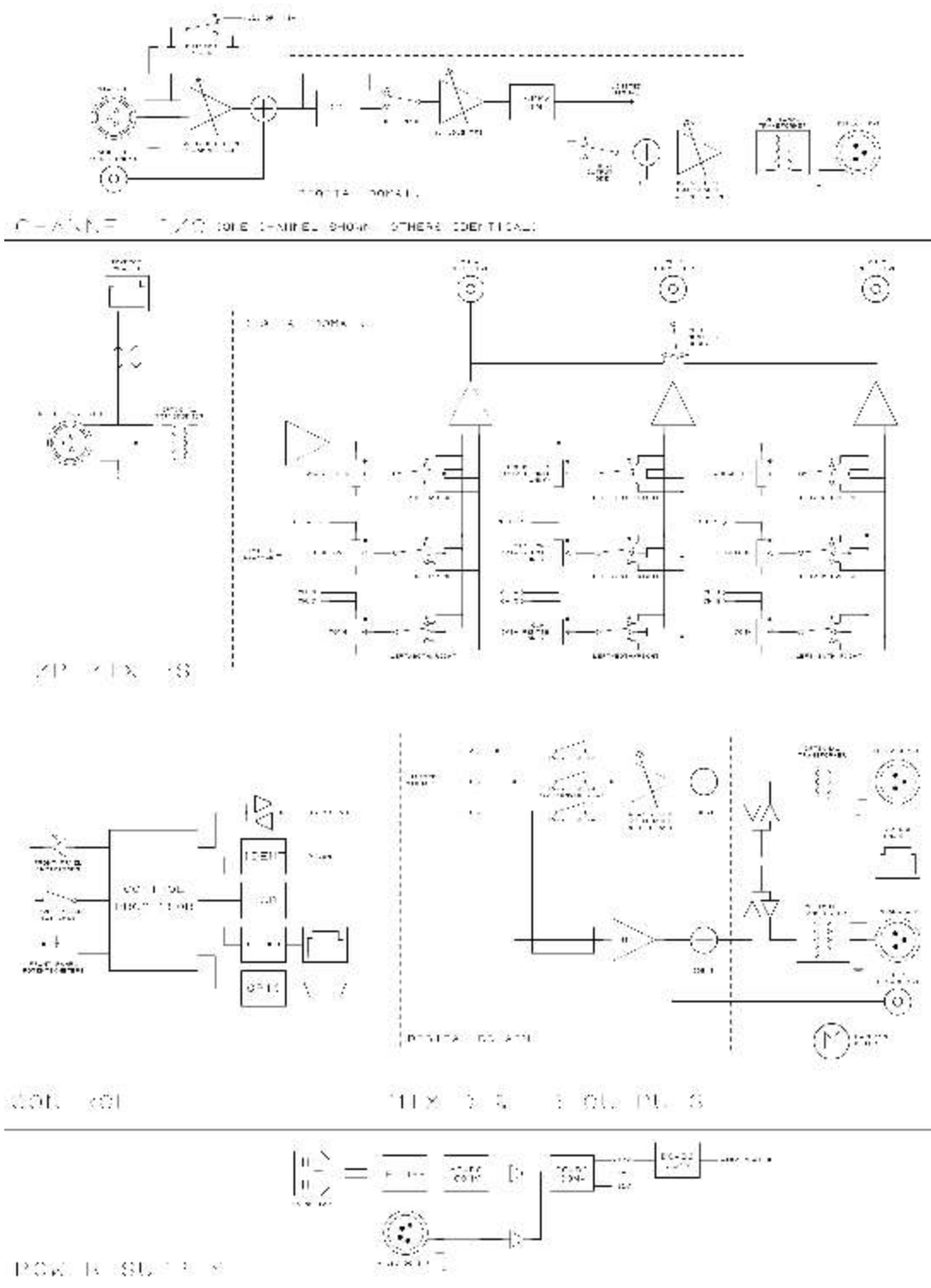


Talent Box
Block Diagram

Talent Box
Block
Diagram



block diagram



Technical Specification



GENERAL SPECIFICATIONS

TALENT BOX HEIGHT/WIDTH/DEPTH (Excluding Connectors)	102mm/293mm/265mm
TALENT REMOTE HEIGHT/WIDTH/DEPTH (Excluding Connectors)	83mm/95mm/199mm
POWER INPUT	100 to 240 VAC 50 – 60 Hz
AUDIO CONNECTORS	Neutrik XLRs

AUDIO INPUTS & CONNECTORS

MIC/LINE INPUTS ON XLR	3
UNBALANCED 3.5MM INPUT	1
CMBUS INPUTS RJ11	3
EXTERNAL MONITORING INPUTS on XLR	5

AUDIO INPUT SPECIFICATIONS

MIC INPUT LEVEL	-70 dBu to -50 dBu
MIC+ PHANTOM POWER LEVEL	-45 dBu to -25dBu
LINE INPUT	-10 dBu to +10dBu
PHTM POWER	+12V or +48V
MAX INPUT LEVEL	-30 dBu (gain@60dB)

AUDIO PARAMETERS

NOISE	<-60dB (gain@60dB0
DISTORTION	<0.1% (50Hz to 20kHz)
FREQUENCY RESPONSE	>-2dB (26Hz to 16 kHz)
FILTER	-3dB@80Hz, -3dB @ 12kHz

AUDIO OUTPUTS & CONNECTORS

HEADPHONE AMPLIFIERS OUTPUT ON 6.35MM JACK	3
MIXED PROGRAMME OUTPUTS ON XLR WITH VARIABLE COMPRESSOR	2
TALK BACK OUTPUTS ON XLR	3
DIRECT MIC/LINE OUTPUTS ON XLR	3
LOCAL RECORD ON 3.5MM JACK	1

AUDIO OUTPUT SPECIFICATIONS

DIRECT OUTPUT NOMINAL LEVEL	Switchable 0/+6/+12dBu
TALKBACK OUTPUT NOMINAL LEVEL	Switchable 0/+6/+12dBu
MIXED OUTPUT NOMINAL LEVEL	0dBu
LOCAL RECORD OUTPUT NOMINAL LEVEL	-14dBu
MINIMUM LOAD IMPEDANCE (BALANCED OUTPUTS)	600 ohms
MINIMUM LOAD IMPEDANCE (UNBALANCED OUTPUT)	10K ohms

HEADPHONE SPECIFICATION

IMPEDANCE	200 to 2k ohms
OUTPUT LEVEL	Max +19dBu into 600ohm. Warning - High headphone levels can be harmful to hearing

BALANCING OPTIONS

VERSION 1 (EE)	Electronically balanced audio input and output circuits
VERSION 2 (ET)	Electronically balanced inputs with transformer balanced outputs
VERSION 3 (TT)	Transformer balanced inputs and outputs with high quality Lundhall transformers on individual mic outputs

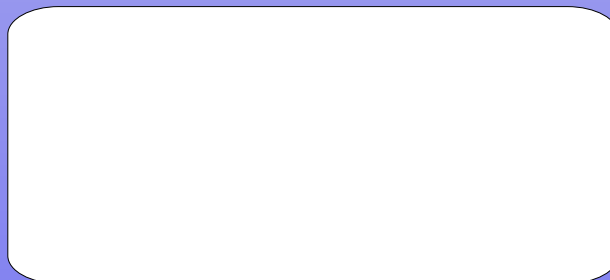
CONNECTIONS

INPUTS ON FEMALE XLR	1-GND, 2-HOT, 3-COLD (antiphase)
OUTPUTS ON MALE XLR	1-GND, 2-HOT(phase), 3-COLD (antiphase)
LOCAL RECORD ON 3.5MM STEREO JACK SOCKET	TIP-signal, RING-signal, SLEEVE-Ground. Mono plugs may be used without damage
HEADPHONE OUTPUTS ON 6.35MM STEREO JACK SOCKET	TIP-L signal, RING-R signal, SLEEVE-ground. Accepts A or B gauge jack plugs
REMOTE CONNECTIONS	A type latching USB
CMBUS LINKS	RJ45 sockets
GPIO REMOTES	9 pin d-type

POWER

INTERNAL	Switch mode 100-240v
EXTERNAL	9-18V DC.
INDICATION	Power indicated by display backlight

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@glen sound.co.uk www.glen sound.co.uk

sales@glen sound.co.uk