



TopHat **Multiple Headphone Amps With Monitoring and Talkback**

The Top Hat range incorporates multiple headphone amps with talkback and monitoring. In many environments where multiple headphone amps are required, the Top Hat range provides these with the inclusion of talkback facilities.

Key Points

- Suitable for studio and outside broadcast applications
- Multiple headphone amps with talkback and monitoring
- Individual monitoring mixes per headphone amp
- Engineer talkback to all sources (M4 only)
- External producer talkback (M4 Only)
- Compact (M3) and 1U 19" (M4) variations

Features



TOPHAT

TOP HAT M4

The Top HAT M4 is a headphone amplifier/talkback unit housed in a 1U 19" subrack with two accompanying producer talkback boxes. Each Producer's box is connected via XLR, has a gooseneck microphone and a series of one-way talkback destinations.

Features

- 4 headphone amplifiers with 3 input mixer and engineer talkback
- 2 Producers' boxes with talkback to all headphone amps and master talkback circuits
- 5 master talkback circuits
- Engineer talkback to all headphone amps and master talkback circuits

Four Headphone Amplifiers

The Top Hat M4 has four separate headphone amplifiers each with its own three channel mixer and interruptible talkback from the engineer and both producer boxes. Each headphone amp connects via a single XLR located on the rear panel.

Four Sources

The unit has facility for four sources; input 1, input 2, cue, and clean feed, connected to the rear panel via a D25 socket. Each source has a corresponding input gain POT located on the front panel.

Three Input Mixer Per Headphone Amp

Each headphone amplifier has a 3 input mixer to include either input 1 or input 2, an external input and cue or clean feed, for unique individual mixes. The left ear, both and right ear mixes are adjusted via corresponding POTS located on the front panel. Configuration is as follows;

- Input 1 or input 2: selectable via the toggle switch, mixes into the left ear with volume adjustment via the 'left' POT.
- Each headphone amplifier has its own unique external input: mixes into both ears with volume adjustment via the 'both' POT.
- Cue or clean feed: selectable via the toggle switch, mixes into the right ear with volume adjustment via the 'right' POT.

All inputs connect via a D15 socket.

Headphone Amp Talkback/Output

Interruptible (to the right ear mix) talkback using the white momentary push buttons on each headphone amp/producers' box can be routed from three locations;

1. Producer Box 1 (indicated via the illuminated LED on the headphone amplifier)
2. Producer Box 2 (indicated via the illuminated LED on the headphone amplifier)
3. Engineer by pressing the white button on the front panel.

Master Talkback/Output

There are five separate interruptible talkback circuits all using momentary push buttons;

1. RTB1 from both Producer 1 and 2 (Blue)
2. O/P1 from Producer 1 (Yellow)
3. O/P2 from Producer 2 (Yellow)
4. BASE 1 from Producer 1 (Red with a toggle switch for enabling button to ensure intended talkback interruption)
5. BASE 2 from Producer 2 (Red with a toggle switch for enabling button to ensure intended talkback interruption)

All five talkback circuits are available to the engineer on the base station via the front panel located adjacent to the talkback microphone. BASE 1 and BASE 2 circuits use a toggle switch for enabling the button to ensure intended talkback interruption.

Power

The 1U rack is mains powered. Producers' Boxes are powered via the connecting XLR.

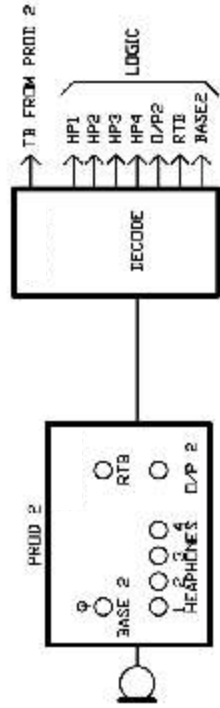
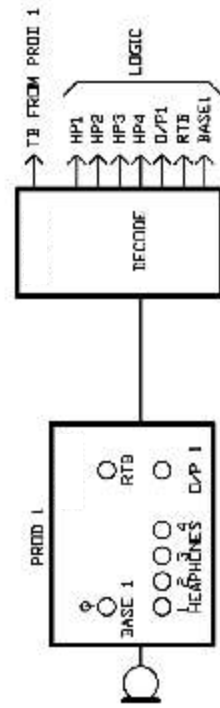
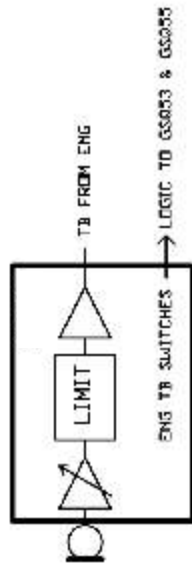
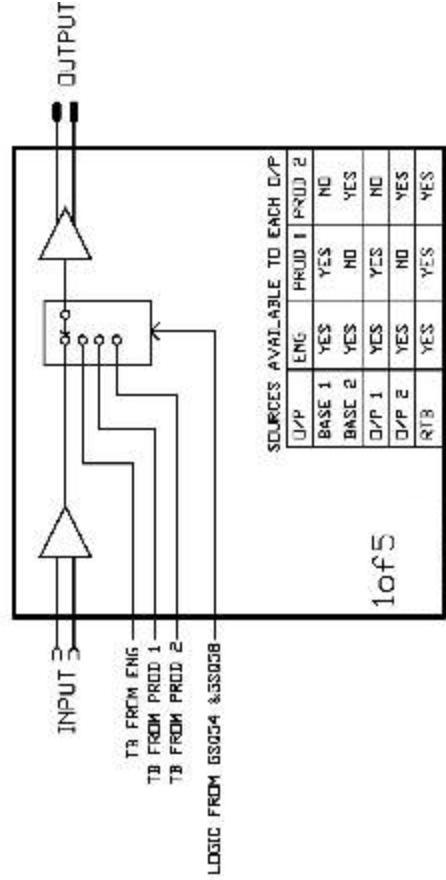
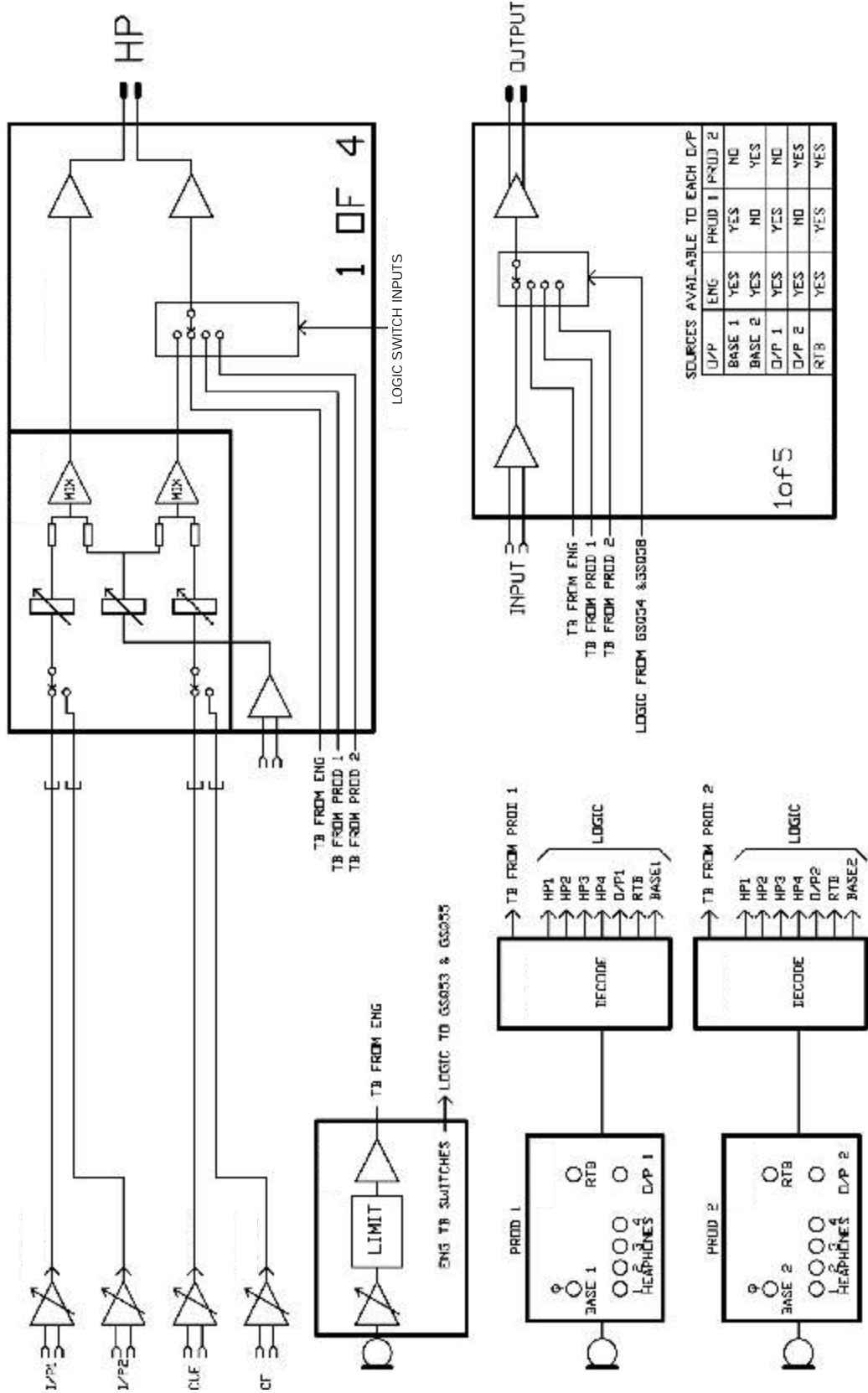
Top Hat M4 Block Diagram

Block
Diagram



TOPHAT

TOP HAT M4



Images



TopHAT

Top Hat M3



FRONT VIEW



LEFT VIEW

Top Hat M4



PRODUCERS BOX





RIGHT VIEW



REAR VIEW



FRONT VIEW



REAR VIEW

Features



TOPHAT

TOP HAT M3

The Top HAT M3 is a compact mixing headphone amplifier designed to provide flexible features for monitoring in an outside broadcast environment.

Features

- Two compact mixing headphone amplifiers
- Three outputs on each headphone amplifier
- Four inputs produce an individual mix per headphone amp
- Single talkback circuit
- Mic input has compressor/limiter and is controlled via a sturdy front panel lever switch
- RJ45 connections for looping multiple Top HAT M3s
- 2 x C cell battery or external DC power

Two Headphone Amplifiers

The Top HAT M3 features two separate headphone amplifiers. Each amplifier has 3 individual 6.35mm jack sockets for headphone monitoring, therefore the unit provides monitoring for 6 pairs of headphones.

Four Input Mixer

Both headphone amplifiers are fed via a mix of the 4 common inputs. The inputs are on XLRs and there are variable POTS for each input to create the required mix. There are 2 sets of the 4 variable POTS allowing separate mixes to be created for each of the two headphone amplifiers.

Outputs

In addition to the 3 x 6.35mm jack sockets available for headphone monitoring on each headphone amplifier, there is also a master output available on XLR; this output can be switched to either MIX 1 or MIX2

Talkback

There is an XLR input for a talkback mic with adjustable gain control and a compressor/limiter. The talkback mic is switched to the XLR talkback mic output via a front panel lever key. The lever key is momentary when pushed down and locks when pushed up.

Loops

The Top HAT M3 features 2 x RJ45 connections for looping audio between units. The input connection is in parallel to the main inputs and contains the audio for the 4 inputs. The output connection simply loops the 4 audio inputs for linking to further units using normal CAT5 cable.

Power

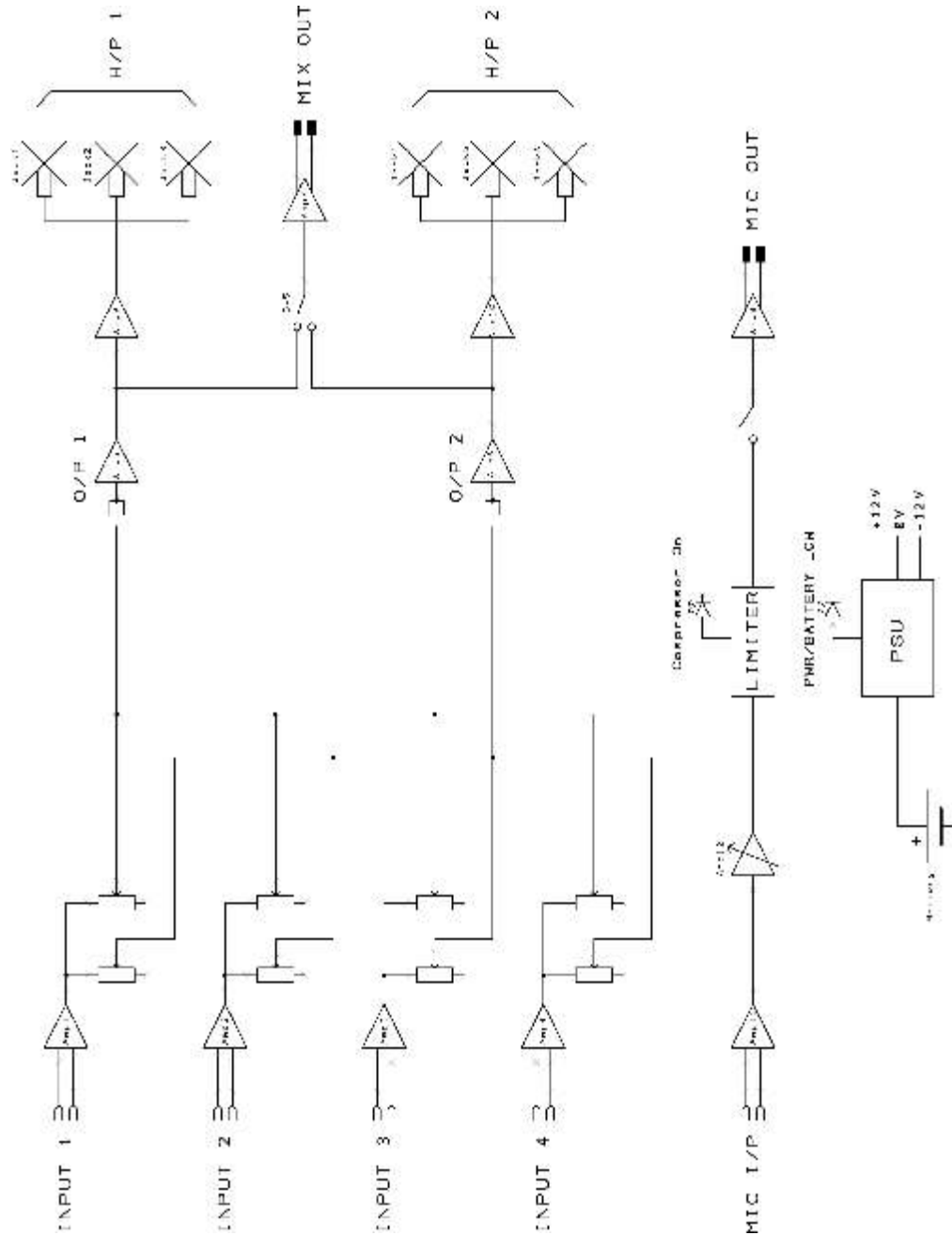
The Top Hat M3 is powered by 2 x C cell batteries or optional external DC power. As the battery level decreases there is a lower power LED for indication; as the level drops, the LED will start to flash faster and faster.

Block
Diagram



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TOP HAT M3





specifications

GENERAL SPECIFICATIONS

TOP HAT M4 (1U SUBRACK)

HEIGHT	1U
WIDTH	19"
DEPTH (Excluding external connectors)	234mm
POWER INPUT	100-250AC
POWER CONSUMPTION	2.8 Watts @ 230V

TOP HAT M3 (COMPACT)

HEIGHT	51mm
WIDTH	250mm
DEPTH (Excluding external connectors)	140mm
POWER INPUT	'C' Cells or External 'B' Type USB

TOP HAT M4 INPUT

CIRCUIT TYPE	Electronically balanced
ALL HEADPHONE SOURCES CONNECTORS	D25 Socket
TALKBACK INPUT SOURCES CONNECTORS	D15 Socket
INPUT GAIN	-20dBu to +10dBu
FREQUENCY RESPONSE	-1dBu @ 40Hz to 20kHz
HEADPHONE INPUT NOISE AT LINE UP	-78Dbu 22-22kHz RMS

TOP HAT M4 OUTPUT

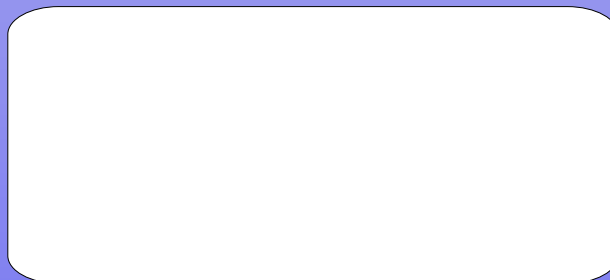
CIRCUIT TYPE	Electronically balanced nominal 50 Ohms
TALKBACK OUTPUT CONNECTOR	D15 Plug
HEADPHONE OUTPUT	XLR 3 Pin Plug
HEADPHONE OUTPUT LEVEL CONTROL	-20dBu to +10dBu
MAX HEADPHONE OUTPUT LEVEL	+18dBu into 600 Ohm output
HEADPHONE OUTPUT OPTIMIZATION	200-2000 Ohms

PRODUCERS BOX

CONNECTION LINK	XLR (standard microphone cable)
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TOP HAT M3 SPECIFICATION TBA

Your local dealer:



E & OE

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