

Remix



24:8:16:2

Recording Console



Remix: quality, features

Following the Hill Audio tradition of designing and manufacturing sound consoles that truly excel, Hill Audio has introduced a Recording console that stands alone in its class: the **Remix 24:8:16** – a semi-modular console with 24 inputs, 8 subgroups and 16 monitors.



Features of the Remix include a new sweepable Equalisation section which is 4 band with the 2 mid bands sweepable over 4 octaves. The centre frequencies are at: 60Hz +/- 12dB, 150Hz to 1.5kHz +/- 12dB, 500Hz to 5kHz +/- 12dB, 12kHz +/- 12dB. Comparatively wide band filters with a $Q < 1$ have been utilized to create a very natural sounding eq with minimal phase distortion. The 60Hz filter is of the peak/dip (bell) type to allow a 12dB boost at 60Hz without boosting 25Hz as would occur with a shelving type filter. This becomes particularly important as a high pass filter is not fitted to this console. The 30Hz point is 3dB down when the 60Hz is boosted fully. Similarly, the 12kHz band is not shelving; but the 20kHz is only 1dB down when the 12kHz is fully boosted.

operation of the Remix is effortless

Another feature of the Remix is an auto pfl switch located on the master section that activates a circuit which assigns any pfl signal to the studio stereo monitors in mono, at pre fader level. The pfl signal will defeat whatever signal is in the monitors at that time so that in any situation, with all channels in use, the operator can instantly isolate the signal from any one channel and listen to it in mono, pre pan and pre fader. At all times whether the the auto pfl circuit is activated or not, any selected pfl signal appears in the headphones and on the pfl VU meter. Other features of the Remix include 6 auxilliary sends; separate tape inputs with select switches normalled to the monitor section that allow remixing without repatching; peak LED's and status LED's; +4dB/-10dB selectable; 8 buss with 16 track monitoring; monitoring with eq. and 2 auxillaries; 100mm smooth action faders; 8 effects returns; direct outputs on all channels; send and return patch points throughout; remote 2U power supply; soft start 48V phantom power; oscillator and a meter bridge housing 19 VU meters.

INPUT

electronically balanced mic input
pad 20dB pad (mic input only)
LEVEL level adjustment (0db to +60dB)

line selects line level input jack
tape selects the tape return input jack (this has priority over the line/mic select)

12kHz +/- 12dB

500Hz-5kHz hi-mid frequency select

LEVEL hi-mid level +/- 12dB

150Hz-1.5kHz low-mid frequency select

LEVEL low-mid level +/- 12dB

60Hz +/- 12dB

defeat defeats the equalisation settings

auxilliary sends using 4 rotary controls and select switches (aux 3 and 4 can be selected aux 5 and 6), 6 auxilliary sends are available. Aux 1 and 2 are switchable pre or post fader and aux 3,4,5 and 6 are post fader

pan positions the signal left/right in the routing busses

mute with status LED defeats the channel output

p.f.l. sends the pre fader signal to the headphones and PFL VU meter

peak indicates when the pre fader, post Eq, signal level is at +10dBu. This is not a clip indicator as there is 12dB of headroom after this LED illuminates.

routing assigns the post fader signal to the groups and/or mix

fader a 100mm fader controls the output level of the channel.



and audio transparency

MONITORS 1-16

10kHz +/- 12dB, shelving
100Hz +/- 12dB, shelving

auxilliary sends 2 auxilliary sends are available, switchable pre/post the level control

pan positions the signal left/right in the routing busses

mute with status LED defeats the monitor output

p.f.l. sends the pre fader signal to the headphones and PFL VU meter

tape selects the signal source for the monitor from the group or the tape return. The VU meters in the meter bridge follow this switch

level monitor output level control

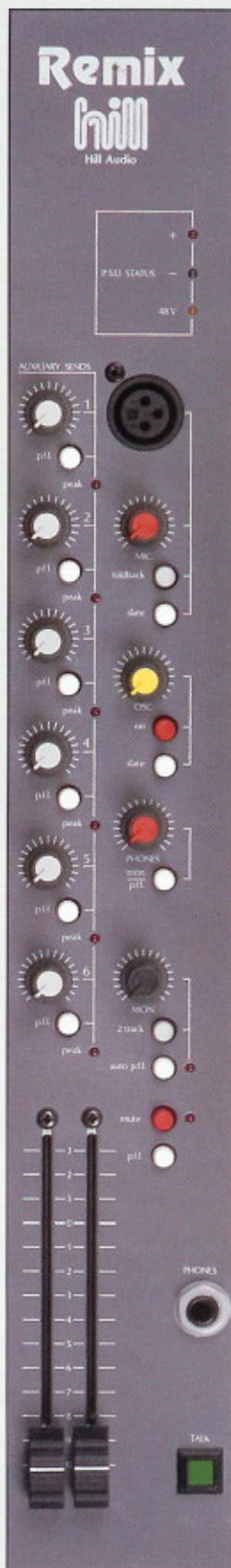
FX selects the input to the first 8 monitor sections from the back panel 1/4" jack allowing the monitor to be used as an effects return. A back panel switch selects +4dBu/-10dBv

GROUPS 1-8

mute with status LED defeats the group output

p.f.l. sends the pre fader signal to the headphones and PFL VU meter

fader 100mm group output level control



POWER SUPPLY STATUS

+ positive rail status LED
- negative rail status LED
+48V phantom power status LED indicating that the soft start +48V phantom power is applied to all the mic input XLR's and the talkback mic XLR via a switch on the PS-2 power supply.

MASTERS

6 x Auxilliary Send Masters

level master aux buss level control

p.f.l. sends the pre fader signal to the headphones and PFL VU meter

peak indicates when the signal level is at +10dBu. It is pre level. This is not a clip indicator as there is 12dB of headroom after this LED illuminates.

MIC XLR for a talkback mic (see +48V above)
level talkback mic level control
foldback assigns the talkback mic to aux 1 and 2
slate assigns talkback mic to all group and mix outputs

OSCILLATOR (1kHz)

Osc level oscillator level control
ON oscillator on slate routes oscillator to all group and mix outputs

PHONES

level headphone level control
pfl/mon selects the signal source for the headphones from pfl buss or monitor buss

MONITOR

level stereo monitor level control
2tk selects the 2 track return in the monitors
auto pfl with status LED activates a circuit which assigns any pfl signal to the stereo monitors in mono, at pre fader level.

talkback turns on the talkback microphone

headphones stereo 1/4" jack for headphones

MASTER LEFT/RIGHT

mute with status LED defeats the master stereo outputs
p.f.l. sends the pre fader signal to the headphones.
faders 2 x 100mm smooth action faders



The meter bridge is capable of folding flat for shipping and is easily pivoted forward for operation. A ribbon cable connects the meter bridge to the body of the Remix.

INTERFACING



Inputs

Mic in
line in
tape in

balanced XLR
unbalanced 1/4"
unbalanced 1/4"
selectable +4dBu/-10dBv
unbalanced 1/4" (+4dBu)
unbalanced 1/4"
unbalanced 1/4"

direct out
send (normalised)
return

Subgroup

send (normalised)
return
direct out (2)

unbalanced 1/4"
unbalanced 1/4"
unbalanced 1/4" (-10dBv)
selectable +4dBu/-10dBv

Mon/FX

FX input
-10dBv/+4dBu

unbalanced 1/4"
switch

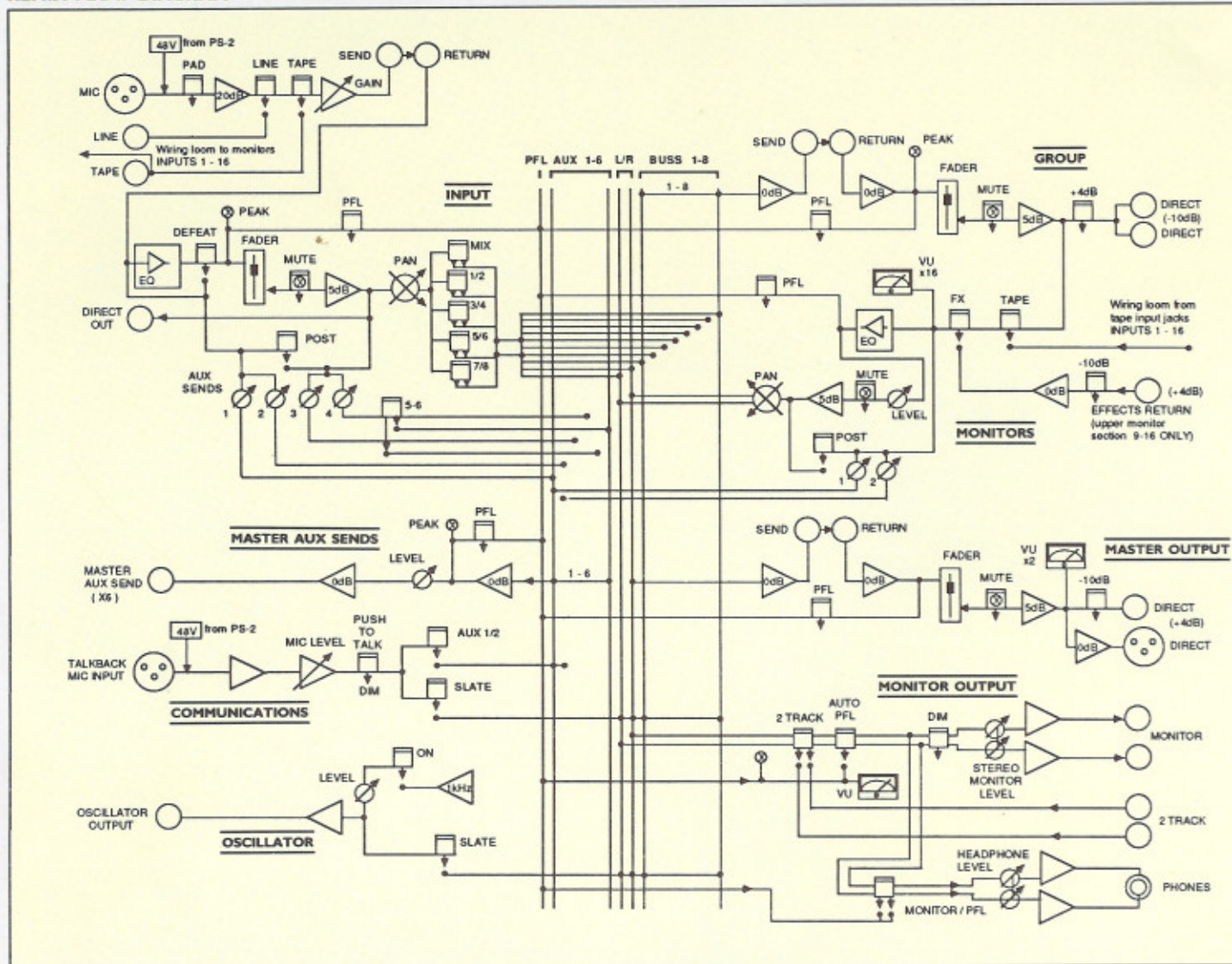
Masters

aux sends (6)
send L (normalised)
return L
send R (normalised)
return R
oscillator out
2 track in (2)
monitor out (2)
direct out (2)
direct out (2)

unbalanced 1/4"
unbalanced 1/4"
unbalanced 1/4"
unbalanced 1/4"
unbalanced 1/4"
unbalanced 1/4"
unbalanced 1/4" (+4dBu)
unbalanced 1/4" (+4dBu)
unbalanced 1/4" (-10dBv)
balanced XLR (+4dBu)

Ref: 0dBu = -7.75V

REMIX FLOW DIAGRAM



SPECIFICATIONS

Level (output)	
maximum	+21dBu into $\geq 600\Omega$ (unbalanced)
	+21dBu into $\geq 600\Omega$ (balanced)
0dB (desk)	+4dBu or -10dBv
Gain	
Max MIC	+72dB
Max LINE	+32dB
Overall	+70dB
Headroom	+17dB
Common Mode Rejection	> -50dB (typically -60dB)
Crosstalk	(any input to any un-routed subgroup)
1kHz	< -80dB
10kHz	< -60dB
Noise	
MIC input (150 Ω)	< -124dB (A) EIN
Output (typical)	< -72dBu (24 inputs & 16 monitors routed to MIX)

Distortion (THD + Noise)	@ 20dBu output (MIC input 40dB gain) to MIX output
	1kHz < 0.02%
	10kHz < 0.05%
Frequency Response	20Hz - 20kHz +0dB/-1dB (MIC input to MIX output)
Size	
Meter bridge up	121.3cms(W)x74.9cms(D)x26.7cms(H)
	47 $\frac{3}{4}$ " (W)x29 $\frac{1}{2}$ " (D)x10 $\frac{1}{2}$ " (H)
Meter bridge down	121.3cms(W)x78.1cms(D)x15.2cms(H)
	47 $\frac{3}{4}$ " (W)x30 $\frac{3}{4}$ " (D)x6" (H)
Weight	40Kgs, 88lbs
Shipping weight	45Kgs, 100lbs

Hill Audio Ltd. reserves the right to alter design and specifications of its products without prior notice.



Manufactured in the UK

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