S6k Mastering Preset Specs sw 3.60

This section contains detailed descriptions of Mastering and Monitoring presets of System 6000 and Mastering 6000. From version 3.60, the Mastering sections contains 3 Banks:

- Mastering Stereo
- Mastering Surround
- Monitor & Format

Please note that much of the thinking behind a preset is reflected in what fader assignments have been made. The most important parameters will appear on faders, and are subject to instant adjustment once a recall has been performed. Therefore, the most important parameters are also always available from the E1-4 page view.

Remember that you can have presets with **fader assignments of your own choice** by using the Link key, and store attractive assignments with User Presets. If you don't want any parameters at all to appear on faders, this is possible too.

Engine Bank F9, decade 0: Static EQ's (identical with F10, decade 0)

0	0 Parametric EQ 5.1		EQ5.1	Six full ra Filter pos	Six full range, four band parametric Eqs with analog modeling at fs/2 and 48 bit res Filter possibility on Low and Hi band.				
In Level L		In Level C	In Level	R	In Level SL	In Level SR	In Level LFE		

1 Parametric E	1 Parametric EQ 5.1 Linked		Like pres	Like preset 0, but with the 5 Main channels operating linked together.				
In Level L	In Level C	In Level	R	In Level SL	In Level SR	In Level LFE		

2	2 MDW HiRes EQ		MDW HiRes EQ	George	George Massenburg upsampling, high resolution stereo Eq.			
In Level L		In Level C	In Level	R	In Level SL	In Level SR	In Level LFE	

3	3 MDW HiRes EQ 5.1		MDW HiRes EQ 5.1	George	George Massenburg upsampling, high resolution six channel Eq.			
In Level L		In Level C	In Leve	R	In Level SL	In Level SR	In Level LFE	

F9, decade 1: De-Esser and Dynamic EQ's

0	0 De-Ess Parametric		De-Esser	Stereo De-Esser using Parametric filters. For Dual Mono, unlink L/R on the Setur Check targeted frequency range by pressing Side Chain key.			
Threshold		Frequency	Curve		Ratio		
Low Threshold for more de-essing.		Target center frequency of parametric de-esser.	Width of freq. ra affected by de-e	nge sser.	High ratio for more de- essing.		

1	1 De-Ess Shelving		De-Esser	Like pres	ke preset 0, but using Shelving filter fo	
Threshold		Frequency	Curve		Ratio	
Low Thre de-essin	eshold for more g.	Freq. at which de-esser obtains half its cut.	Cut curve used esser (Hi Shelve	by de- e).	High ratio for more de- essing.	

2	2 De-Ess Parametric (MS)		De-Esser	De-Esser De-Esser with individual operation on M and S components of a stereo signal. Set for parametric cut filters, 1.6 octave wide.				
Threshold M Frequency M		Ratio M	1	Threshold S	Frequency S	Ratio S		
Low Three de-essing and other elements	eshold for more g on lead vocal r LR center	Target center frequency of M signal parametric de-esser.	High Ratio for m essing on mix co elements.	nore de- enter	Low Threshold for more de-essing on LR panned elements (cymbals, choir etc).	Target center frequency of S signal parametric de-esser.	High Ratio for more de- essing on mix lateral elements.	

3	3 De-Ess Shelving (MS)		De-Esser	e-Esser De-Esser with individual operation on M and S components of a stereo signal. Set for shelving hi-cut ffilters.				
Threshold M Frequency M		Ratio M	1	Threshold S	Frequency S	Ratio S		
Low Thre de-essing and othe elements	eshold for more g on lead vocal r LR center s.	Target center frequency of M signal parametric de-esser.	High Ratio for m essing on mix co elements.	nore de- enter	Low Threshold for more de-essing on LR panned elements (cymbals, choir etc).	Target center frequency of S signal parametric de-esser.	High Ratio for more de- essing on mix lateral elements.	

4 DynEQ		De-Esser	Dynamic page. Cl	e, Parametric Cut filters for St neck targeted frequency rang	ereo signals. For Dual Mono, unlink L/R on the Setup e by pressing Side Chain key.	
Threshold Frequency		Frequency	Curve		Ratio	
Low Thre Cut.	eshold for more	Target center frequency of Cut filter.	Width of Cut filte	er.	High ratio for more Cut at selected frequency.	

5 DynEQ (MS) De-Esser		Dynamic for Parar	Dynamic cut filters with individual operation on M and S components of a stereo signal. Set for Parametric cut ffilters, 1.6 octave wide.			
Threshold M Frequency M		Curve M		Ratio M	Threshold S	Frequency S
Low Thre Cut on ce of a mix.	Low Threshold for more Cut on center elements of a mix.Target center frequency of Cut filter used on the M signal.Width of Cut filter applied to the M signal		er signal.	High ratio for more Cut on mix center elements.	Low Threshold for more Cut on panned elements of a mix.	Target center frequency of S signal cut filter.

F9, decade 2: Upsampled Limiters

0	0 BrickWall Limit 0dBFS		BrickWall 2	Adaptive shows if Watch th The pres Word len	Adaptive Limiter to protect end listeners from distortion. Without adjustments, this prese shows if a signal is offensive, and can be expected to generate unpredictable distortion Watch the Input, Gain Reduction and bit transparency indicators. The preset preserves dither and input word length when bit shifted gain controls are us Word length preservation is indicated with green signs in the display. As long as levels				
Gain L Gain R		safe, the output is a clone of the input. Consider linking L and R to process ster Threshold Profile Soft Clip			process stereo material.				
Gain L Gain/Drive adjustment. First, set max output using Threshold, then decide the amount of limiting using the Gain controls. Bit shift at 6 dB intervals.		Gain/Drive adjustment. First, set max output using Threshold, then decide the amount of limiting using the Gain controls. Bit shift at 6 dB intervals.	Sets max output When Upsample active, Threshole intersample peal account. For low coding, back off Threshold by 1-2	level. e is d takes ks into v bit rate 2 dB.	Select adaptive profile to match processing requirements. Use Dynamic or Soft to prioritize low distortion over loudness.	Reduces peaks but adds distortion. Use with caution, and don't allow peaks to exceed the soft clip threshold by more than 4-7 dB.			

1 Limit SMPTE		BrickWall 2 Limiting		preset confoming to SMPTE and NAB standards.		
Gain	Threshold	Profile		Delay		
Adjusts static gain. Use to increase or decrease overall loudness.	Sets max out level. Activate Upsample to take intersample peaks into account.	Select adaptive match processin requirements. U to prioritize loud speech.	profile to g se Voice ness of	Add up to 9 frames of compensation delay. Parameter may be adjusted live.		

2	2 Limit EBU BrickWall 2			Limiting	preset confoming to EBU tran
	Gain	Threshold	Profile		Delay
Adjusts to increa overall le	static gain. Use ase or decrease oudness.	Sets max out level. Activate Upsample to take intersample peaks into account.	Select adaptive match processin requirements. U to prioritize loud speech.	profile to Ig se Voice ness of	Add up to 7.5 frames of compensation delay. Parameter may be adjusted live.

3	3 Limit Pop/Rock		BrickWall 2 Preset for t listener dis counting st threshold is		or typical Pop/Rock requirements, but without adding severe and unpredictable end distortion. For connoisseurs who need loudness but have realized that sample g should not be used for level restrictions. Consider linking L and R, especially if the d is exceeded regularly.		
	Gain L Gain R		Thresho	ld	Profile	Soft Clip	
Gain/Driv Use to in decrease loudness	ve adjustment. crease or e overall s.	Gain/Drive adjustment. Bit shift at 6 dB intervals	Sets max output When Upsample active, Threshol intersample pea account. For low coding, back off Threshold by 1-2	t level. e is d takes ks into v bit rate 2 dB.	Select adaptive profile to match processing requirements.	Reduces peaks but adds distortion. Use with caution, and don't allow peaks to exceed the soft clip threshold by more than 4-7 dB.	

4 Limit Voice	E	BrickWall 2	Preset for compress	Preset for limiting of speak or lead vocal. May be used stand alone, or on the output of a compressor. Configured for dual mono operation. Press Link to operate channels in tandem.				
Gain L Gain R		Thresho	ld	Profile	Soft Clip			
Gain/Drive adjustment. Use to increase or decrease overall loudness.	Gain/Drive adjustment. Bit shift at 6 dB intervals.	Sets max output When Upsample active, Threshol intersample pea account. For low coding, back off Threshold by 1-2	t level. e is d takes ks into / bit rate 2 dB.	Select adaptive profile to match processing requirements.	Reduces peaks but adds distortion. Use with caution, and don't allow peaks to exceed the soft clip threshold by more than 4-7 dB.			

5	5 Limit Classical		BrickWall 2 Preset of distc		reset for use with Classical Music. Best possible preservation of transients with a minimum f distortion at low as well as high frequencies.		
				Preset is controls	bit transparent, and preserves dither and input word length when bit shifted gain are used. Word length preservation is indicated with green signs on the display.		
Gain Threshold		Profile					
Gain adju increase overall lo shift at 6 preserve length.	Gain adjustment. Use to increase or decrease overall loudness. Bit shift at 6 dB intervals to preserve dither and word length		The Dynamic pr offers perceptua based distortion prevention.	ofile Illy			

Engine Bank F9, decade 3: Multiband Dynamics (MD3)

0 MD3 CD Ma	0 MD3 CD Master		MD3 Three band Expander/Compressor, Eq and Limiter. Auto Gain is on, so make-up automatically compensates lowered thresholds or higher ratios in the individual b				
Norm. Trim Comp. Lo Thresh.		Comp. Mid T	hresh.	Comp. Hi Thresh.	Limiter Softclip	Output Fader	
Gain/Drive adjustment. Use to increase or decrease overall loudness.	Threshold of Lo Band relative to Reference Level.	Threshold of Mirrelative to Referred Level.	d Band rence	Threshold of Hi Band relative to Reference Level.	Reduces peaks but adds distortion. Can be used to complement dynamic limiter.	Post limiter, pre dither output fader.	

1	MD3 CD Master (MS)		As preset 0, but M and S components of the stereo signal can be treated services regards to Gain, Eq, Expansion and Compression.			treated separately with	
Norm. Trim M Norm. Trim S		Limiter Sof	tclip	Limiter Thresh.	Output Fader		
Gain/Driv for the ce elements	ve adjustment enter panned s of a mix.	Gain/Drive adjustment for the off center elements. Can be used to increase or decrease the stereo width.	Reduces peaks distortion. Can b to complement o limiter.	but adds e used dynamic	Dynamic output limiter threshold. Measured sample by sample, and relative to Full Scale.	Post limiter, pre dither output fader.	

2	2 Tape Sim 1 M5k		MD3	A classio	c preset from MD2 of TC M50	000 emulating analog tape sa	turation and HF roll-off.
Norm. Trim Comp. Lo Thresh.		Comp. Mid T	hresh.	Comp. Hi Thresh.	Limiter Softclip	Output Fader	
Gain/Drive adjustment for saturation effect.		Threshold of Lo Band relative to Reference Level.	Threshold of Mic relative to Refer Level.	d Band ence	Threshold of Hi Band relative to Reference Level.	Reduces peaks but adds distortion.	Post limiter, pre dither output fader.

3	3 Tape Sim 2 M5k		MD3 A classic preset from MD2 of TC M5000 emulating analog tape saturation and				
No	Norm. Trim Comp. Lo Thresh.		Comp. Mid T	hresh.	Comp. Hi Thresh.	Limiter Softclip	Output Fader
Gain/Drive adjustment for saturation effect. Level.		Threshold of Lo Band relative to Reference Level.	Threshold of Mic relative to Refer Level.	d Band ence	Threshold of Hi Band relative to Reference Level.	Reduces peaks but adds distortion.	Post limiter, pre dither output fader.

4	4 SoftLim M5k		MD3	A classic preset from MD2 of TC M5000.				
Limiter Thresh.		Output Fader						
Dynamic output limiter threshold.		Post limiter, pre dither output fader.						

5	Music Thru 4:2:4 Matrix MD3		A preset such as	A preset designed to prevent music from collapsing when played through a matrix decoder such as Dolby Prologic.			
Norm. Trim M Norm. Trim S		Limiter Sof	ftclip	Limiter Thresh.	Output Fader		
Gain/Driv for the ce elements	e adjustment nter panned of a mix.	Gain/Drive adjustment for the off center elements.	Reduces peaks distortion.	but adds	Dynamic output limiter threshold. Measured sample by sample, and relative to Full Scale.	Post limiter, pre dither output fader.	

6	6 De-Compress		MD3 Excess some		cessive upstream compression or limiting cannot be removed, but this preset reinstates ne dynamic differences for input signals between -20 and 0 dBFS.			
In Level L In Level R		Reference I	_evel	Limiter Thresh.	Output Fader			
Input atte used with signals.	enuation to be a overly hot	Input attenuation to be used with overly hot signals.	Define level at w unity gain of pre occurs. Level be value is reduced	vhich set elow this I.	Dynamic output limiter threshold. Measured sample by sample, and relative to Full Scale.	Post limiter, pre dither output fader.		

7	7 Expander Noise Red		Μ	MD3 Multiband expansion with look-ahead capability may be a better choice than a perceptually based algorithms such as BackDrop. Plain vanilla can be easier never adds artefacts such as "birdies" or "space monkeys" that can be conserved overdoing processing extensive on filtering.				noice than advanced, n be easier to dose, and n be consequences of
Exp. Lo Thresh. Exp. Mid Thresh.			Exp. Hi Thresh.		Exp. All Ratio	Exp. All Attack	Exp. All Release	
Level, relative to Reference, at which the band is fully open.		Level, relative to Reference, at which the band is fully open.	÷	Level, relative to Reference, at wh band is fully oper	nich the n.	Expansion ratio when level falls below the threshold. Range of expanders may be adjusted on the Exp. page.	Time for the expander to open. Should normally be lower than the Nominal Delay.	Time required for expanders to close. Range of expanders may be adjusted on the Exp. page.

8 Expander Noise Red (MS)		MD3 Multibar compor reductio		Iultiband expander with look-ahead capability and separate processing of the M and S omponents of a stereo signal. This preset offers more control than #7 and #9, when noise eduction is performed on a stereo source.			
Exp. All Thresh. M Exp. All		Exp. All Range M	Exp. All Rele	ase M	Exp. All Thresh. S	Exp. All Range S	Exp. All Release S
Level, relative to Reference, at which the M part processor is fully open.		Max noise reduction performed on the center elements (M part) of a stereo signal.	Expander closin for the M part of signal (for instar speak).	g time a stereo nce	Level, relative to Reference, at which the S part processor is fully open.	Max noise reduction performed on the L/R elements (S part) of a stereo signal.	Expander closing time for the S part of a stereo signal (for instance ambience).

9	9 Cat43 Emulate		MD3	Multiban originally Compare	d expander emulating proces designed to align analog noi against preset 11-5-9, or for	sing and operation of the old ise reduction, the Cat43 is st r multichannel 10-8-9.	l Dolby Cat43. While ill used for dialog clean-up.	
				This digital version offers look-ahead capability plus much lower distortion than what's possible in the analog world. The fader layout on lcon almost makes you want to paint it orange for a true retro experience.				
Refe	rence Level		Exp. Lo Ra	inge	Exp. Mid Range	Exp. Hi Range		
Threshol allowing discrimin signal an	Threshold for all bands allowing dynamic discrimination between signal and noise.		Max noise reduct the low frequence material12 dB typical setting.	ction on cy is a	Max noise reduction on the mid frequency material6 dB is a typical setting.	Max noise reduction on the high frequency material. 0 dB (off) is a typical setting.		

Engine Bank F9, decade 4: Multiband Dynamics (MD4)

0	0 MD4 CD Master		MD4	Five ban preset pi 20 dB wi fader.	Five band Compressor with integrated Eq and upsampled, adaptive BrickWall 2 Limiter. The preset provides a spectrally linear starting point for further adjustments. A reference tone at - 20 dB will be subjected to a 3 dB increase in level, which may be easily adjusted on the Trim fader.				
			Soft Clip at the Limiter is relative to the Limiter threshold, and the Profile of the Limiter ma be adjusted for a particular type of operation. See details in the description of BrickWall 2 presets, Engine Bank F10, decade 2.						
	Trim	Reference Level	All Three	sh.	All Gain	Lim. Thresh. L	Lim. Thresh. R		
Overall C adjustme processii without lo	Gain/Drive nt. 48 bit ng allows boost posing	Reference level for the Thresholds of the five band processor.	Adjust to set ma amount of dyna processing.	aster mic	Adjust master amount of gain make-up. After the compressor, but before the limiter, for instance	Output Limiter L threshold. Consider linking L and R when used on stereo signals.	Output Limiter R threshold. Consider linking L and R when used on stereo signals.		

1	1 MD4 CD Master (MS)		MD4	Five ban BrickWal the MS c which ma	Five band Compressor and DXP processor with integrated Eq and upsampled, adaptive BrickWall 2 Limiter. The preset provides a spectrally linear starting point for compression in the MS domain. A reference tone at -20 dB will be subjected to a 3 dB increase in level, which may be easily adjusted on the Trim M and Trim S faders.			
			adjustments. See additional descriptions at preset 0 above.					
	Trim M Trim S		All Thresh	. M	All Thresh. S	Lim. Thresh. L	Lim. Thresh. R	
Overall C control fo elements signal pr 48 bit pro boost wit resolutio input leve	Overall Gain/Drive control for center elements of a stereo signal preset at +3 dB. 48 bit processing allows boost without loosing resolution regardless of input level.Overall Gain/Drive control for L/R panned elements of a stereo signal preset at +3 dB. 48 bit processing allows boost without loosing resolution regardless of input level.		Adjust to set master amount of dynamic processing applied to M components. Apply post dynamics make-up gain on the 5Band page if needed.		Adjust to set master amount of dynamic processing applied to S components. Apply post dynamics make-up gain on the 5Band page if needed.	Output Limiter L threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	
2	MD4 Limit		MD4 Five dura add		d limiter with soft knee chara signals between -3 (Lo) and ally protects against ultra sho	cteristics. The five-band sec -12 dBFS (Hi) are detected. rt peaks, and out of band sig	tion kicks in when long The output limiter nals close to its threshold.	
				The preset is unity gain until soft knee/limiting action starts, and the output stays manageable even for low bandwidth perceptual coders. To apply gain, simply turn up the Trim parameter.				
	Trim Reference Level		All Thres	h.	All Gain	Lim. Thresh. L	Lim. Thresh. R	
Overall Gain/Drive control preset at 0 dB.Reference level 1 Thresholds of the band processor.48 bit processing allows boost without loosing resolution regardless of input level.aband processor.		Reference level for the Thresholds of the five band processor.	Adjust to set ma amount of soft k limiting of PPM o peaks.	ster nee pre- duration	Adjust master amount of gain make-up. After the compressor, but before the limiter, for instance when changing the Threshold.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	

3 MD4 Limit (MS)		S)	MD4	 ID4 Five-band limiter with soft knee characteristics applied individually to M and S com The five-band section kicks in when long duration signals between 0 (Lo M) and -1 (Hi) are detected. The output limiter additionally protects against ultra short peaks, band signals close to its threshold. The preset is unity gain until limiting action starts, and the output stays manageabl low bandwidth perceptual coders. To apply gain to M or S components, simply turr Trim parameters. 			
	Trim M Trim S		All Thresh. M		All Thresh. S	Lim. Thresh. L	Lim. Thresh. R
Trim MTrimOverall Gain/Drive control for center elements of a stereo signal preset at 0 dB. 48 bit processing allows boost without loosing resolution regardless of input level.Overall Gain/D control for L/R elements of a stereo signal preset at 0 dB. 48 bit processing boost without loosing resolution regardless of input level.		Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB. 48 bit processing allows boost without loosing resolution regardless of input level.	Adjust to set ma amount of dynar processing appli components. Ap dynamics make- on the 5Band pa needed.	ster nic ed to M ply post up gain uge if	Adjust to set master amount of dynamic processing applied to S components. Apply post dynamics make-up gain on the 5Band page if needed.	Output Limiter L threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.

4	4 Parallel Comp Slow		M	MD4 Five-b The p		Five-band parallel compressor with relative slow transient tracking and no look-ahead delay. The preset adds 3 dB gain to a -20 dBFS signal, and hits unity gain at -4 dBFS.				
Trim I		Reference Level		All Thresh.		All Gain	Lim. Thresh. L	Lim. Thresh. R		
Overall C control a "dry" and when par selected.	Gain/Drive ffecting both the I the "wet" signal rallel mode is	Reference level for the Thresholds of the five band processor.		The point above low level gain sta dropping off. The is relative to Ref Level.	which arts e setting erence	Master "wet" level of the parallel processor.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.		

5 Parallel Comp Fast		MD4 Five-t		Five-band parallel compressor with fast transient tracking including look-ahead delay. The preset adds 4 dB gain to a -20 dBFS signal, and hits unity gain at -9 dBFS.			
Trim	Reference Level	All Th	resh.	All Gain	Lim. Thresh. L	Lim. Thresh. R	
Overall Gain/Drive control affecting both t "dry" and the "wet" sig when parallel mode is selected.	Reference level for the Thresholds of the five al band processor.	The point ab low level gain dropping off. is relative to Level.	ove which starts The setting Reference	Master "wet" level of the parallel processor.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	

6	6 Parallel Comp (MS)		MD4	Five-ban delay. Th	Five-band parallel M and S compressor with fast transient tracking including look-ahead delay. The preset adds 5.5 dB gain to a -20 dBFS signal, and hits unity gain at -7 dBFS.				
Trim M Trim S		Trim S	All Thresh	n. M	All Thresh. S	Lim. Thresh. L	Lim. Thresh. R		
Overall C control a "dry" and of the M the signa	Gain/Drive ffecting both the I the "wet" part compo-nents of al.	Overall Gain/Drive control affecting both the "dry" and the "wet" part of the S compo-nents of the signal.	The point above low level gain to elements starts off. The setting i relative to Refer Level.	e which the M dropping is ence	The point above which low level gain to the S elements starts dropping off. The setting is relative to Reference Level.	Output Limiter L threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.		

Engine Bank F9, decade 5: DXP Processing (MD4)

0	0 MD4 DXP		MD4	Five ban The pres consider the Setu	Five band DXP processor with integrated Eq and upsampled, adaptive BrickWall 2 Limiter. The preset provides a starting point suitable for most sources where detail enhancement is considered appropriate, and may be configured for dual mono operation instead of stereo on the Setup page.				
				A referer low level	A reference tone at -20 dB will be subjected to a 4 dB increase in level. Further increase in low level may be obtained using higher Steer values in each band.				
			Soft Clip at the Limiter is relative to the Limiter be adjusted for a particular type of operation. presets, Engine Bank F10, decade 2.			e Limiter threshold, and the least on. See details in the de	Limiter threshold, and the Profile of the Limiter may ation. See details in the description of BrickWall 2		
	Trim	Reference Level	All Thres	h.	All Gain	Lim. Thresh. L	Lim. Thresh. R		
Overall Gain/Drive adjustment. 48 bitRefe the D unityprocessing allows boost without loosing resolution regardless of input level.Refe		Reference level at which the DXP processor hits unity gain, unless Band Gains or Trim are offset.	Below this point gain is max. The is relative to Ref Level.	, DXP e setting ference	Offset DXP gain make- up. Individual Band Gains are available in the 5Band page.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.		

1 MD4 DXP (MS)		3)	MD4 Five com		Five band DXP processor for stereo signals with separate processing of the M and S components, plus Eq and upsampled, adaptive BrickWall 2 Limiter. The preset provides a starting point for further adjustments.			
			A reference tone at -20 dB will be subjected to a 3 dB increase in level. Unity gain is Reference Level found on the Setup page. Further increase in low level may be obtausing higher Steer values in each band.			level. Unity gain is hit at v level may be obtained		
	Trim M	Trim S	All Thresh	n. M	All Thresh. S	Lim. Thresh. L	Lim. Thresh. R	
Overall Gain/Drive control for center elements of a stereo signal preset at 0 dB.		Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.	Below this point gain to the M pa signal is max. The setting is relative Reference Leve	, DXP art of the he e to I.	Below this point, DXP gain to the S part of the signal is max. The setting is relative to Reference Level.	Output Limiter L threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	

2	2 DXP Music		MD4	Five ban paramete	Five band DXP processor with basic settings suitable for music. Use the Band Gain parameters on the 5Band page to adjust the spectral balance.				
				A reference tone at -20 dB will be subjected to a 5 dB increase in level. Unity gain is Reference Level found on the Setup page. Further increase in low level may be obtausing higher Steer values in each band.					
	Trim Reference Level		All Thresh.		All Gain	Lim. Thresh. L	Lim. Thresh. R		
Overall Gain/Drive adjustment preset at +1 dB. Reference lev the DXP proc unity gain, un Gains or Trim		Reference level at which the DXP processor hits unity gain, unless Band Gains or Trim are offset.	Below this point, gain is max. The is relative to Ref Level.	, DXP e setting ference	Offset DXP gain make- up. Individual Band Gains are available in the 5Band page.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.		

	3 DXP Music (MS)		1S)	MD4 Five based of Center		Five band DXP processor for stereo signals with basic settings suitable for music. Use the Band Gain parameters on the 5Band M and S pages to adjust the spectral balance on centered and wide elements of the mix.			
				A reference tone at -20 dB will be subjected to a 4 dB increase in level. Unity gain is hit Reference Level found on the Setup page. Further increase in low level may be obtained using higher Steer values in each band.				level. Unity gain is hit at level may be obtained	
I	1	Γrim M	Trim S	All Thresh	n. M	All Thresh. S	Lim. Thresh. L	Lim. Thresh. R	
Overall Gain/Drive control for center elements of a stereo signal preset at +2 dB.		ain/Drive r center of a stereo eset at +2 dB.	Overall Gain/Drive control for L/R panned elements of a stereo signal preset at +2 dB.	Below this point gain to the M pa signal is max. The setting is relative Reference Leve	, DXP art of the he e to I.	Below this point, DXP gain to the S part of the signal is max. The setting is relative to Reference Level.	Output Limiter L threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	

4	DXP Cuba Lil	MD4	Five ban The pres	Five band DXP processor for stereo signals with basic settings suitable for acoustic music. The preset is more mellow and focused on room detail than preset 3, and developed to				
				make the most out recodings such as the wonderful Cuban music we're enjoying as an antidote to overly polished and controlled desktop music. Use the Band Gain parameters of the 5Band M and S pages to adjust the spectral balance on centered and wide elements of the mix. Low level gain is disabled 20 dB below the DXP threshold at a ratio of 1:1.25. This setting can be changed in the 5Band page.				
				A reference tone at -20 dB will be subjected to a 3 dB increase in level. Unity gain is Reference Level found on the Setup page. Further increase in low level may be obta using higher Steer values in each band.			level. Unity gain is hit at level may be obtained	
	Trim M	Trim S	All Thresh	n. M	All Thresh. S	Lim. Thresh. L	Lim. Thresh. R	
Overall Gain/Drive control for center elements of a stereo signal preset at +1 dB.Overall Gain/Drive control for L/R panned elements of a stereo signal preset at +1 dB.		Below this point, DXP gain to the M part of the signal is max. The setting is relative to Reference Level.		Below this point, DXP gain to the S part of the signal is max. The setting is relative to Reference Level.	Output Limiter L threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R. Soft Clip threshold is relative to this setting.		

5	5 DXP Dialog (Dual)		MD4 Five band DXP processor for dual mono signals with basic settings suitable for dial over, lead vocal and human voice in general.					
				The preset is aimed at speech and vocal clarity. Voice details may be further dynamically magnified by turning up the Steer parameter on the HiMid and Hi bands. Low level gain cabe disabled by bringing up the Defeat Ratio. This parameter can be found in the 5Band page.				
			The static spectrum may be conveniently adjusted in the 48 bit domain prior to dynamic processing by using the EQ pages. A reference tone at -20 dB will be subjected to a 6 increase in level. Unity gain is hit at Reference Level found on the Setup page.				main prior to dynamics I be subjected to a 6 dB Setup page.	
	Trim A	Trim B	All Thresh	ι. A	All Thresh. B	Lim. Thresh. A	Lim. Thresh. B	
Overall Gain/Drive control for the A channel preset at +2 dB.Overall Gain/Drive control for the B channel preset at +2 dB.Below this point, gain to the A cha max. The setting 		, DXP annel is g is ence	Below this point, DXP gain to the B channel is max. The setting is relative to Reference Level.	Output Limiter A threshold. Soft Clip threshold is relative to this setting.	Output Limiter B threshold. Soft Clip threshold is relative to this setting.			

6	6 DXP Classical		MD4	ID4 Five band DXP processor with basic settings suitable for classical music, and sensitive music. The preset is spectrally flat, and uses the Dynamic limiter pr perceivable transient distortion. Low level gain is disabled 20 dB below the D a ratio of 1:1.25. This setting can be changed in the 5Band page.			music, and other types of ic limiter profile for lowest below the DXP threshold at
				A reference tone at -20 dB will be subjected to a 5 dB increase in level. Unity gain is hit at Reference Level found on the Setup page. Further increase in low level may be obtained using higher Steer values in each band.			
	Trim	Reference Level	All Thresh.		All Gain	Lim. Thresh.	Fader
Overall Gain/Drive adjustment preset at +3 dB. Reference leve the DXP proces unity gain, unle Gains or Trim a		Reference level at which the DXP processor hits unity gain, unless Band Gains or Trim are offset.	Below this point gain is max. The is relative to Ref Level.	, DXP e setting ference	Offset DXP gain make- up. Individual Band Gains are available in the 5Band page.	Threshold of the linked output limiter. Soft Clip threshold is relative to this setting, but turned off in this preset.	Post limiter, pre dither output fader.

7	7 DXP Classical (MS)		MD4	ID4 Five band DXP processor with basic settings suitable for classical music, and o sensitive music, where additional stereo enhancement or width control is of imp preset is spectrally flat, and uses the Dynamic limiter profile for lowest perceiva distortion.				
				A reference tone at -20 dB will be subjected to a 4 dB increase in level. Unity gain is hit at Reference Level found on the Setup page. Further increase in low level may be obtained using higher Steer values in each band.				
	Trim M	Trim S	All Thresh	n. M	All Thresh. S	Lim. Thresh.	Fader	
Overall Gain/Drive control for center elements of a stereo signal preset at +3 dB.Overall Gain/Drive control for L/R panned elements of a stereo signal preset at +3 dB.		Below this point, DXP gain to the M part of the signal is max. The setting is relative to Reference Level.		Below this point, DXP gain to the S part of the signal is max. The setting is relative to Reference Level.	Threshold of the linked output limiter. Soft Clip threshold is relative to this setting, but turned off in this preset.	Post limiter, pre dither output fader.		

Engine Bank F9, decade 6: DXP Processing (MD4)

0	0 Madison 03 MD4			Famed preset suitable for preserving the low level space detail in music tending to get lost when data reduction is used. Note that Madision presets do not offset the general M/S balance unless the M and S Trim faders are used.				
				The Madison 03 preset adds 3 dB boost to low levels signals. Unity gain is hit at Referen Level.				
	Trim M Trim S Reference L		_evel	Profile	Lim. Thresh. L	Lim. Thresh. R		
Overall C control fo elements signal pro	Gain/Drive or center s of a stereo eset at 0 dB.	Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.	Reference level the DXP proces unity gain, unles Gains or Trim an	at which sor hits s Band re offset.	Limiter profiles can be optimized for different program material. Default setting is Universal profile.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	

1	1 Madison 06 MD4		MD4	Famed p when da balance	Famed preset suitable for preserving the low level space detail in music tending to get lost when data reduction is used. Note that Madision presets do not offset the general M/S balance unless the M and S Trim faders are used.				
				The Madison 06 preset adds 6 dB boost to low levels signals. Unity gain is Level.			y gain is hit at Reference		
	Trim M	Trim S	Reference I	evel	Profile	Lim. Thresh. L	Lim. Thresh. R		
Overall Gain/Drive control for center elements of a stereo signal preset at 0 dB.		Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.	Reference level the DXP proces unity gain, unles Gains or Trim an	at which sor hits s Band re offset.	Limiter profiles can be optimized for different program material. Default setting is Universal profile.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.		

2	2 Madison 09 MD4			Famed presets suitable for preserving the low level space detail in music tending to get lost when data reduction is used. Note that Madision presets do not offset the general M/S balance unless the M and S Trim faders are used.				
			The Madison 09 preset adds 9 dB boost to low levels signals. Unity gain is hit at Level.				y gain is hit at Reference	
	Trim M	Trim S	Reference L	.evel	Profile	Lim. Thresh. L	Lim. Thresh. R	
Overall G control fo elements signal pro	Overall Gain/Drive control for center elements of a stereo ignal preset at 0 dB.Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.Reference level at the DXP processor unity gain, unless B Gains or Trim are of		at which sor hits s Band e offset.	Limiter profiles can be optimized for different program material. Default setting is Universal profile.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.		

3	3 Madison Acoustic 03 MD4			Famed p get lost v M/S bala The Mac Reference	Famed preset suitable for preserving the low level space detail in acoustic music tending to get lost when data reduction is used. Note that Madision presets do not offset the general M/S balance unless the M and S Trim faders are used. The Madison Acoustic 03 preset adds 3 dB boost to low levels signals. Unity gain is hit at Reference Level.					
	Trim M Trim S		Reference	Level	Profile	Lim. Thresh. L	Lim. Thresh. R			
Overall 0 control fo elements signal pr	Gain/Drive or center s of a stereo eset at 0 dB.	Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.	Reference leve the DXP proces unity gain, unle Gains or Trim a	l at which ssor hits ss Band are offset.	Limiter profile. Default setting is Universal. Set to Soft or Dynamic if the source is fragile.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.			

4	4 Madison Acoustic 06		MD4 Famed preset suitable for preserving the low level space detail in acoustic music tend get lost when data reduction is used. Note that Madision presets do not offset the ger M/S balance unless the M and S Trim faders are used. The Madison Acoustic 06 preset adds 6 dB boost to low levels signals. Unity gain is h Reference Level.				
Trim M Trim S		Reference Level		Profile	Lim. Thresh. L	Lim. Thresh. R	
Overall Gain/Drive control for center elements of a stereo signal preset at 0 dB.Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.		Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.	Reference level the DXP process unity gain, unles Gains or Trim ar	at which sor hits s Band re offset.	Limiter profile. Default setting is Universal. Set to Soft or Dynamic if the source is fragile.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.

5	5 Madison Acoustic 09		MD4	ID4 Famed preset suitable for preserving the low level space detail in acoustic music tending get lost when data reduction is used. Note that Madision presets do not offset the general M/S balance unless the M and S Trim faders are used. The Madison Acoustic 09 preset adds 9 dB boost to low levels signals. Unity gain is hit a Reference Level.				
Trim M Trim S		Reference Level		Profile	Lim. Thresh. L	Lim. Thresh. R		
Overall Gain/Drive control for center elements of a stereo signal preset at 0 dB.		Overall Gain/Drive control for L/R panned elements of a stereo signal preset at 0 dB.	Reference level the DXP proces unity gain, unles Gains or Trim a	at which sor hits is Band re offset.	Limiter profile. Default setting is Dynamic. Set to Soft or Universal if the source is not fragile.	Output Limiter L threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	Output Limiter R threshold. Consider linking L and R when used on stereo signals. Soft Clip threshold is relative to this setting.	

Engine Bank F10, decade 0: Static EQ's (identical with F9, decade 0)

0	0 Parametric EQ 5.1		EQ5.1	Six full range, four band parametric E Filter possibility on Low and Hi band.		qs with analog modeling at fs/2 and 48 bit resolution.	
Ir	n Level L	In Level C	In Level	R	In Level SL	In Level SR	In Level LFE

1	Parametric E	ຊ 5.1 Linked	EQ5.1 Like pr		Like preset 0, but with the 5 Main channels operating linked together.			
Ir	In Level L In Level C		In Level R		In Level SL	In Level SR	In Level LFE	

2	2 MDW HiRes EQ		MDW HiRes EQ	George	George Massenburg upsampling, high resolution stereo Eq.				
In Level L In Level C		In Level	R	In Level SL	In Level SR	In Level LFE			

3	3 MDW HiRes EQ 5.1		MDW HiRes EQ 5.1	George	George Massenburg upsampling, high resolution six channel Eq.			
Ir	In Level L In Level C		In Level	R	In Level SL	In Level SR	In Level LFE	

F10, decade 1: DXP Processing for Multichannel (MDX5.1)

0 MDX5.1 Film Master		MDX5.1 48 bit dy data red preset for		3 bit dynamics processor for 5.1 Film Mastering. Limiting points are set to avoid distortion in ata reduction codecs such as DTS and Dolby AC3. More engines can be loaded with the reset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
			Low level gain is set to 3 dB. If more gain is needed, adjust Fader #1 and #2 and/or use higher Steer settings. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. Th linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference level		DXP Defeat Level	Lo Xover	Hi Xover
Adjusts input gain of the five Main channels without sacrificing resolution.		Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ch the oximates eference old	Relative level below band Thresholds at which DXP gain is disabled.	Low cross-over point for Main channel processing.	High cross-over point for Main channel processing.	

1 Film Xtra Srnd Lift		MDX5.1 48 bit d data rec preset 1		48 bit dynamics processor for 5.1 Film Mastering. Limiting points are set to avoid distortion in data reduction codecs such as DTS and Dolby AC3. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.				
				Low level gain is set to 6 dB on Ls and Rs, and 3 dB on other channels. Channel linking is L- R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference level		FullRng Thresh.	Limit LFE Thresh.		
Adjusts input gain of the five Main channels without sacrificing resolution.Adjusts input gain of th LFE channel without sacrificing resolution.		Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.			

2 Film Xtra Cnt Lift		MDX5.1 48 bit dy data red preset for		48 bit dynamics processor for 5.1 Film Mastering. Limiting points are set to avoid distortion in data reduction codecs such as DTS and Dolby AC3. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
			Low level gain is set to 6 dB on Center channel, and 3 dB on other channels. Channel linkir is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.	
Adjusts input gain of the five Main channels without sacrificing resolution. Adjusts input gain of th LFE channel without sacrificing resolution.		Level above whi processor appro unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.		

3 MDX5.1 Music Master		MDX5.1 48 bit d in data preset t		48 bit dynamics processor for 5.1 Music Mastering. Limiting points are set to avoid distortion in data reduction codecs such as DTS and Dolby AC3. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
			Low level gain is set to 5 dB. If more gain is needed, adjust Fader #1 and #2 and/or use higher Steer settings. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. T linking setup can be changed on the Link page.				
Maiı	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.	
Adjusts input gain of the five Main channelsAdjus LFE c sacrific resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	 Level above whi processor appro- unity gain, and r for DXP Thresho settings. 	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.	

4 Music Xtra Srnd Lift		MDX5.1 48 bit in dat prese		48 bit dynamics processor for 5.1 Music Mastering. Limiting points are set to avoid distortion in data reduction codecs such as DTS and Dolby AC3. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.				
				Low level gain is set to 8 dB on Ls and Rs, and 5 dB on other channels. Channel linking is R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference level		FullRng Thresh.	Limit LFE Thresh.		
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.		

5 Music Xtra Cnt Lift		MDX5.1 48 bit dy in data r preset for		48 bit dynamics processor for 5.1 Music Mastering. Limiting points are set to avoid distortion in data reduction codecs such as DTS and Dolby AC3. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.					
				Low leve is L-R, L Link pag	Low level gain is set to 8 dB on Center channel, and 5 dB on other channels. Channel linkin is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference level		FullRng Thresh.	Limit LFE Thresh.			
Adjusts input gain of the five Main channels without sacrificing resolution. Adjusts input gain of th LFE channel without sacrificing resolution.		Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.				

F10, decade 2: Dynamic Range Conversion for Multichannel (MDX5.1)

0 Film Remap Curve A3		MDX5.1 48 bit dynamics processor for converting 5.1 Film to Domestic listening. boosted, normal level input is untouched, overly hot input is limited. More loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel for		ening. Low level input is d. More engines can be nel formats.			
			Low level gain is set to 3 dB for all channels, output limiting at –3 dBFS. Channel linking i R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference level		FullRng Thresh.	Limit LFE Thresh.	
Adjusts input gain of the five Main channels without sacrificing resolution. Adjusts input gain of LFE channel without sacrificing resolution		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ch the oximates eference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.	

1 Film Remap Curve A6		MDX5.1	48 bit dynamics processor for converting 5.1 Film to Domestic boosted, normal level input is untouched, overly hot input is lin with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel f		5.1 Film to Domestic listenir , overly hot input is limited. M 7.1 or 10.2 channel formats	ng. Low level input is lore engines can be loaded			
			Low level ga Ls-Rs, Cente	Low level gain is set to 6 dB for all channels, output limiting at –3 dBFS. Channel linking is L-l Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.					
Mair	n Channels	LFE Channel	Reference level		FullRng Thresh.	Limit LFE Thresh.			
Adjusts input gain of the five Main channels without sacrificing resolution. Adjusts input gain of th LFE channel without sacrificing resolution.		e Level above processor a unity gain, a for DXP Thr settings.	which the oproximates nd reference eshold	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.				

2 Film Remap Curve A9		MDX5.1 48 bit dy boosted, loaded v		48 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is boosted, normal level input is untouched, overly hot input is limited. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.				
				Low level gain is set to 9 dB for all channels, output limiting at –3 dBFS. Channel linking is R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.		
Adjusts input gain of the five Main channels without sacrificing resolution. Adjusts input gain of t LFE channel without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.		

3 Film Remap Curve A12		MDX5.1 48 bit dy boosted loaded v		8 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is boosted, normal level input is untouched, overly hot input is limited. More engines can be baded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
			Low level gain is set to 12 dB for all channels, output limiting at –3 dBFS. Channel linking L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Li page.				
Mair	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.	
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro unity gain, and r for DXP Thresho settings.	ch the eximates eference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.	

4	4 Film Remap Curve B6		MDX5.1 48 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is boosted, normal level input is boosted less, overly hot input is limited. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.					
				Low level gain is set to 6 dB on all channels, normal level gain is set to 4 dB, output limiting at –3 dBFS. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mai	Main Channels LFE Channel		Reference	level	FullRng Thresh.	Limit LFE Thresh.		
Adjusts i five Mair without s resolutio	Adjusts input gain of the five Main channels without sacrificing resolution. Adjusts input ga LFE channel wi sacrificing resol		Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.		

5 Film Remap Curve B9		Curve B9	MDX5.1 48 bit dy boosted, loaded v		8 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is oosted, normal level input is boosted less, overly hot input is limited. More engines can be baded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
				Low level gain is set to 9 dB on all channels, normal level gain is set to 4 dB, output limiting at –3 dBFS. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Mair	Main Channels LFE Channel		Reference level		FullRng Thresh.	Limit LFE Thresh.		
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.		

6 Film Remap Curve B12		MDX5.1 48 bit dy boosted loaded v		48 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is boosted, normal level input is boosted less, overly hot input is limited. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
			Low level gain is set to 12 dB on all channels, normal level gain is set to 4 dB, output limiting at –3 dBFS. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Main Channels LFE Channel		LFE Channel	Reference level		FullRng Thresh.	Limit LFE Thresh.	
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.	

7 Film Remap Curve C6		MDX5.1	48 bit dy boosted boosted processi	48 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is boosted - especially on the C channel to preserve speech intelligibility - normal level input is boosted less, overly hot input is limited. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.					
				Low level gain is set to 8 dB on the C channel and 6 dB on other channels, normal level g is set to 4 dB, output limiting at –3 dBFS. Channel linking is L-R, Ls-Rs, Center by itself at LFE by itself. The linking setup can be changed on the Link page.					
Mair	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.			
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.			

8	8 Film Remap Curve C9		MDX5.1 48 bit of booster proces		48 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level input is boosted - especially on the C channel to preserve speech intelligibility - normal level input is boosted less, overly hot input is limited. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.				
					Low level gain is set to 11 dB on the C channel and 9 dB on other channels, normal level gain is set to 4 dB, output limiting at –3 dBFS. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.				
Maii	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.			
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	Level above whi processor appro- unity gain, and r for DXP Thresho settings.	ich the oximates reference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.			

9 Film Remap Curve C12		MDX5.1	48 bit dy boosted boosted processi	48 bit dynamics processor for converting 5.1 Film to Domestic listening. Low level inp boosted - especially on the C channel to preserve speech intelligibility - normal level i boosted less, overly hot input is limited. More engines can be loaded with the preset processing of e.g. 6.1, 7.1 or 10.2 channel formats.					
				Low level gain is set to 14 dB on the C channel and 12 dB on other channels, normal level gain is set to 4 dB, output limiting at –3 dBFS. Channel linking is L-R, Ls-Rs, Center by itself and LFE by itself. The linking setup can be changed on the Link page.					
Maii	n Channels	LFE Channel	Reference	level	FullRng Thresh.	Limit LFE Thresh.			
Adjusts input gain of the five Main channels without sacrificing resolution.		Adjusts input gain of the LFE channel without sacrificing resolution.	 Level above whi processor appro unity gain, and r for DXP Thresho settings. 	ch the oximates eference old	Limit Threshold for the five Main channel limiters.	Limit Threshold for the LFE channel limiter.			

Engine Bank F10, decade 7: Multichannel Limiters and Soft Clip (MD5.1)

0 5.1 Limit 0dBFS		MD5.1	5.1 widel for proce	5.1 wideband Limiter with Soft Clip functionality. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.			
			The preset is unity gain until limiting action starts. To apply gain, turn up the Comp All Gain and Comp LFE Gain parameters.				
Comp. All Gain FullRng. Thresh.		FullRng. Thresh.	FullRng. Softclip		Comp. LFE Gain	LFE Thresh.	Output Fader
Master amount of gain make-up to the 5 Main channels. After the multiband sections, but before the limiters.		Threshold of the 5 Main output limiters expressed in dBFS.	Threshold of so applied to the 5 channels expres dBFS.	ft clip Main ssed in	Master amount of gain make-up to the LFE channel.	Threshold of the LFE output limiter expressed in dBFS.	Post limiter, pre dither output fader for all 5.1 channels.

1	1 5.1 SoftKnee Lim 0dBFS		MD5.1	ND5.1 Three-band 5.1 Soft Knee Limiter. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.					
				The mult are linke The outp	The multiband section kicks in when long duration signals above -8 dBFS are detected, and are linked LFr-RFr, LSr-RSr and Center by itself. Linking can be changed on the Setup page. The output limiters protects against short peaks on a sample by sample basis.				
			The preset is unity gain until soft knee/limiting action starts. To apply gain, turn up the All Gain and Comp LFE Gain parameters.				ply gain, turn up the Comp		
Com	ıp. All Gain	FullRng. Thresh.	FullRng. So	oftclip	Comp. LFE Gain	LFE Thresh.	Output Fader		
Master amount of gain make-up to the 5 Main channels. After the multiband sections, but before the limiters.Threshold of the 5 output limiters expressed in dBF		Threshold of the 5 Main output limiters expressed in dBFS.	Threshold of so applied to the 5 channels expres dBFS.	ft clip Main ssed in	Master amount of gain make-up to the LFE channel.	Threshold of the LFE output limiter expressed in dBFS.	Post limiter, pre dither output fader for all 5.1 channels.		

2	2 5.1 NAB Limit		MD5.1	Three-ba latency a Use the	Three-band 5.1 NAB broadcast Soft Knee Limiter with 3 ms look-ahead delay. For low latency applications the delay may be as low as 0.5 ms without compromising the sound. Use the Nominal Delay parameter to adjust.				
			The multiband section kicks in when long duration signals above -10 dBFS are detected, a are linked LFr-RFr-LSr-RSr with Center by itself. Linking can be changed on the Setup pay The output limiters protects against short peaks above -6 dBFS on a sample by sample basis.						
FullR	Ing. Thresh.	LFE Thresh.							
Threshold of the 5 Main output limiters preset at - 6 dBFS.Threshold of the LFE output limiter preset a -6 dBFS.									

3 5.1 EBU Limit MDS		MD5.1	Three-band 5.1 EBU broadcast Soft Knee Limiter with 3 ms look-ahead delay. For low latency applications the delay may be as low as 0.5 ms without compromising the sound. Use the Nominal Delay parameter to adjust.					
				The multiband section kicks in when long duration signals above -12 dBFS are detected, and are linked LFr-RFr-LSr-RSr with Center by itself. Linking can be changed on the Setup page. The output limiters protects against short peaks above -9 dBFS on a sample by sample basis.				
FullR	Rng. Thresh.	LFE Thresh.						
Threshold of the 5 Main output limiters preset at - 9 dBFS.Threshold of the LFE output limiter preset at -9 dBFS.								

4	5.1 SoftClip		MD5.1	 5.1 Soft Clip Limiter preset adding 4 dB gain to a 5.1 signal. Look-ahead delay is preset to 3 ms. For low latency applications the delay may be as low a 0.5 ms without compromising the sound. Use the Nominal Delay parameter to adjust. 				
Comp. All Gain FullRng. Softclip			FullRng. Thresh.		Comp. LFE Gain	LFE Softclip	LFE Thresh.	
Master amount of gain applied to the 5 Main channels.		Threshold of soft clip applied to the 5 Main channels expressed in dBFS.	Threshold of the output limiters expressed in dB	e 5 Main FS.	Amount of gain applied to the LFE channel.	Threshold of soft clip applied to the LFE channel expressed in dBFS.	Threshold of the LFE output limiter expressed in dBFS.	

Engine Bank F10, decade 8: Multichannel Dynamics Processing (MD5.1)

0	0 5.1 DVD Master MD5.1			Multichar More eng formats.	Multichannel, multiband dynamics processor for optimization of level on DVD film releases. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats.				
			The preset adds 3 dB of gain to an input of -20 dBFS, with the mulitband section linke RFr, LSr-RSr, Center and LFE separate. Center additionally adds steering to LFr and max speech intelligibility. Linking can be changed on the Setup page.						
			The output limiters protects against short peaks on a sample by sample basis. Look-ahead delay is preset to 3 ms. For low latency applications the delay may be as low as 0.5 ms without compromising the sound. Use the Nominal Delay parameter to adjust.						
Comp	. All Thresh.	FullRng. Thresh.	Comp. LFE T	hresh.	LFE Thresh.	Output Fader			
Master threshold of the 5 Main channel, 3-band char compressors. Setting is exp relative to Reference Level.		Threshold of the 5 Main channel output limiters expressed in dBFS.	Threshold of the compressor. Se relative to Refer Level.	e LFE tting is rence	Threshold of the LFE output limiter expressed in dBFS.	Post limiter, pre dither output fader for all 5.1 channels.			

1 5.1 Classical Master		MD5.1 Multichannel, multiband dynamics processor for optimization of level on DVD clas acoustic music releases. More engines can be loaded with the preset for processi 6.1, 7.1 or 10.2 channel formats.			vel on DVD classical and eset for processing of e.g.			
				The preset adds 4.5 dB of gain to an input of -20 dBFS, with the mulitband section linked LFr-RFr, LSr-RSr, Center and LFE separate. Linking can be changed on the Setup page.				
				The out	out infiniters protects against s	non peaks on a sample by sa	ampie basis.	
Comp	o. All Thresh.	FullRng. Thresh.	Comp. LFE T	hresh.	LFE Thresh.	Output Fader		
Master threshold of the 5 Main channel, 3-band compressors. Setting is relative to Reference Level.		Threshold of the compressor. Se relative to Refer Level.	e LFE tting is rence	Threshold of the LFE output limiter expressed in dBFS.	Post limiter, pre dither output fader for all 5.1 channels.			

2	2 5.1 Film to DVD		MD5.1	Multicha film to do 7.1 or 10 <i>applicati</i>	Multichannel, multiband dynamics processor for transcoding the dynamic range of feature film to domestic use. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats. <i>Note: Presets based on MDX5.1 provide more flexibility for this application.</i>			
			The preset adds 5 dB of gain to an input of -20 dBFS, with the mulitband section linke RFr-LSr-RSr, Center and LFE separate. Linking can be changed on the Setup page.				litband section linked LFr- on the Setup page.	
				The output limiters protects against short peaks on a sample by sample basis. Look-ahead delay is preset to 3 ms. For low latency applications the delay may be as low as 0.5 ms without compromising the sound. Use the Nominal Delay parameter to adjust.				
Comp	. All Thresh.	FullRng. Thresh.	Comp. LFE T	hresh.	LFE Thresh.	Output Fader		
Master threshold of the 5 Main channel, 3-band compressors. Setting is relative to Reference Level.		Threshold of the 5 Main channel output limiters expressed in dBFS.	Threshold of the compressor. Se relative to Refer Level.	e LFE tting is rence	Threshold of the LFE output limiter expressed in dBFS.	Post limiter, pre dither output fader for all 5.1 channels.		

3	3 5.1 Film to B'Cast		MD5.1	Multicha film to br 7.1 or 10 <i>applicati</i>	Multichannel, multiband dynamics processor for transcoding the dynamic range of feature film to broadcast use. More engines can be loaded with the preset for processing of e.g. 6.1, 7.1 or 10.2 channel formats. <i>Note: Presets based on MDX5.1 provide more flexibility for this application.</i>				
				The preset adds 2.5 dB of gain to an input of -20 dBFS, with the mulitband section linked LFr-RFr-LSr-RSr, Center and LFE separate. Linking can be changed on the Setup page.					
			The output limiters protects against short peaks on a sample by sample basis. Look-ahead delay is preset to 3 ms. For low latency applications the delay may be as low as 0.5 ms without compromising the sound. Use the Nominal Delay parameter to adjust.						
Comp	. All Thresh.	FullRng. Thresh.	Comp. LFE T	hresh.	LFE Thresh.	Output Fader			
Master threshold of the 5 Main channel, 3-band compressors. Setting is relative to Reference Level.		Threshold of the 5 Main channel output limiters expressed in dBFS.	Threshold of the compressor. Se relative to Refer Level.	e LFE tting is rence	Threshold of the LFE output limiter expressed in dBFS.	Post limiter, pre dither output fader for all 5.1 channels.			

7 5.1 De-Compress		MD5.1 Exca		Excessive upstream compression or limiting cannot be removed, but this preset reinstates some dynamic differences for input signals between -22 and 0 dBFS.			
Reference Level Exp. LFE Range		Exp. Lo Range		Exp. Mid Range	Exp. Hi Range	Output Fader	
Define le unity gai occurs. L value is r	Define level at which unity gain of preset occurs. Level below this value is reduced.		Max range of de compression of bands of the 5 M channels.	e- the Low ∕lain	Max range of de- compression of the Mid bands of the 5 Main channels.	Max range of de- compression of the High bands of the 5 Main channels.	Post limiter, pre dither output fader for all 5.1 channels.

8 5.1 Noise Reduction		MD5.1 Multibane multichai		<i>I</i> ultiband expansion with look-ahead capability is ideal for subtle noise reduction on nultichannel signals.			
				The preset provides an example of MD5.1 used for that purpose. Channels are lin RFr, LSr-RSr, Center and LFE separate Linking can be changed on the Setup p ahead delay is set to 3 ms.			
Reference Level		Exp. LFE R	ange	Exp. Lo Range	Exp. Mid Range	Exp. Hi Range	
Threshold for all bands, all channels allowing dynamic discrimination between signal and noise.			Max noise reduct the LFE channe	ction on I.	Max noise reduction on the Low frequency bands of the 5 Main channels.	Max noise reduction on the Mid frequency bands of the 5 Main channels.	Max noise reduction on the High frequency bands of the 5 Main channels.

9	9 5.1 Cat43 Emulate MD5.4		MD5.1	Multiban Cat43. T layout re	Multiband 5.1 expander emulating processing and operation of the old two channel Dolby Cat43. The preset is an example of a realtime Cat43 for multichannel signals, with a fader layout resembling that of the orange predecessor.				
				For single channel or stereo work, compare against preset 10-3-9 and 11-5-9.					
				Channel the Setu	Channels are linked LFr-RFr-LSr-RSr, Center and LFE separate. Linking can be changed on the Setup page. Look-ahead delay is set to 3 ms.				
Refe	rence Level		Exp. LFE Range		Exp. Lo Range	Exp. Mid Range	Exp. Hi Range		
Threshold for all bands, all channels allowing dynamic discrimination between signal and noise.		Max noise reduct the LFE channe	ction on I.	Max noise reduction on the low frequency material12 dB is a typical setting.	Max noise reduction on the mid frequency material6 dB is a typical setting.	Max noise reduction on the high frequency material. 0 dB (off) is a typical setting.			

Engine Bank F11, decade 0: Monitoring

0	Monitor Matri	х* Т	Foolbox 5.1	Monitor I to 5.1. TI speakers approach processin TC site, a Program	Matrix with Calribrated Loudn he preset is set for a 20 dB a s. Move fader 6 to change tha n as suggested by SMPTE ar ng is also taken into account. and in mastering engineer Bo ming and selction of speaker	ess listening, and handling a ttenuation upon recall, so you at, or consider using an integ nd EBU. The loudness loop n . More details can be found ir ob Katz' writing about a "K-m calibration levels are perforr	ny input format from mono u don't harm your ears or rated monitoring-metering nay be closed further when n the Tech Library on the eter" standard. ned on the Level page.
				The com precision relays et for a use	bination of a high digital reson converters with custom dow c., makes the 6000 with the M r working with any audio form	olution, analog gain scaling pr nsampling filters, a qualified Monitor Matrix one of the only nat in the analog or digital do	re and post conversion, analog signalpath with / critical listening solutions main.
				This algo it is bit tra dB. Down reproduct page.	orithm's resolution is 48 bit fix ansparent. For a bit transpare nmix and Bass Management tion conditions. Bypass is dis	ted point, and when no specia ent bypass of all 5.1 channels may be invoked to judge ma sabled in this preset, but can	al functions are turned on, s, move the Fader to 0.0 terial under different be enabled on the Level
				Downmix or 90 deg and atter and post	c coefficients can be adjusted gree Mono. 90 degree mono nuates fully correlated elemen production.	I, and summing points set to preserves out of phase elem nts by 3 dB. Both characteris	normal Mono (0 degree) ents in the mono signal, tics are useful in film, DVD
				Trimming in timing (ms and samples) can be found in the Trim page, and may be added if speaker placement or signal correction calls for it.			
				The algo distributio signals.	rithm includes precision test on of test tones etc., as well a	signal generators for calibrat as solo/mute functions for rea	ion of speakers, altime inspection of various
				Note: In output of	the Monitoring preset descrip this channel is called "Sub/L	otions, the ".1" input is referre .FE", because of its relation t	d to as "LFE", while the o a particular speaker.
Out	put Format	Mono Output	90 degree N	lono	LFE Mode		Fader
Selects the performe Use the o change in between presenta	he downmix d to a 5.1 input. control to n realtime different tion formats.	Select if a Mono downmix is presented in one speaker (center) or as a phantom image in L and R.	Select if downmi 90 degree summ LCRS and Mono	x uses hing in o format.	Selects how the LFE channel is handled. "Extract" adds LF from the 5 Main channels to the Sub out. "Distribute" spreads the LFE signal among all the 5 Main speakers.		Pre dither output fader for all 5.1 channels preset at -20 dB. If Calibrated Reference levels are used (Level page), the Fader becomes inactive.

1	1 Mon. Main Ch to Sub Toolbox 5			This pres set for "s redirecte	This preset gives a presentation of a 5.1 signal, if bass management at the end listener is set for "satellite configuration", ie. 5 Small Main speakers with all low frequency energy redirected to one single Sub/LFE speaker.			
				Note that the preset allows the LFE input to be or not to be mixed and output with the LF content of the Main channels. Some consumer systems have more gain on the LFE input to Sub/LFE output than they apply for low frequency elements derived from the Main channels. To set up these properties, adjust the LFE setting on the Bass page relative to the setting o the 5 other channels.				
				Tip: To hear how much a particular Main channel contributes to the Sub/LFE output, Solo LFE Output in combination with Input Solo or Mutes on the Main page.				
				Basic description of the Toolbox algorithm at preset 0.				
Ма	in Lo Cut	Main Lo Cut Order	LFE Hi C	ut	LFE Hi Cut Order	Out Level LFE	Fader	
Lo Cut frequency of the 5 Main channels. Lo Cut is not performed when Lo Cut Order is set to Off.		Low frequency Cut off slope for the 5 Main channels. Preset defaults to Off (no lo cut applied to the Main channels).	Hi Cut frequenc Sub/LFE output defaults to 80 H	y for the . Preset z.	Hi frequency Cut off slope for all channels before they are passed to the Sub/LFE output. Preset defaults to 4th order.	Gain of the Sub/LFE output. Note that LFE input may or may not be mixed with the LF content of the Main channels based upon the LFE setting on the Bass page.	Output fader for all 5.1 channels preset at -10 dB. Note that Inputs are trimmed down by 10 dB (Trim page), so total input attenuation is 20 dB upon preset recall.	

2	2 Mon. LFE to Main Ch		Toolbox 5.1 This preset gives a presentation of a 5.1 signal, if there is no Sub/LFE speaker in the reproduction setup, and all LF energy has to be emitted by the 5 Main speakers. Ful Main speakers would obviously be needed for this to work as intended.			LFE speaker in the /ain speakers. Full Size nded.			
				The pres needs to Main spe page.	The preset takes into account that for film reproduction, acoustic gain for LFE element needs to be higher than gain for Main channel elements (see fader 1). Whether or not Main speakers carry the same amount of LFE input signal may be adjusted on the Bas page.				
				Tip: To hear how much a particular Main channel receives from the LFE input, Solo LFE input in combination with Main channel Output Solo on the Main page.					
				Basic de	Basic description of the Toolbox algorithm at preset 0.				
In	Level LFE	LFE Hi Cut	LFE Hi Cut Order		Bass Level LFE		Fader		
The amo directed speakers speaker signals a LFE setti indicates gain of + amount of emitted f speaker the Bass	unt of LFE input to the 5 Main carries its own t -10 dB, so an ing of -4 a relative LFE 6 dB. The of LFE energy rom each Main is adjusted on page.	A Hi Cut may be applied to the LFE input before it's spread among the Main speakers. This parameter adjust the corner frequency of the Hi Cut filter	This parameter slope of the Hi C described at fad	sets the Cut filter ler 2.	This parameter determines if the LFE signal is also output from the Sub/LFE output channel. Preset default is muted Sub/LFE output.		Output fader for all 5.1 channels preset at -10 dB. Note that Main Channels are trimmed down by 10 dB (Trim page), while the LFE input is trimmed down 4 dB (fader 1). Total input attenuation is 14-20 dB upon preset recall.		

3	Mon. 5.1 to L	CRS	Toolbox 5.1	This pres	This preset gives a presentation of a 5.1 signal if reproduced through an LCRS speaker setup without stereo surrounds and Sub/LFE speaker.				
				The preset does not take into account the reduced channel separation and artefacts associated with steering found in for instance Dolby ProLogic and other 4:2:4 matrixed codecs. Expect a 5.1 signal encoded and decoded through a matrix system to sound worse than the direct transcoding performed by this preset.					
				Note: The LFE input signal is discarded with this preset. If you want to pass LFE to the LCRS outputs, set LFE Mode to Distribute on the Bass page. LFE is added to the 5 Main channels before they are downmixed, so the 5 LFE to Main Channels parameters will determine how much LFE ends up at the LCRS output.					
				Basic description of the Toolbox algorithm at preset 0.					
Out	put Format	Feed From SL/SR					Fader		
Output Format Selects the downmix performed to a 5.1 input. Use the control to change in realtime between different presentation formats.		Sets the coefficients when summing SL and SR. To sum SL and SR with a 90 degree offset, adjust the 90 degree Mono parameter on the Format page. The S output can be limited using the Limiter on the same page.					Output fader for all 5.1 channels preset at -20 dB.		

4	Mon. 5.1 to St	ereo	Toolbox 5.1	This pres	This preset gives a presentation of a 5.1 signal when reproduced through two channel stered speakers (normally reffered to as just "stereo").			
				The char faders 2- Default A to L and	The channel downmix coefficients may be easily adjusted using parameters assigned to faders 2-4. The main issue here is the relative difference between these three parameters. Default ATSC and EBU downmix coefficients calls for C at -3 dB and SL/SR at -6 dB relative to L and R. The absolute numbers are a matter of headroom management.			
				Note: The LFE input signal is discarded with this preset. If you want to pass LFE to the stereo output, set LFE Mode to Distribute on the Bass page. LFE is added to the 5 Main channels before they are downmixed, so the 5 LFE to Main Channels parameters will determine how much LFE ends up at the stereo output.				
				Tip: To hear how much a particular channel contributes to the stereo output, use the Input solo keys on the Main page.				
				Basic description of the Toolbox algorithm at preset 0.				
Out	put Format	Feed From L/R	Feed From	n C	Feed From SL/SR		Fader	
Selects the downmix performed to a 5.1 input. Use the control to change in realtime between different presentation formats.		Sets the mix coefficients of L and R. Preset at -8 dB to accommodate loud 5.1 mixes.	Sets the mix coe of L and R. Pres dB to accommon loud 5.1 mixes.	efficients set at -11 date	Sets the mix coefficients of L and R. Preset at -14 dB to accommodate loud 5.1 mixes.		Output fader for all 5.1 channels preset at -16 dB, which in combination with the downmix attenuation translates a typical 5.1 mix to a normal stereo reproduction level.	

5	5 Mon. 5.1 to Mono Toolbo			This pres speakers Output o	This preset gives a presentation of a 5.1 signal when reproduced in mono through two speakers (phantom mono). To listen through only one speaker, select Center as Mono Output on the Format page, or use preset 5.			
				The channel downmix coefficients may be easily adjusted using paran faders 2-4. The main issue here is the relative difference between the and whether or not the 90 degree de-correlation is activated or not. The are a matter of headroom management.		arameters assigned to these three parameters, t. The absolute numbers		
				Note: The LFE input signal is discarded with this preset. If you want to pass LFE to the mo- output, set LFE Mode to Distribute on the Bass page. LFE is added to the 5 Main channel before they are downmixed, so the 5 LFE to Main Channels parameters will determine how much LFE ends up at the mono output.				
				Tip: To h solo key:	lear how much a particular ch s on the Main page.	nannel contributes to the mor	no output, use the Input	
				Basic description of the Toolbox algorithm at preset 0.				
Out	put Format	Feed From L/R	Feed From	n C	Feed From SL/SR	90 degree Mono	Fader	
Selects the downmix performed to a 5.1 input. Use the control to change in realtime between different presentation formats.		Sets the mix coe of L and R. Pres dB to accommon loud 5.1 mixes.	efficients set at -15 date	Sets the mix coefficients of L and R. Preset at -15 dB to accommodate loud 5.1 mixes.	Applies 90 degree summing when combining L, R, SL and SR. Broadcasters and end listeners will probably not use 90 degree summing, if converting to mono.	Output fader for all 5.1 channels preset at -16 dB, which in combination with the downmix attenuation translates a typical 5.1 mix to a normal stereo reproduction level.		

6 Mon. 5.1 to Mono C Spkr. Toolbox 5.			Toolbox 5.1	This pres speaker. page, or	This preset gives a presentation of a 5.1 signal when reproduced in mono through one speaker. To listen to mono through two speakers, select L/R as Mono Output on the Format page, or use preset 4.			
			The channel downmix coefficients may be easily adjusted using parameters assigned to faders 2-4. The main issue here is the relative difference between these three parameters, and whether or not the 90 degree de-correlation is activated or not. The absolute numbers are a matter of headroom management.					
				Note: The LFE input signal is discarded with this preset. If you want to pass LFE to the mo output, set LFE Mode to Distribute on the Bass page. LFE is added to the 5 Main channel before they are downmixed, so the 5 LFE to Main Channels parameters will determine how much LFE ends up at the mono output.				
				Tip: To hear how much a particular channel contributes to the mono output, use the solo keys on the Main page.			no output, use the Input	
				Basic description of the Toolbox algorithm at preset 0.				
Out	put Format	Feed From L/R	Feed Fror	n C	Feed From SL/SR	90 degree Mono	Fader	
Selects the downmix performed to a 5.1 input. Use the control to change in realtime between different presentation formats.Sets the mix coefficients of L and R. Preset at -12 dB to accommodate loud 5.1 mixes.Sets the mix coefficients of L and R. Preset dB to accommodate loud 5.1 mixes.		efficients set at -15 date	Sets the mix coefficients of L and R. Preset at -15 dB to accommodate loud 5.1 mixes.	Applies 90 degree summing when combining L, R, SL and SR. Broadcasters and end listeners will probably not use 90 degree summing, if converting to mono.	Output fader for all 5.1 channels preset at -13 dB, which in combination with the downmix attenuation translates a typical 5.1 mix to a normal stereo reproduction level.			

9 Spkr. Cal. (Pink Noise) Toolbox 5.1			Toolbox 5.1	This preset was created with speaker loudness calibration in mind, and based on the algorithm's true RMS noise and tone generators. Calibrated loudness will allow you to exhange mixes between studios and colleagues in a meaningful way, and to combat abusive level and distortion from exhausting your headroom.				
			Calibration of the 5 Main speakers should be based on broadband pink noise (default of this preset), or the HPF pink noise also available. Turn up the Fader to 0.0, and adjust the Generator Level to the reference point specified by the standard you wish to follow (normall -18 or -20 dB RMS).					
			Engage of the loudr calibratic operate l have an signal at Consult	Engage one speaker at a time using the Output Solo keys on the Main page, and calibrate the loudness at listening position using an SPL meter (C curve, slow reading). Use a calibration standard suitable for your type of work. Post and television studios tend to operate between 76 and 80 dB SPL, Film studios 83-85 dB SPL, while music studios may have an even higher "comfort level". (Calibration numbers are for a broadband pink noise signal at reference level per speaker). Consult recommended practices from EBU (tech 3276), SMPTE (RP 200) or papers at the				
				Tech Lib Main and	rary of the TC website for mo I LFE speakers.	bre detailed into about test sig	gnals and alignment of	
G	en. Type	Gen. Sine Freq			Gen. Level (RMS)	Gen. LFE Trim	Fader	
Sets the calibratic generate speakers or HPF F LFE use Noise.	type of in signal id. For Main is use Pink Noise Pink Noise. For LPF Pink	If Gen. Type is set to Sine, this parameter adjusts its frequency.			Sets the output RMS level of the signal generator, regardless if it's generating noise or a sine. Reference level is normally either -18 or - 20 dB RMS.	Sets the generator level for the LFE relative to the Main channels to compensate for the boost often incorporated in the LFE reproduction channel.	Master fader for all 5.1 channels. When calibrating, set the fader at 0.0 dB for a valid generator RMS output level setting.	

Engine Bank F11, decade 2: Format Down Conversion for Production Audio

0	0 5.1 to LCRS Toolbox 5.1			The Tool F11 deca presets.	box 5.1 algortithm can be us ade 0 bank holds monitoring	ed for monitoring as well as presets, while decade 2 is fo	production purposes. The r examples of production
				This algo it is bit tra dB, or pr	orithm's resolution is 48 bit fix ansparent. For a bit transpar ess the Bypass key.	ed point, and when no speci ent bypass of all 5.1 channel	al functions are turned on, s, move the Fader to 0.0
				Downmix or 90 deg and atter and post	coefficients can be adjusted gree Mono. 90 degree mono nuates fully correlated eleme production.	I, and summing points set to preserves out of phase elem nts by 3 dB. Both characteris	normal Mono (0 degree) ents in the mono signal, tics are useful in film, DVD
				Trimming speaker	g in timing (ms and samples) placement or signal correctic	can be found in the Trim pag on calls for it.	ge, and may be added if
				The algo distributio signals.	rithm includes precision test on of test tones etc., as well a	signal generators for calibrat as solo/mute functions for rea	ion of speakers, altime inspection of various
				Note: In Monitorir associati	the Production presets, the " ng presets, where the output on with a certain speaker.	1" input and output is referre from this channel is labelled	d to as "LFE", unlike the "Sub/LFE" because of its
Out	put Format	Feed From SL/SR					Fader
Selects ti performe Use the c change in between presenta	he downmix d to a 5.1 input. control to n realtime different tion formats.	Sets the coefficients when summing SL and SR. To sum SL and SR with a 90 degree offset, adjust the 90 degree Mono parameter on the Format page. The S output can be limited using the Limiter on the same page.					Output fader for all 5.1 channels.

1	5.1 to Stereo		Toolbox 5.1	This pres	set transcodes a 5.1 signal to	two channel stereo.	
			The channel downmix coefficients may be easily adjusted using parameters assigned to faders 2-4. The main issue here is the relative difference between these three parameters. Default ATSC and EBU downmix coefficients calls for C at -3 dB and SL/SR at -6 dB relative to L and R. The absolute numbers are a matter of headroom management.				
			Note: The LFE input signal is discarded with this preset. If you want to pass LFE to the stereo output, set LFE Mode to Distribute on the Bass page. LFE is added to the 5 Main channels before they are downmixed, so the 5 LFE to Main Channels parameters will determine how much LFE ends up at the stereo output.				
				Tip: To h	ear how much a particular ch	nannel contributes to the ster	eo output, use the Input
Output Format Feed From L/R					s on the Main page.		
Out	put Format	Feed From L/R	Feed From	n C	Feed From SL/SR		Fader

2	5.1 to Mono		Toolbox 5.1	This pres	set transcodes a 5.1 signal to	two channel mono (L and R	.).	
				The channel downmix coefficients may be easily adjusted using parameters assigned to faders 2-4. The main issue here is the relative difference between these three parameters, and whether or not the 90 degree de-correlation is activated or not. The absolute numbers are a matter of headroom management.				
				Note: The LFE input signal is discarded with this preset. If you want to pass LFE to the m output, set LFE Mode to Distribute on the Bass page. LFE is added to the 5 Main channel before they are downmixed, so the 5 LFE to Main Channels parameters will determine ho much LFE ends up at the mono output.			nt to pass LFE to the mono ed to the 5 Main channels neters will determine how	
				Tip: To hear how much a particular channel contributes to the mono output, use the Input solo keys on the Main page.				
Out	put Format	Feed From L/R	Feed Fror	n C	Feed From SL/SR	90 degree Mono	Fader	
Selects the downmix performed to a 5.1 input. Use the control to change in realtime between different output formats.Sets the mix coefficients of L and R. Preset at -12 		Sets the mix coa of L and R. Pres dB to accommo loud 5.1 mixes.	efficients set at -15 date	Sets the mix coefficients of L and R. Preset at -15 dB to accommodate loud 5.1 mixes.	Applies 90 degree summing when combining L, R, SL and SR.	Output fader for all 5.1 channels.		

3	5.1 to Binaura	Engage	This pres algorithn used as	This preset prepares a 5.1 signal for headphone reproduction through the use of the E algorithm. The algorithm is tuned for AKG240DF headphones, so this selection should used as default, and unless another specific model is specified.				
				Note: Advanced versions of Engage are used for headphone mix optimization and In Flight Entertainment, and carry License protection. Contact TC Support for a trial version of the basic algorithm, if you are prevented from recalling this preset.				
T	hreshold	Release	Output	L	Output R			
Engage incorporates a Limiter. This parameter sets its threshold. Release time constant the Limiter.		Output level L.		Output level R.				

Engine Bank F11, decade 3: Format Up Conversion for Production Audio

0 UnWrap Dry UnWrap			UnWrap output. N material. original r preset in	UnWrap up-converts a stereo or LtRt (matrixed surround) input to a high resolution, 5.1 output. Numerous parameters enables the engineer to get a good result out of most source material. However, there will be times, where the freedom of a new 5.1 mix based on the original multi-track material is the best way forward. UnWrap license is required to recall a preset in this decade.				
				This pres preserva the 5.1 s	set can be used as a starting tion, and where the original n ignal.	point for upconverting mater nix is available using standar	ial where intimacy needs d downmix coefficients on	
			Frontal image width: Solo LCR channels on the Output page when setting Level, of channel and L/R processing parameters. Compare against Bypass if you wish to a same overall image width as the two channel input.					
				Tip: If yo how the result us	u place a Monitor Matrix (pre processing works, should an ing standard downmix princip	set 11-0-0) downstream of U end-listener or broadcaster b les.	nWrap, it's easy to judge be downconverting the	
L/R	Processing	LFE Cut Freq.	SL Dela	у	SR Delay	Decorrelate	Fader	
Controls width.	frontal image	Hi cut filter frequency applied to derive an LFE signal from the input.	Surround delay. larger delays if the reproduction roce expected to be la	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels can be generated in various ways. The Dry algorithm doesn't add extra spaciousness.	Output fader for all 5.1 channels.	

1 UnWrap Intimate UnWra			UnWrap	This part intimacy	This particular preset can be used as a starting point for upconverting material where ntimacy needs preservation, but slightly less dry than preset 0.				
				Frontal image width: Solo LCR channels on the Output page when setting Level, Center channel and L/R processing parameters. Compare against Bypass if you wish to achieve the same overall image width as the two channel input. Basic description of the UnWrap algorithm at preset 0.					
				Buolo uo					
L/R	Processing	LFE Cut Freq.	SL Dela	у	SR Delay	Decorrelate	Fader		
Controls frontal image width. Hi cut filter frequency applied to derive an LF signal from the input.		Hi cut filter frequency applied to derive an LFE signal from the input.	Surround delay. larger delays if the reproduction roce expected to be la	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels can be generated in various ways. The Close algorithm adds a little spaciousness.	Output fader for all 5.1 channels.		

2 UnWrap Lateral		UnWrap Thi fror		This preset can be used as a starting point for upconverting material where lateralization from the surround speakers complements the source.					
				Frontal in channel same ov	Frontal image width: Solo LCR channels on the Output page when setting Level, Center channel and L/R processing parameters. Compare against Bypass if you wish to achieve the same overall image width as the two channel input.				
			Basic description of the UnWrap algorithm at preset 0.						
L/R	Processing	LFE Cut Freq.	SL Delay		SR Delay	Focus	Fader		
Controls frontal image width. Hi cut filter frequency applied to derive an LF signal from the input.		Surround delay. larger delays if the reproduction roce expected to be larger to be	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.			

3	3 UnWrap Soft Sur UnWrap			This pres	This preset can be used as a starting point for upconverting material where an unobtrusive surround room addition complements the source.				
				Frontal in channel same ov	Frontal image width: Solo LCR channels on the Output page when setting Level, Center channel and L/R processing parameters. Compare against Bypass if you wish to achieve the same overall image width as the two channel input.				
				Tip: If yo how the result us	Tip: If you place a Monitor Matrix (preset 11-0-0) downstream of UnWrap, it's easy to judge how the processing works, should an end-listener or broadcaster be downconverting the result using standard downmix principles.				
L/R	Processing	LFE Cut Freq.	SL Delay		SR Delay	Decorrelate	Fader		
Controls frontal image width. Hi cut filter frequency applied to derive an LF signal from the input.		Surround delay. larger delays if t reproduction roc expected to be l	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The Dorsal algorithm adds spaciousness to the surrounds with a pronounced dorsal vector.	Output fader for all 5.1 channels.			

4 UnWrap Wide			UnWrap	This pres spacious	This preset can be used as a starting point for upconverting material where extra spaciousness complements the soure.			
			Frontal image width: Solo LCR channels on the Output page when setting Level, Ce channel and L/R processing parameters. Compare against Bypass if you wish to ac same overall image width as the two channel input.			n setting Level, Center s if you wish to achieve the		
				Tip: If you place a Monitor Matrix (preset 11-0-0) downstream of UnWrap, it's easy to juc how the processing works, should an end-listener or broadcaster be downconverting the result using standard downmix principles.				
L/R	Processing	LFE Cut Freq.	SL Dela	У	SR Delay	Focus	Fader	
Controls frontal image width. Hi cut filter frequency applied to derive an LF signal from the input.		Surround delay. Use larger delays if the reproduction room is expected to be large.		Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.		

4	4 UnWrap Wide UnWrap			This preset can be used as a starting point for a type of upconversion where different contour settings bring out alternative elements, especially in music.				
				Frontal image width: Solo LCR channels on the Output page when setting Level, Center channel and L/R processing parameters. Compare against Bypass if you wish to achieve the same overall image width as the two channel input.				
				Basic description of the UnWrap algorithm at preset 0.				
L/R	Processing	LFE Cut Freq.	SL Dela	у	SR Delay	Focus	Fader	
Controls frontal image width. Hi cut filter frequency applied to derive an LFI signal from the input.		Surround delay. larger delays if t reproduction roc expected to be l	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.		

5 UnWrap Additive		UnWrap This pre mix is th		This preset adds the extra channels without subtracting material from L and R. The original nix is therefore preserved in the L and R output.			
			Basic description of the UnWrap algorithm at preset 0.				
L/R Processing LFE Cut Freq.		SL Delay		SR Delay	Focus	Fader	
Controls width. Tu paramete leave L a complete	frontal image urn this er to 0% to and R ely unaltered.	Hi cut filter frequency applied to derive an LFE signal from the input.	Surround delay. larger delays if the reproduction room expected to be la	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.

6 LtRt Centered UnW			UnWrap	This pres LtRt dec for the la Basic de	This preset turns an LtRt mix into 5.1 without the steering artefacts normally associated with _tRt decoding. The preset is suitable for film and music, but preset 8 may be a better choice for the latter. Basic description of the UnWrap algorithm at preset 0.				
L/R	Processing	LFE Cut Freq.	SL Delay		SR Delay	Focus	Fader		
Controls frontal image width. Turn this parameter to 0% to leave L and R completely unaltered.		Hi cut filter frequency applied to derive an LFE signal from the input.	Surround delay. larger delays if t reproduction roc expected to be l	Use the om is large.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.		

7	7 LtRt Spread UnWrap			This preset turns an LtRt mix into 5.1 without the steering artefacts normally associated with LtRt decoding. The preset is suitable for music and doesn't collapse to the center which an LtRt decoding tends to. Basic description of the UnWrap algorithm at preset 0.				
L/R Processing LFE Cut Freq.		LFE Cut Freq.	SL Delay		SR Delay	Focus	Fader	
Controls frontal image width. Turn this parameter to 0% to leave L and R completely unaltered.		Hi cut filter frequency applied to derive an LFE signal from the input.	Surround delay. larger delays if the reproduction roo expected to be la	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.	

8 LtRt Hall Repro		UnWrap	This preset turns an LtRt mix into 5.1 without the steering artefacts normally associated wit LtRt decoding. The preset has the same profile as no 7, but is aimed at reproduction in a larger hall or movie theatre.Basic description of the UnWrap algorithm at preset 0.				
L/R Processing LFE Cut Freq.			SL Delay		SR Delay	Focus	Fader
Controls frontal image width. Turn this parameter to 0% to leave L and R completely unaltered.		Hi cut filter frequency applied to derive an LFE signal from the input.	Surround delay. larger delays if t reproduction roc expected to be l	Use he om is arge.	Surround delay. Use larger delays if the reproduction room is expected to be large.	The surround channels interact with the frontal image depending on the Focus parameter.	Output fader for all 5.1 channels.

Engine Bank F11, decade 5: BackDrop Noise Reduction

0	0 BackDrop (Startup)		BackDrop	(Drop BackDrop noise reduction was designed to provide the maximum amount of realt reduction without audibly altering the underlying signal. This decade of presets pr starting points for different types of restoration and clean-up work. BackDrop licer required to recall any of these presets.			amount of realtime noise le of presets provide BackDrop license is
				This pres not very L/R signa	set provides a good choice w complex (for instance tape hi als, Unlink the channels on th	hen the level of the noise is r iss). To process single sourc ne Model page.	elatively low and when it is es rather than related or
				For certa when ope noted tha noise prin	in stereo audio sequences, c erating in Stereo mode. Oper at when you change the Proc nt information for the current	operating in M/S mode can gi ating mode is set on the Mai essing Mode, BackDrop auto operating mode.	ve better results than n screen. It should be matically recalculates the
_				Tip: Use	the Listen Removed key to h	lear if you affect the holse or	
Ag	gression	Max Reduction	Basilar Dispe	ersion	Transient Recov.	Trim Start	Trim End
Together with Max Reduction, this parameter controls how much noise reduction is applied.Sets the max number dB BackDrop is allow to remove.		Sets the max number of dB BackDrop is allowed to remove.	Amount of mask by BackDrop's perceptual mode the artefacts of r reduction on low material. When s 0%, Transient R is disabled.	ting used el to limit noise / level set to ecovery	Limits the artefacts of Basilar Disperson, which can blur the transients.	Sets the starting point of the noise print. Trim a loop that contains only noise, and remember to press Calculate whenever Trim Start or End is pressed.	Sets the end point of the noise print. Trim a loop that contains only noise, and remember to press Calculate whenever Trim Start or End is pressed.

1	1 Basic Noise Reduction		BackDrop	This preset provides a good choice when the level of the noise is relatively low and when not very complex (for instance tape hiss). To process single sources rather than related L/R signals, Unlink the channels on the Model page.Basic description of the BackDrop algorithm at preset 0.				
Aggression Max Reduction			Basilar Disp	ersion	Transient Recov.	Trim Start	Trim End	
Together Reduction parameter much no applied.	with Max n, this er controls how ise reduction is	Sets the max number of dB BackDrop is allowed to remove.	f Amount of mask limit the artefact noise reduction level material. W to 0%, Transien Recovery is disa	king to s of on low Vhen set t abled.	Limits the artefacts of Basilar Disperson, which can blur the transients.	Sets the starting point of the noise print. Trim a loop that contains only noise, and remember to press Calculate whenever Trim Start or End is pressed.	Sets the end point of the noise print. Trim a loop that contains only noise, and remember to press Calculate whenever Trim Start or End is pressed.	

2	2 MultiBand Noise Reduction		BackDrop	This pres model us bands. X	This preset offers an enhanced set of controls compared to preset 1 or 2. The MultiBand model used provides three independent noise reduction engines split across three frequency bands. Xover frequencies are accessed from the Model page.			
				The MultiBand model is a good choice for higher levels of noise and when you need a high degree of precision in where you apply the noise reduction. If more noise reduction is needed, turn up the Aggression parameters on the Model page. To process single sourc rather than related or L/R signals, Unlink the channels on the Model page.				
			Basic description of the BackDrop algorithm at preset 0. Note that MS or channe processing is also available in MultiBand mode.			MS or channel unlinked		
Lo Ma	ax Reduction	Lo Bas. Dispers.	Mid Max Red	uction	Mid Bas. Dispers.	Hi Max Reduction	Hi Bas. Dispers.	
Sets the max number of dB BackDrop is allowed to remove on the Lo band. Amount of masking use to limit the artefacts of noise reduction on low level material on the Lo Band.		B Sets the max nu dB BackDrop is to remove on the band.	umber of allowed e Mid	Amount of masking used to limit the artefacts of noise reduction on low level material on the Mid Band.	Sets the max number of dB BackDrop is allowed to remove on the Hi band.	Amount of masking used to limit the artefacts of noise reduction on low level material on the Hi Band.		

3	3 MultiType Noise Reduction		BackDrop	This MultiType preset gives you the ability to de-compose the noise in realtime, and treat elements of it separately.				
			For example, consider a recording that has been corrupted by a combination of to a ground loop, room rumble and tape hiss. In such a situation one often find tonal components of the hum are more annoying than the other two noise com Therefore, it is useful to apply the most noise reduction specifically to the hum Conversely, the tape hiss component might be quite acceptable and so you mile ave it untouched while reducing the room rumble component.			ombination of a hum due ne often finds that the /o noise components. y to the hum component. nd so you might want to		
			Basic description of the BackDrop algorithm at preset 0. Note that MS or channel unlin processing is also available in MultiType mode.					
Buz	z Aggress.	Room Aggress.	Hiss Aggre	ess.	Max Reduction	Basilar Dispersion	Transient Recov.	
Buzz Aggress.Room Aggress.Amount of noise reduction applied to tonal components, e.g. hum, air conditioners, cooling fans, hard disks or CRT fly-back transformers.Amount of noise reduction applied to room components, e.g. air conditioning units, cooling fans, hard disks frequency rumble due to traffic noise, room feeling etc.		Amount of noise reduction applie components, e.g thermal or quant noise.	e d to hiss g. tape, tization	Sets the max number of dB BackDrop is allowed to remove from any noise component.	Amount of masking to limit the artefacts of noise reduction on low level material. When set to 0%, Transient Recovery is disabled.	Limits the artefacts of Basilar Disperson, which can blur the transients.		

4	4 Gentle Noise Reduction		BackDrop This pre thermal		This preset provides a good choice for subtle reduction of random noise such as tape hiss, hermal or quantization types.			
				Basic description of the BackDrop algorithm at preset 0.				
Aggression Max Reduction		Max Reduction	Basilar Disp	ersion	Transient Recov.	Trim Start	Trim End	
Together Reductio paramete much no applied.	with Max n, this er controls how ise reduction is	Sets the max number of dB BackDrop is allowed to remove.	f Amount of mask limit the artefact noise reduction level material. W to 0%, Transien Recovery is disa	king to s of on low Vhen set t abled.	Limits the artefacts of Basilar Disperson, which can blur the transients.	Sets the starting point of the noise print. Trim a loop that contains only noise, and remember to press Calculate whenever Trim Start or End is pressed.	Sets the end point of the noise print. Trim a loop that contains only noise, and remember to press Calculate whenever Trim Start or End is pressed.	

5	5 Air-Conditioning Remove		BackDrop	BackDrop This MultiType preset gives you the ability to de-compose the noise in realtime, and a reduction specifically to tonal room components such as AC's.			e in realtime, and apply		
				processii	Basic description of the BackDrop algorithm at preset 0. Note that MS or channel unlinked processing is also available in MultiType mode.				
Buzz Aggress. Room Aggress.		Room Aggress.	Hiss Aggre	ess.	Max Reduction	Basilar Dispersion	Transient Recov.		
Amount of reduction tonal com hum, air cooling fa or CRT fl transform	of noise applied to nponents, e.g. conditioners, ans, hard disks y-back hers.	Amount of noise reduction applied to room components, e.g. air conditioning units, cooling fans, low frequency rumble due to traffic noise, room feeling etc.	Amount of noise reduction applie components, e.g thermal or quant noise.	d to hiss g. tape, tization	Sets the max number of dB BackDrop is allowed to remove from any noise component.	Amount of masking to limit the artefacts of noise reduction on low level material. When set to 0%, Transient Recovery is disabled.	Limits the artefacts of Basilar Disperson, which can blur the transients.		

6 Hiss Remove Back			BackDrop	This Mul reduction	This MultiType preset gives you the ability to de-compose the noise in realtime, and apply reduction specifically to random noise such as tape hiss, thermal or quantization types.				
				Basic de processi	Basic description of the BackDrop algorithm at preset 0. Note that MS or channel unlinked processing is also available in MultiType mode.				
Buz	Buzz Aggress. Room Aggress. Hiss Aggr			ess.	Max Reduction	Basilar Dispersion	Transient Recov.		
Amount of reduction tonal corr hum, air cooling fa or CRT f transform	of noise n applied to nponents, e.g. conditioners, ans, hard disks ly-back ners.	Amount of noise reduction applied to room components, e.g. air conditioning units, cooling fans, low frequency rumble due to traffic noise, room feeling etc.	Amount of noise reduction applie components, e.g thermal or quant noise.	d to hiss g. tape, tization	Sets the max number of dB BackDrop is allowed to remove from any noise component.	Amount of masking to limit the artefacts of noise reduction on low level material. When set to 0%, Transient Recovery is disabled.	Limits the artefacts of Basilar Disperson, which can blur the transients.		

7 Buzz Remove		BackDrop This Mult reduction		his MultiType preset gives you the ability to de-compose the noise in realtime, and apply eduction specifically to buzz and hum elements.			
			Basic description of the BackDrop algorithm at preset 0. Note that MS or channel unlinked processing is also available in MultiType mode.				
Buzz Aggress. Room Aggress.			Hiss Aggre	ess.	Max Reduction	Basilar Dispersion	Transient Recov.
Amount of reduction tonal corr tonal corr hum, air cooling fa or CRT f transform	of noise n applied to nponents, e.g. conditioners, ans, hard disks ly-back ners.	Amount of noise reduction applied to room components, e.g. air conditioning units, cooling fans, low frequency rumble due to traffic noise, room feeling etc.	Amount of noise reduction applie components, e.g thermal or quant noise.	d to hiss g. tape, tization	Sets the max number of dB BackDrop is allowed to remove from any noise component.	Amount of masking to limit the artefacts of noise reduction on low level material. When set to 0%, Transient Recovery is disabled.	Limits the artefacts of Basilar Disperson, which can blur the transients.

8 Buzz Remove		BackDrop	This MultiType preset gives you the ability to de-compose the noise in realtime, and apply reduction specifically to room sound, traffic noise and similar sources.					
				Basic description of the BackDrop algorithm at preset 0. Note that MS or channel unlinked processing is also available in MultiType mode.				
Buzz Aggress.		Room Aggress.	Hiss Aggre	ess.	Max Reduction	Basilar Dispersion	Transient Recov.	
Amount of noise reduction applied to tonal components, e.g. hum, air conditioners, cooling fans, hard disks or CRT fly-back transformers.		Amount of noise reduction applied to room components, e.g. air conditioning units, cooling fans, low frequency rumble due to traffic noise, room feeling etc.	Amount of noise reduction applied components, e.g thermal or quant noise.	d to hiss J. tape, ization	Sets the max number of dB BackDrop is allowed to remove from any noise component.	Amount of masking to limit the artefacts of noise reduction on low level material. When set to 0%, Transient Recovery is disabled.	Limits the artefacts of Basilar Disperson, which can blur the transients.	

9 Advanced Cat43		BackDrop	This MultiBand preset puts the realtime power of an updated Cat43 into your hands. Same Xovers and operating procedures, but better resolution and perceptual realtime modeling added. Compare against preset 10-3-9, or for multichannel 10-8-9.				
				Basic description of the BackDrop algorithm at preset 0. Note that MS or channel unline processing is also available in MultiType mode.			MS or channel unlinked
Lo Aggression Mid Aggression		Hi Aggression					
Amount of noise reduction applied to low frequency elements, and taking masking into account. 100% gives a max reduction of 24 dB.		Amount of noise reduction applied to mid band elements, and taking masking into account. 100% gives a max reduction of 20 dB.	Amount of noise reduction applied frequency eleme taking masking i account. 100% g max reduction of	d to hi ents, and nto gives a f 16 dB.			