

《针对高端会议体验的“灵魂”浅析》

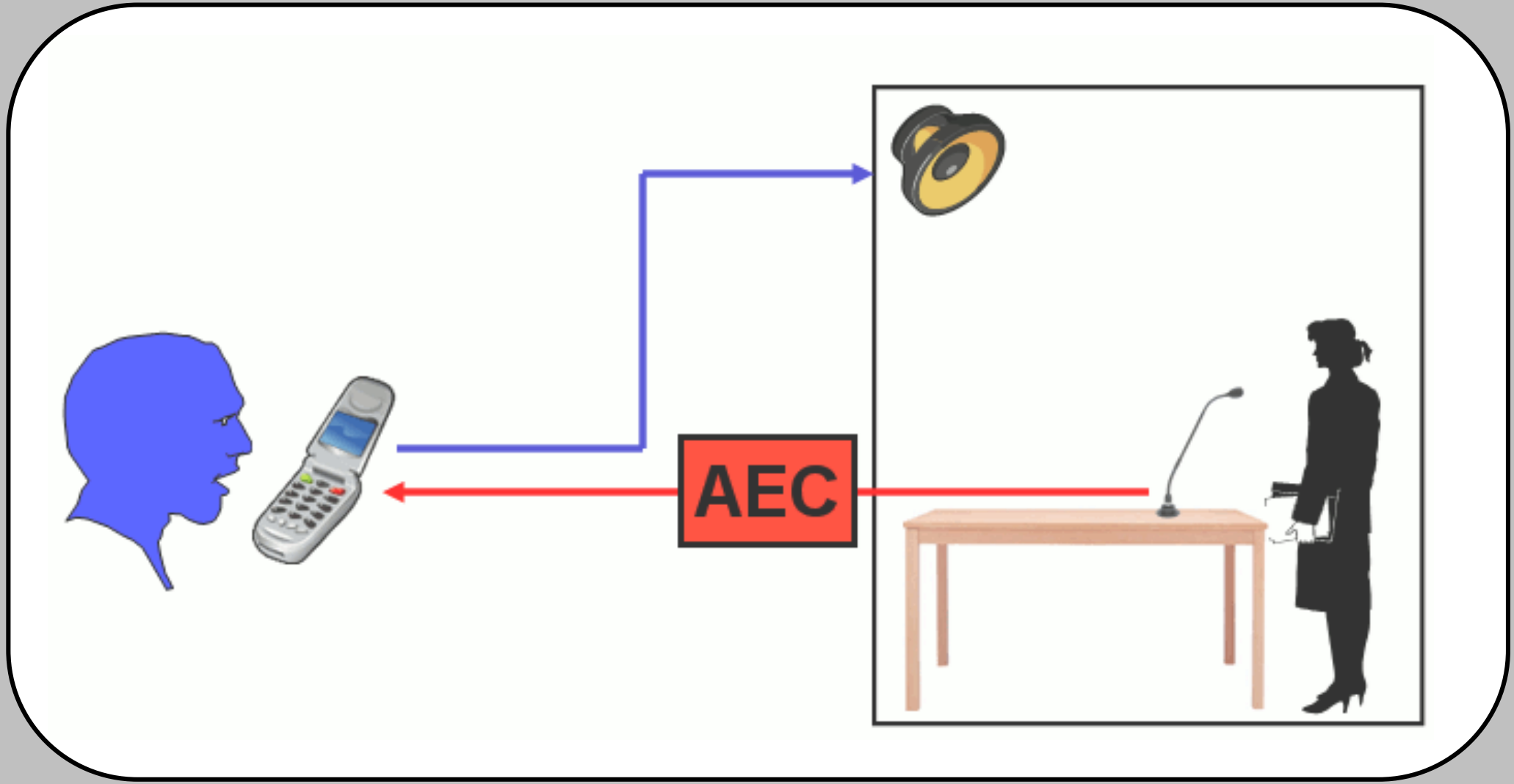
—当会议室遇上“黑科技”

离话筒远声音小



离话筒近声音大





麦克风分段压缩无感均衡处理



Expander/Gate (13)
Mono Expander
In#1 Out#1
Side Ctrl 1.3%

Compressor/Limiter (14)
Mono Split Com
In#1 Out#1
Side Ctrl Hi Ctrl Lo 1.9%

AGC (15)
Mono
In#1 Out#1
Ctrl 1.4%

Out#1

Module: Expan...

G.R. +0 -6 -12 -18 -24 -30 -36 -42 -48

Threshold: -48.0 dB
Ratio: 3:00
Attack: 2.00 ms
Release: 1000 ms

Side Chain In Active

Module: Compressor/Limiter (14) (Compressor/Limit...

Low Band Compressor High Band Compressor

G.R. Output +0 -6 -12 -18 -24 -30 -36 -42 -48

Knee: Soft Medium Hard
Threshold: -30.0 dB
Ratio: 2:00
Attack: 2.00 ms
Release: 1000 ms

Knee: Soft Medium Hard
Threshold: -30.0 dB
Ratio: 4:00
Attack: 0.80 ms
Release: 200 ms

Split Frequency: 300 Hz

Side Chain In Active

Module: AGC (15)...

Input +0 -6 -12 -18 -24 -30 -36 -42 -48

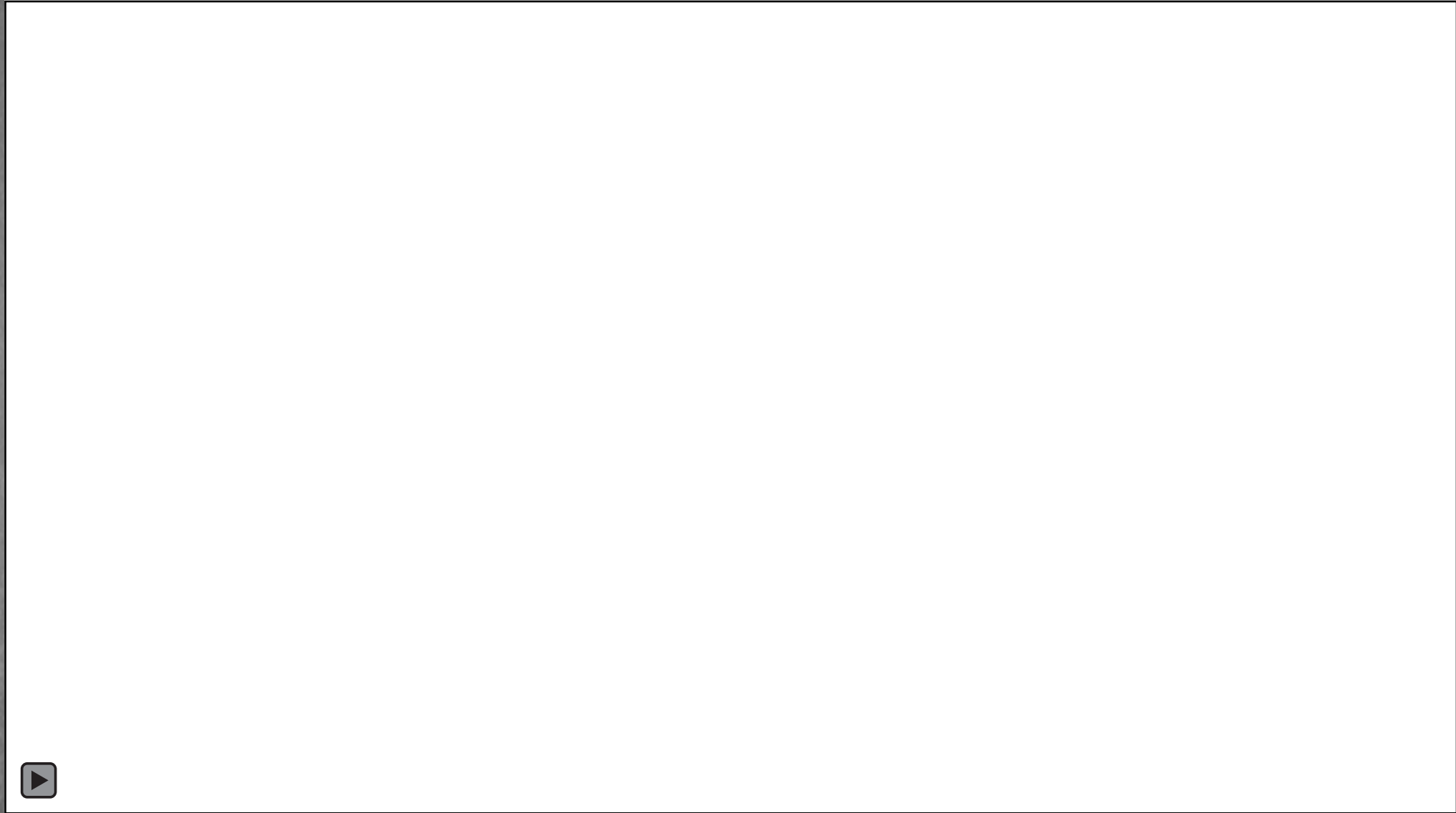
Output +0 -6 -12 -18 -24 -30 -36 -42 -48

Detector Threshold: -40.0 dB
Ratio: 3:00
Target Output Level: -24.0 dB

Speed: Slow Fast

Active Contour





如何打破

玻璃房的“铁思”



易科国际
简易·科技·共享

简易源于自然 科技改变生活 共享创造价值

- 小型空间，高效协作
- 单音箱远程语音还声，听感清晰自然、无回声
- “铁思”方案加持，真正做到全双工会议体验



audio-technica

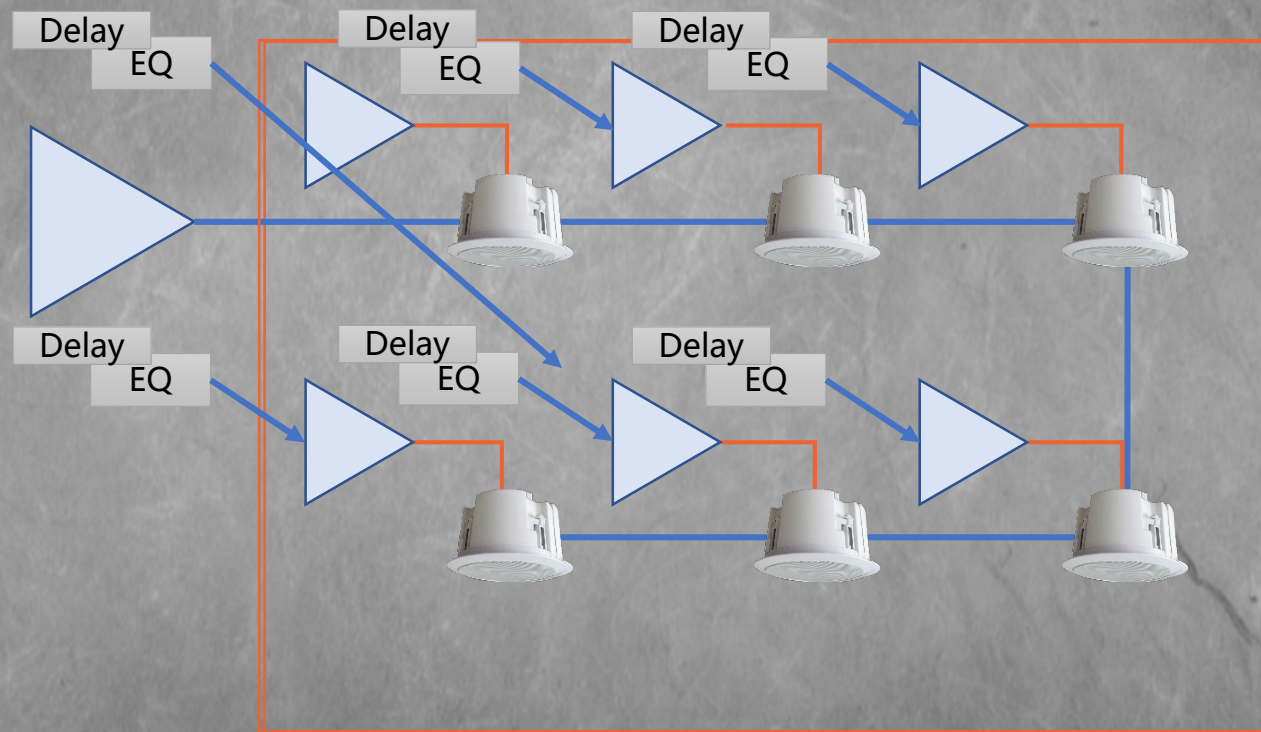


Symetrix

铁思方案

- ✓ 声音清晰，沟通顺畅
- ✓ 多方与会，自然双讲
- ✓ 情绪沟通，画面自然
- ✓ 高效协作，无感体验

独立通道



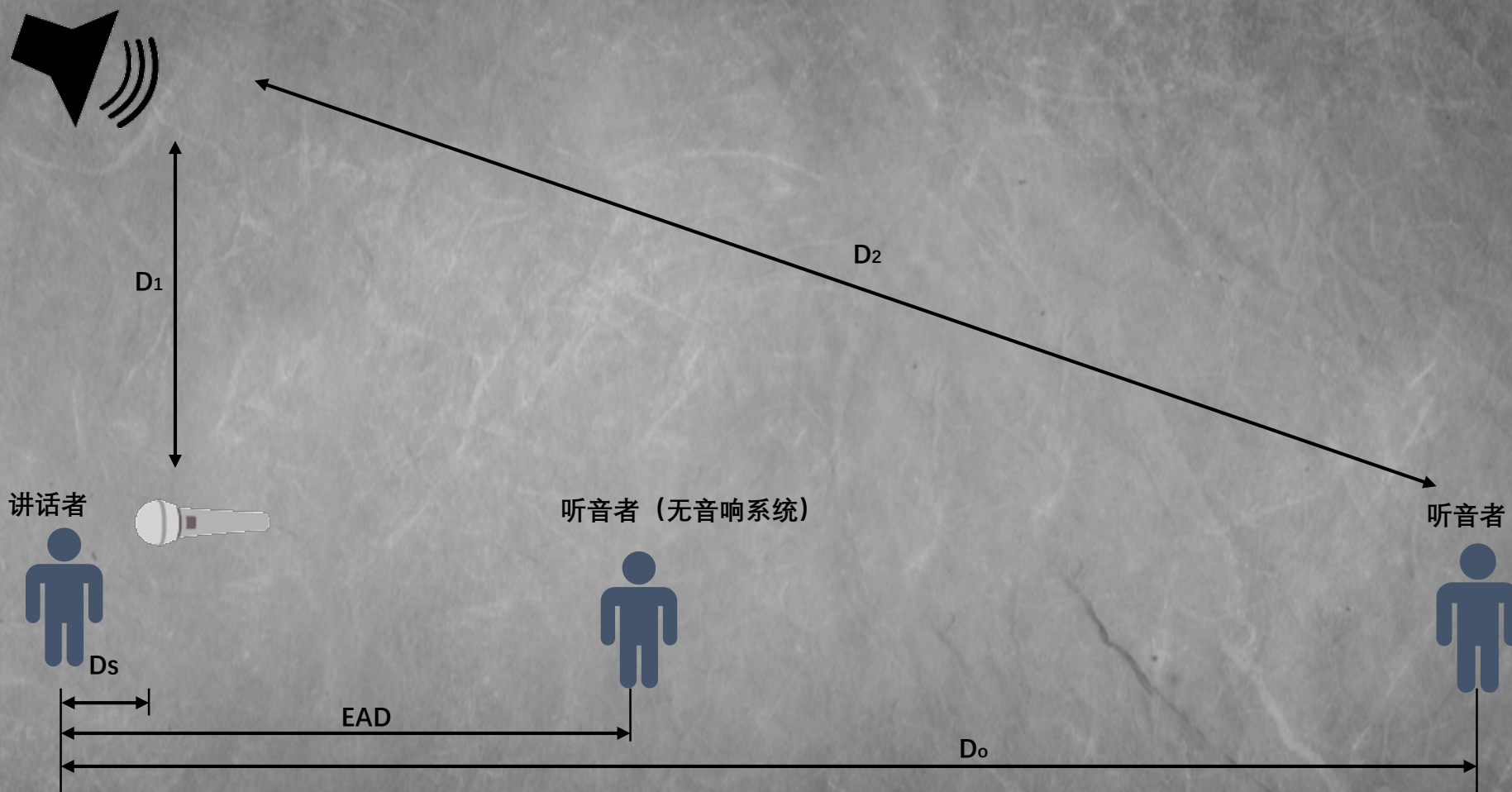
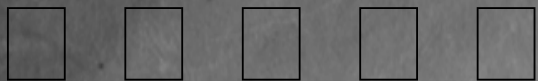


南方科技大学报告厅

南方科技大学是由广东省领导和管理的全日制公办普通高等学校，是深圳市创办的一所创新型大学，校园占地面积194.38万平方米，规划总建筑面积为90多万平方米。

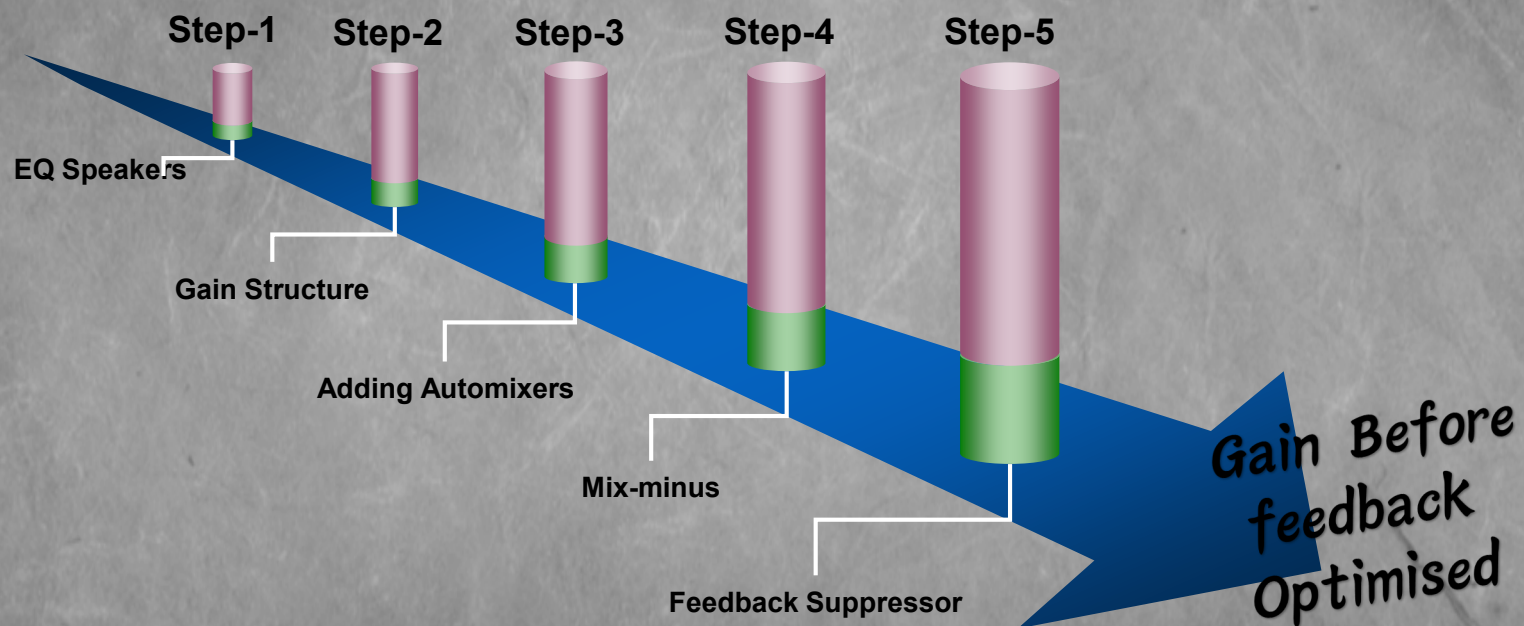
209只话筒可**全部打开**19台Symetrix处理器全程保障

远程控制，话筒一键开启/关闭

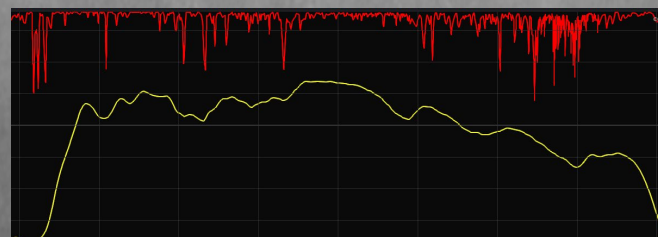
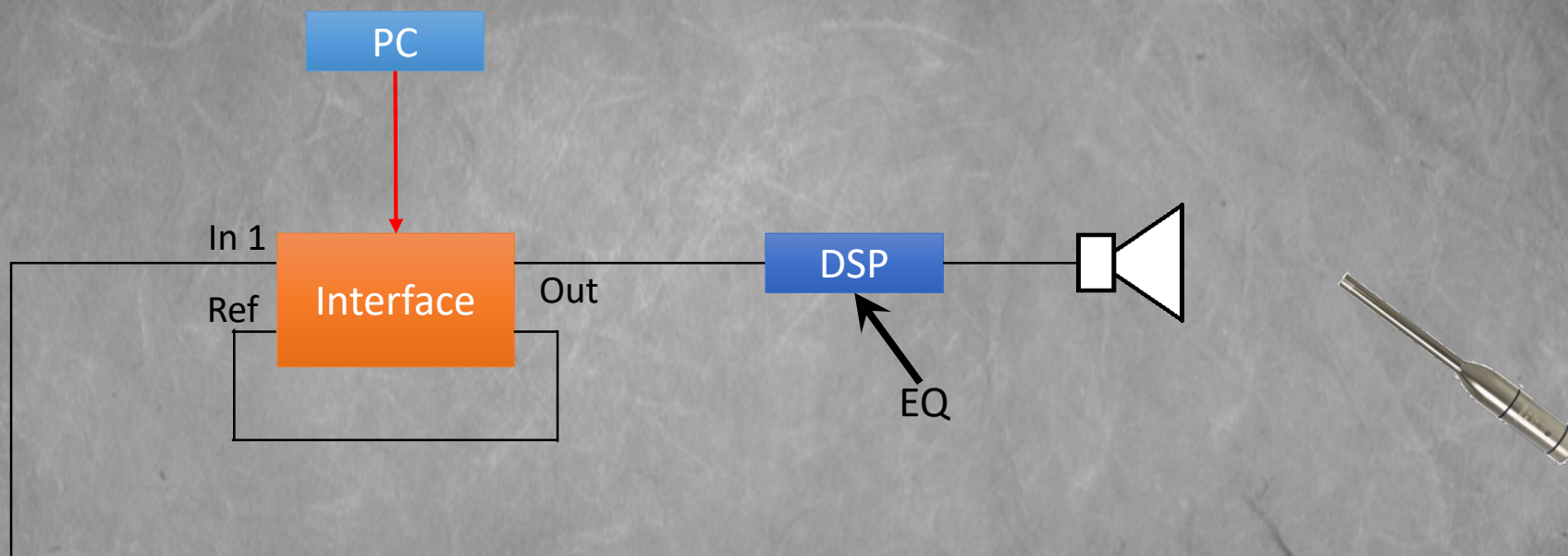


$$20\text{Log} \frac{EAD}{D_s} - 10\text{Log}NOM - FSM \geq 20\text{Log} \frac{D_2}{D_1}$$

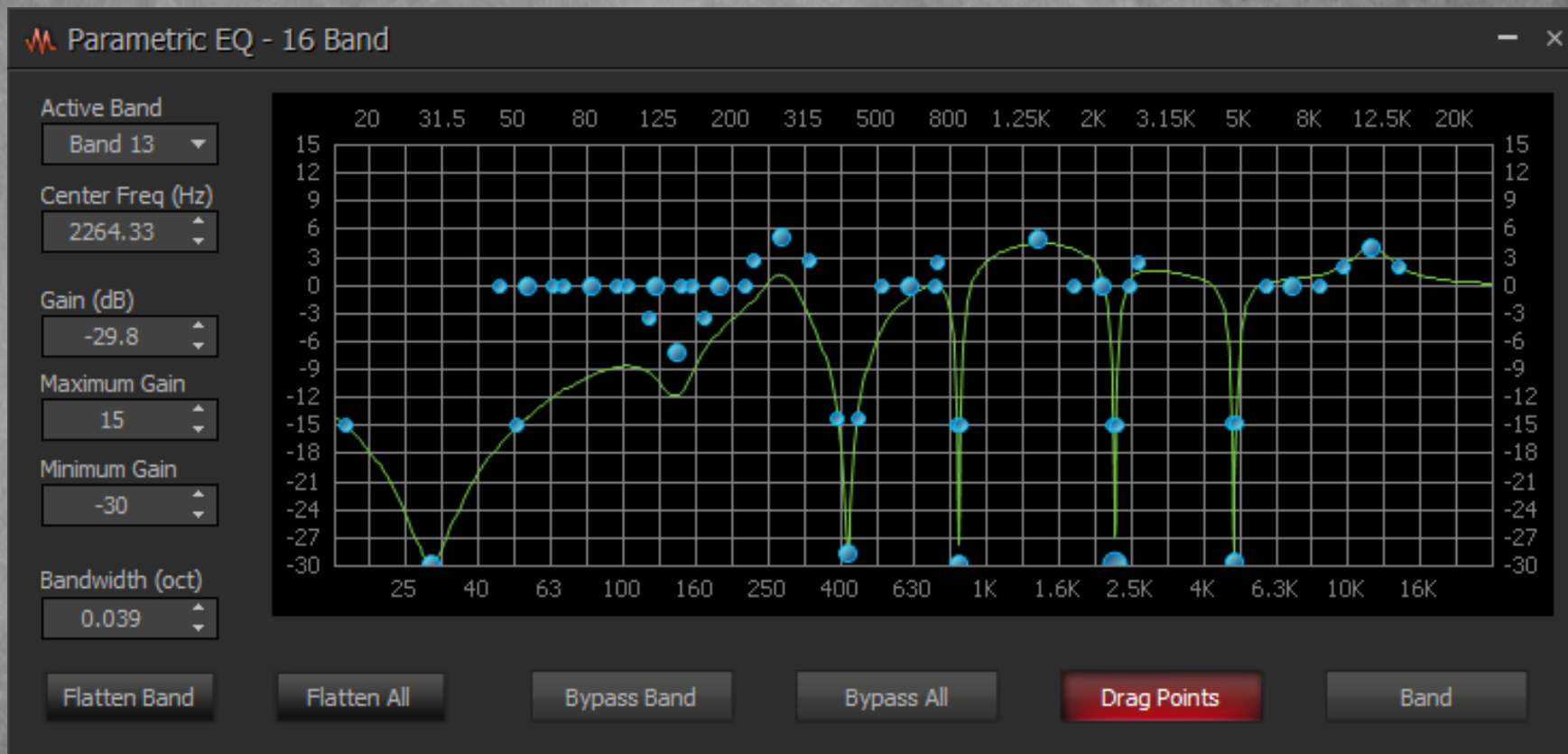
五步法:



EQ



EQ



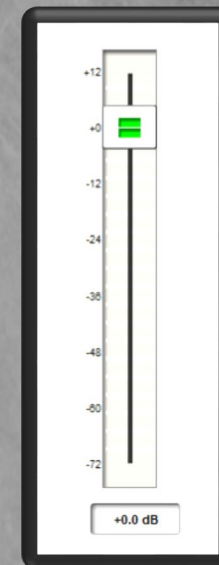
Gain Structure

- 确定房间增益。
- EQ + Delay

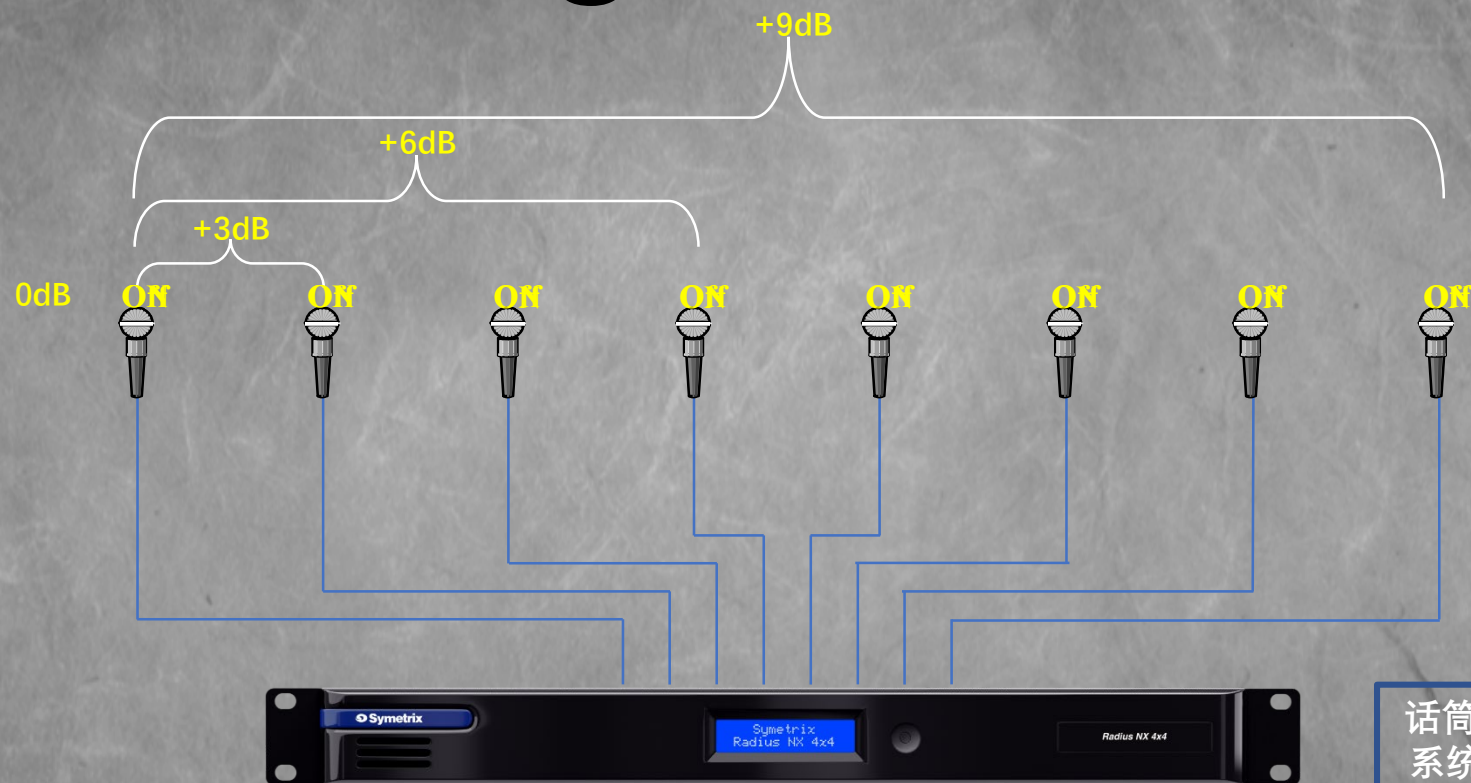
-

-

-



Automixing



话筒数量每增加一倍
系统增益增加3个dB

Automixing

Gating

Automixer

门控自动混音器

VS

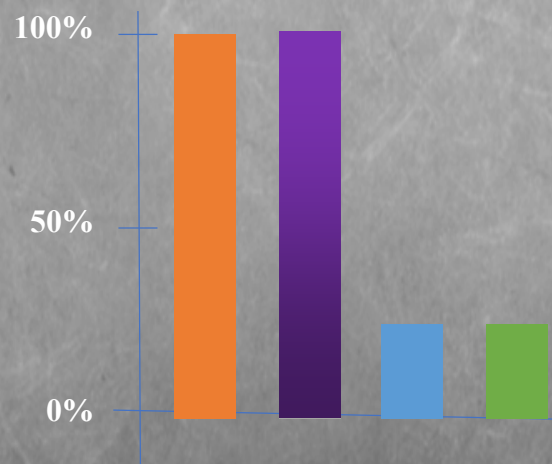
Gain Sharing

Automixer

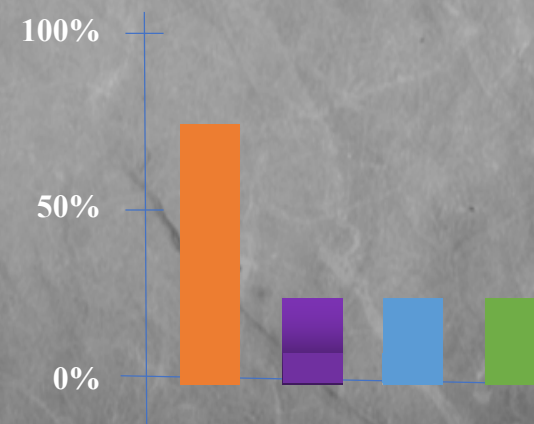
增益共享自动混音器

Automixing

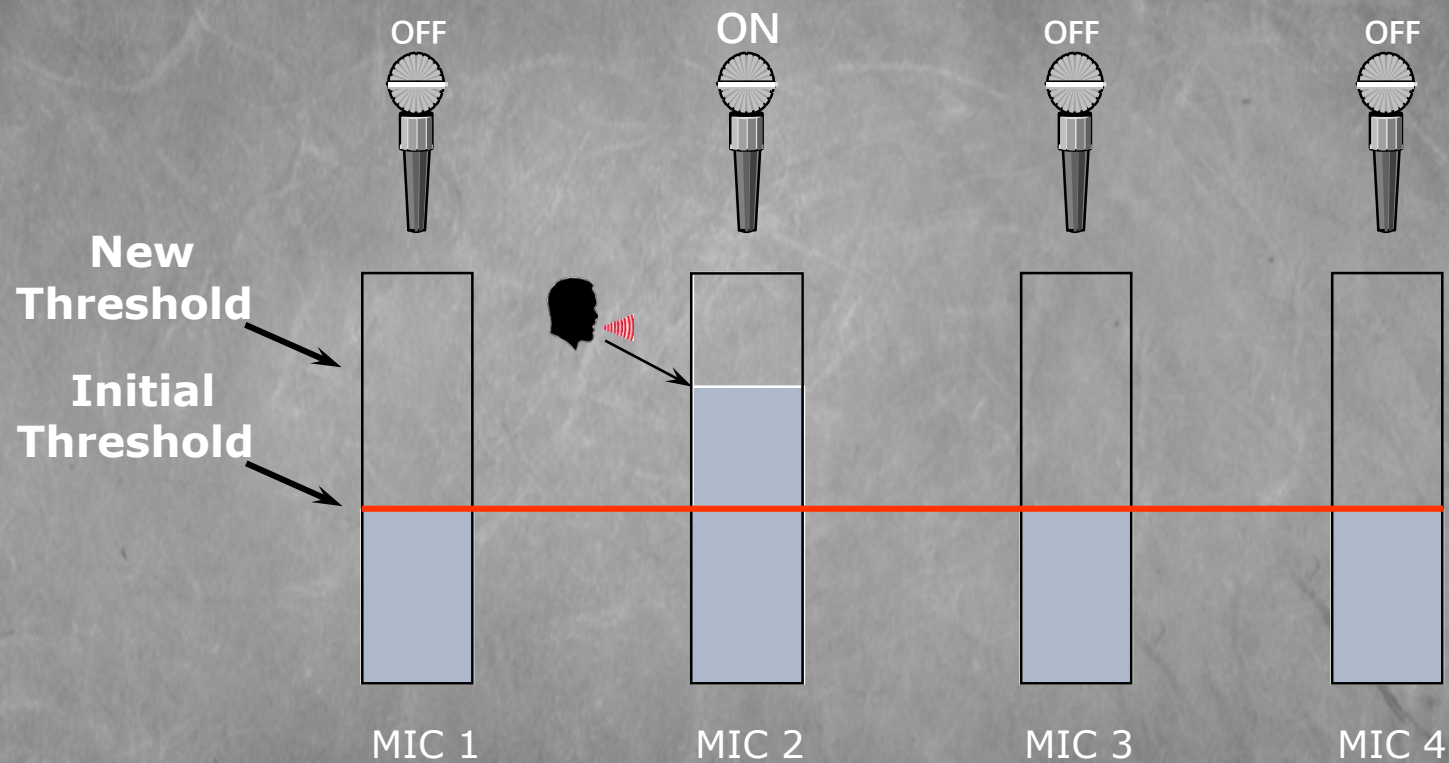
Gating Automixer 门控自动混音器



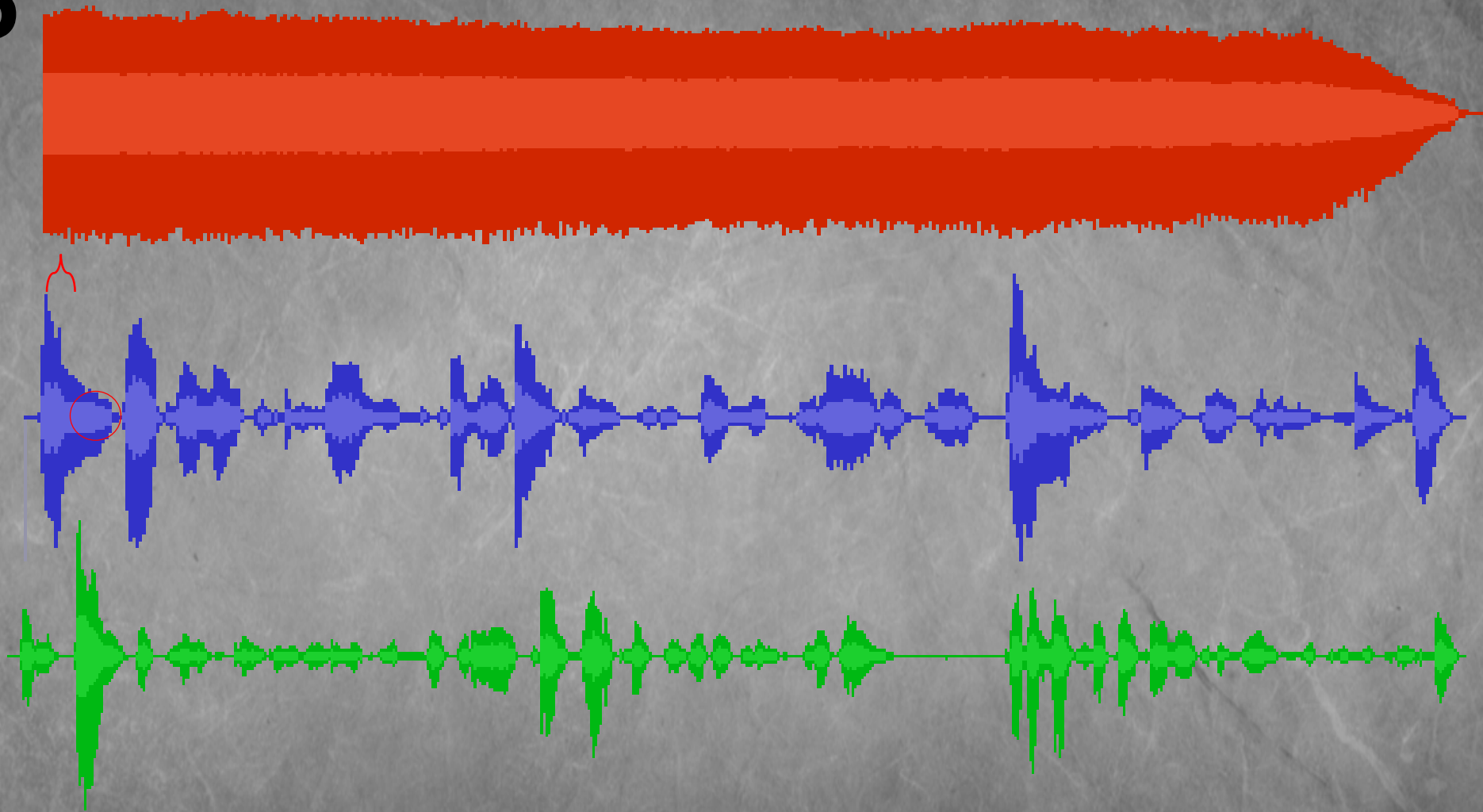
Gain Sharing Automixer 增益共享自动混音器



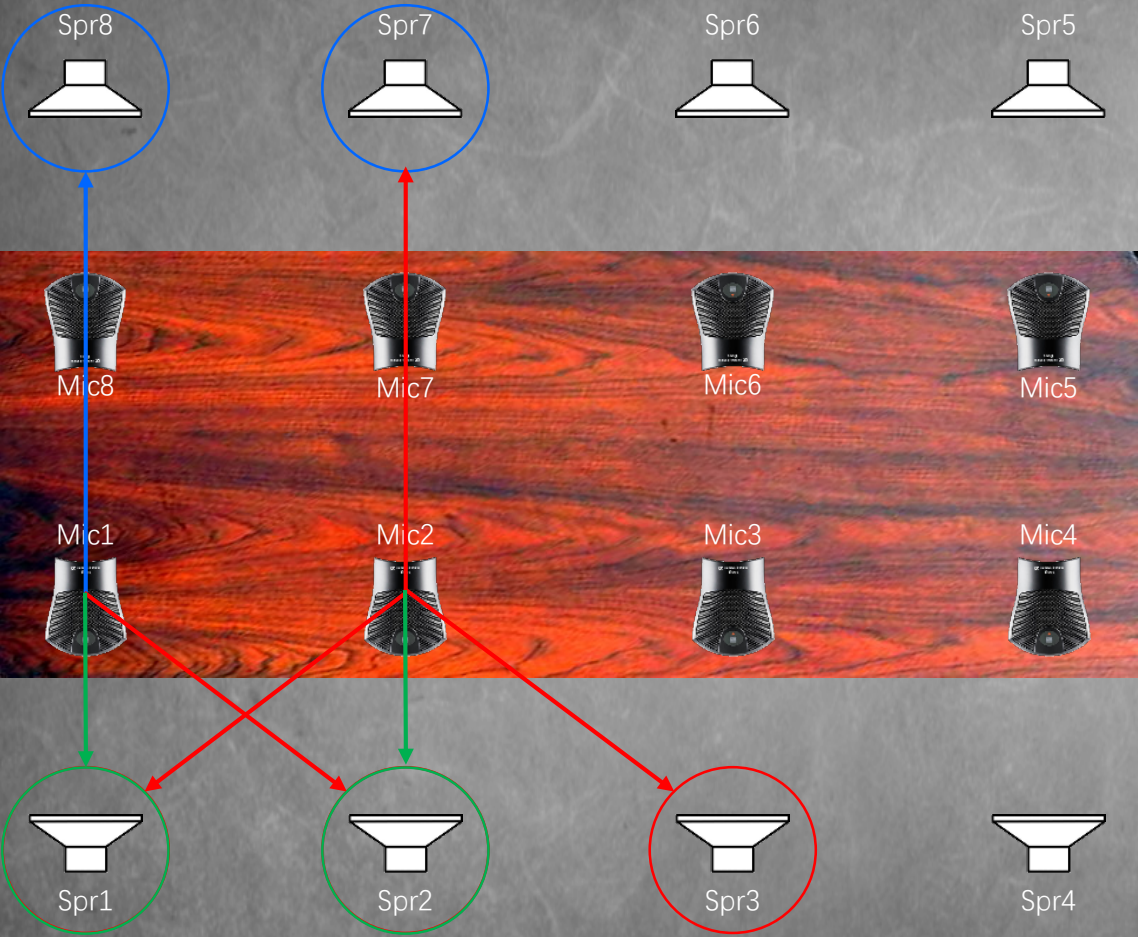
ATS



ATS



Mix-minus



Mute Out

Level Out

	1	2	3	4	5	6	7	8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1	2	3	4	5	6	7	8

Mute In Level In

Bus (dB)

1	0.0	1	0	-3.0	0	0	0	0	-6.0
2	0.0	2	-3.0	0	-3.0	0	0	-6.0	0
3	0.0	3	0	-3.0	0	-3.0	0	-6.0	0
4	0.0	4	0	0	-3.0	0	-6.0	0	0
5	0.0	5	0	0	0	-6.0	0	-3.0	0
6	0.0	6	0	0	-6.0	0	-3.0	0	-3.0
7	0.0	7	0	-6.0	0	0	0	-3.0	0
8	0.0	8	-6.0	0	0	0	0	0	-3.0

Feedback Suppressor



