





POWER



-12V



+12V



**Power
Off**



On

12V 1A

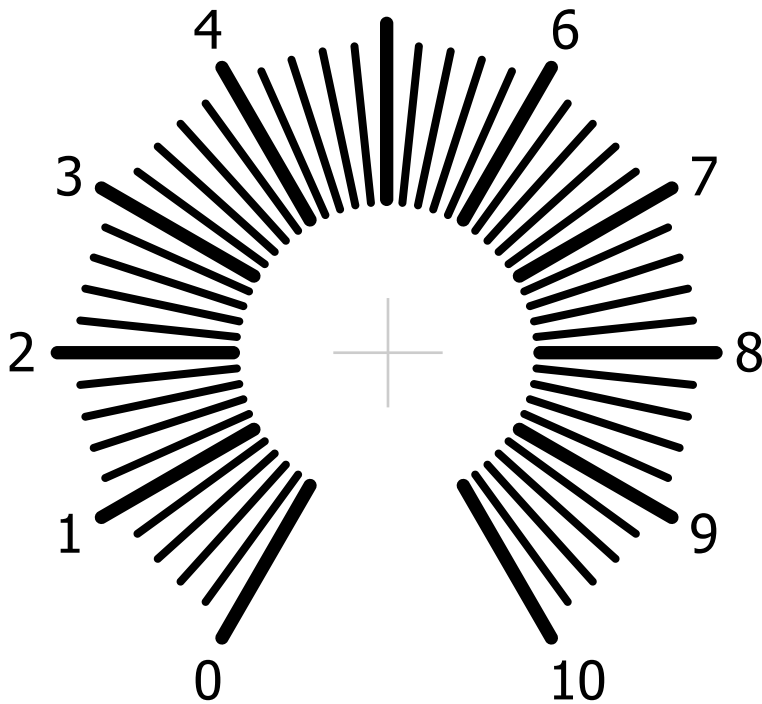




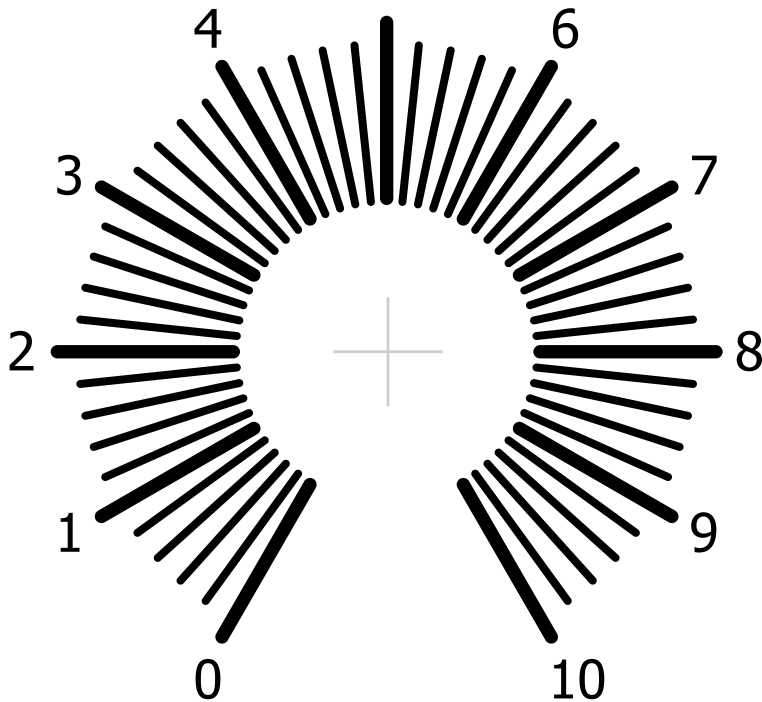
ADSR



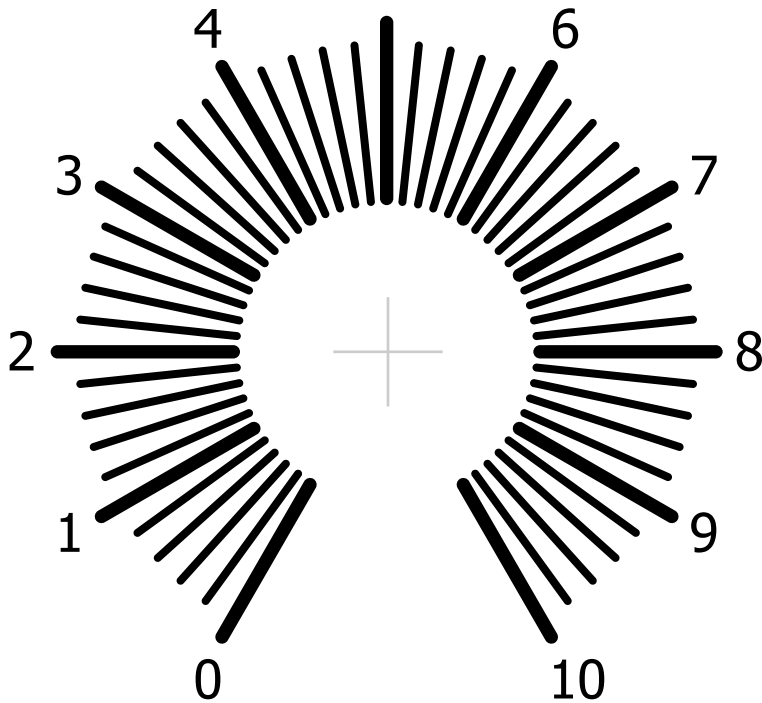
Attack



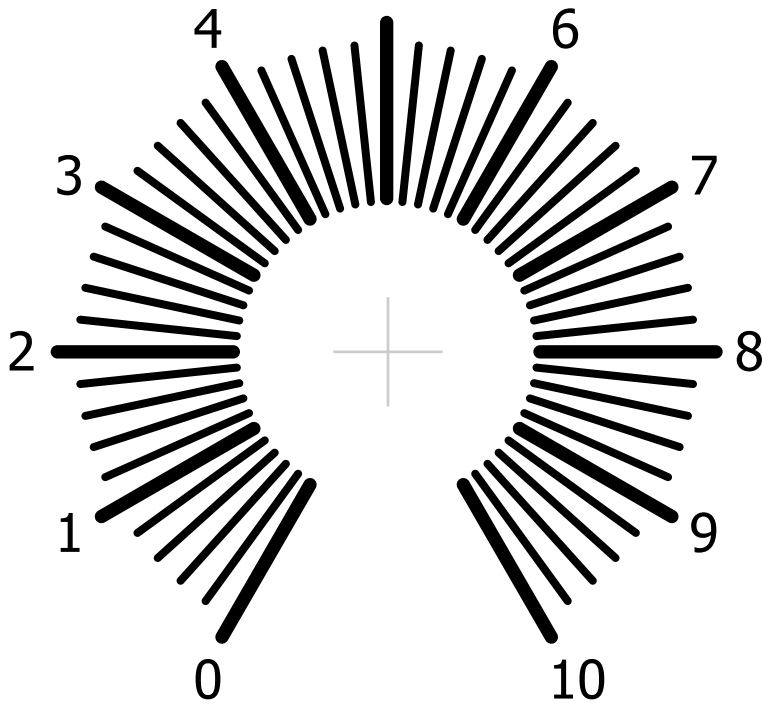
Decay



Sustain



Release



Manual

Duration

Short

Long

Gate In

Trigger In

Out

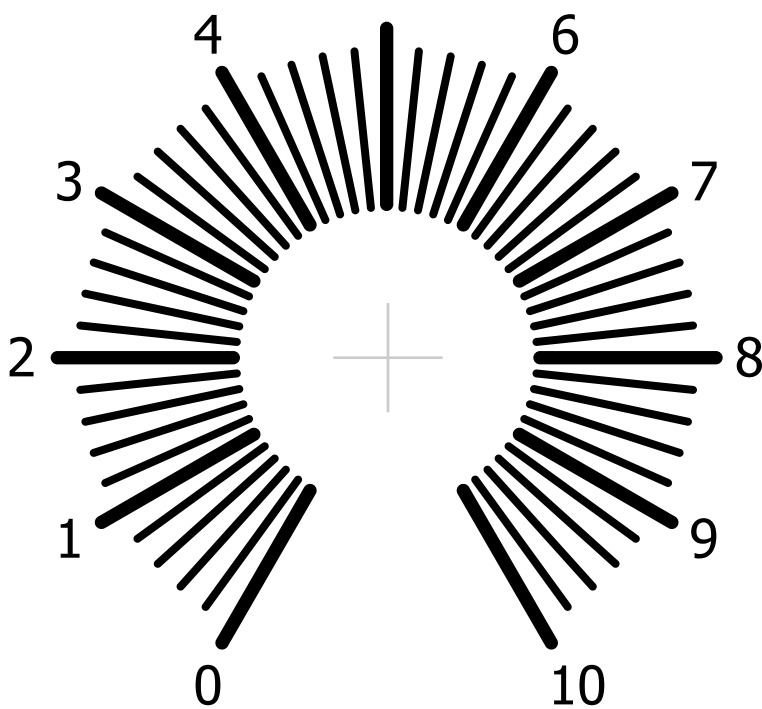


MFOS

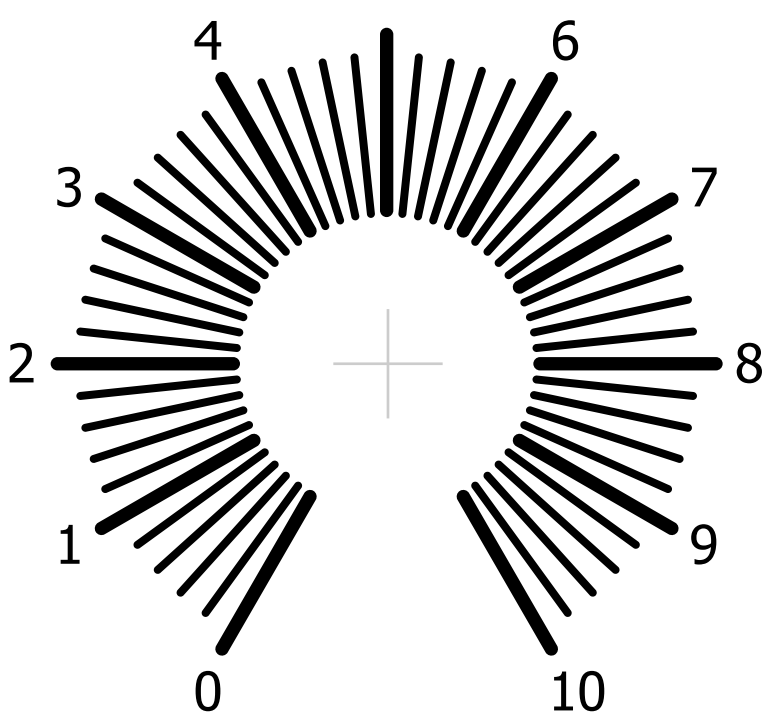


VCA

VCA 1 Gain



VCA 2 Gain



VCA 1

VCA 2

Response

Response

Log

Log

Linear

Linear

Input

Input

Gain CV In

Gain CV In

Gain CV In

Gain CV In

Out

Out

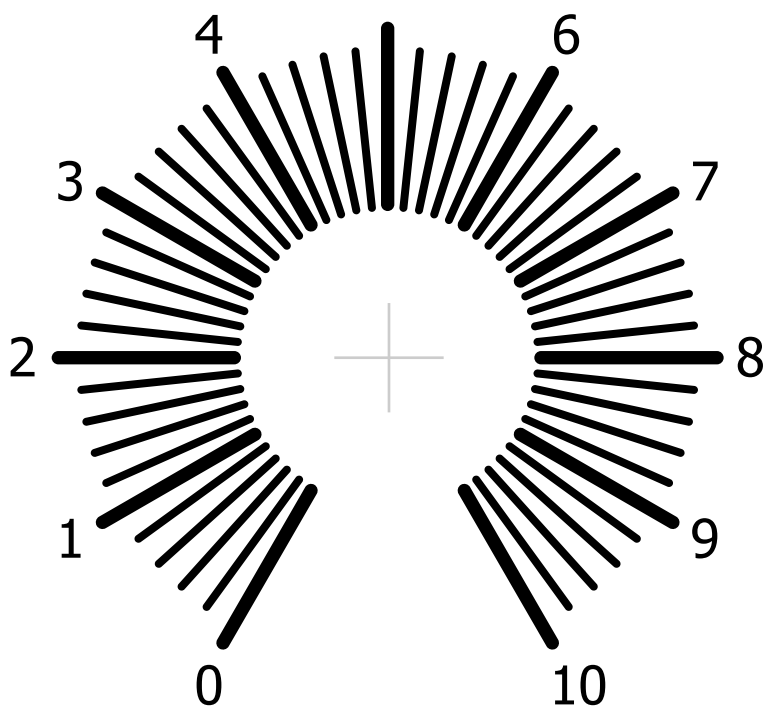
MFOS



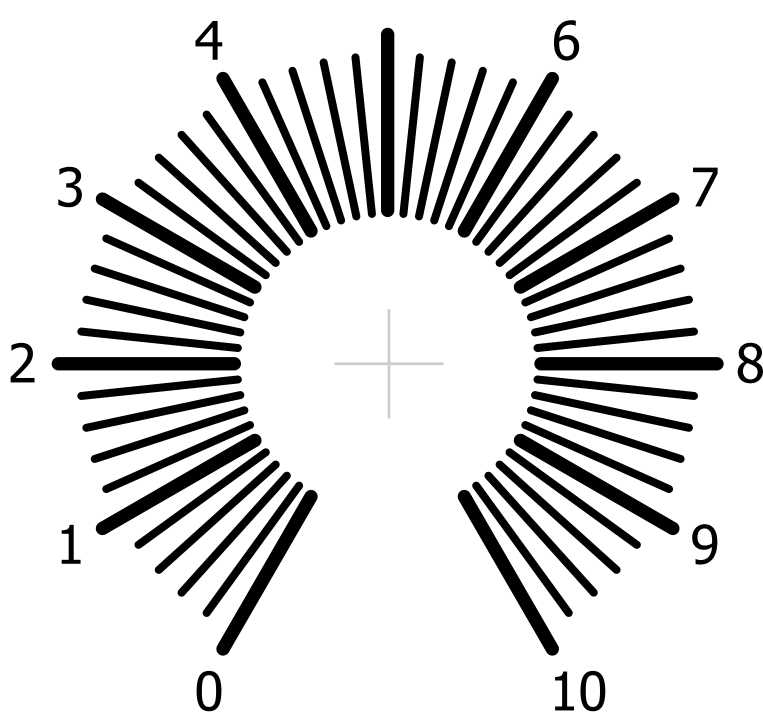
LFO



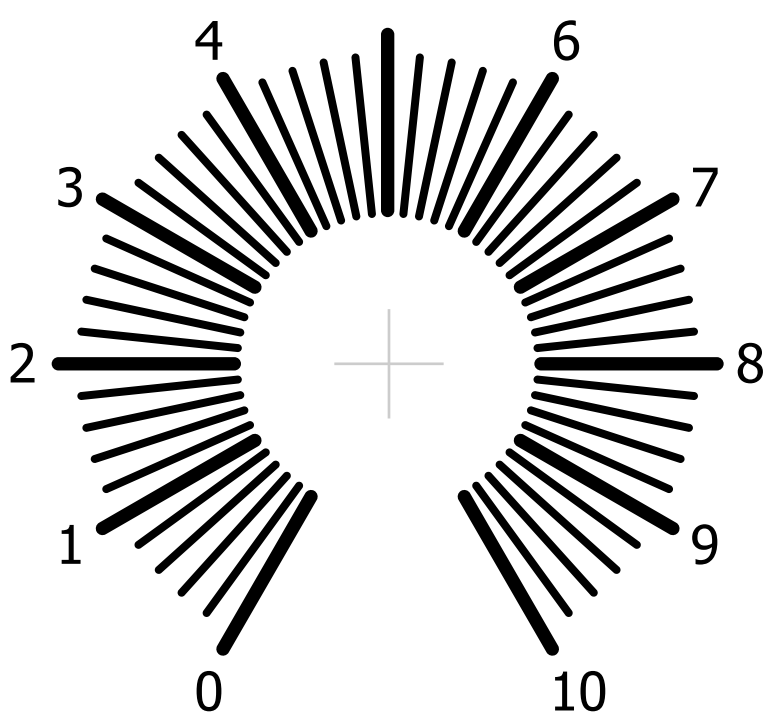
Coarse



Fine



PWM Width %



Square Out

Sine Out



PWM CV In

Triangle Out



Freq CV In

Saw Out



Freq CV In

Ramp Out



MFOS





MULTI



Link 1/2

Link 3/4

Off

Off



On

On



Bank 1



Bank 2



Bank 3



Bank 4



LukeLabs

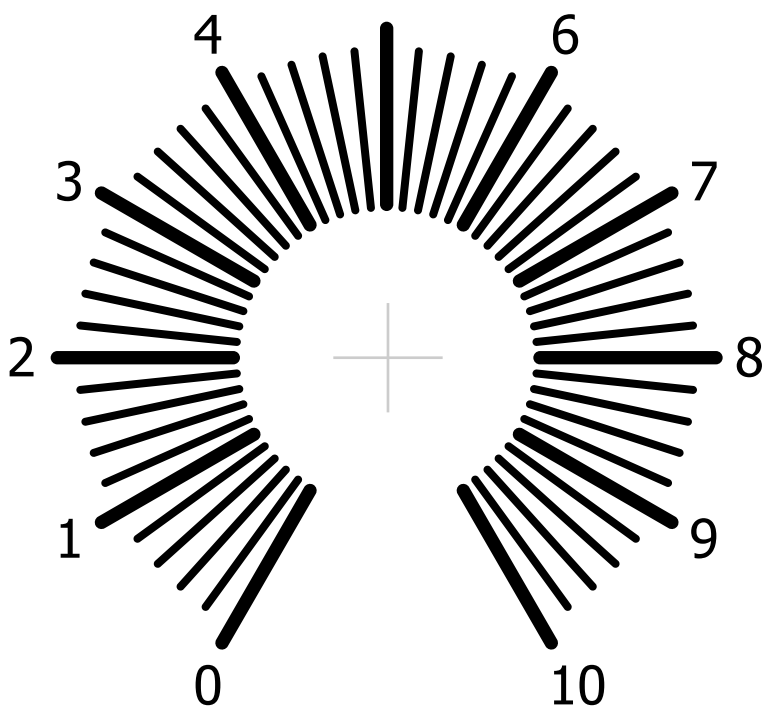




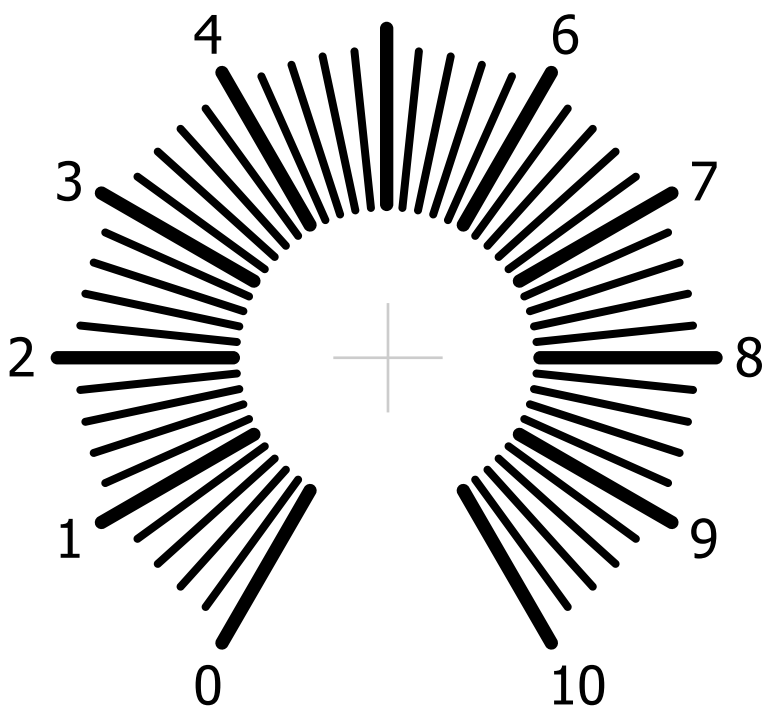
LEVEL



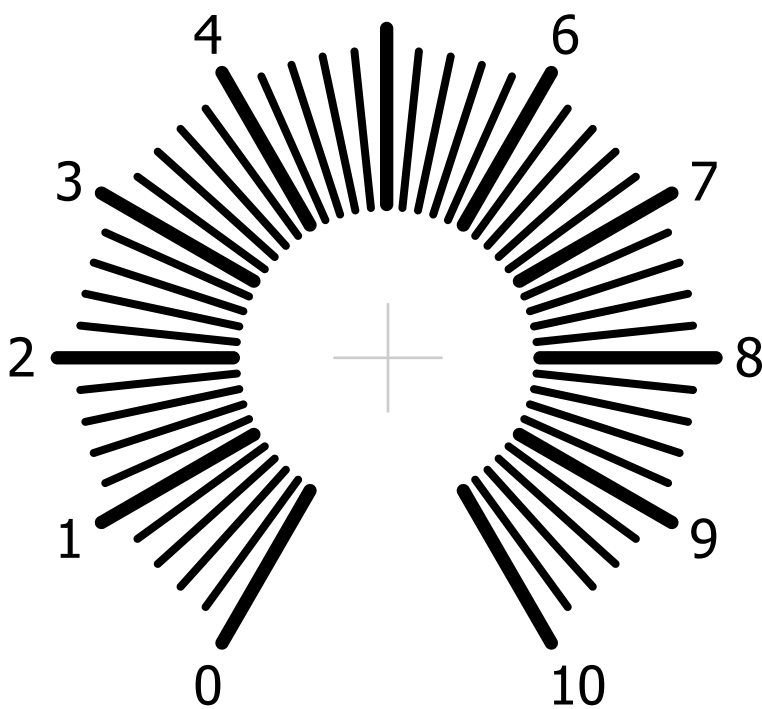
Level 1



Level 2



Level 3



1 In

1 Out



2 In

2 Out



3 In

3 Out



4 In

4 Out

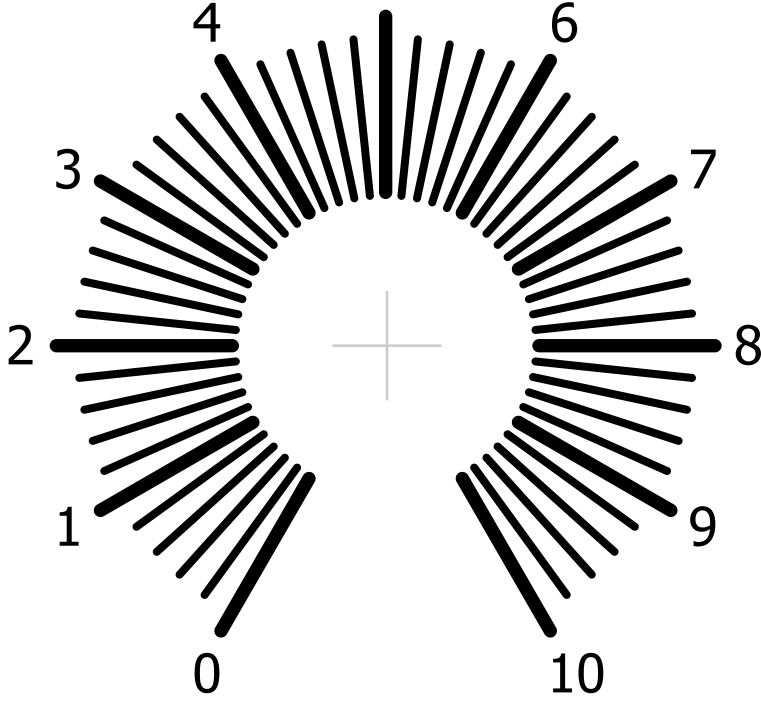


+

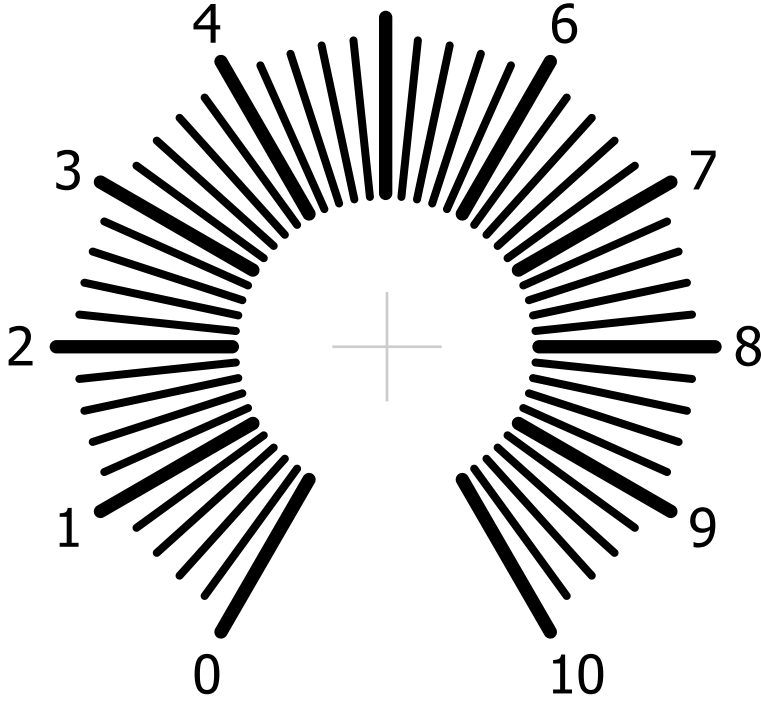
DMOD

+

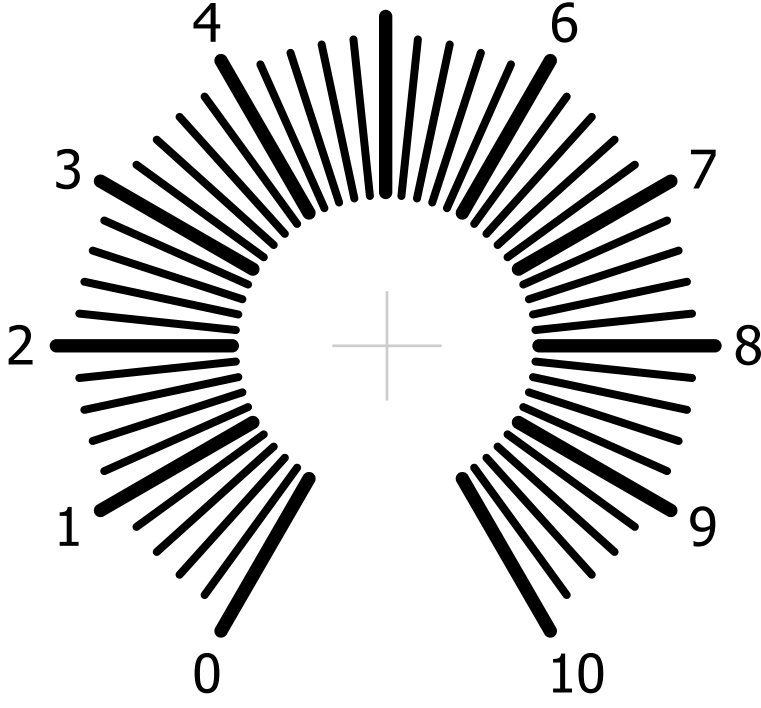
Attack



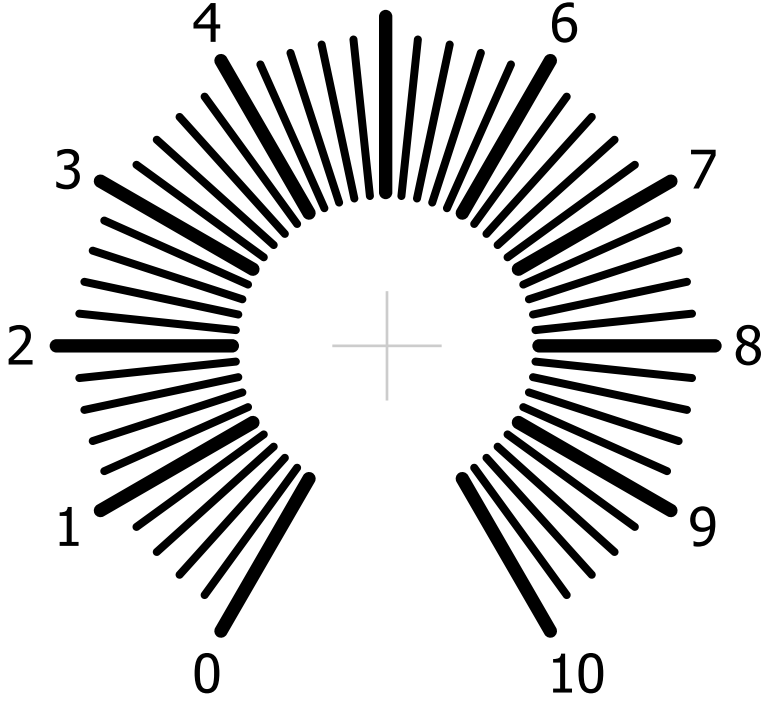
Release



LFO Frequency



Modulation



LFO

Square

Active



Sine

Input

Mod Level

Gate

Low



Trigger

High

Trigger In

Out



+

MFOS

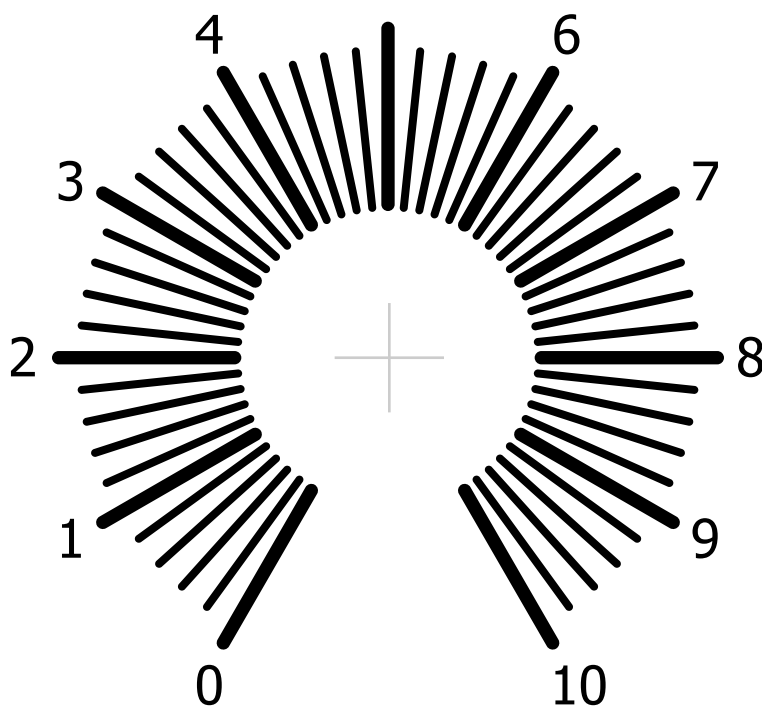
+



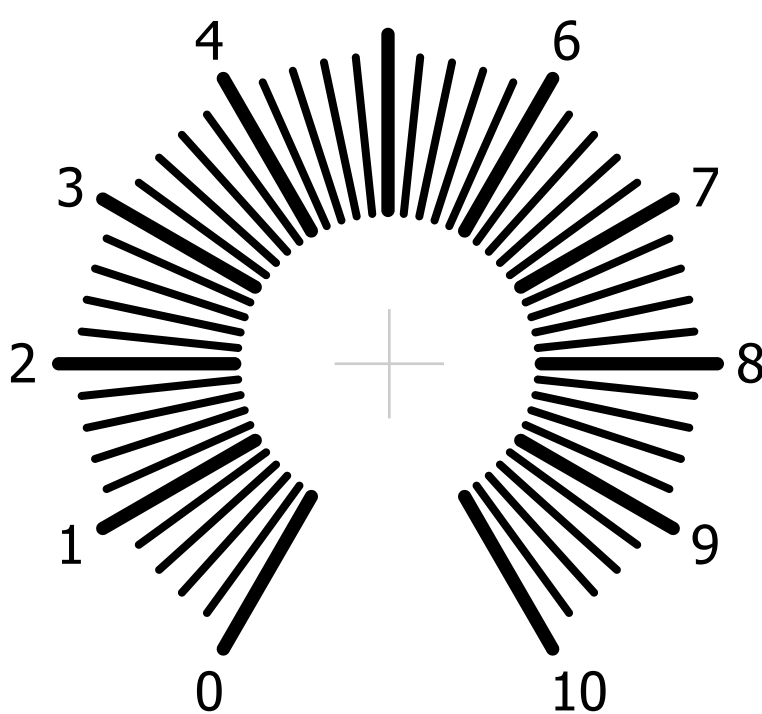
S&H



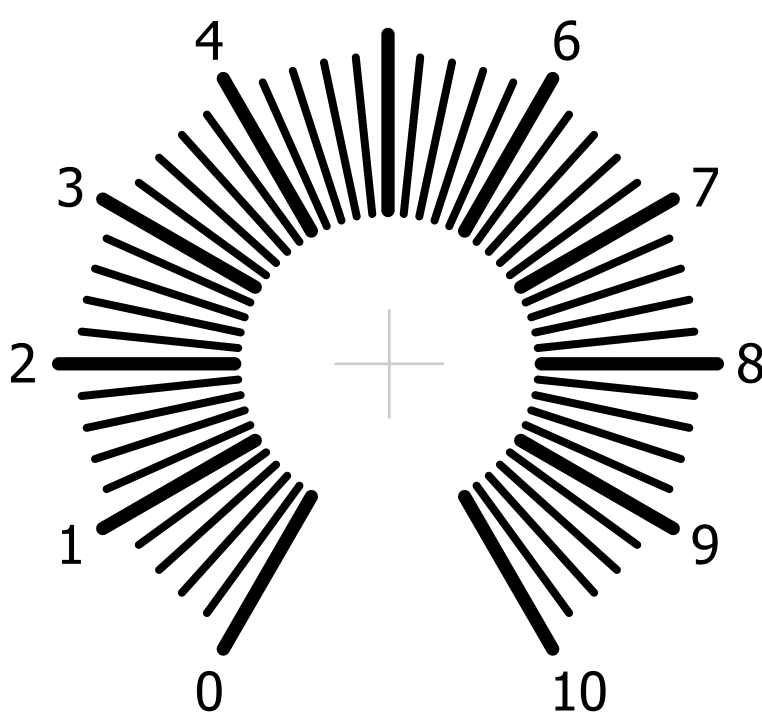
Input Level



Sample Rate



Glide



Active



Signal In

Out



Rate CV In

Glide Out



Sync In

Trigger Out



MFOS

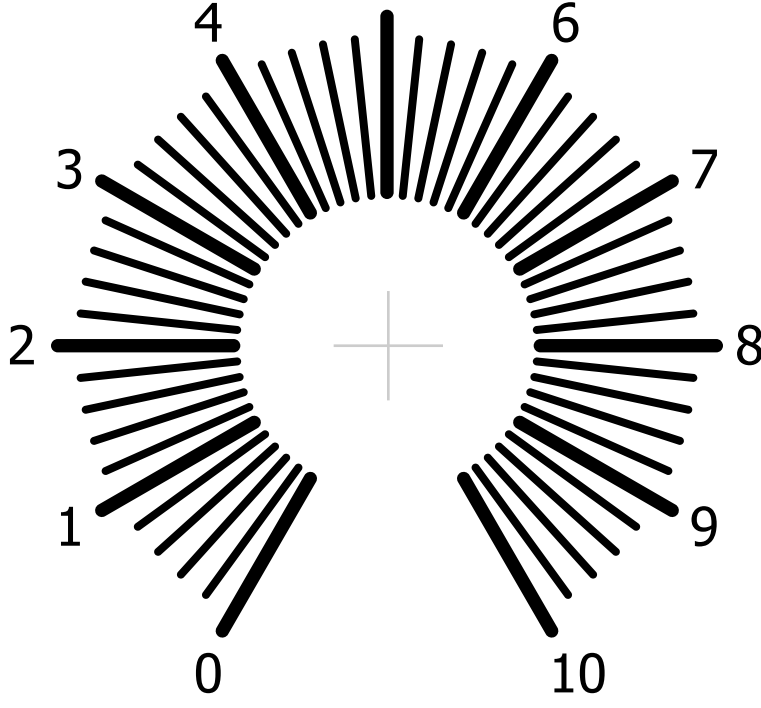




PAN



Input Level



Leslie Simulation

Off



On

Rate Toggle



Active



Signal In



Left Out

Right Out



MFOS

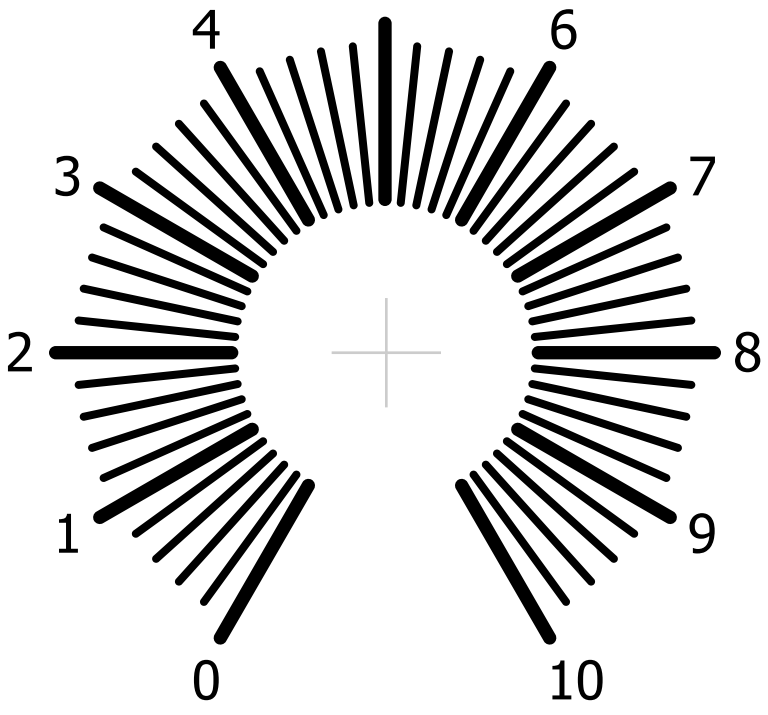


+

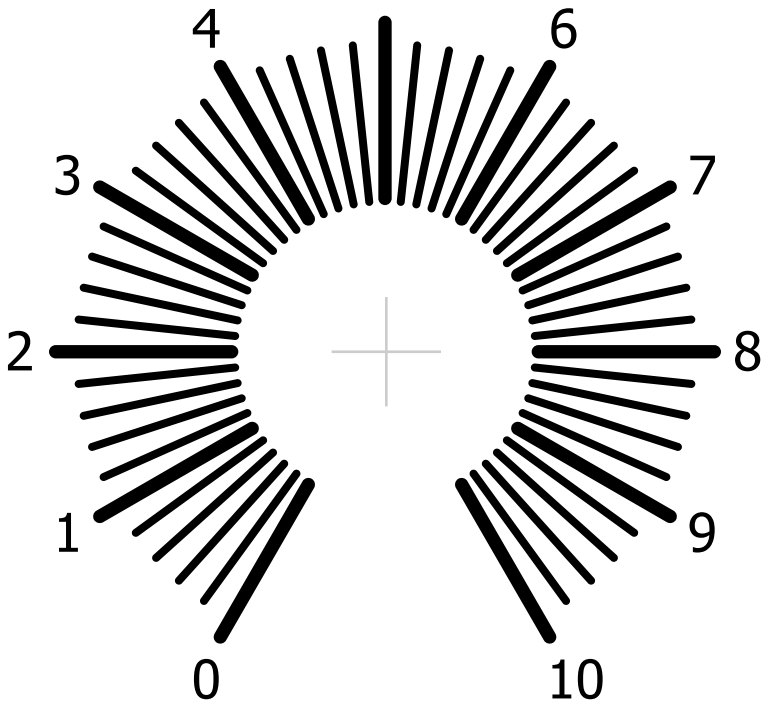
NOISE

+

Graininess



Gate Frequency



Gate Active



Noise



Random



Low-Pass



Grain



High-Pass



High-Pass



+

MFOS

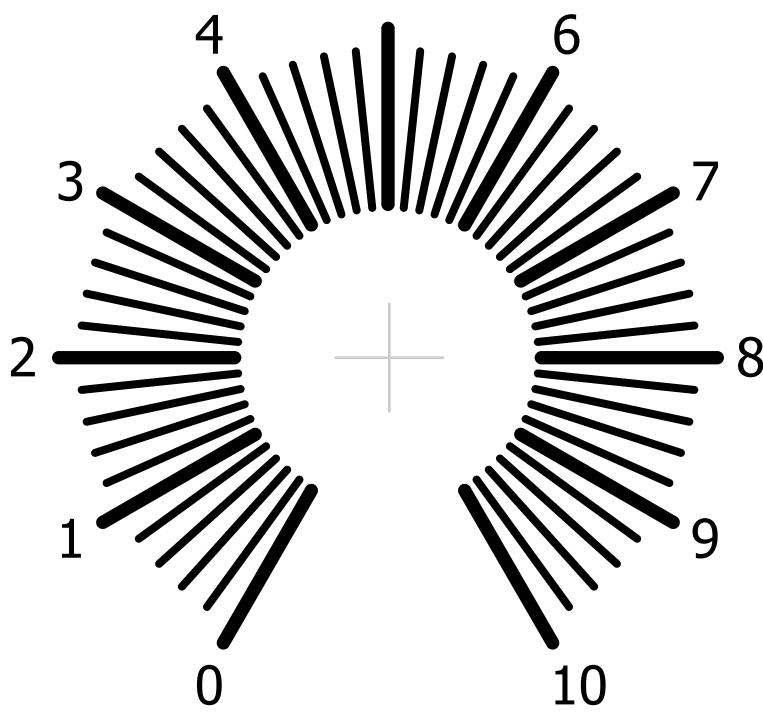
+



QUANT



Input Bias



Steps

Whole



Half

In



In



Steps

Fourths

Out



Out



MFOS

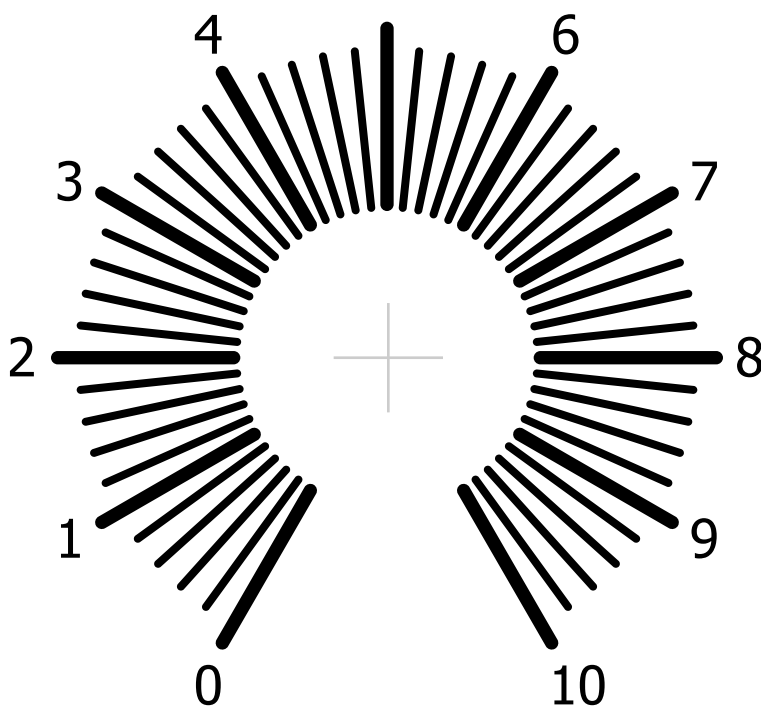




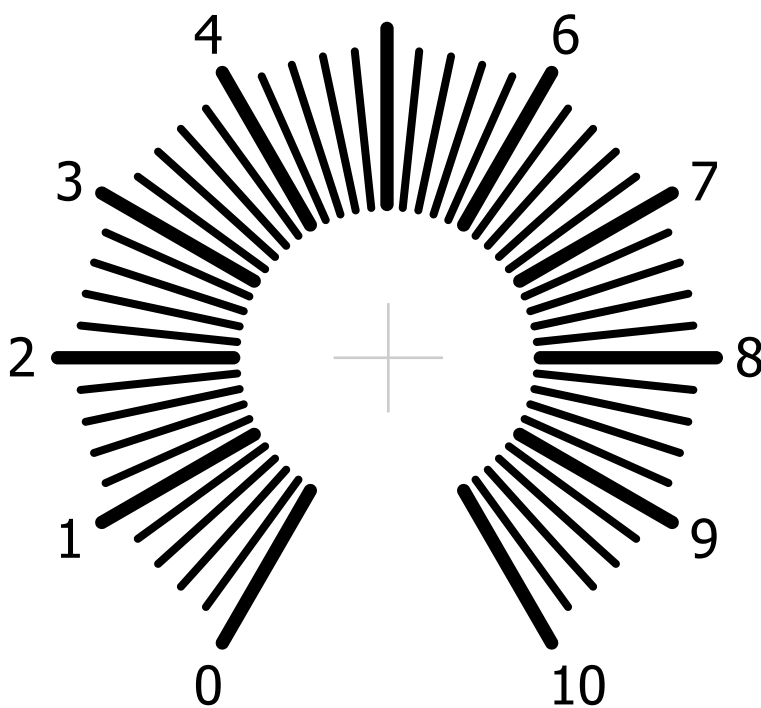
REVERB



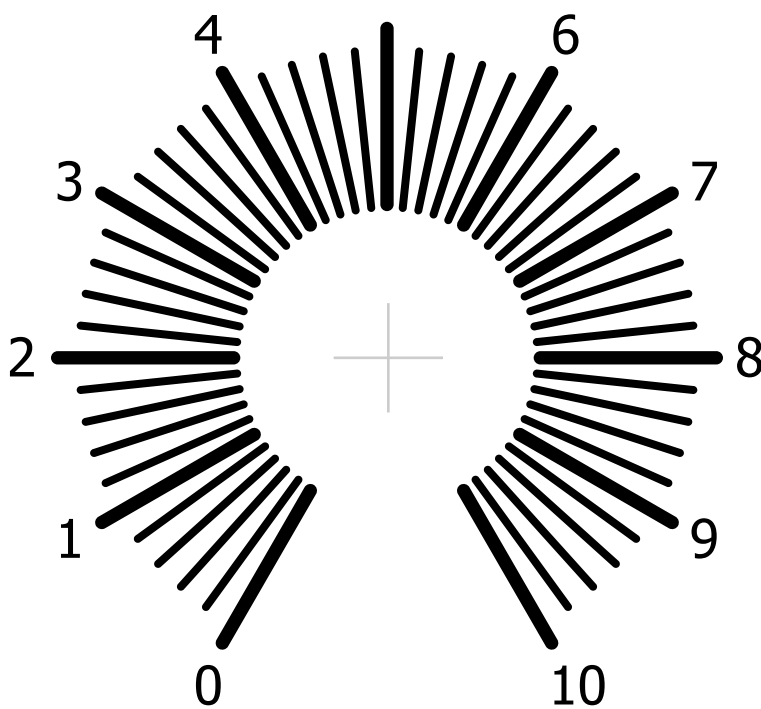
Input Trim



Original Level



Reverb Level



Overload



In

Out



Original CV



Reverb CV

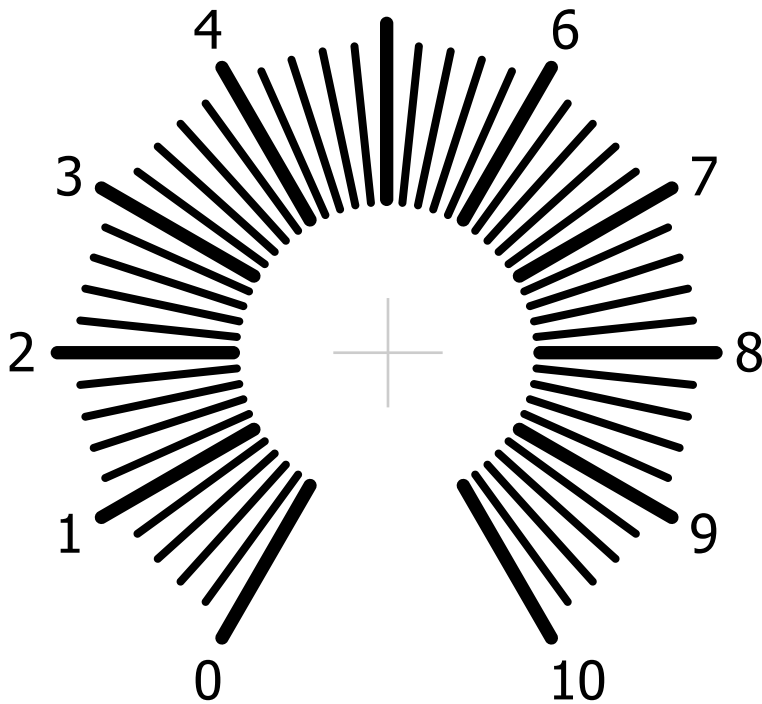


MFOS

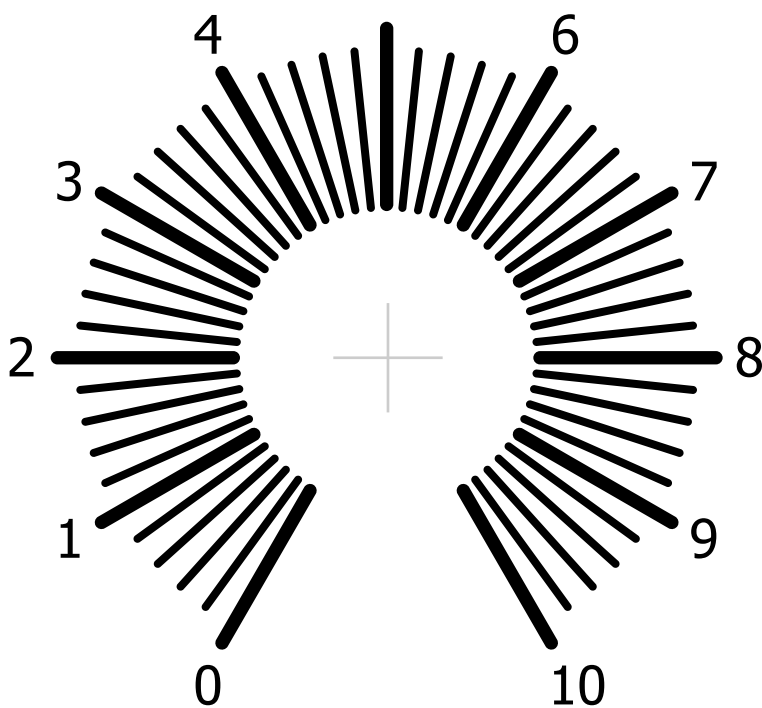


PHASE

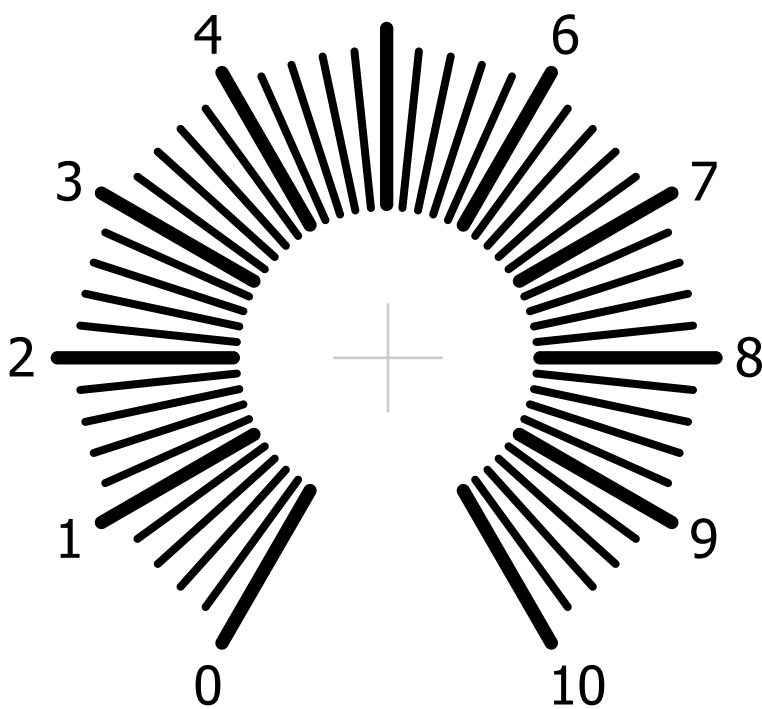
Input Level



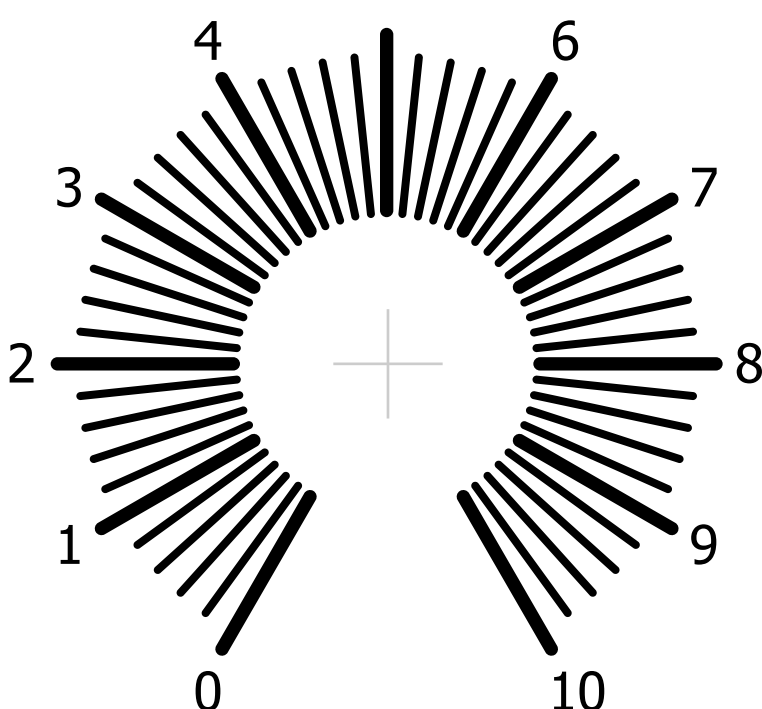
Rate



Depth



Feedback



Modulation

Triangle



Ramp

Signal In



CV In



Stages

Four



Eight

Out



Out

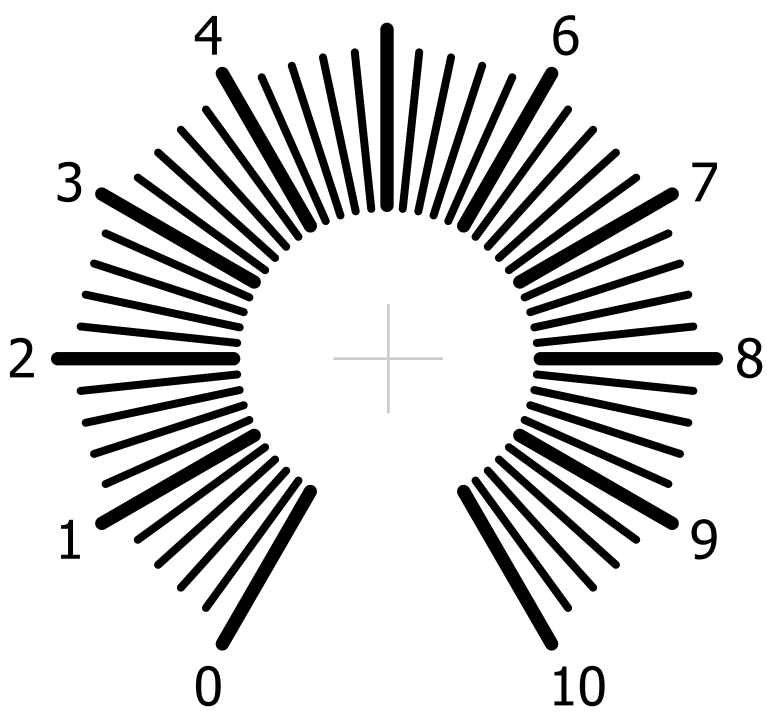


MFOS

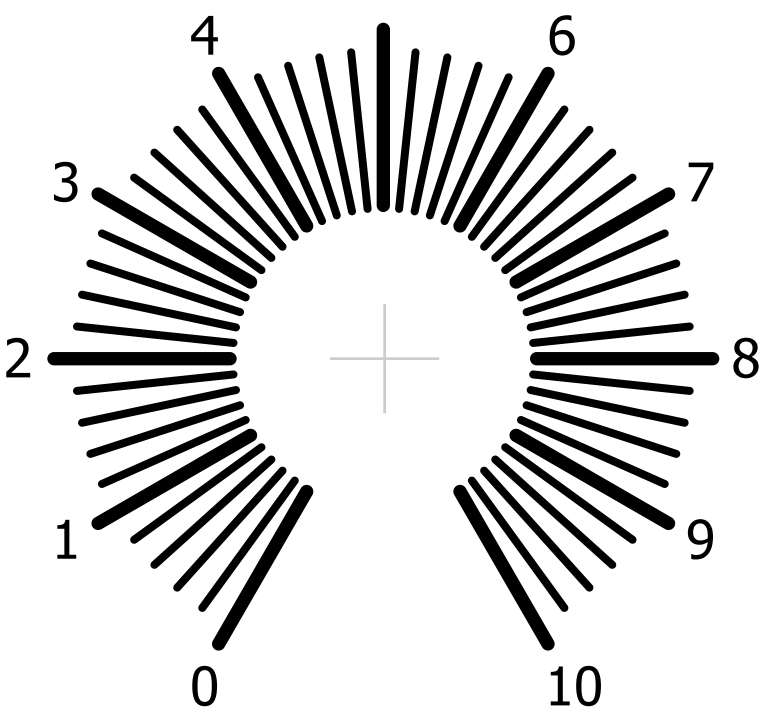


VCO

Coarse



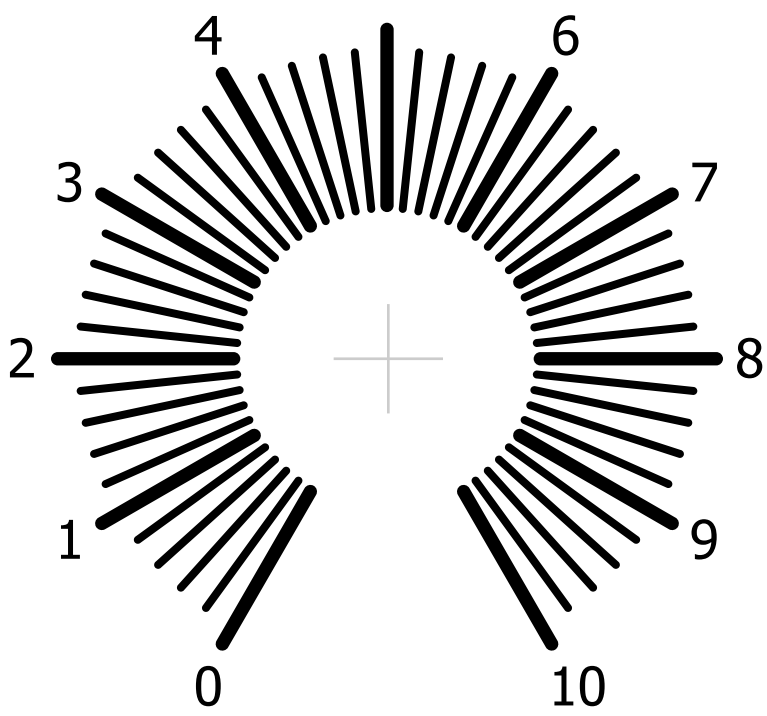
Fine



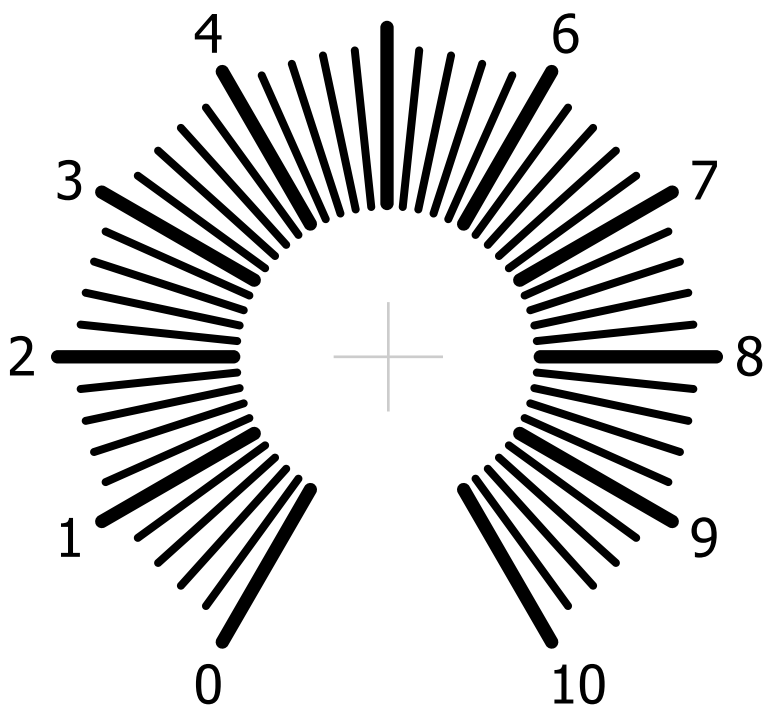
Frequency
Adjust



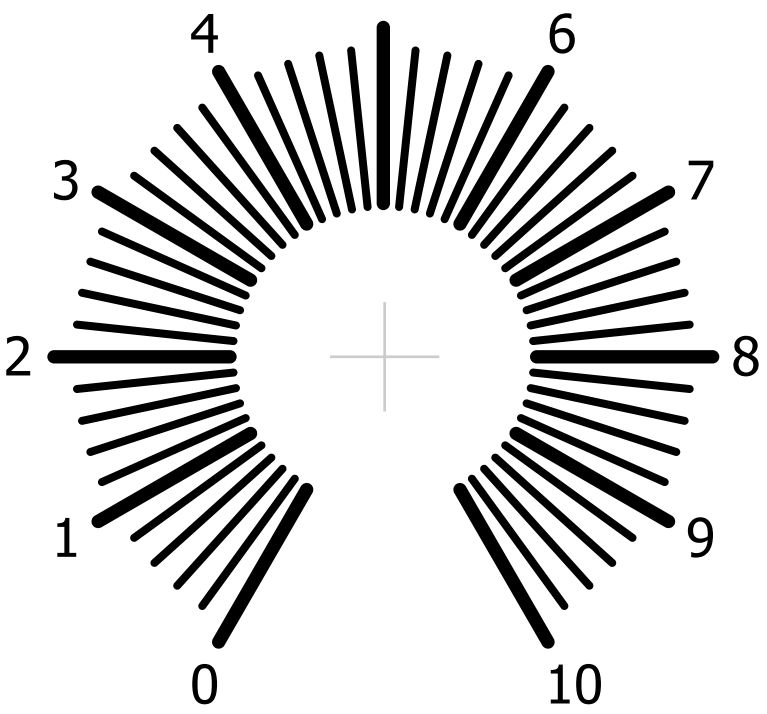
Freq Mod 1 Depth



Freq Mod 2 Depth



PWM Width %



Freq Mod 1 In

PWM CV In



Freq Mod 1 In

Sync In



CV In

Sine Out

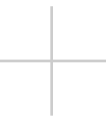
Triangle Out



CV Linear In

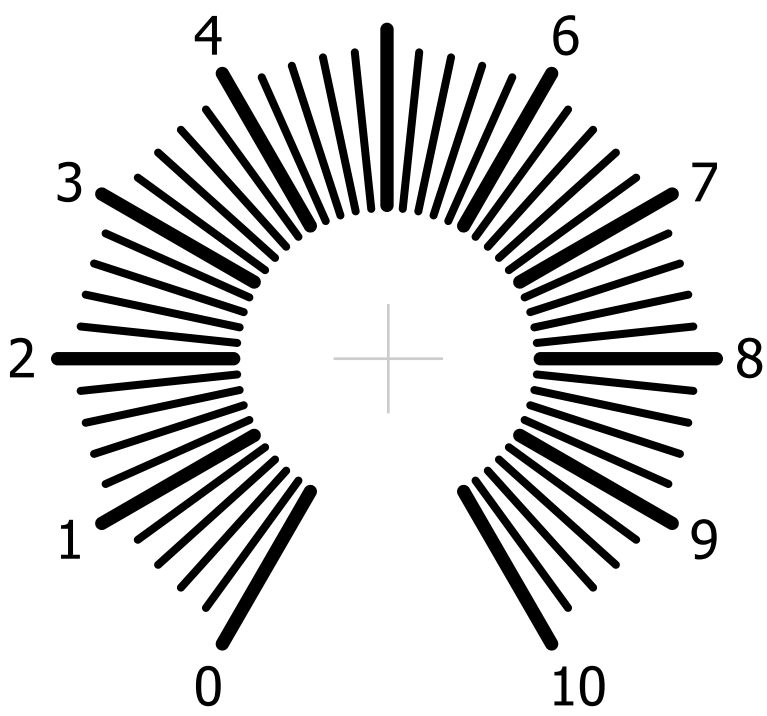
Ramp Out

Square Out

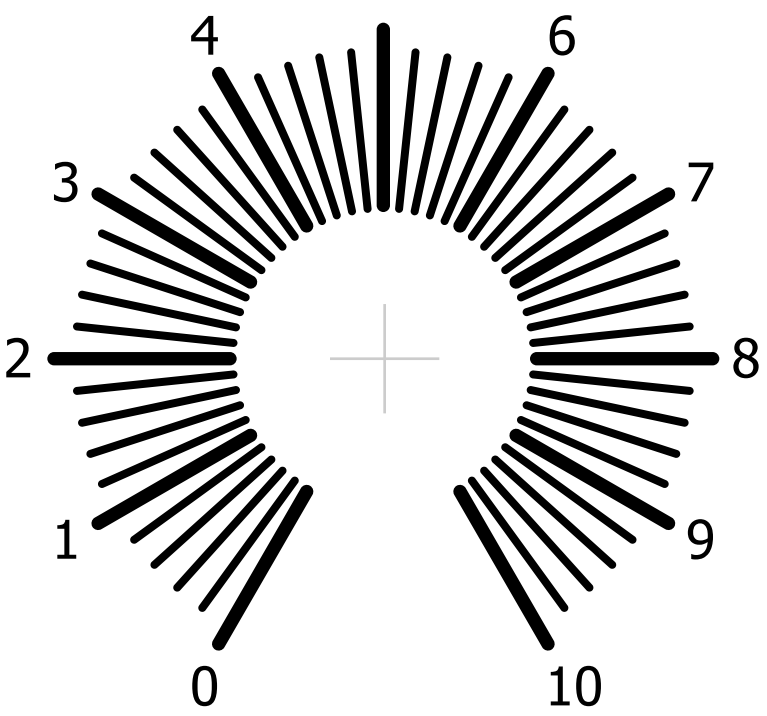


VCF 12

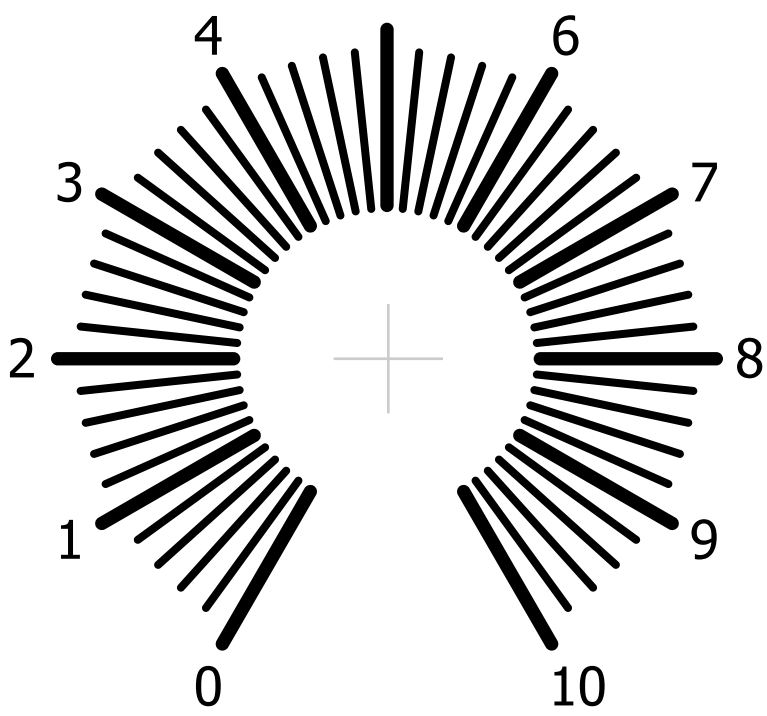
Signal 1



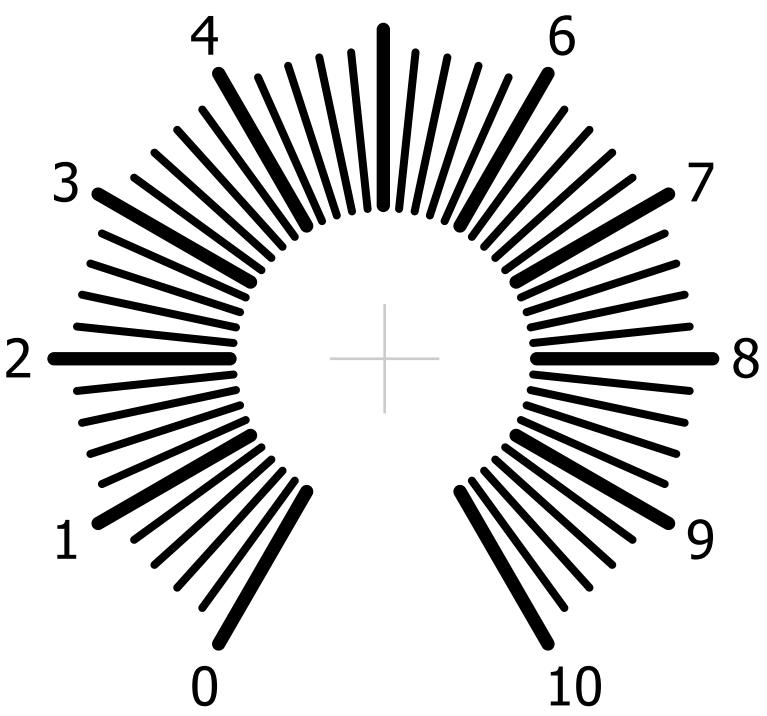
Resonance



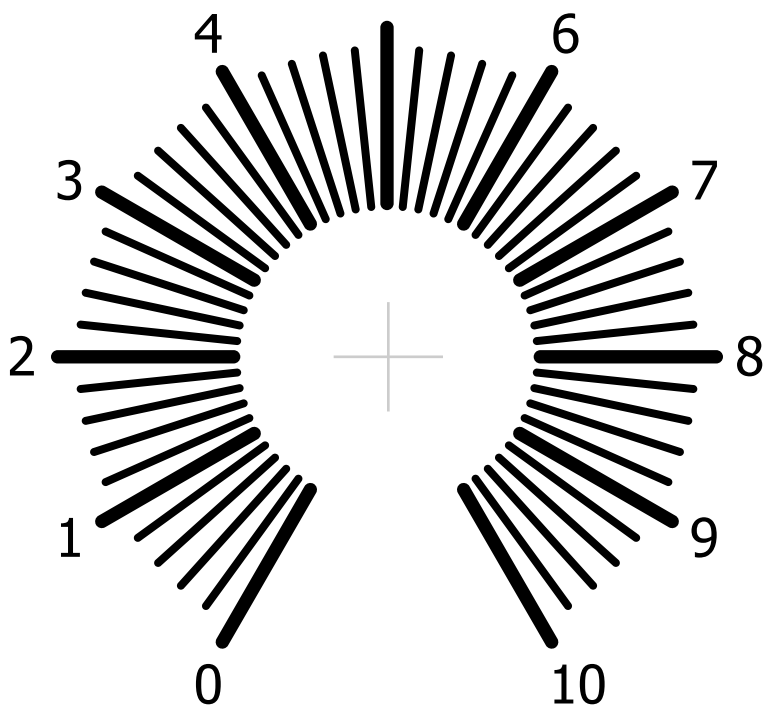
Signal 2



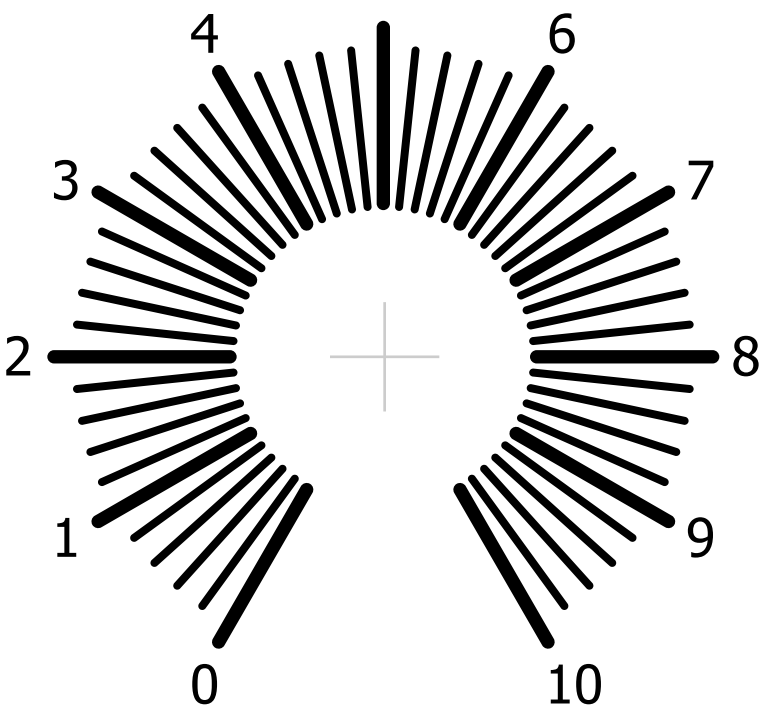
Cut-Off Frequency



Signal 3



Freq Mod Depth



Signal 1 In



Cut-Off CV In



High-Pass Out



Signal 2 In



Freq Mod In



Band-Pass Out



Signal 3 In



Resonance CV In

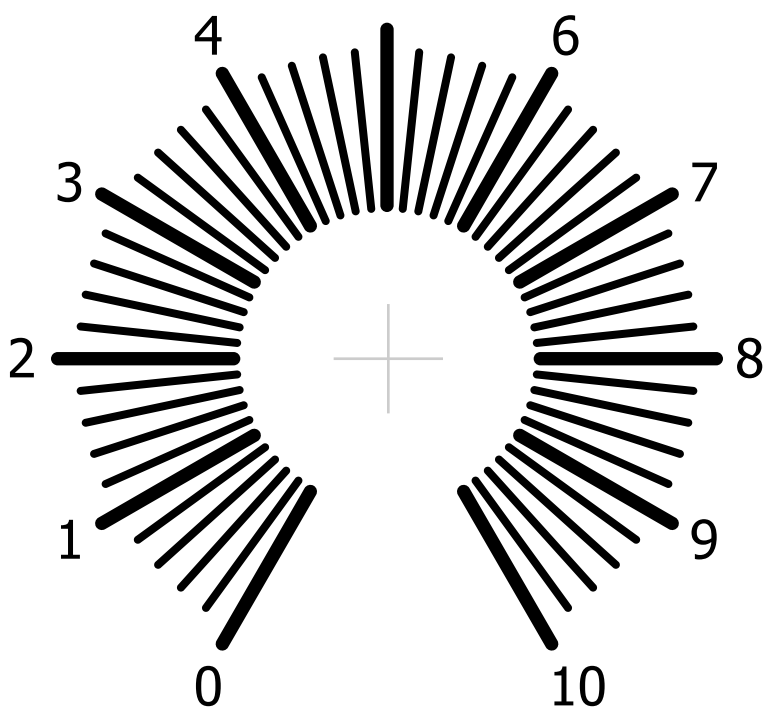


Low-Pass Out

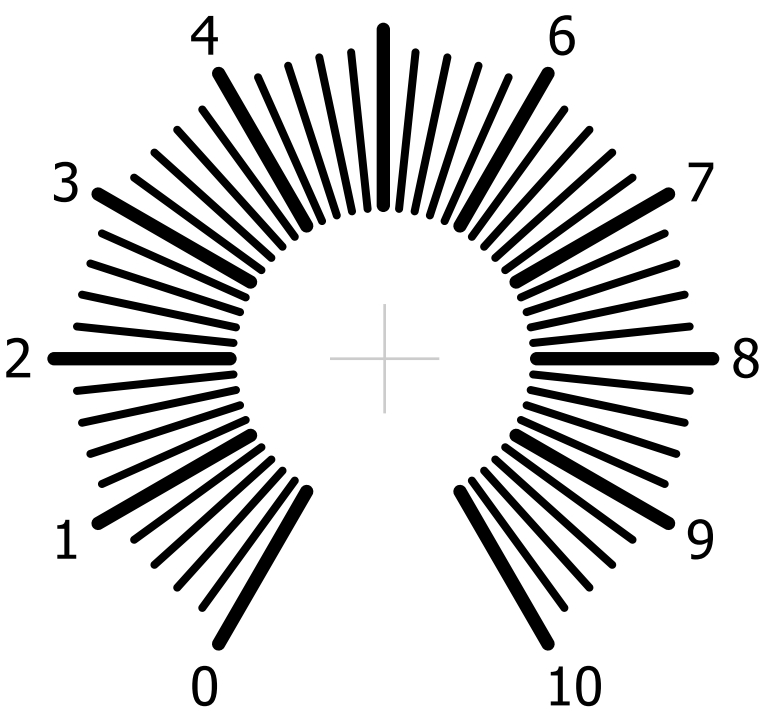


VCF 24

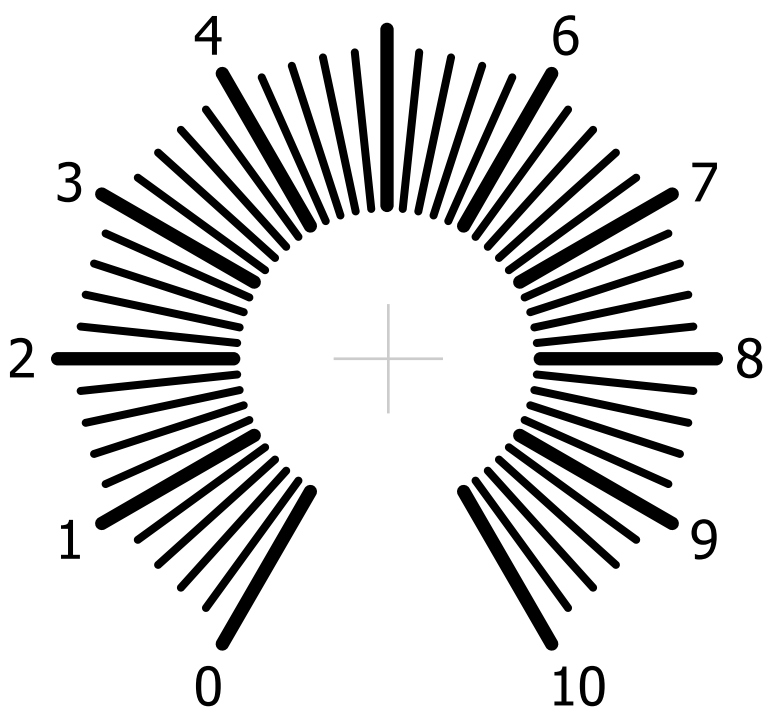
Signal 1



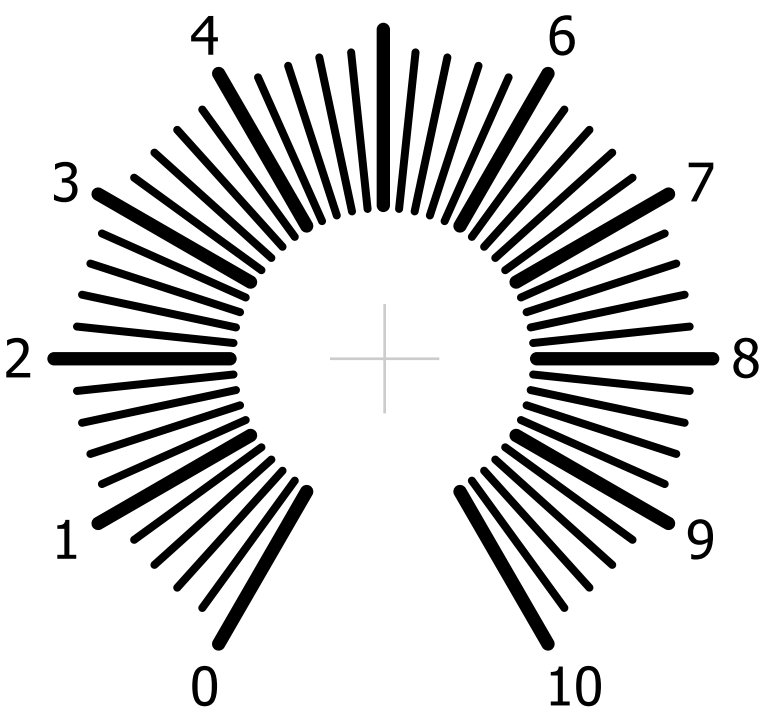
Resonance



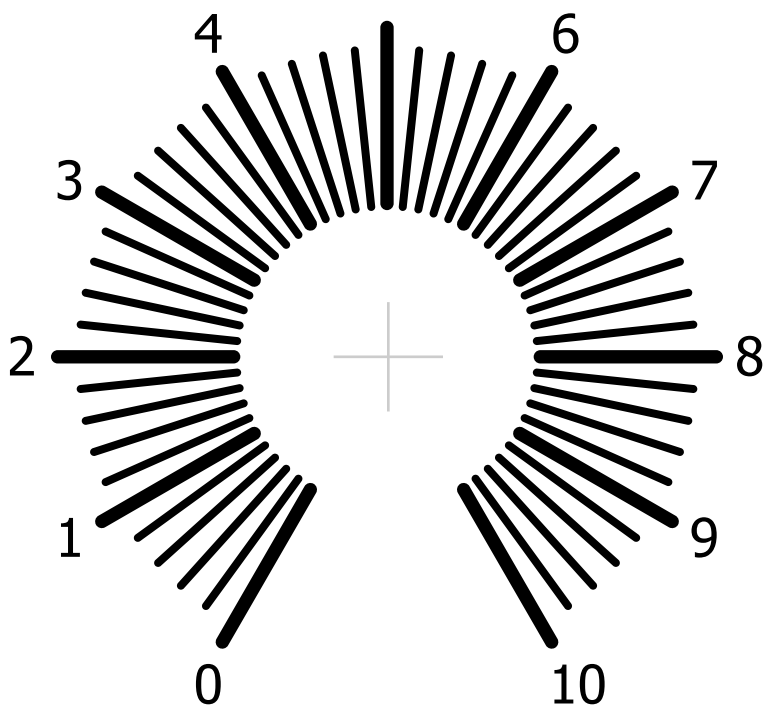
Signal 2



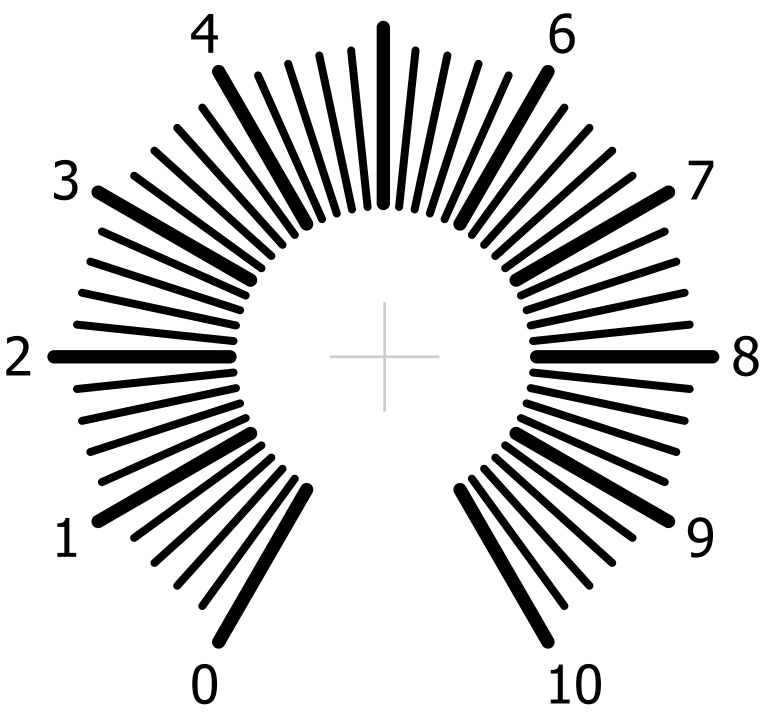
Cut-Off Frequency



Signal 3



Freq Mod Depth



Signal 1 In



Cut-Off CV In



Cut-Off CV In



Signal 2 In



Freq Mod In



Signal 3 In



Resonance CV In



Low-Pass Out

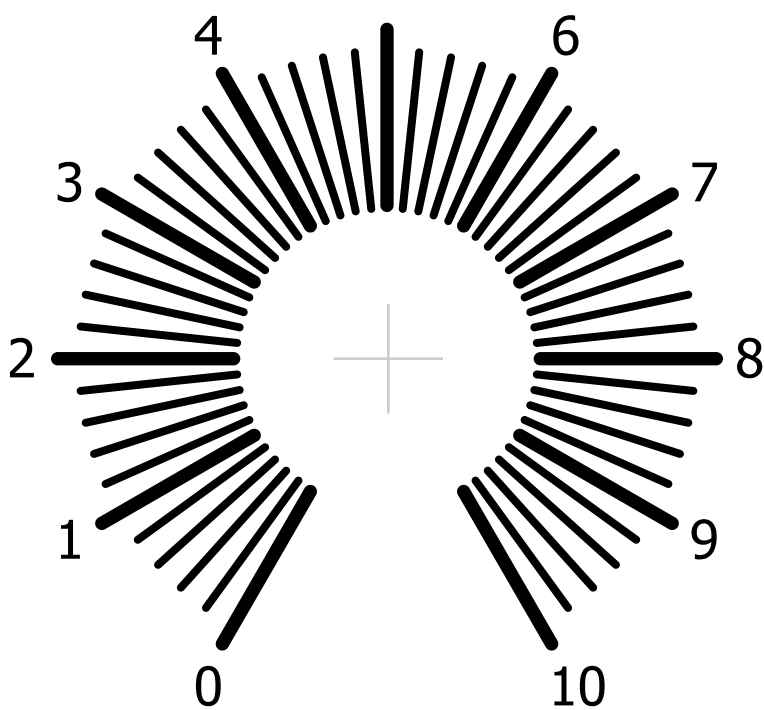


+

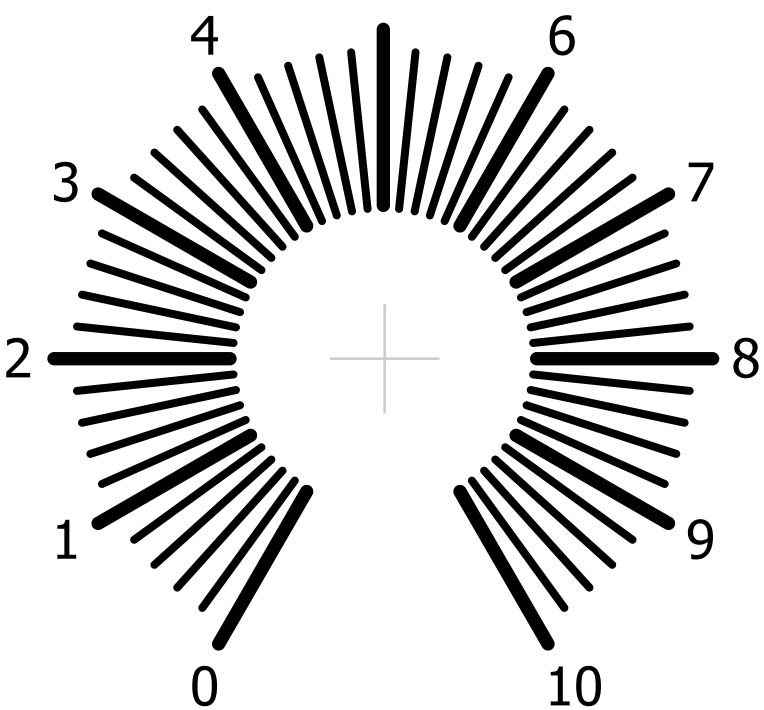
CV / GATE

+

CV 2 Portamento



Gate Delay



CV 1 In



CV 2 In



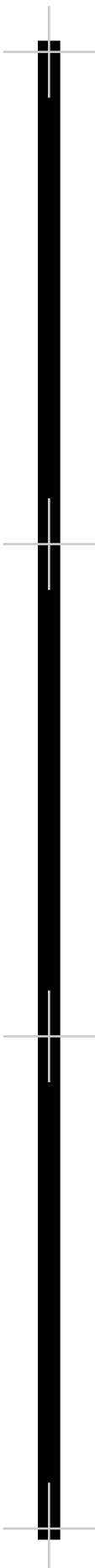
CV 1/2 Link
Off



Gate In



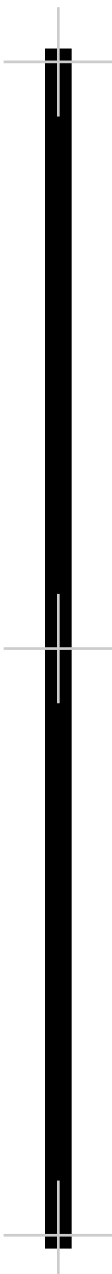
CV 1 Out



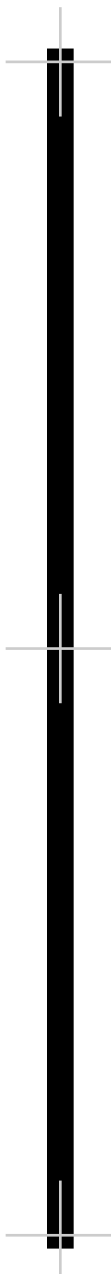
CV 2 Out



Delay Out



Gate Out



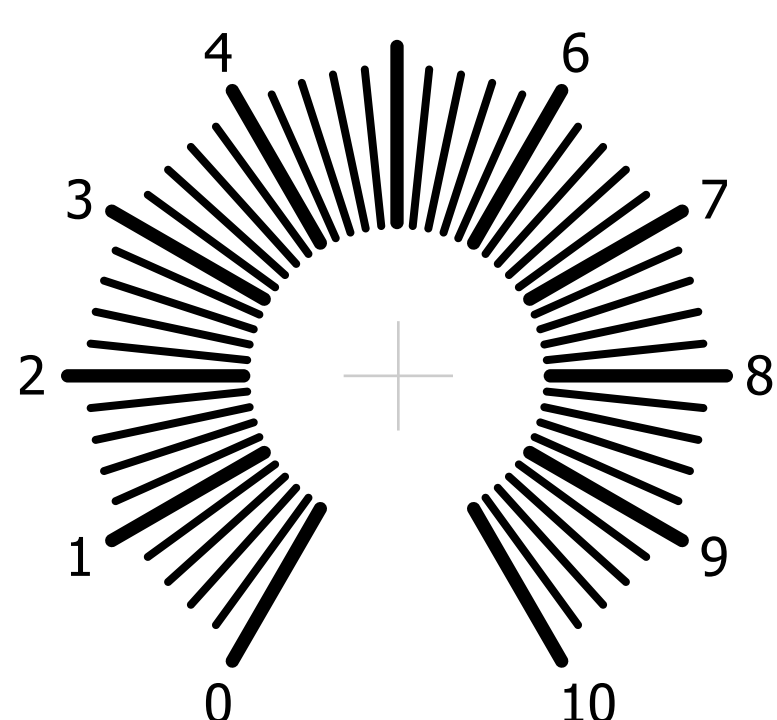
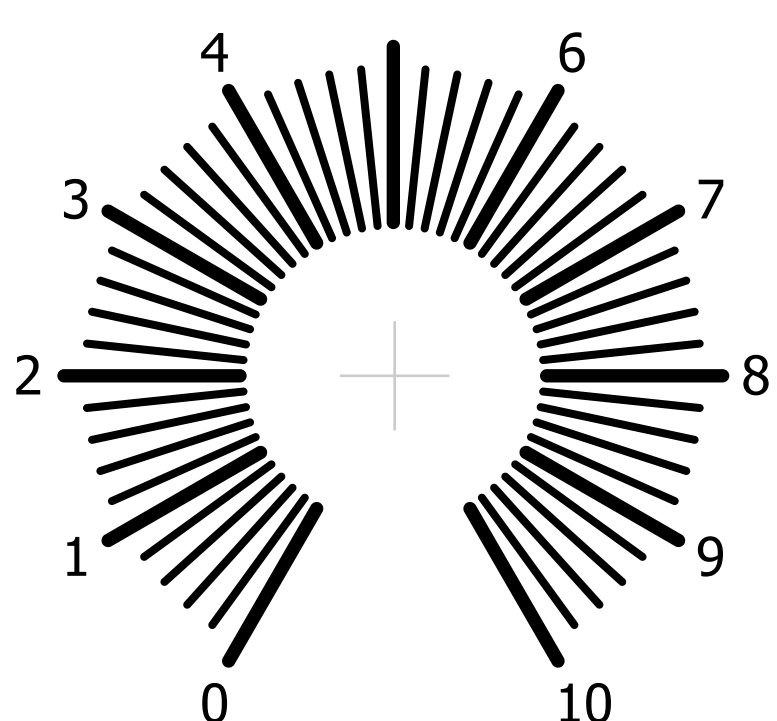
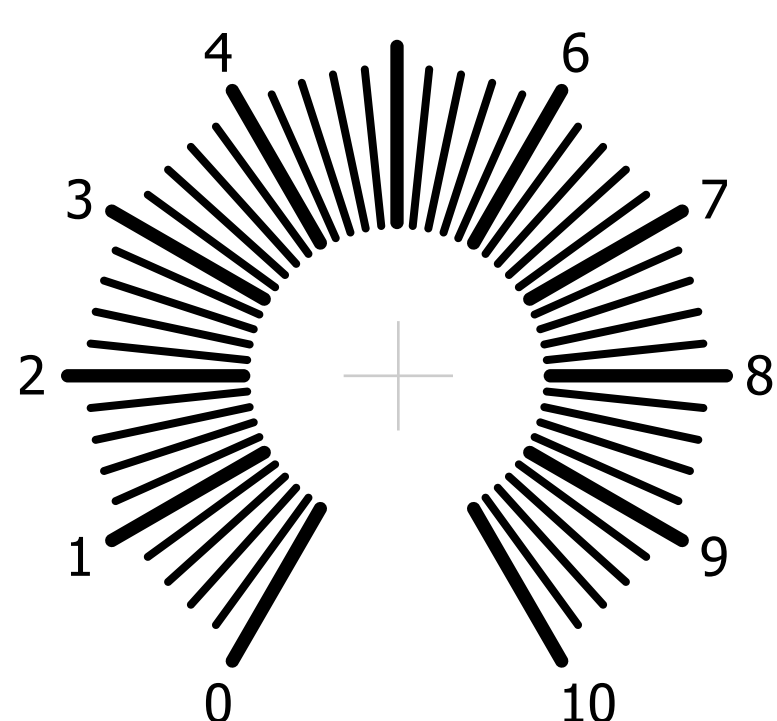
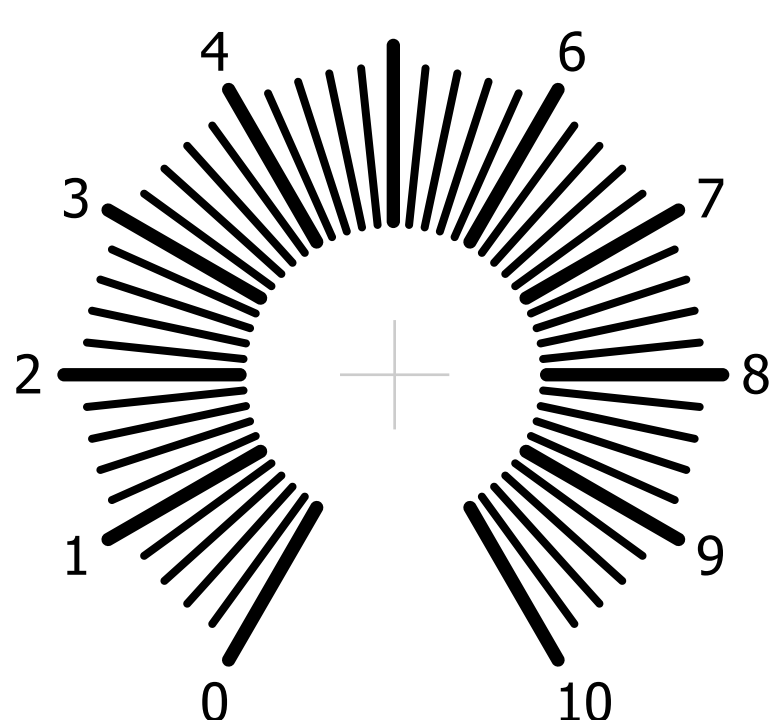
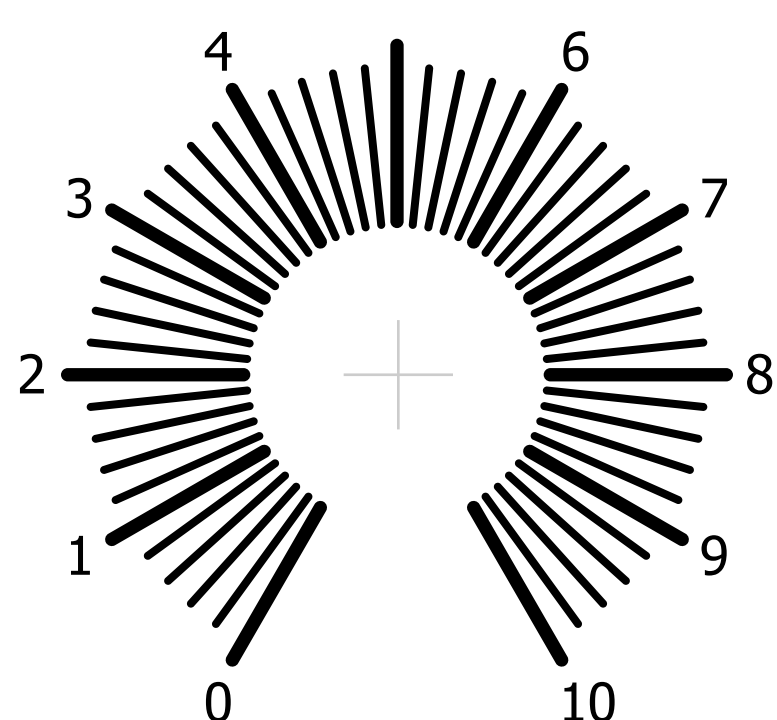
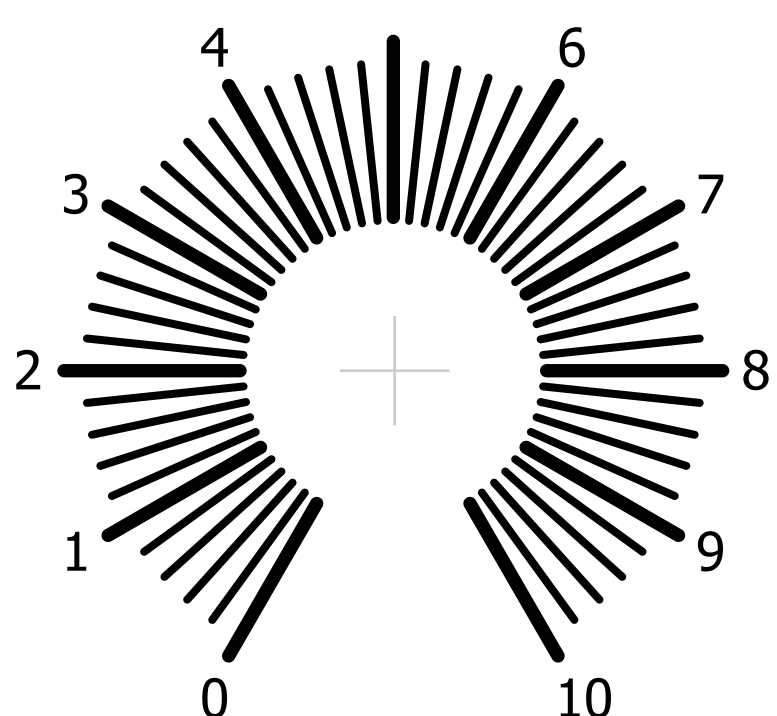
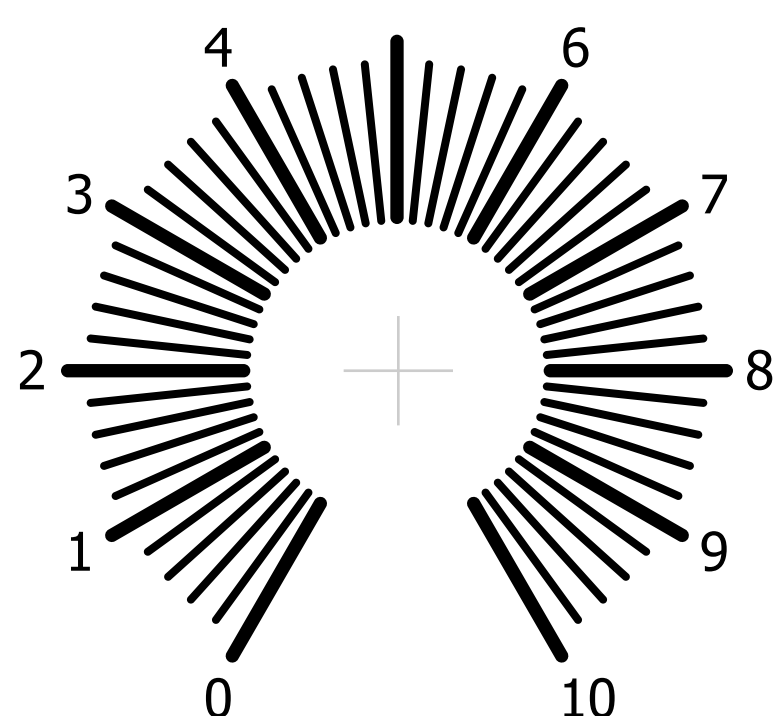
Delay Active



Gate Active



WAVE FREAKER



Active

Shaper Mode

Up

Down

Input

Wave Shape CV 1

Step Wave CV 1

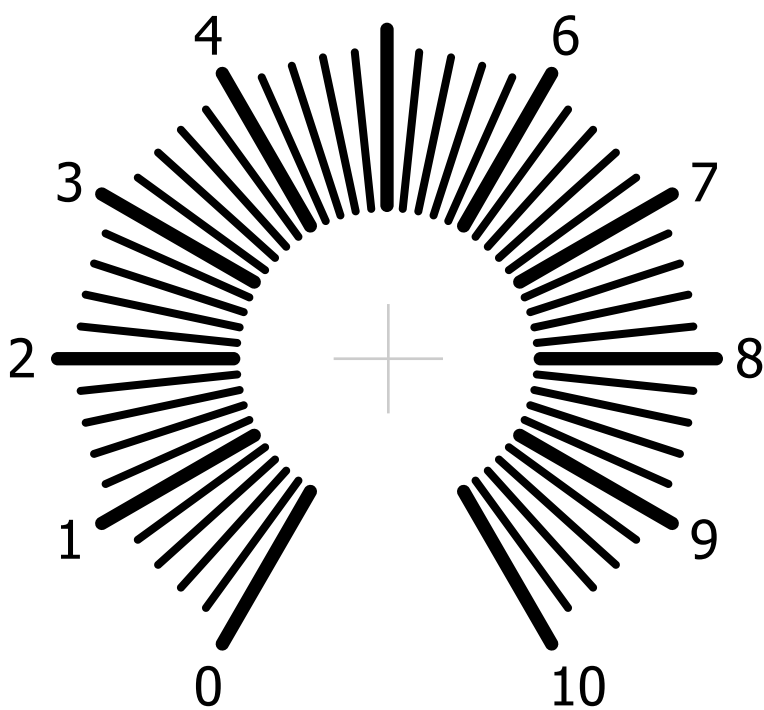
Output

Wave Shape CV 2

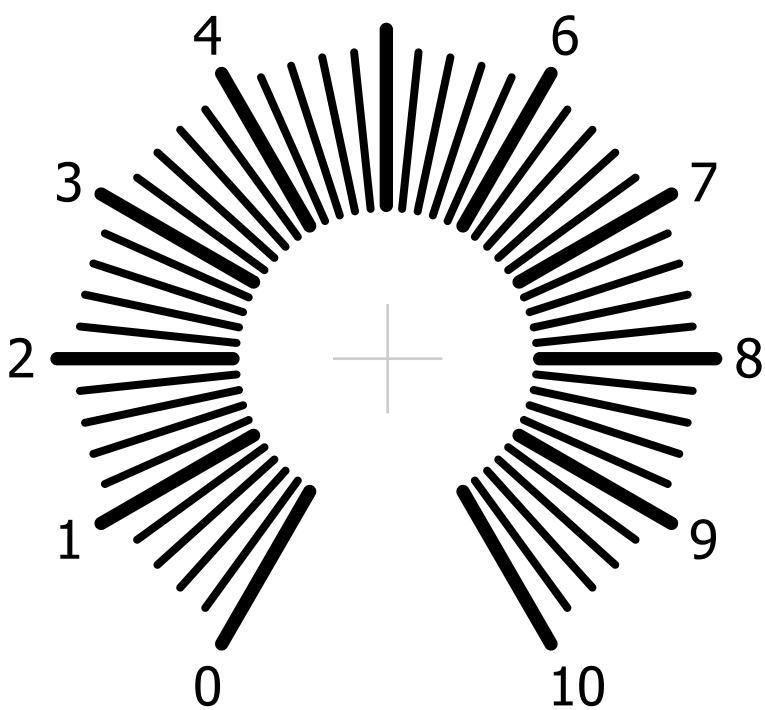
Step Wave CV 2

ECHO

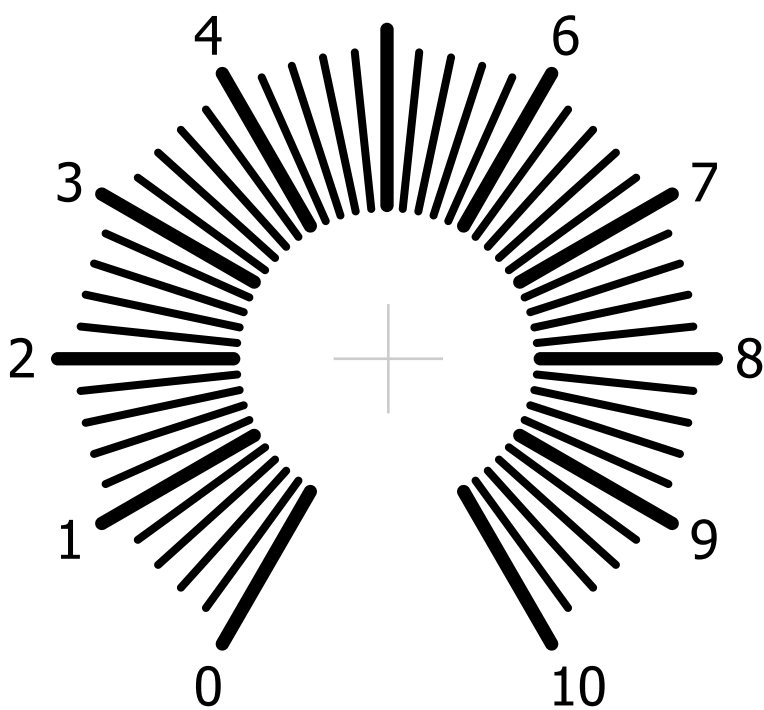
Input Level



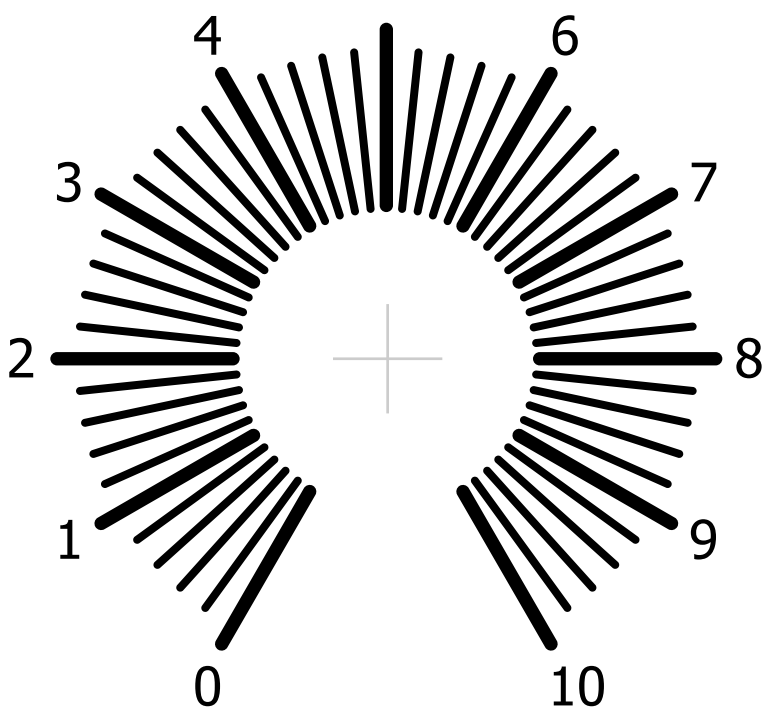
Echo Level



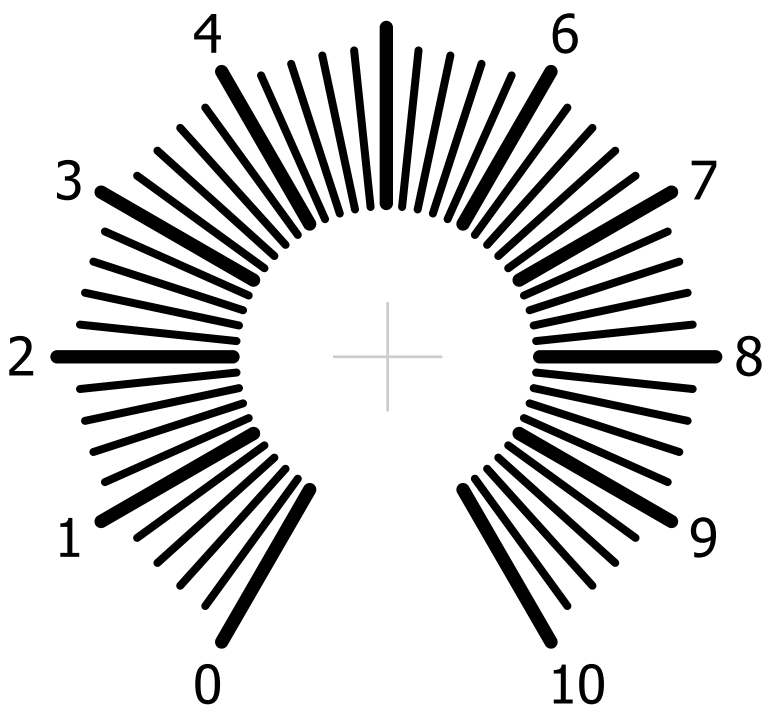
Original Level



Echo Repeat



Delay



Input Type

Line



Mic

Echo Level CV



Echo Repeat CV



Delay CV



Mic Buffer Out



Output



Input

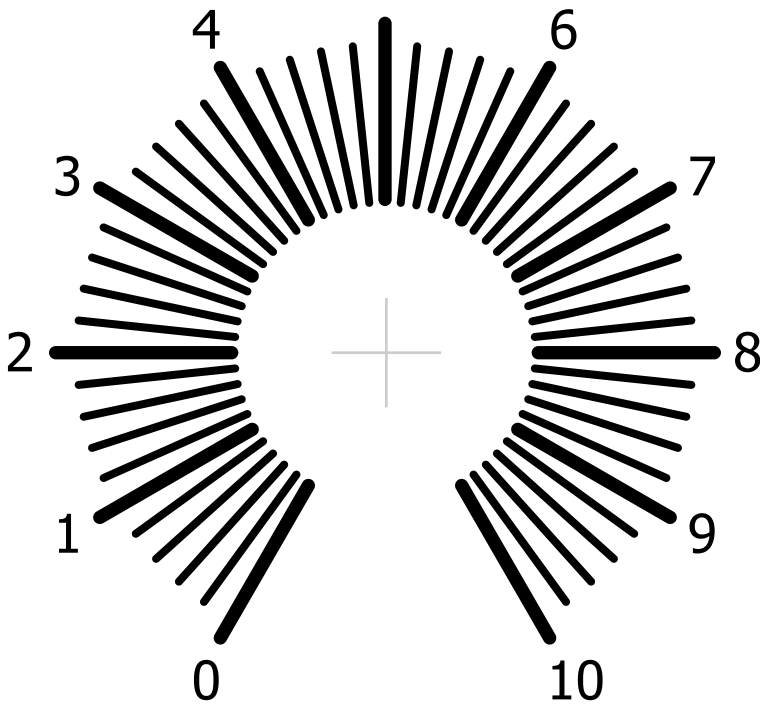


Output

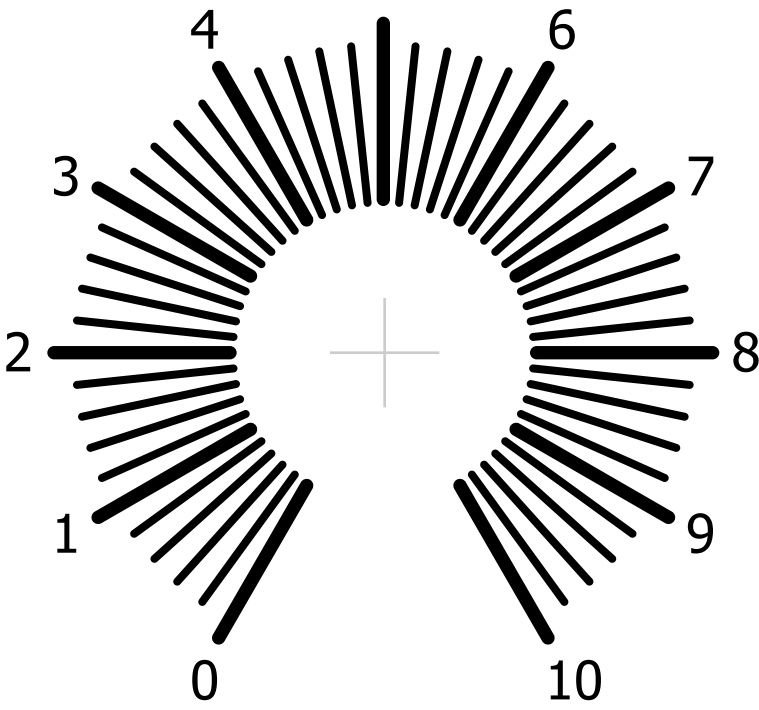


RING MODULATOR

Coarse

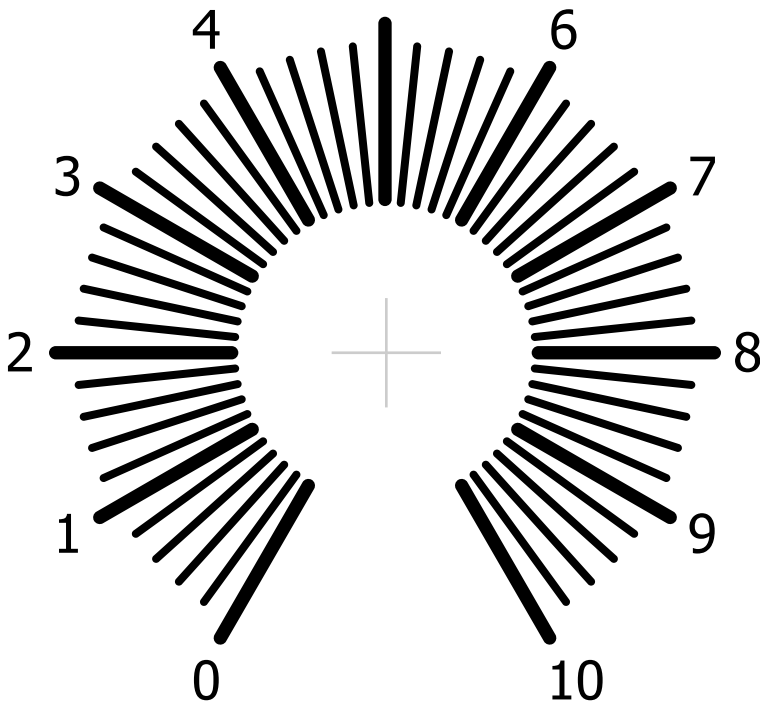


Fine

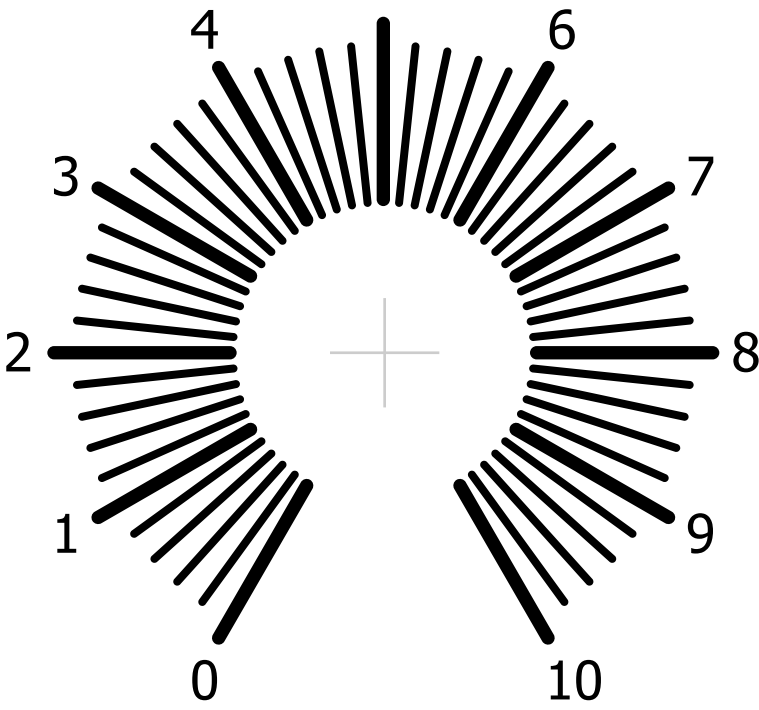


Oscillator Frequency

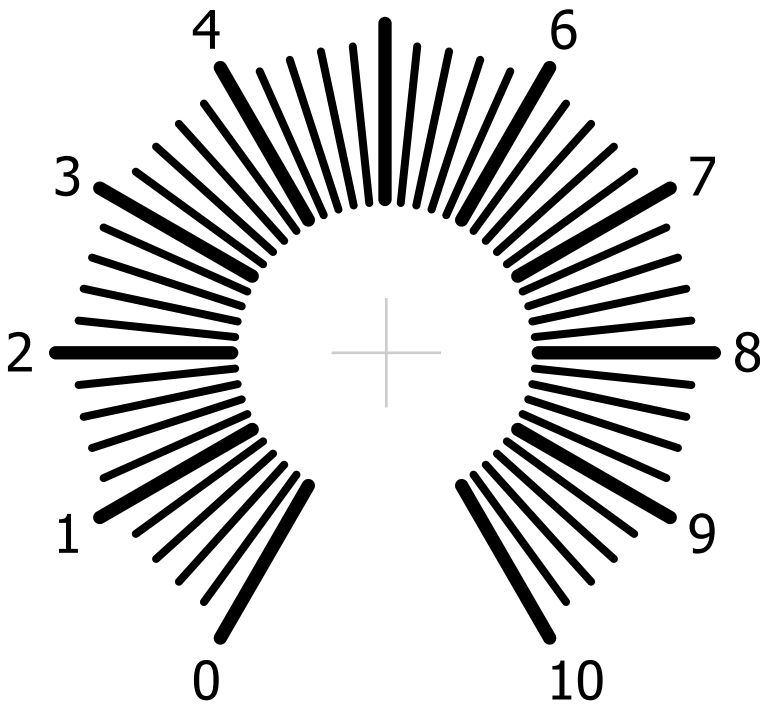
Input Level 1



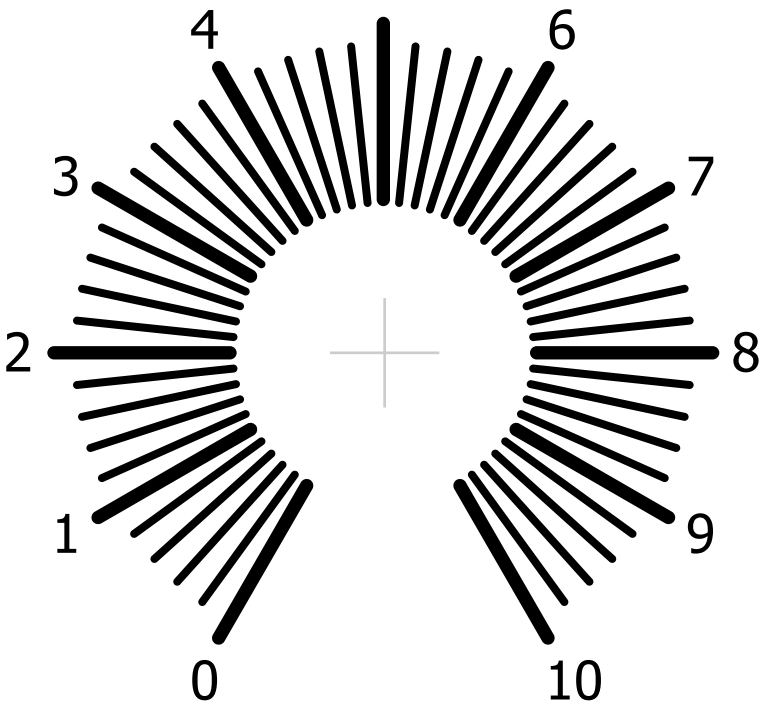
Gain Level 1



Input Level 2



Gain Level 2



Source Select

Input 2 * Sine



Input Type

Independent



Input 2 * Input 1

Combined

Signal 1 In

Oscillator CV 1 In

Sine Output



Signal 2 In

Oscillator CV 2 In

Output

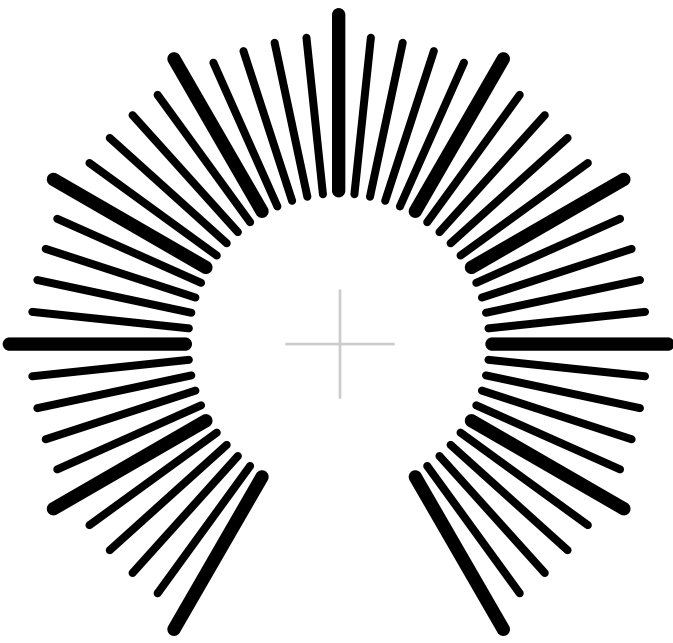
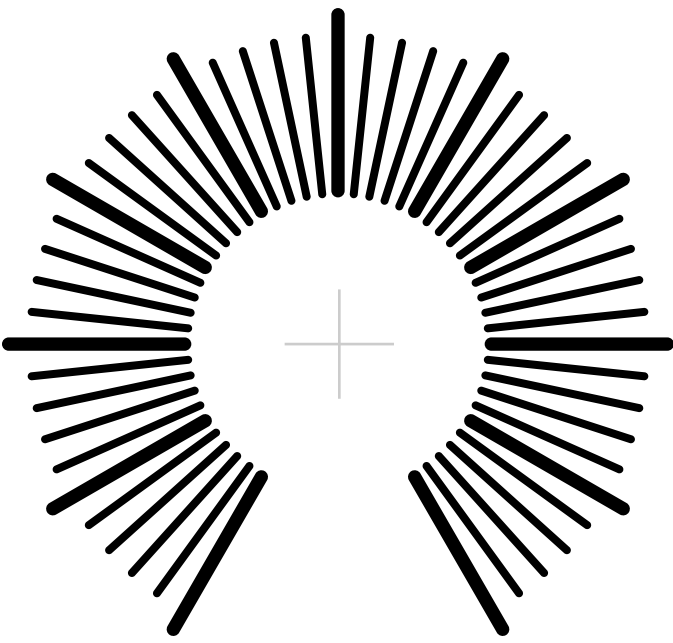
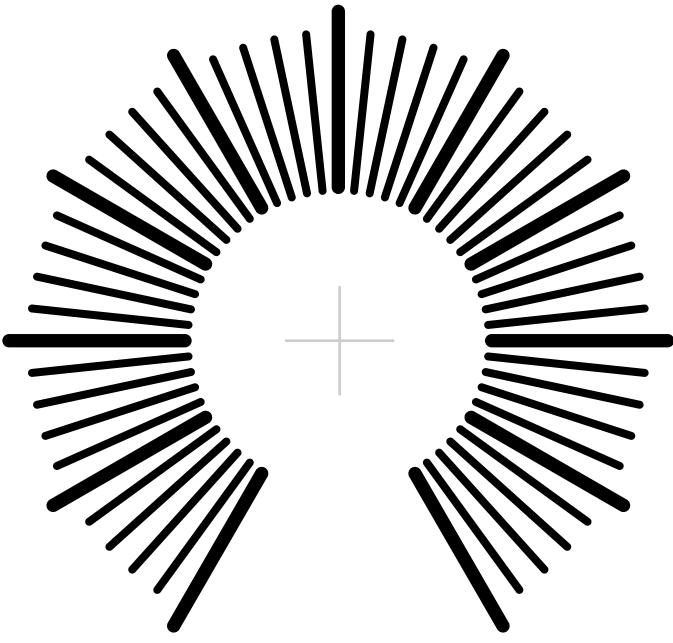
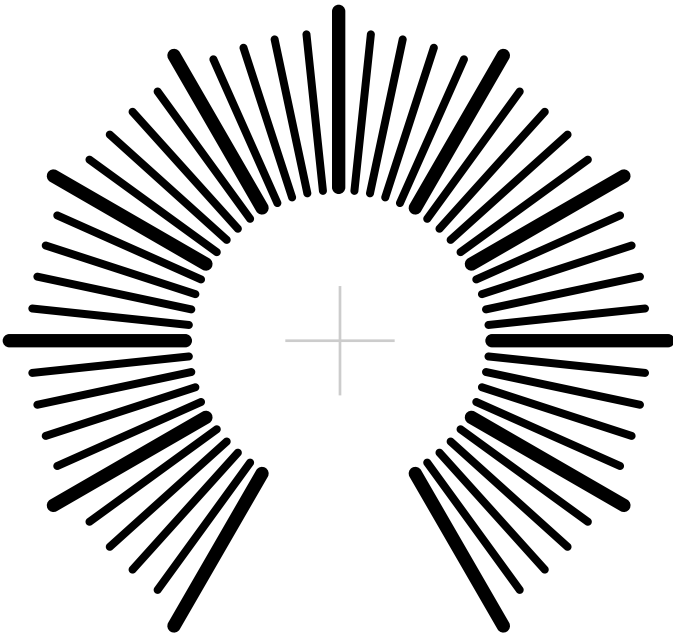
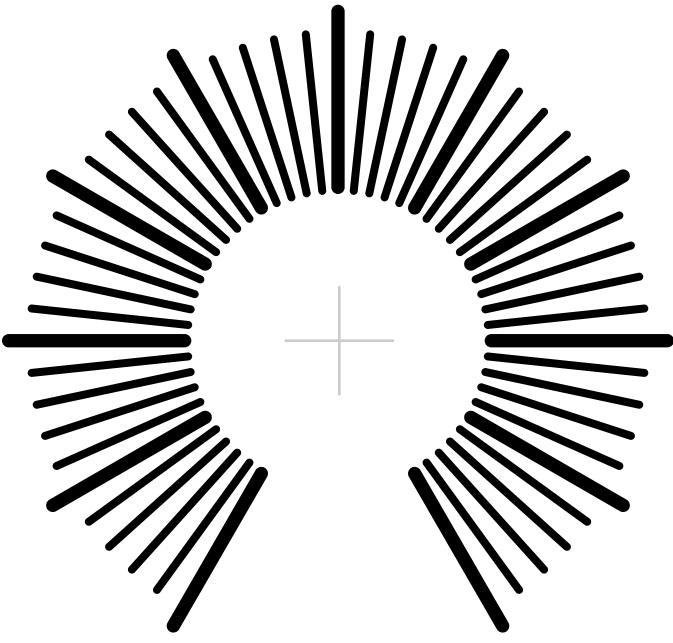


7 SEG ENVELOPE

Slope

Threshold

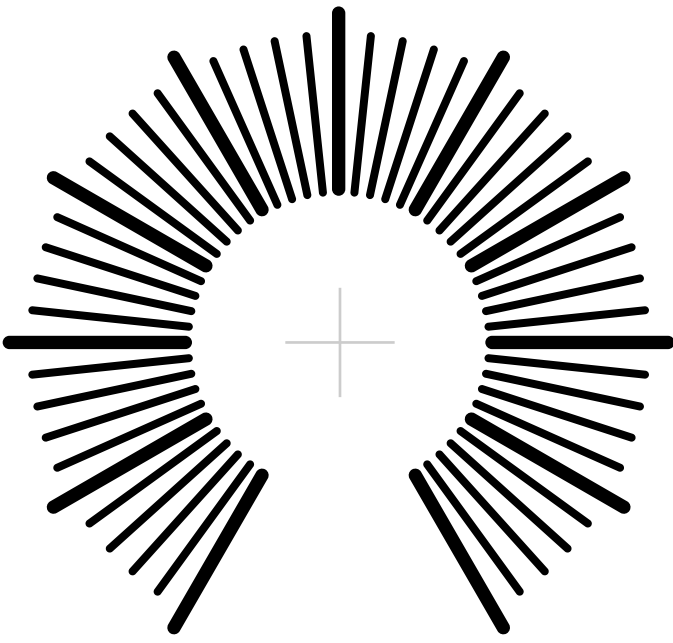
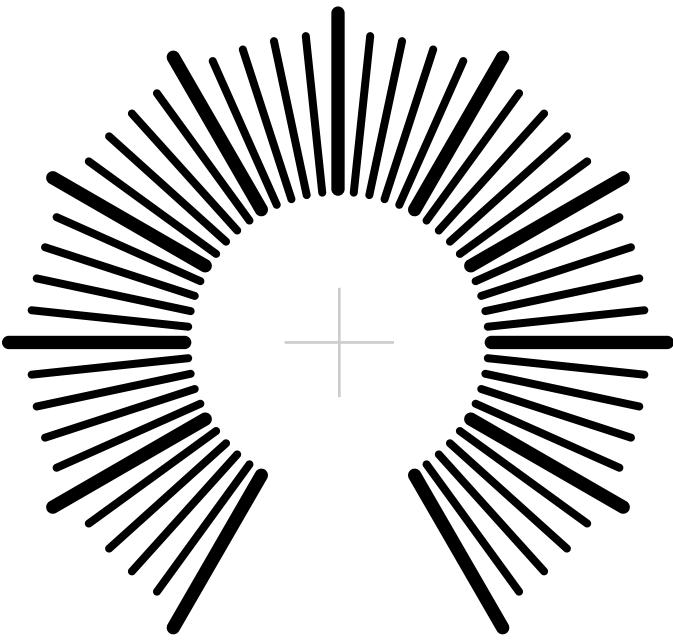
Level



Sustain



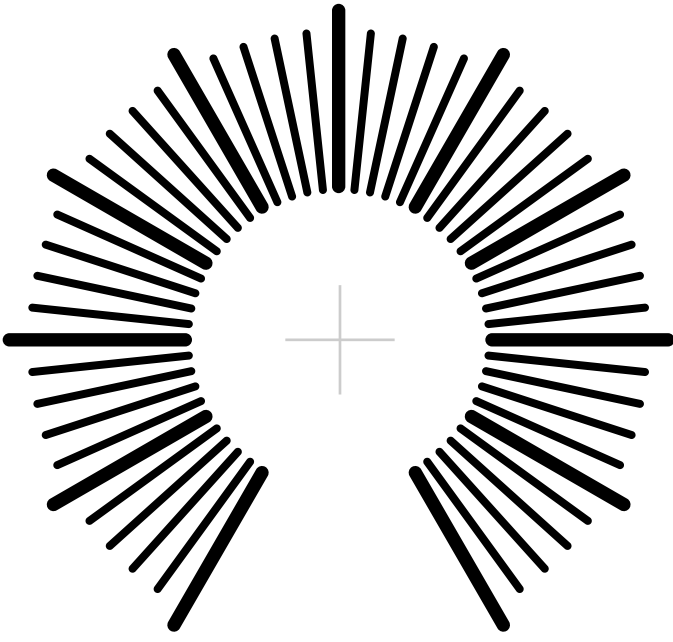
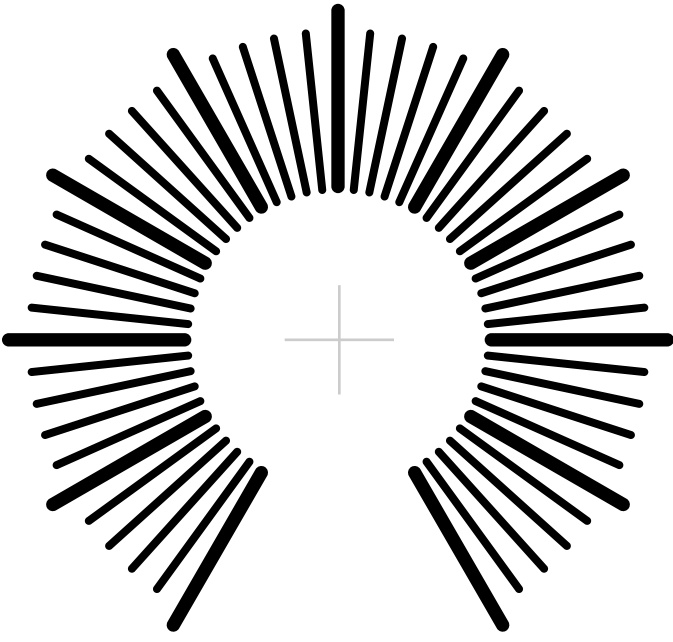
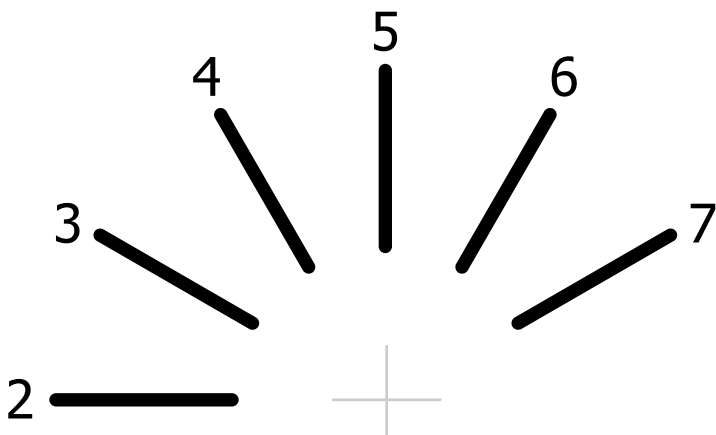
Ready



Slope Runaway



Segments



Repeat

On

Gate

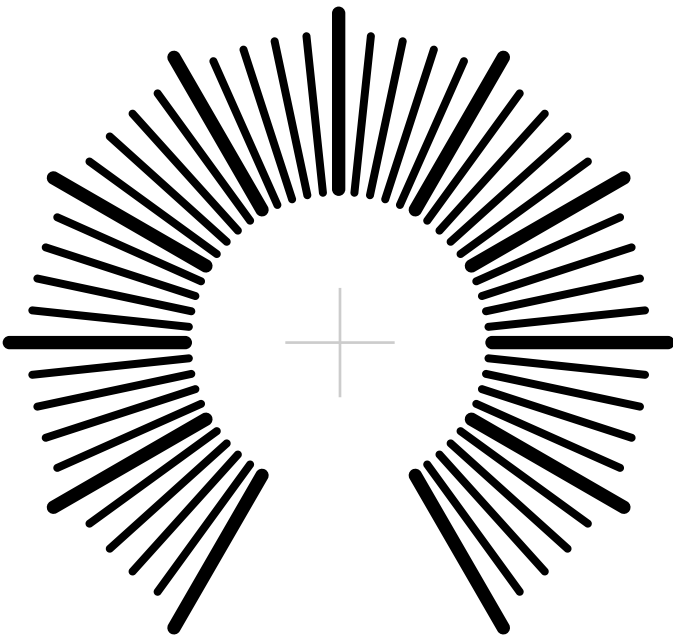
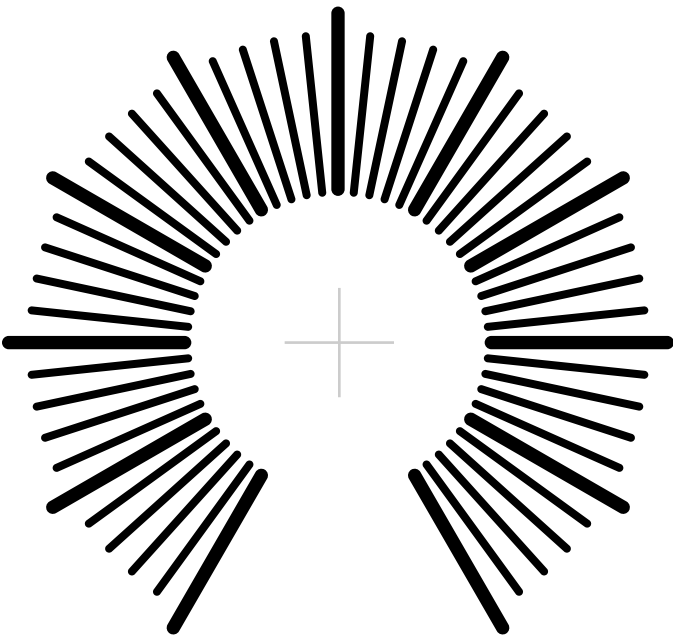
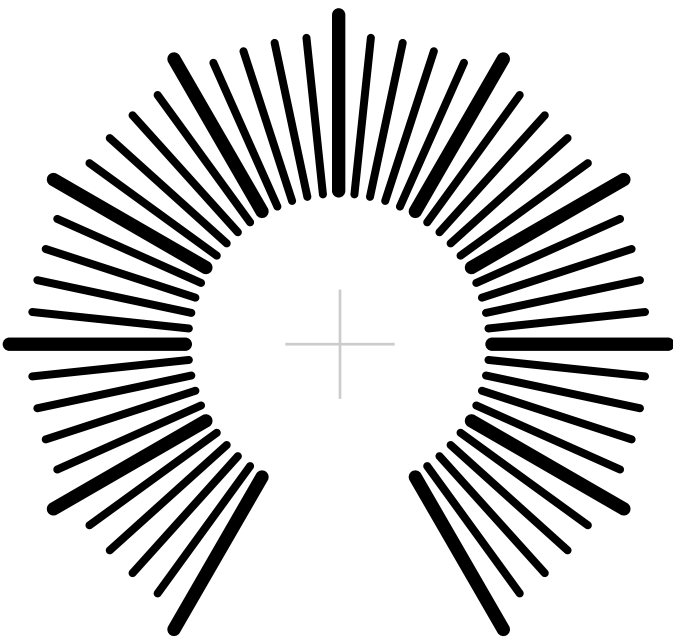
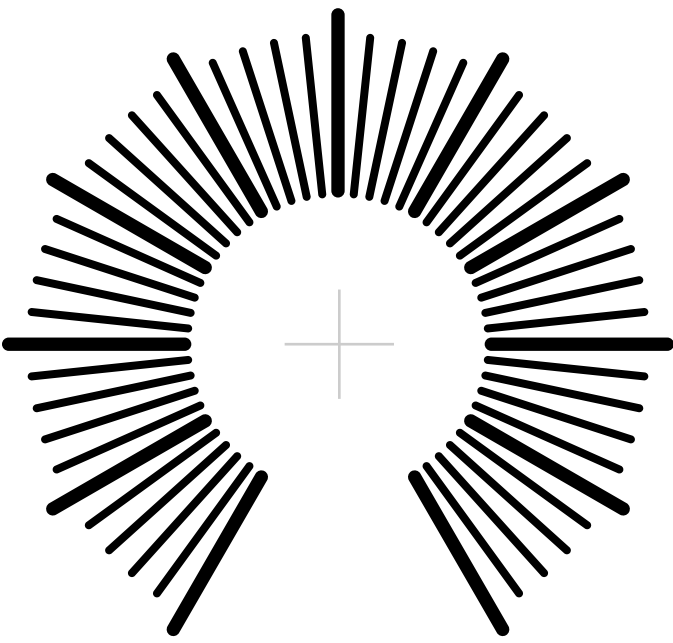
Mode 1



Off

Mode 2

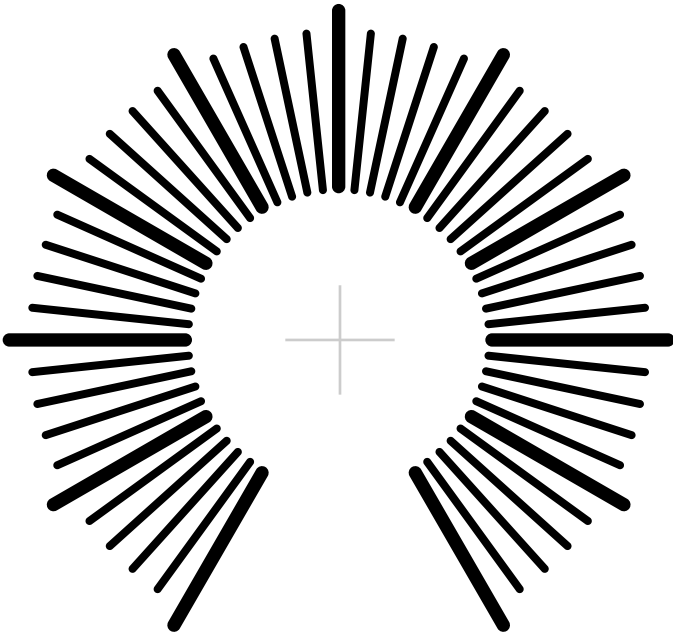
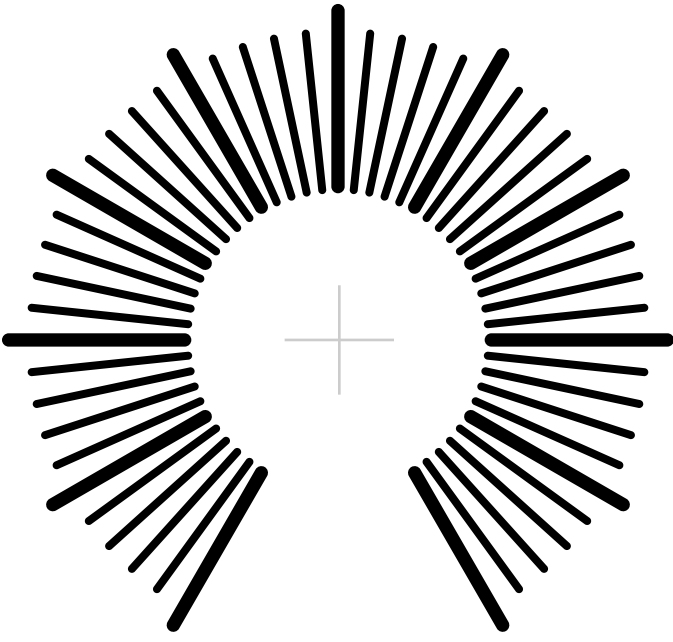
Manual



Gate Input

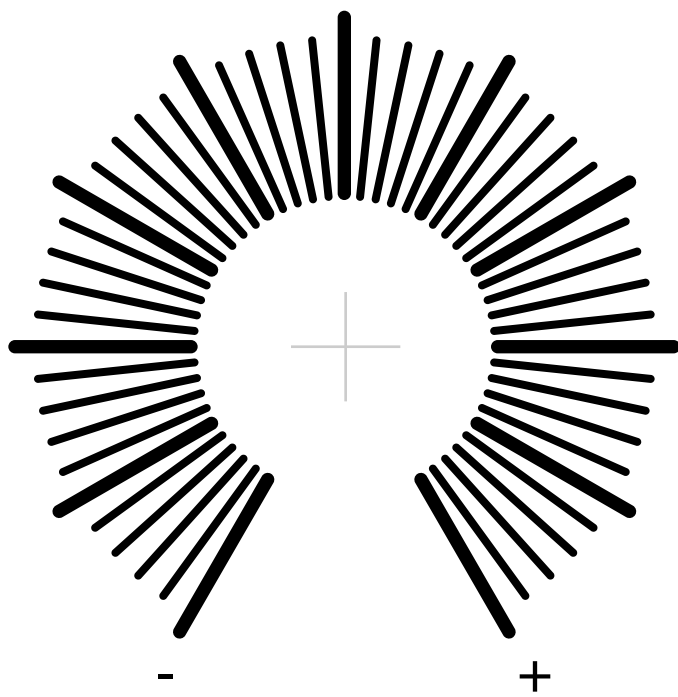


Envelope Out

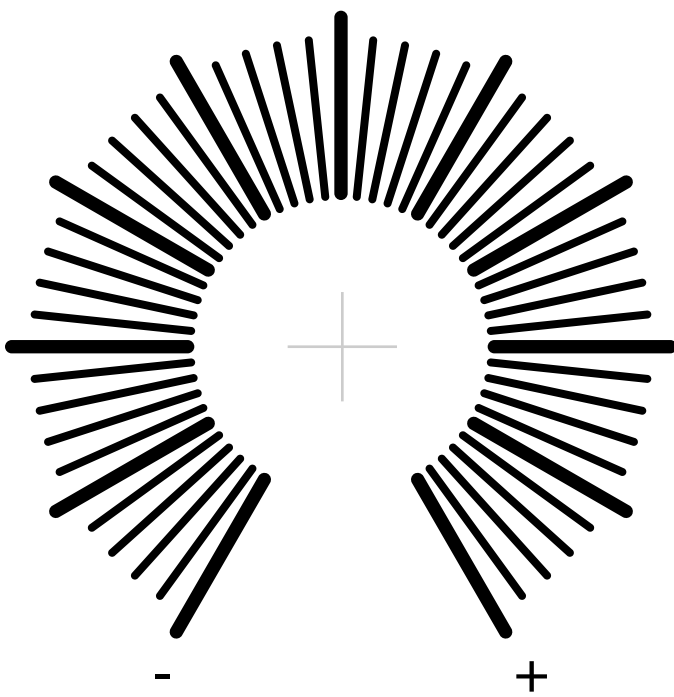


4+2 MIXER

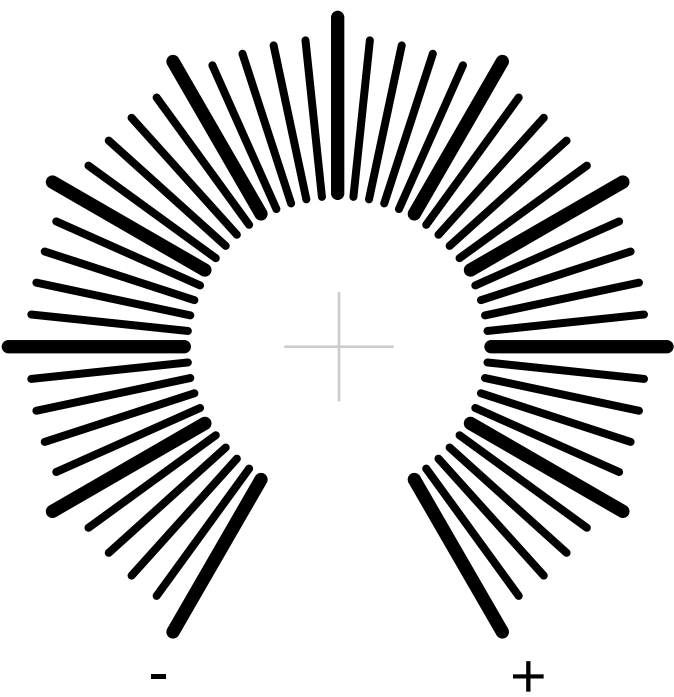
Effect 1



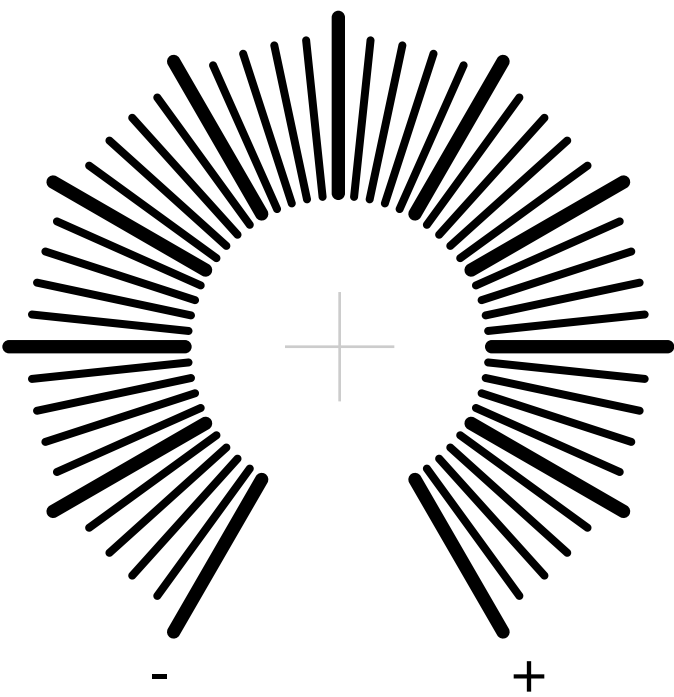
Effect 1



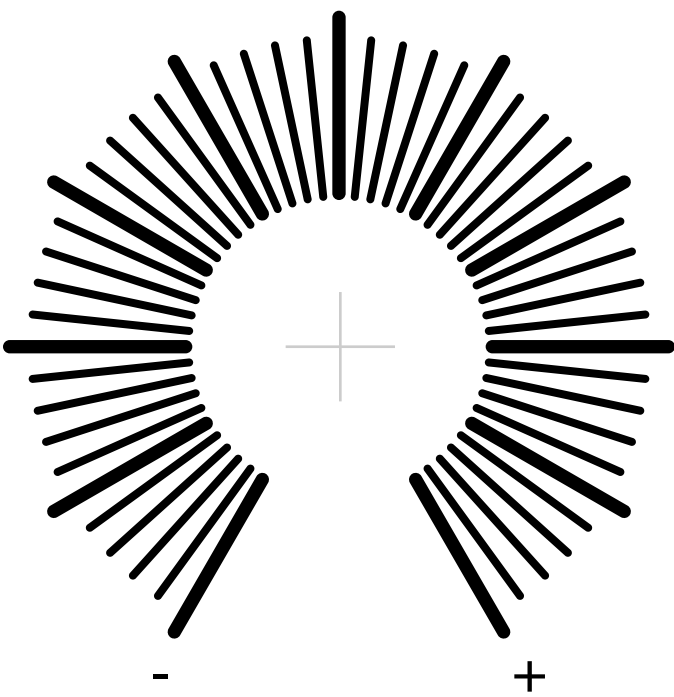
Effect 1



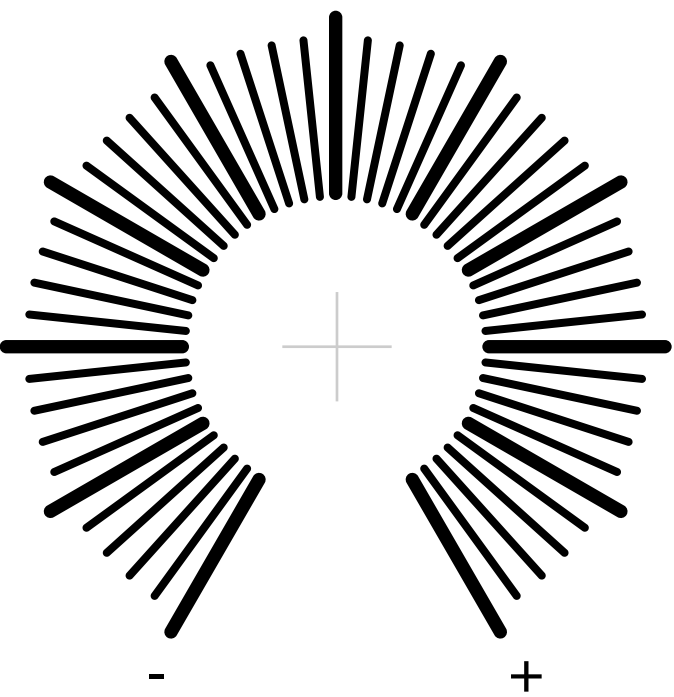
Effect 1



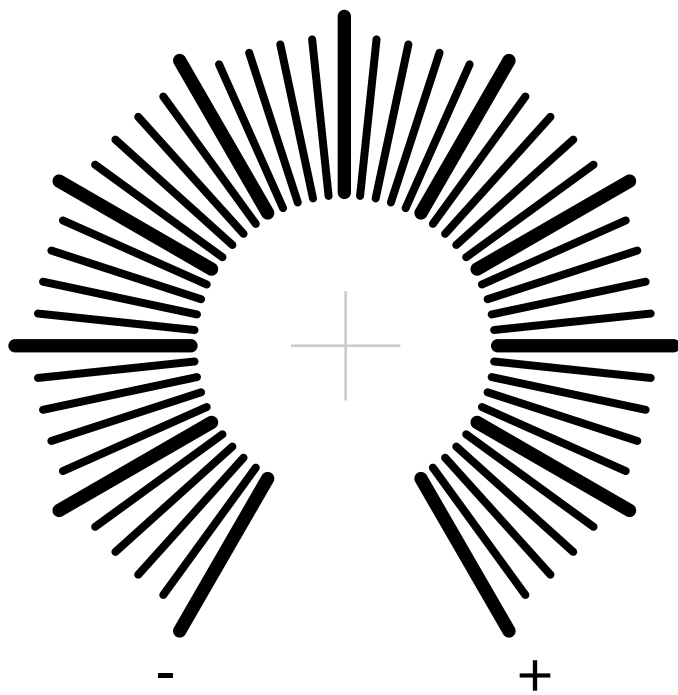
Effect 1 Level



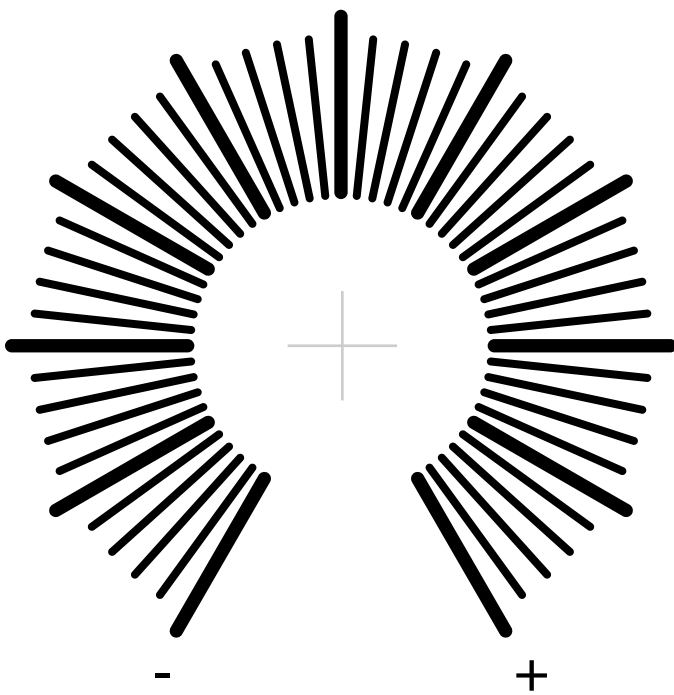
Effect 2 Level



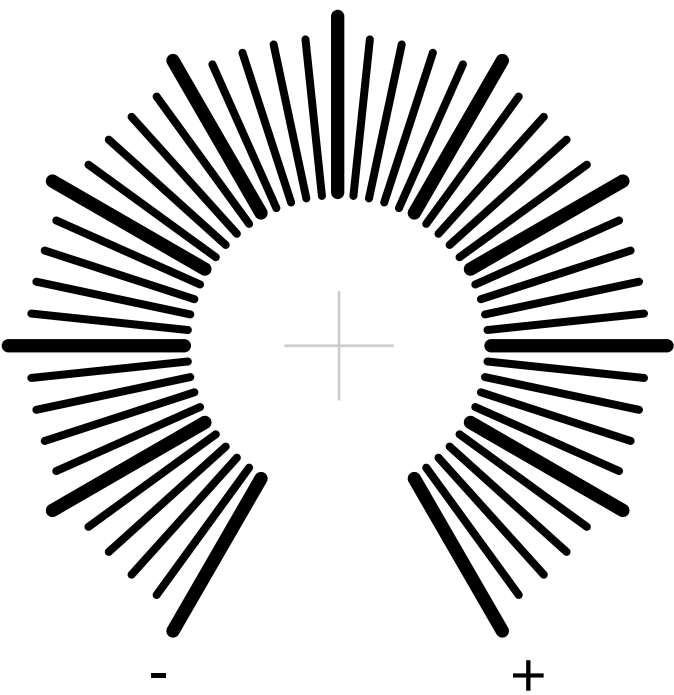
Effect 2



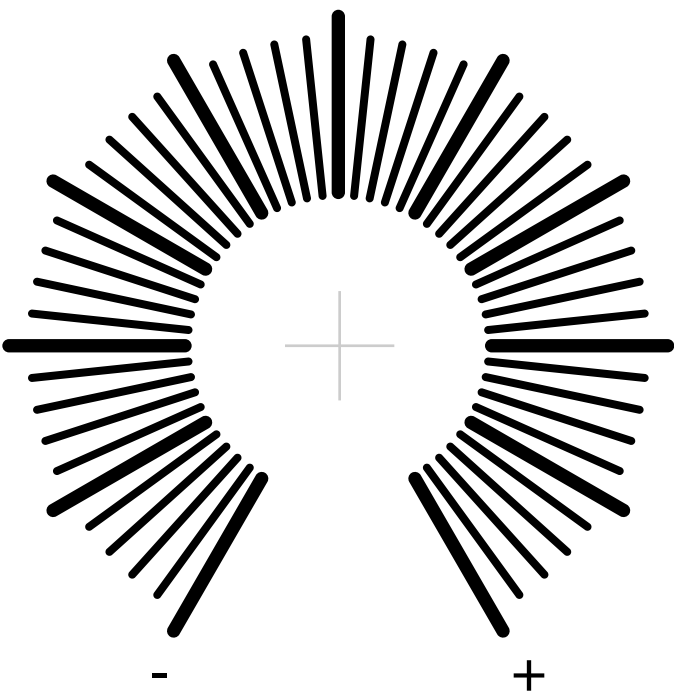
Effect 2



Effect 2



Effect 2



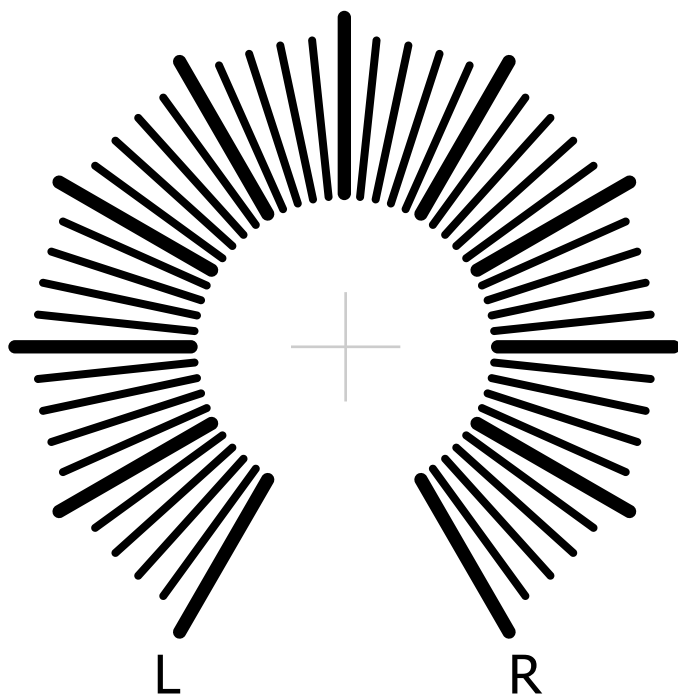
Left Send

Left Send

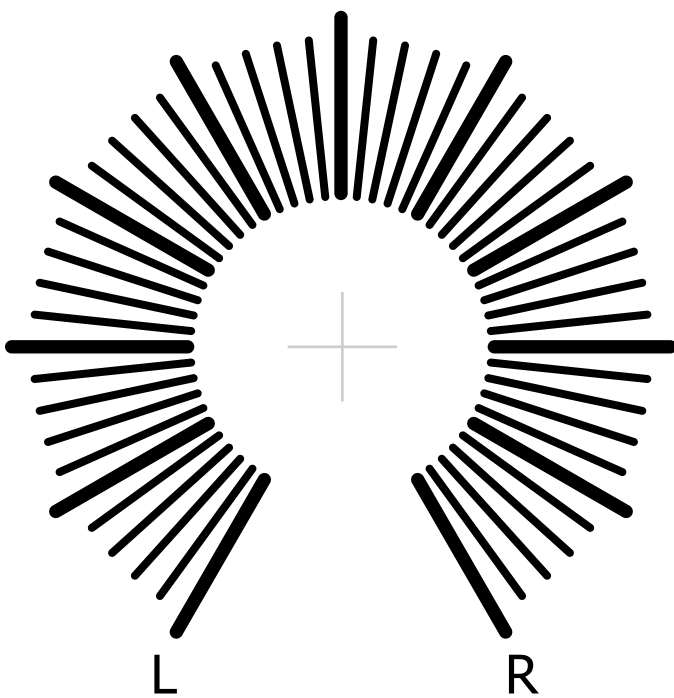
Right Send

Right Send

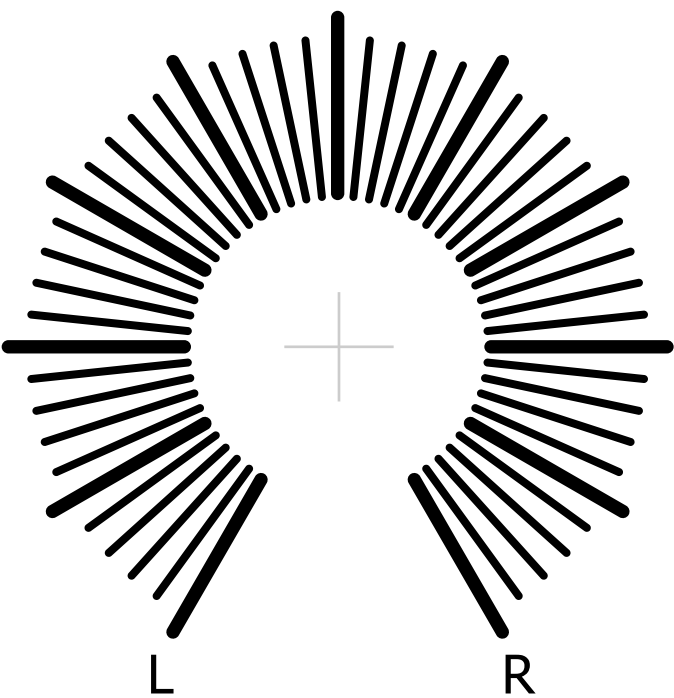
Pan



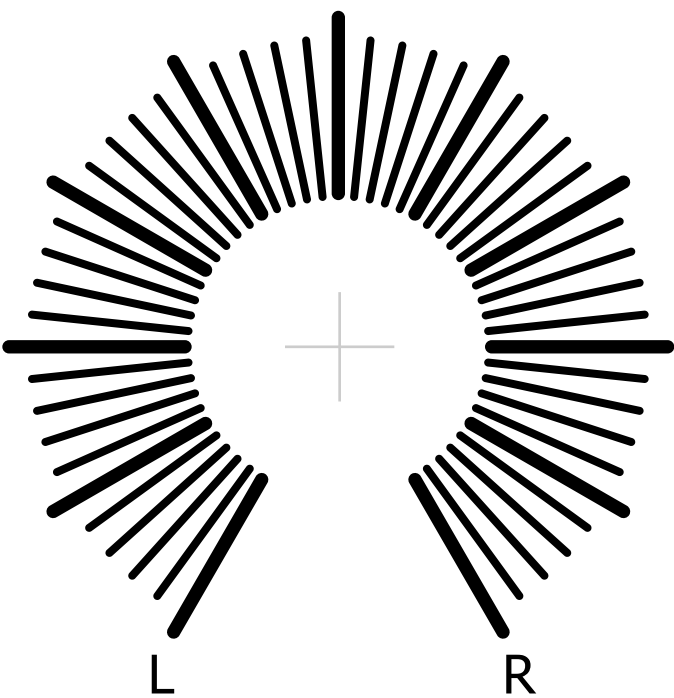
Pan



Pan



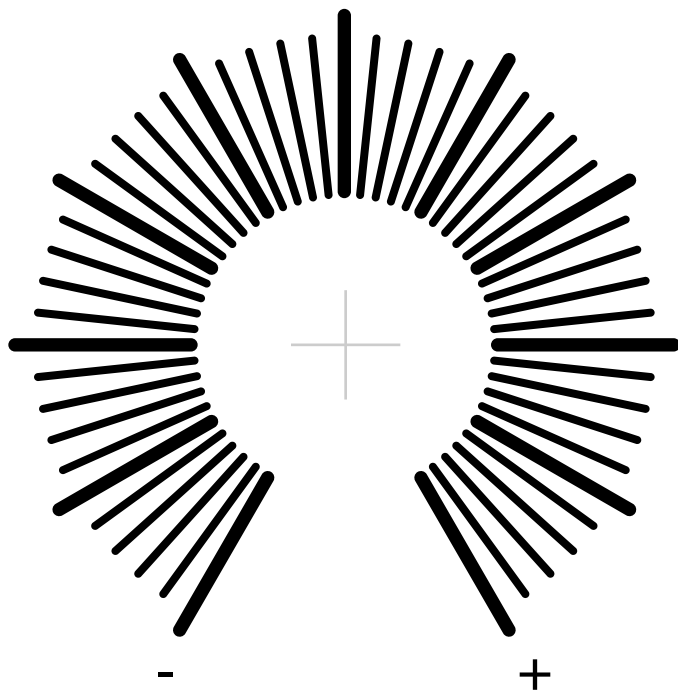
Pan



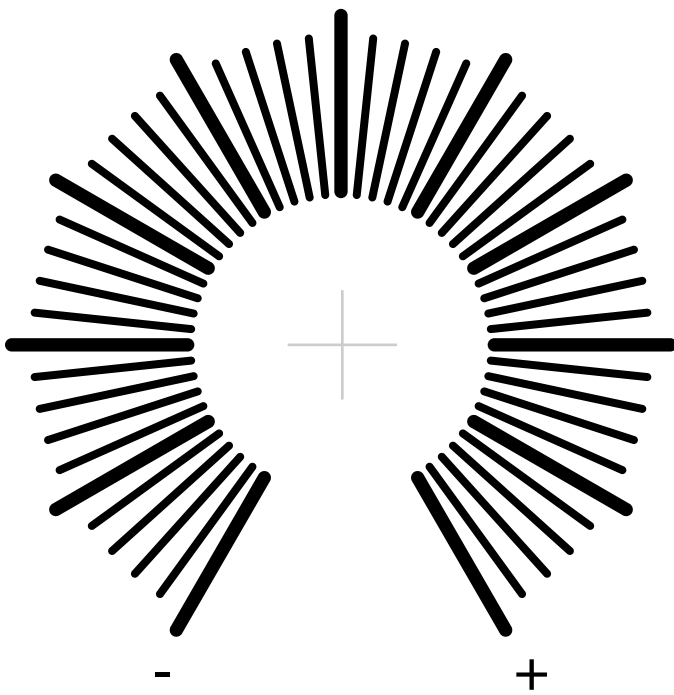
Left Return

Left Return

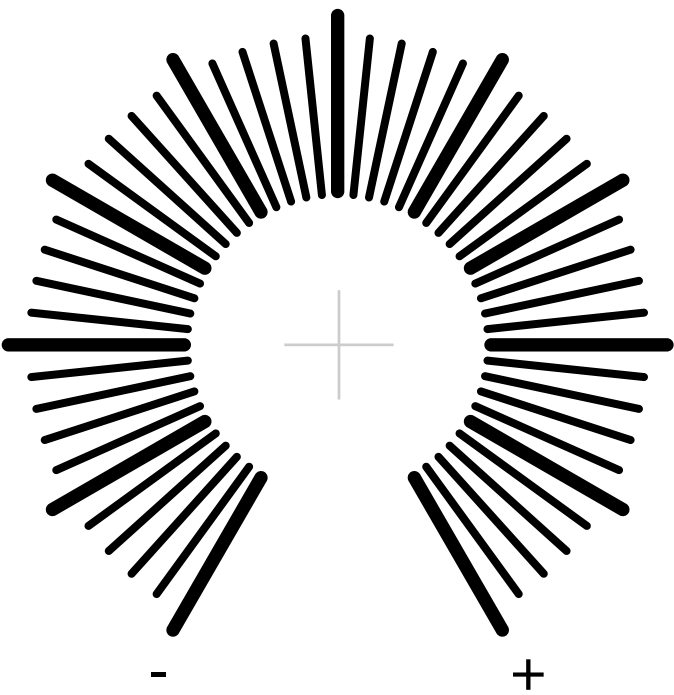
Level



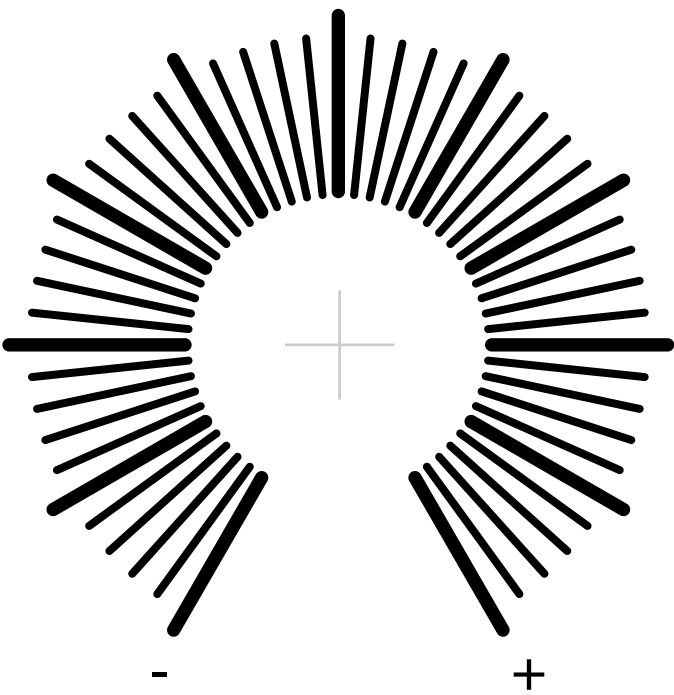
Level



Level



Level



Right Return

Right Return

Chan 1 In

Chan 2 In

Chan 3 In

Chan 4 In

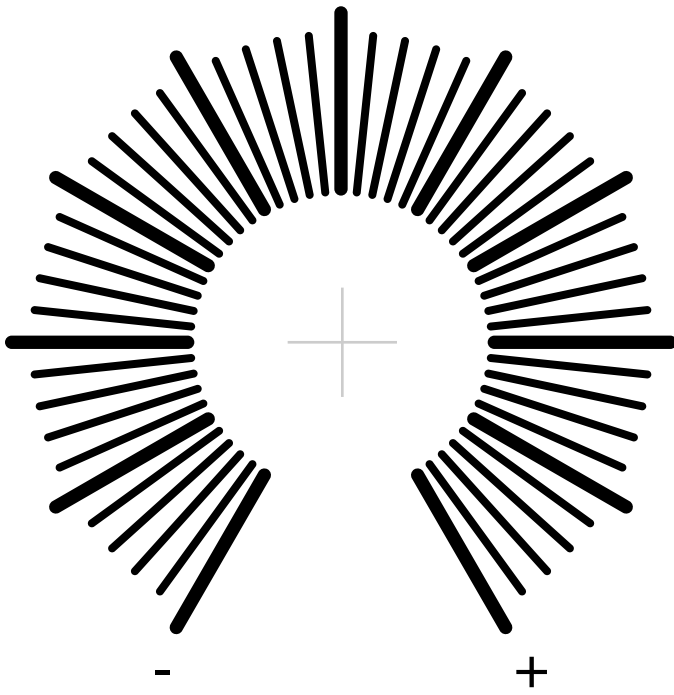
Left Out

Right Out

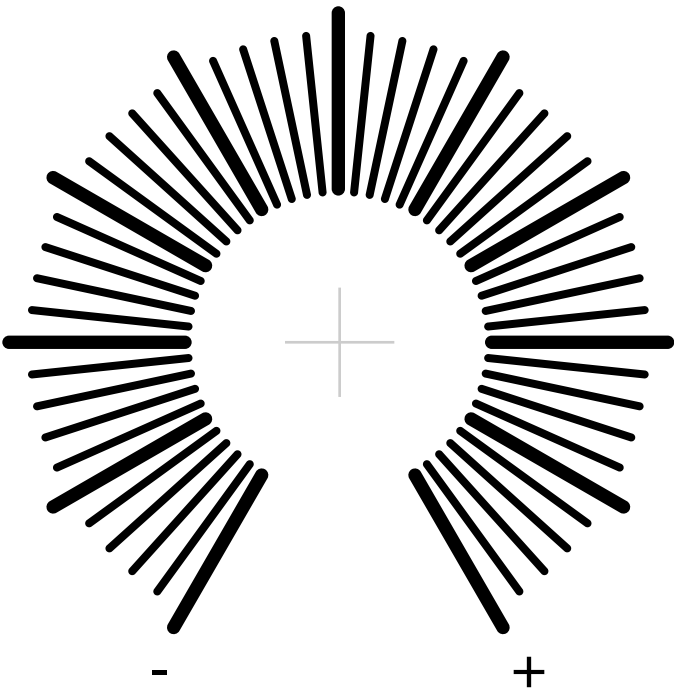
Chan 5 In

Chan 7 In

Level

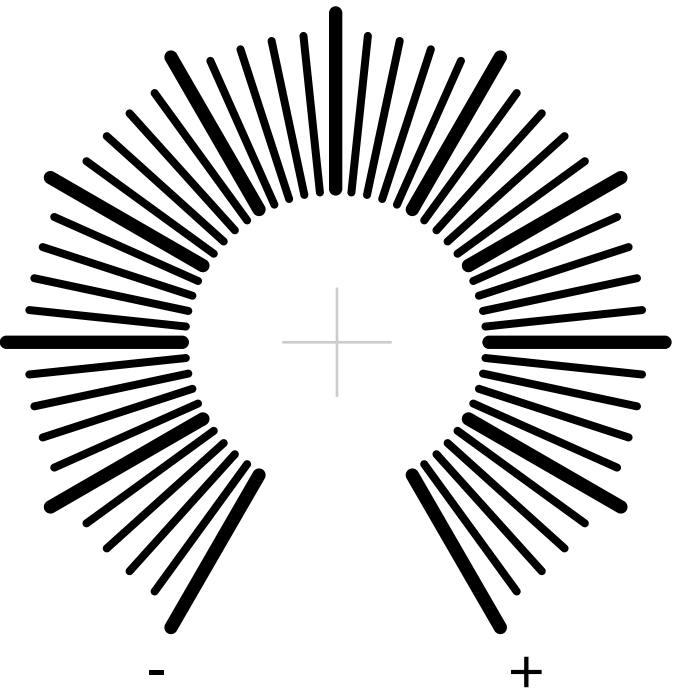


Level



Headphones

Level



Chan 6 In

Chan 8 In

Headphones

16 STEP QUANTIZED SEQUENCER

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

Off

On

On

On

On

On

On

On

On

On

On

On

On

On

On

On

On

On

Coarse 1

Coarse 2

Coarse 3

Coarse 4

Coarse 5

Coarse 6

Coarse 7

Coarse 8

Coarse 9

Coarse 10

Coarse 11

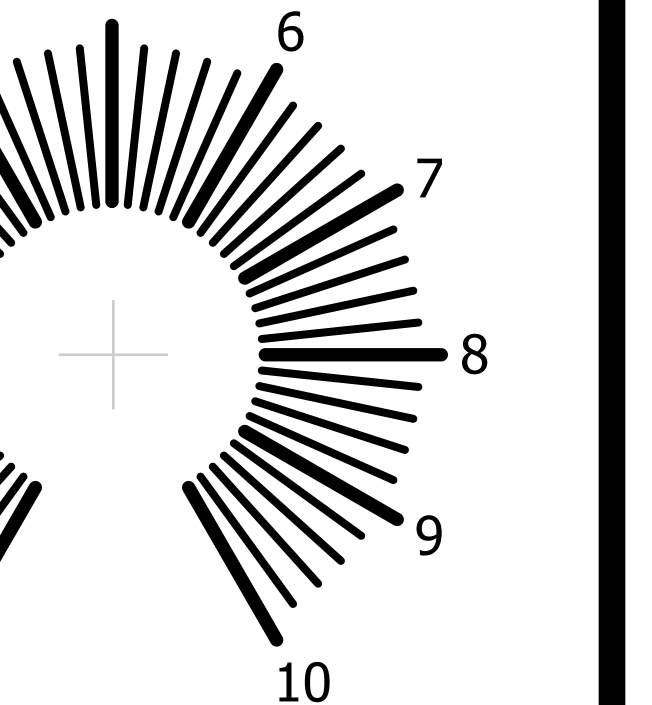
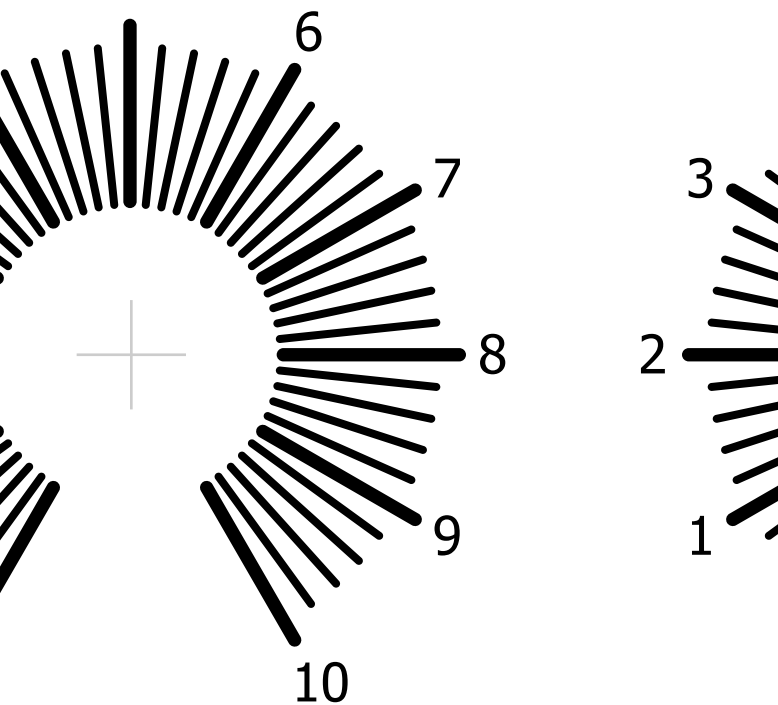
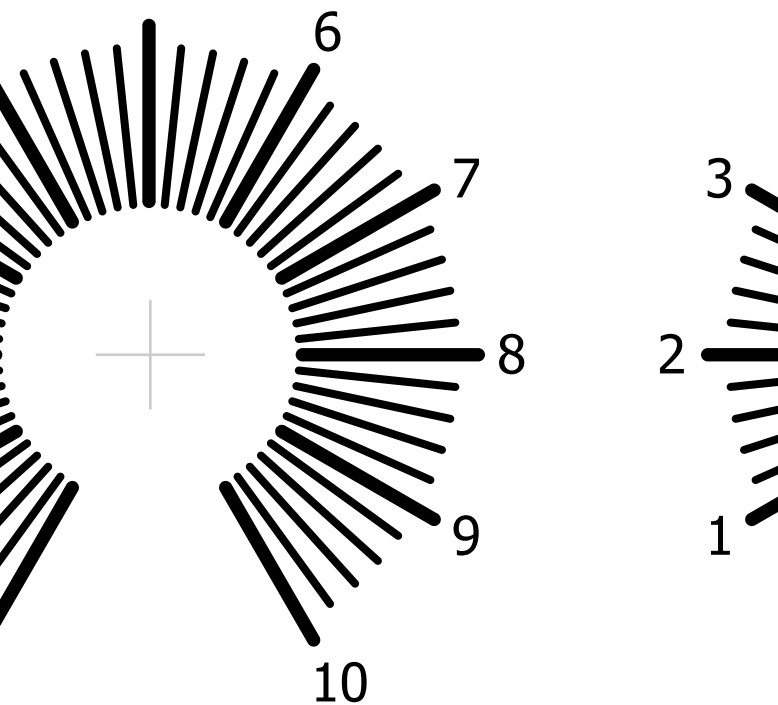
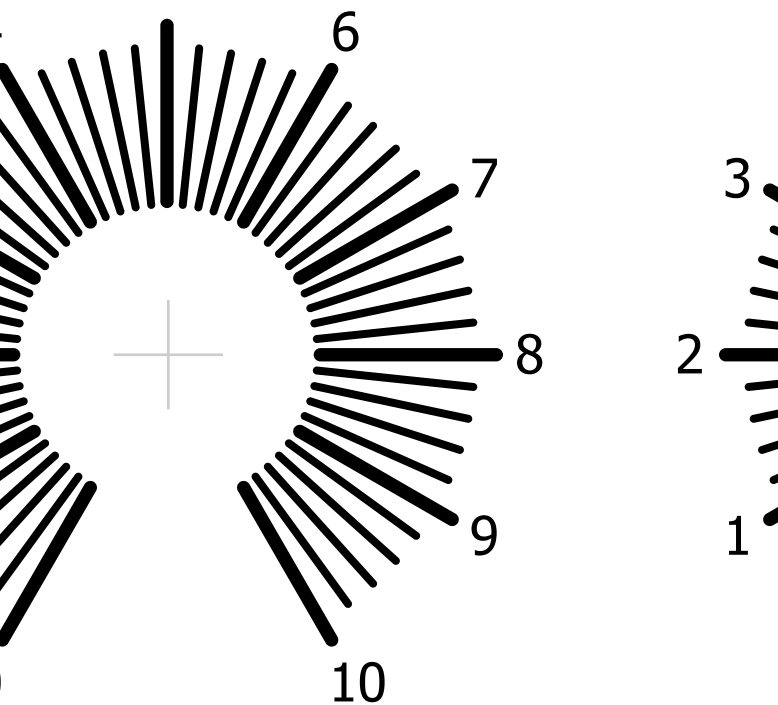
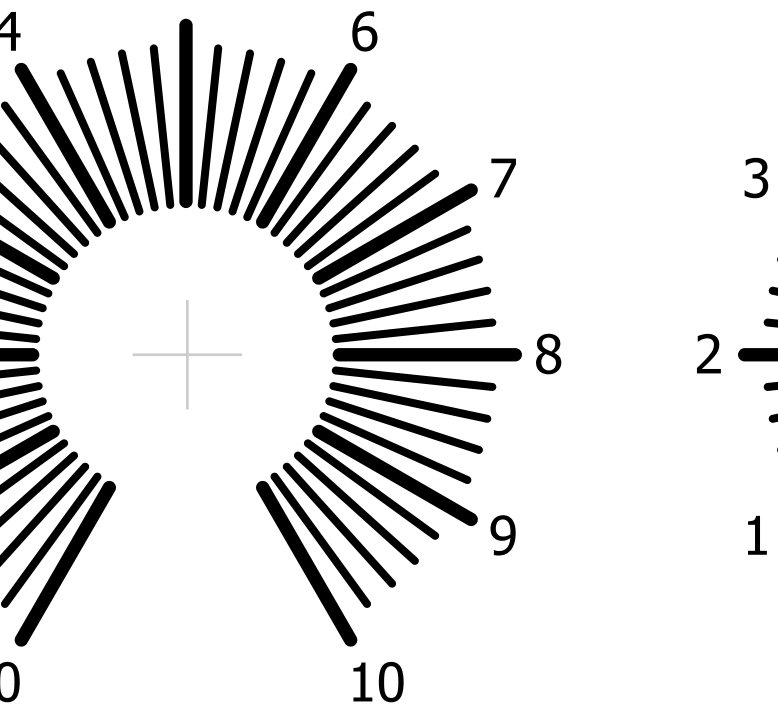
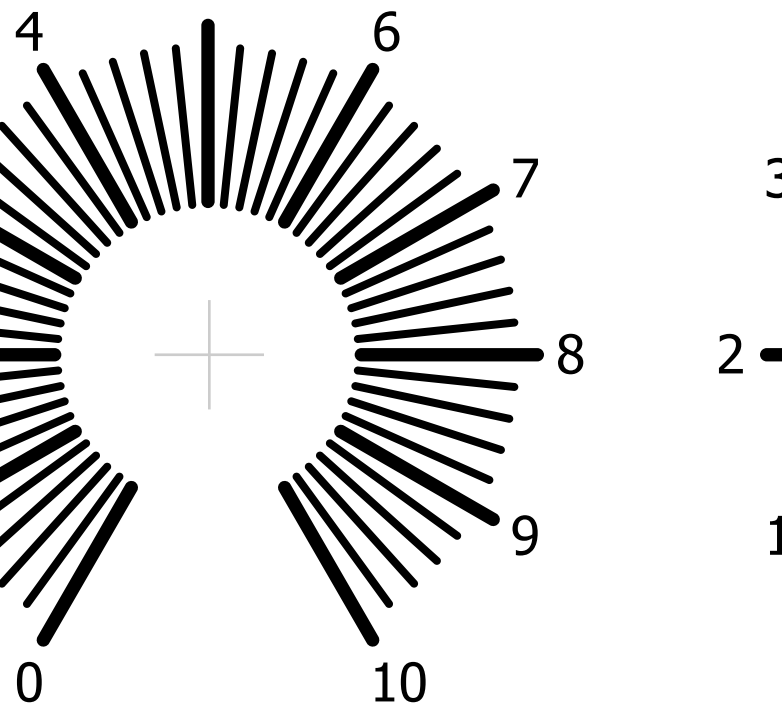
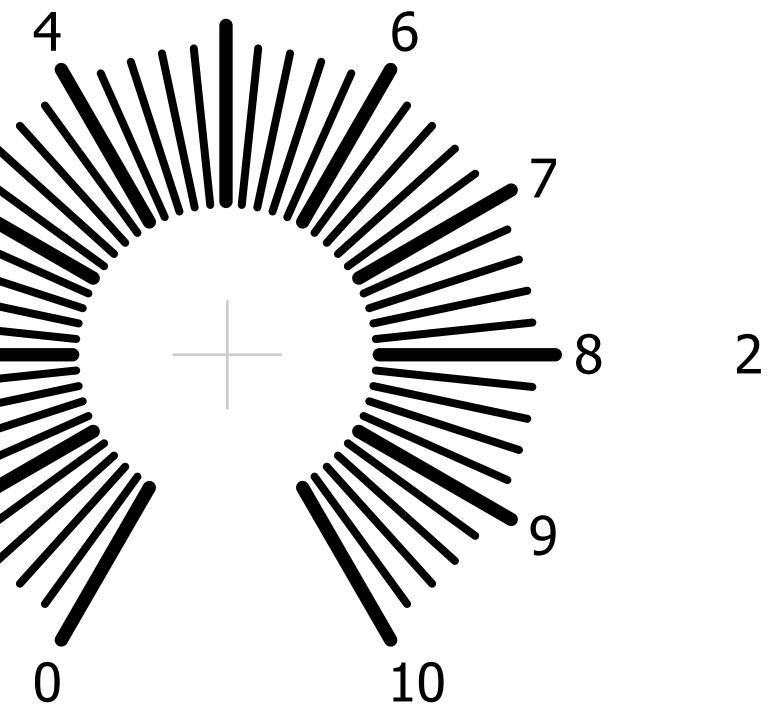
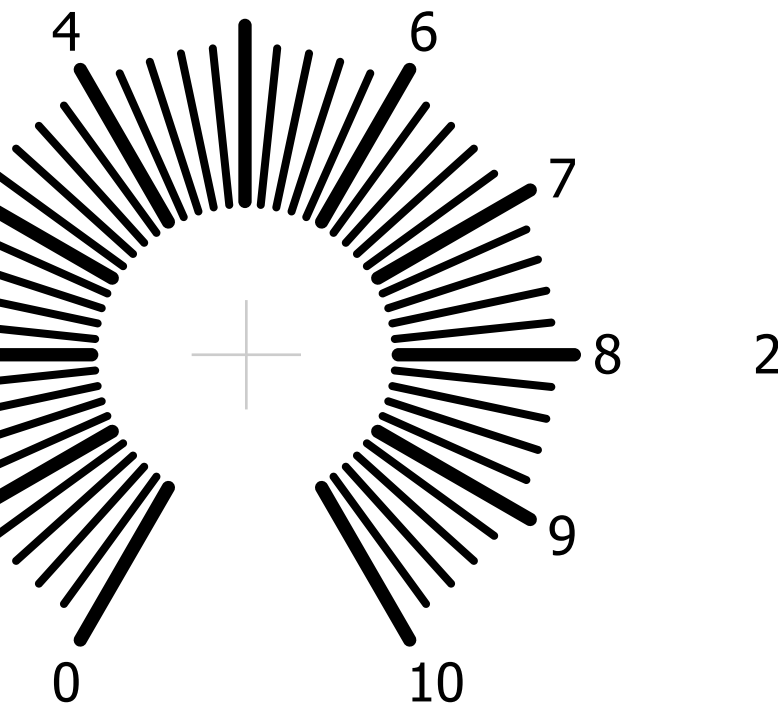
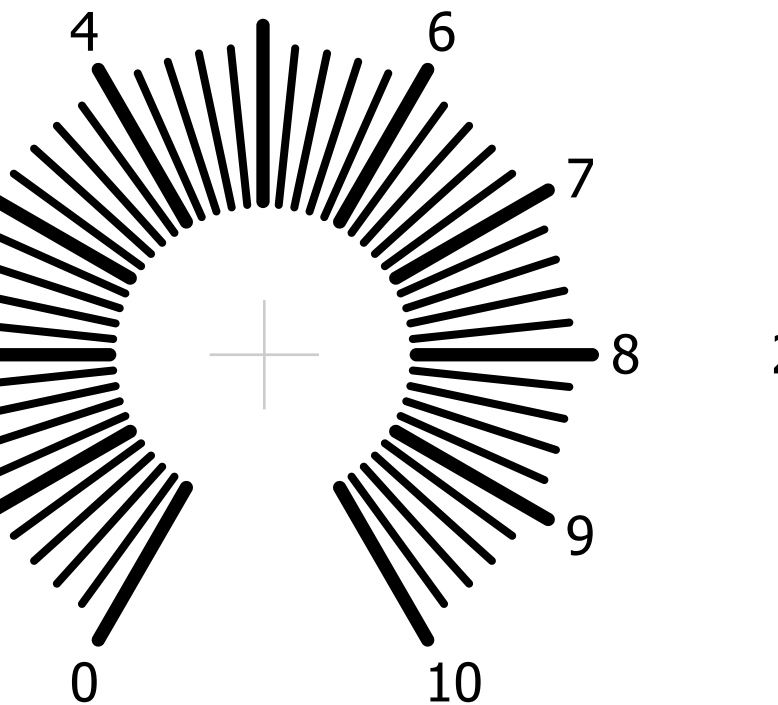
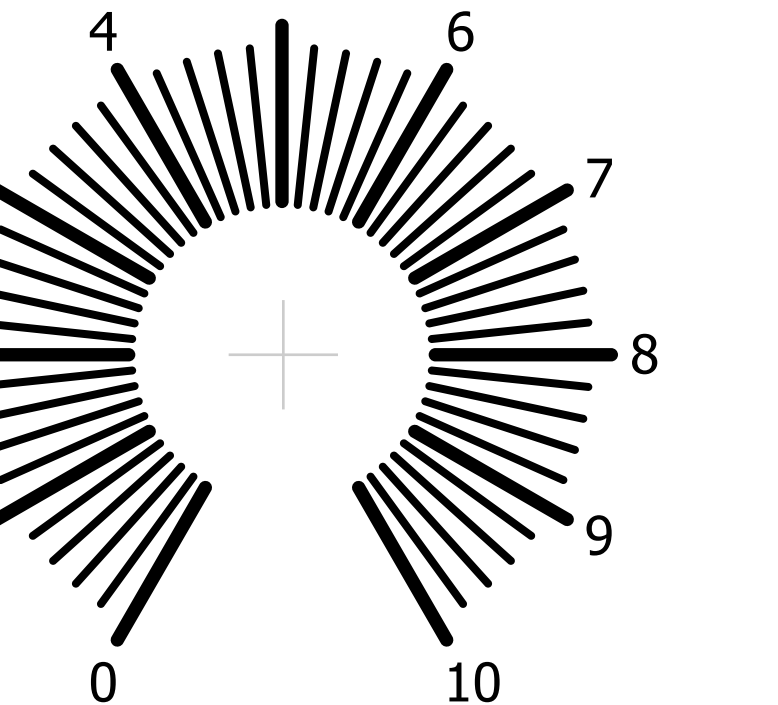
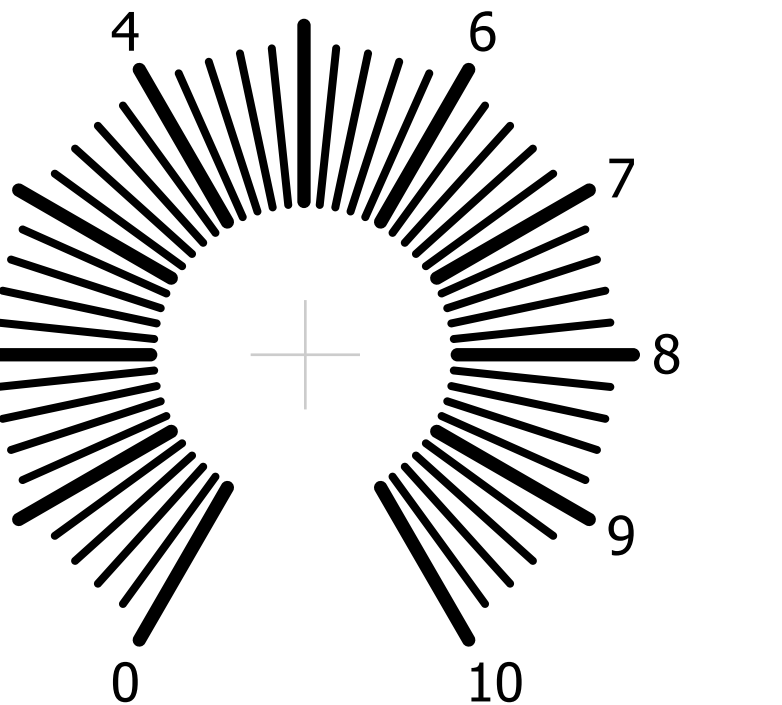
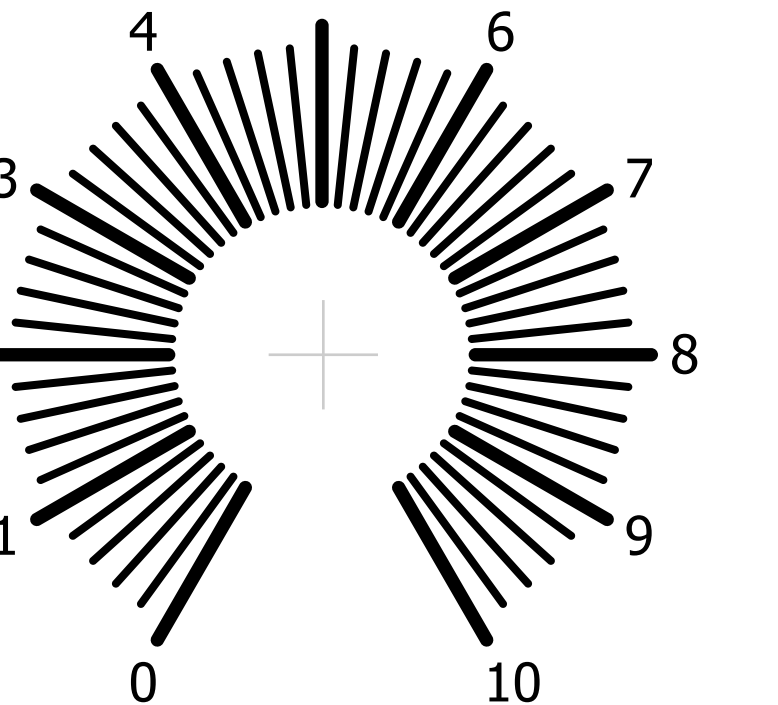
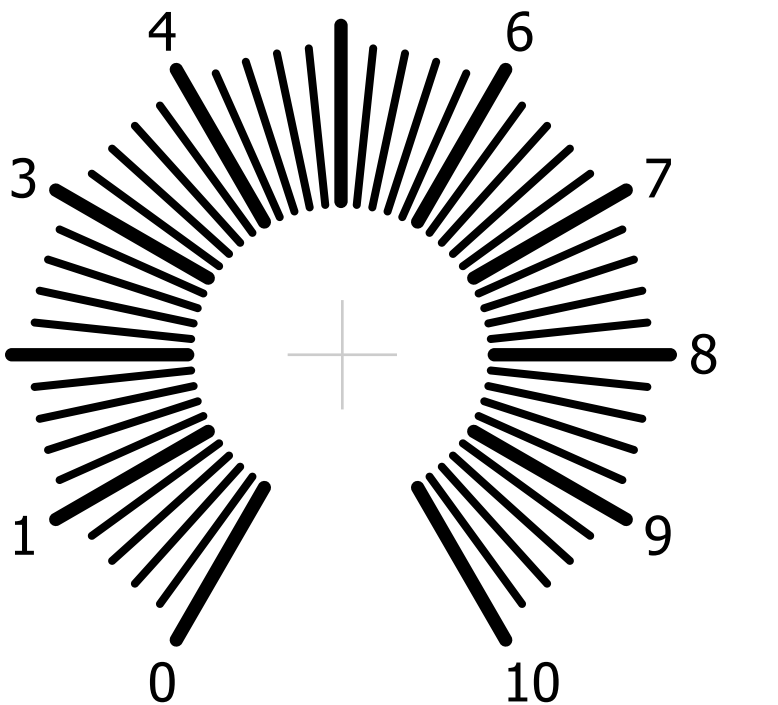
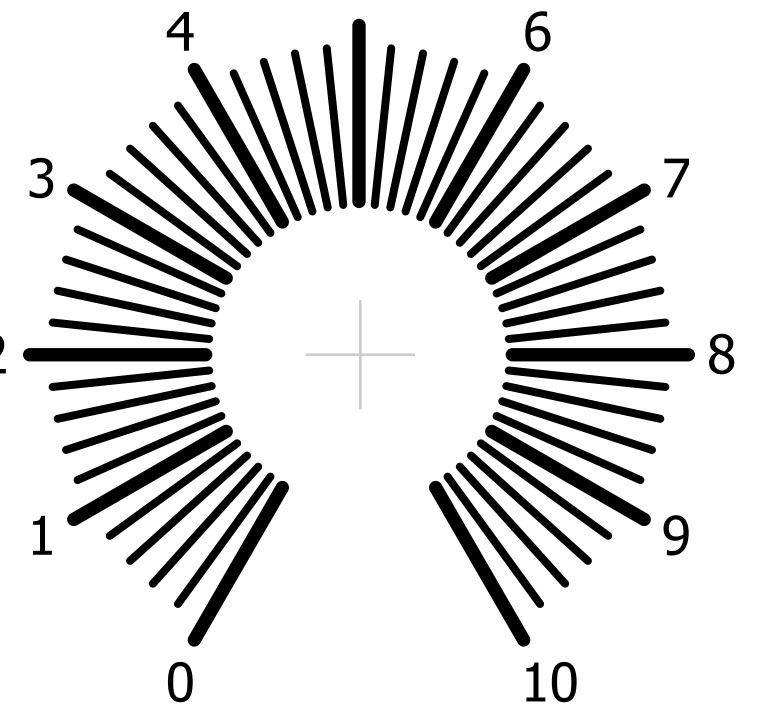
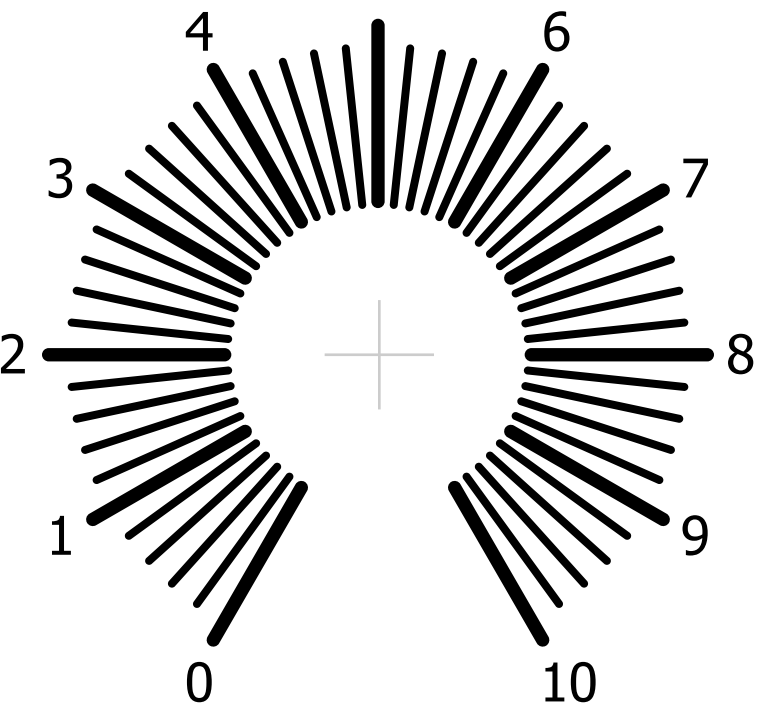
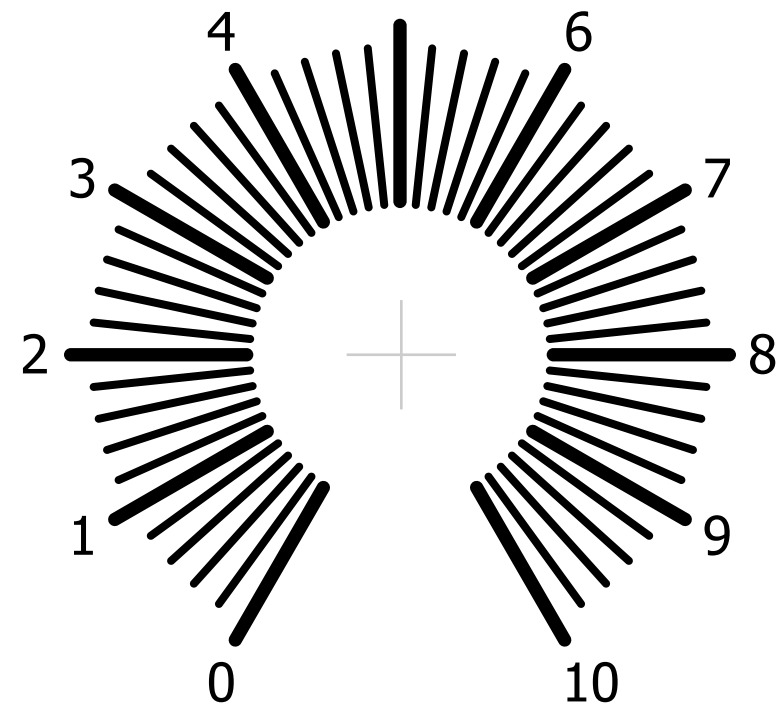
Coarse 12

Coarse 13

Coarse 14

Coarse 15

Coarse 16



Fine 1

Fine 2

Fine 3

Fine 4

Fine 5

Fine 6

Fine 7

Fine 8

Fine 9

Fine 10

Fine 11

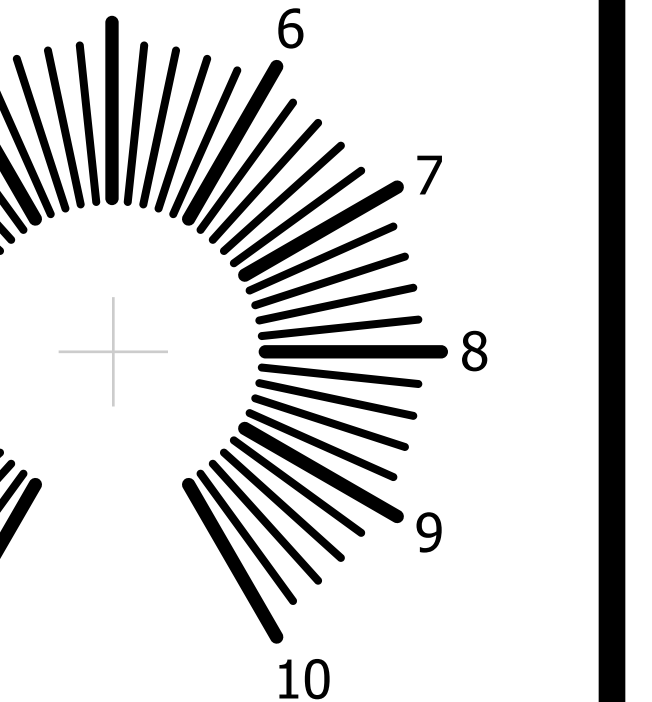
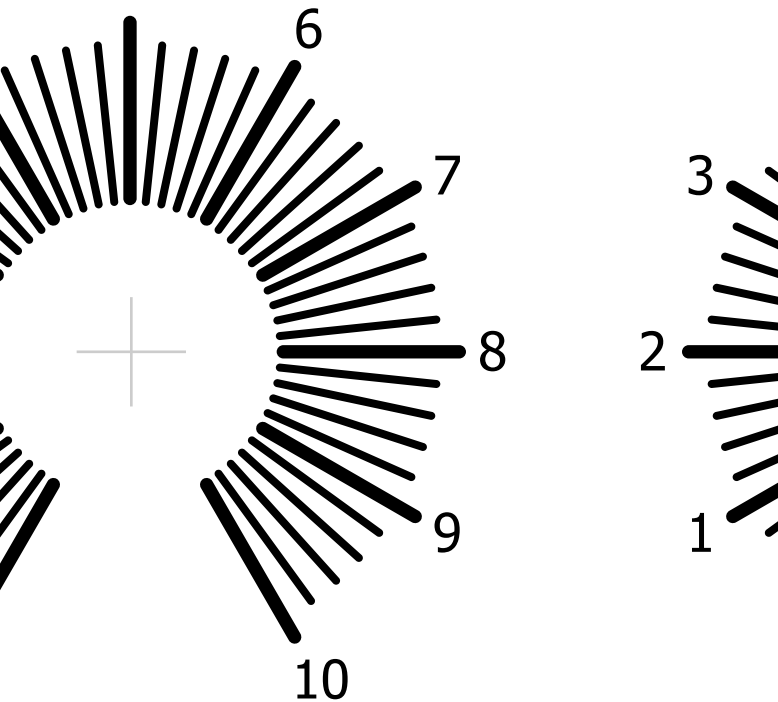
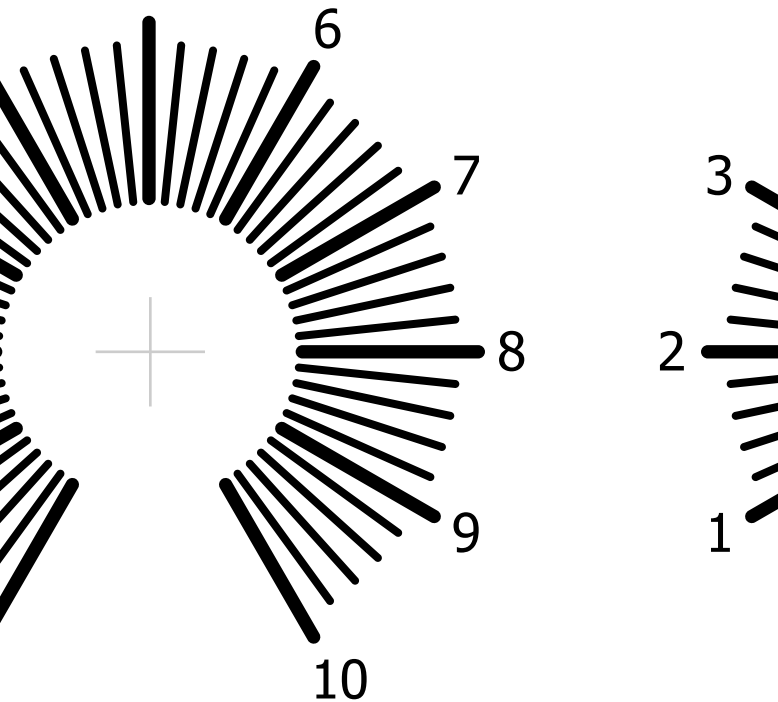
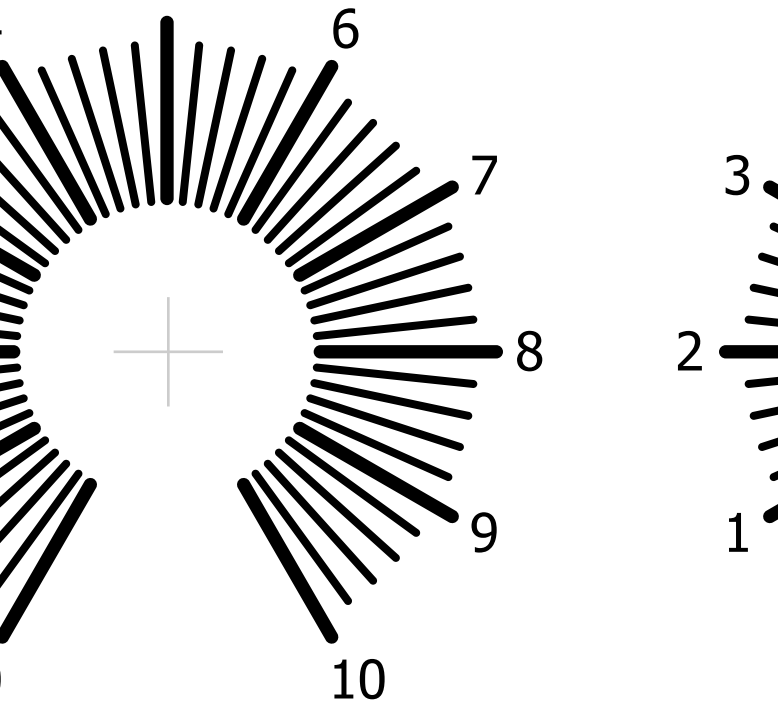
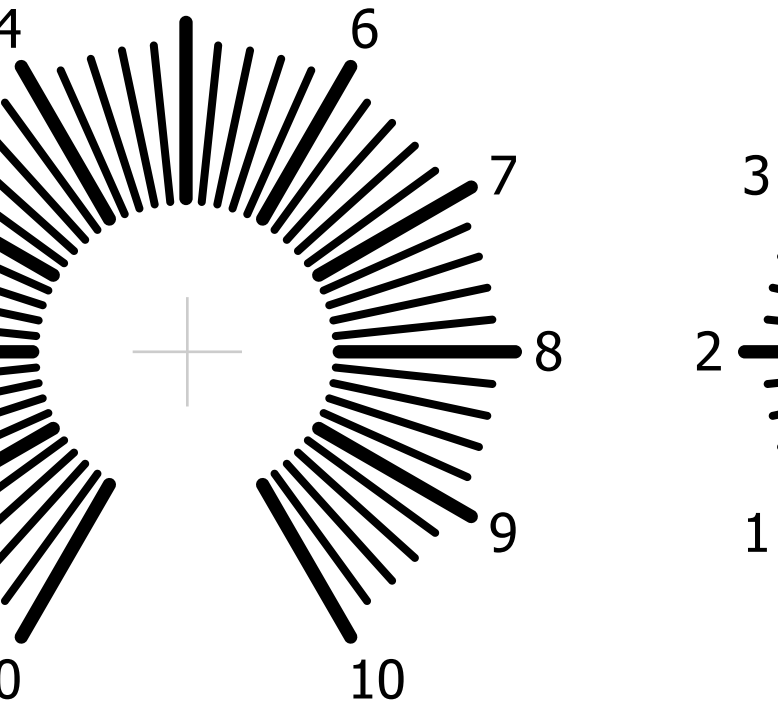
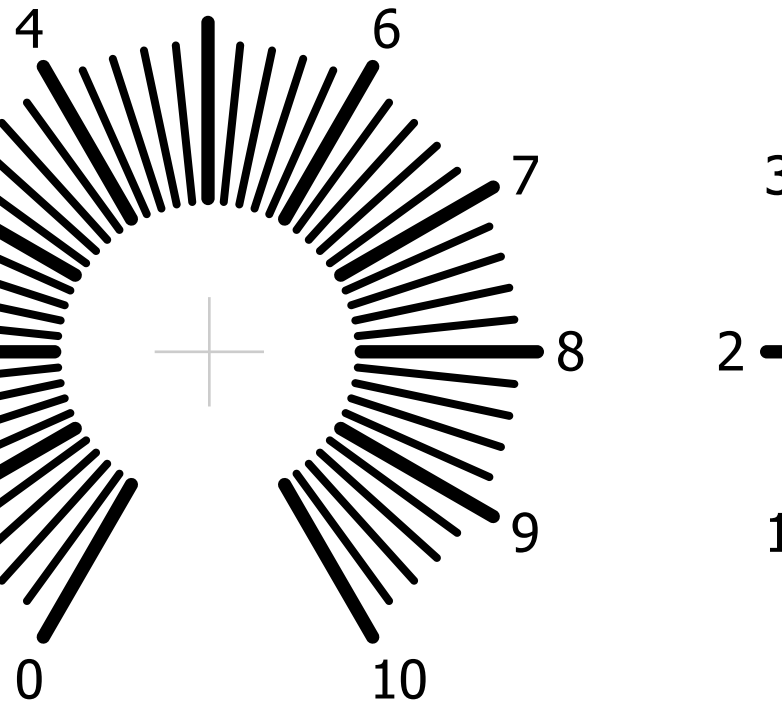
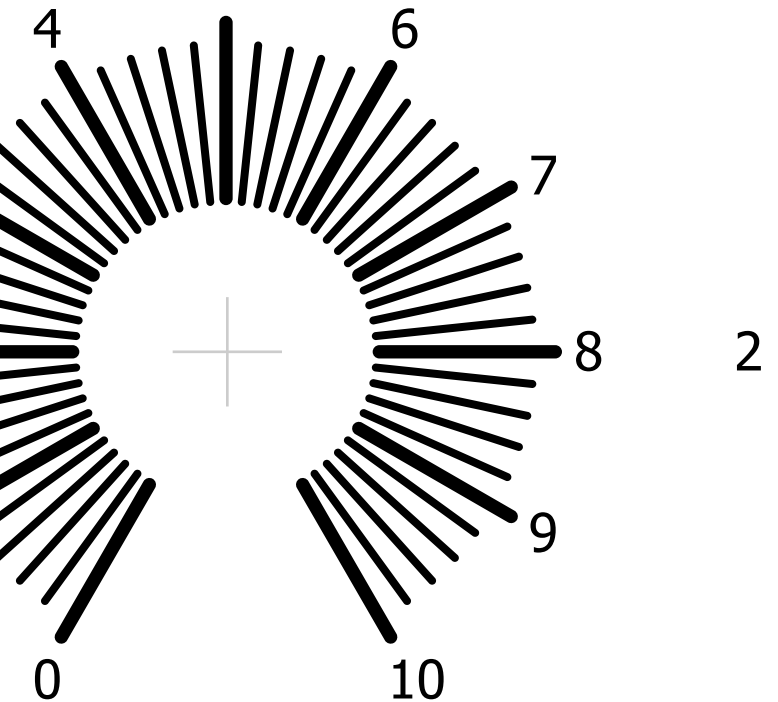
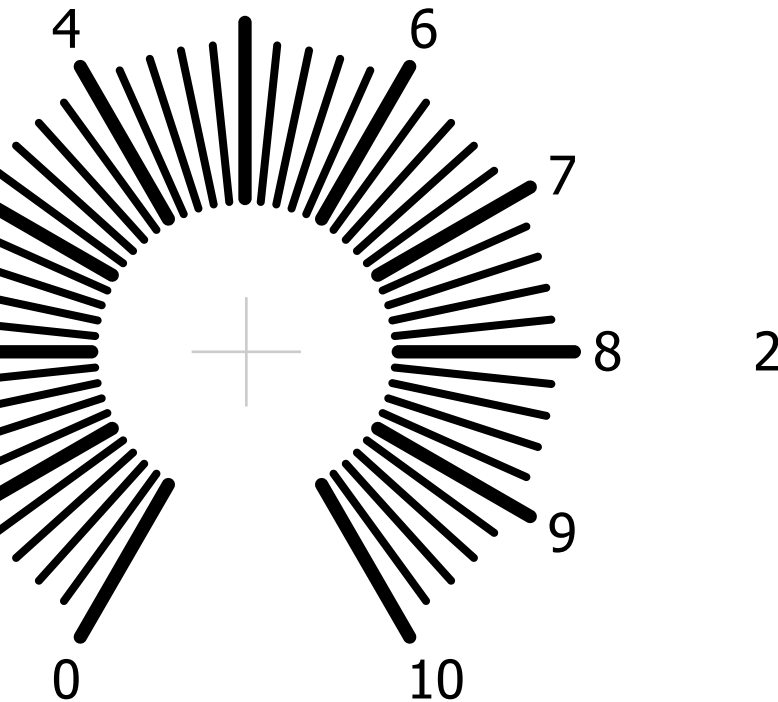
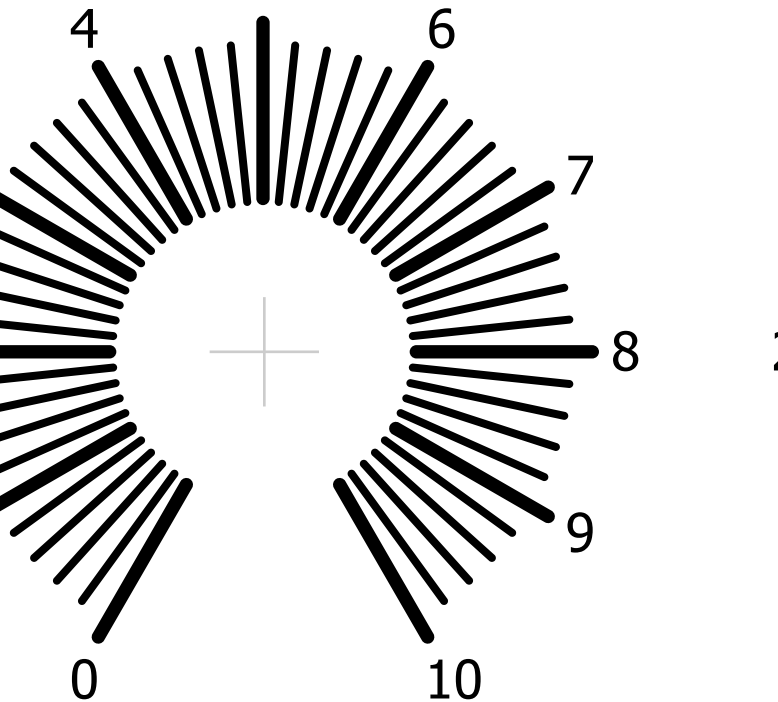
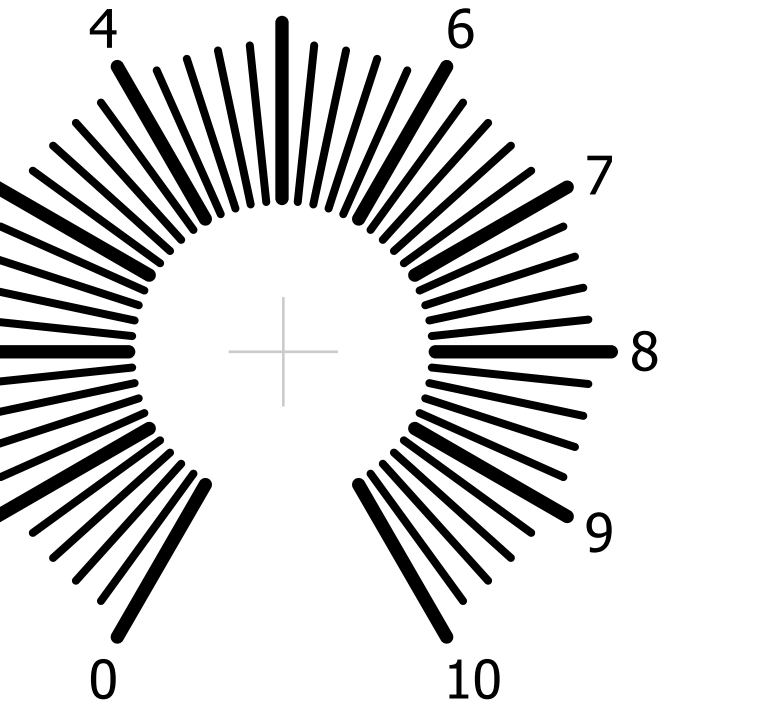
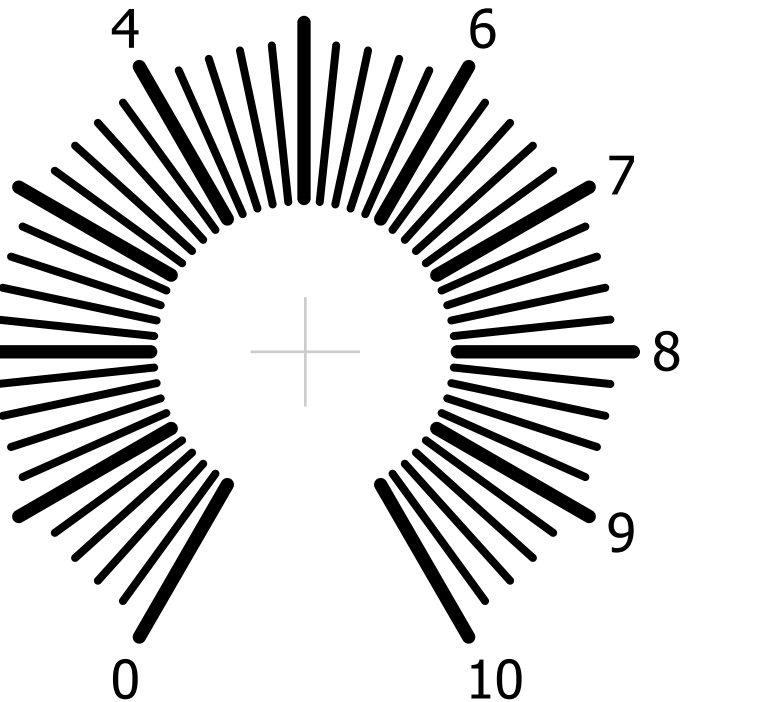
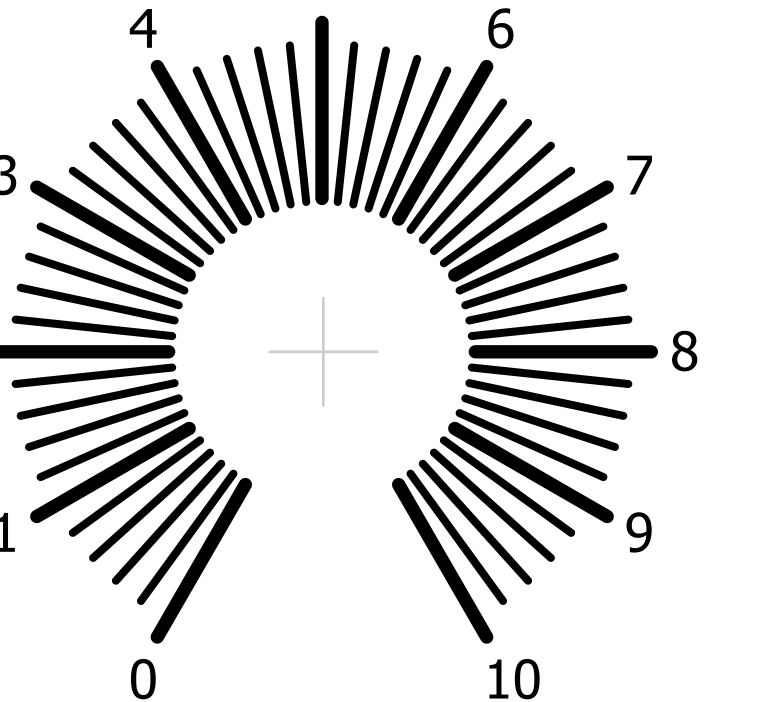
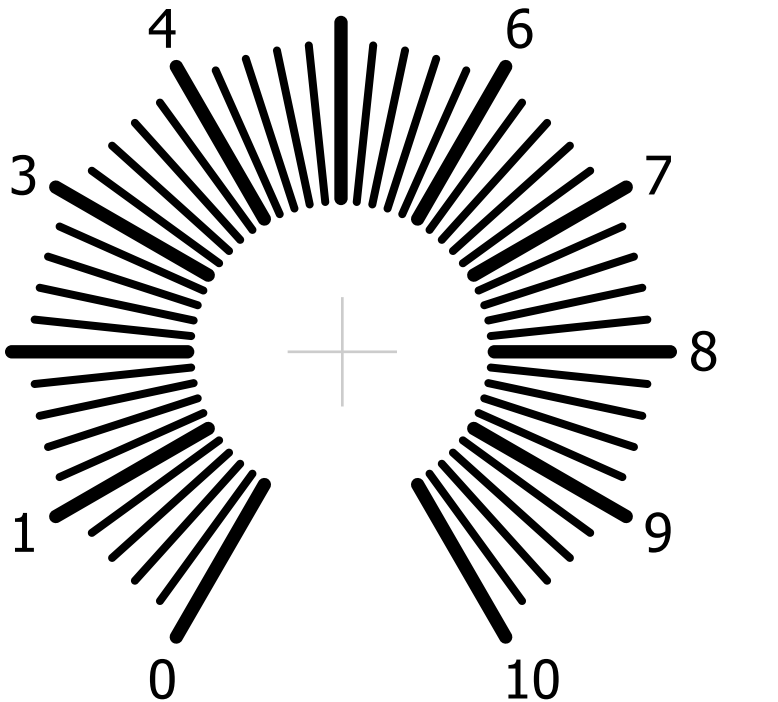
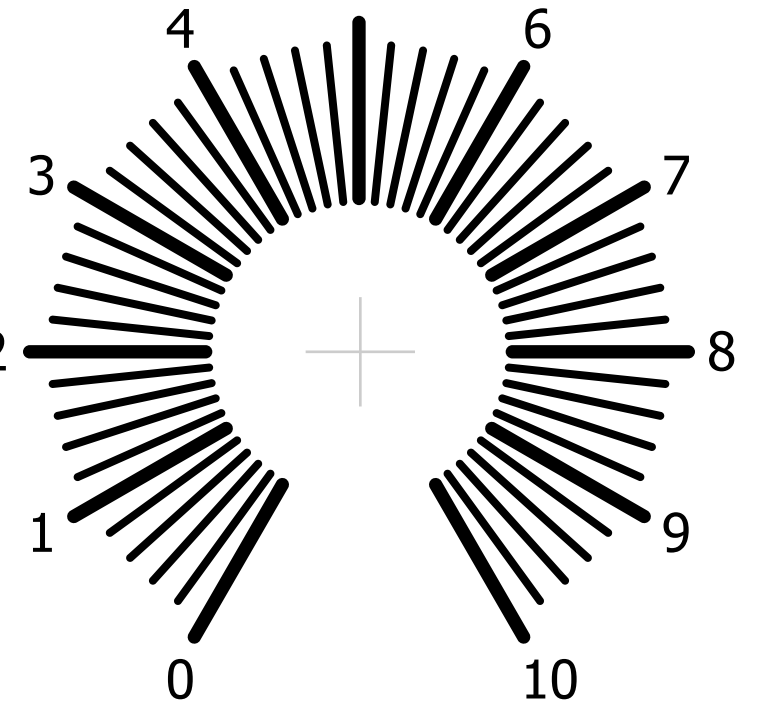
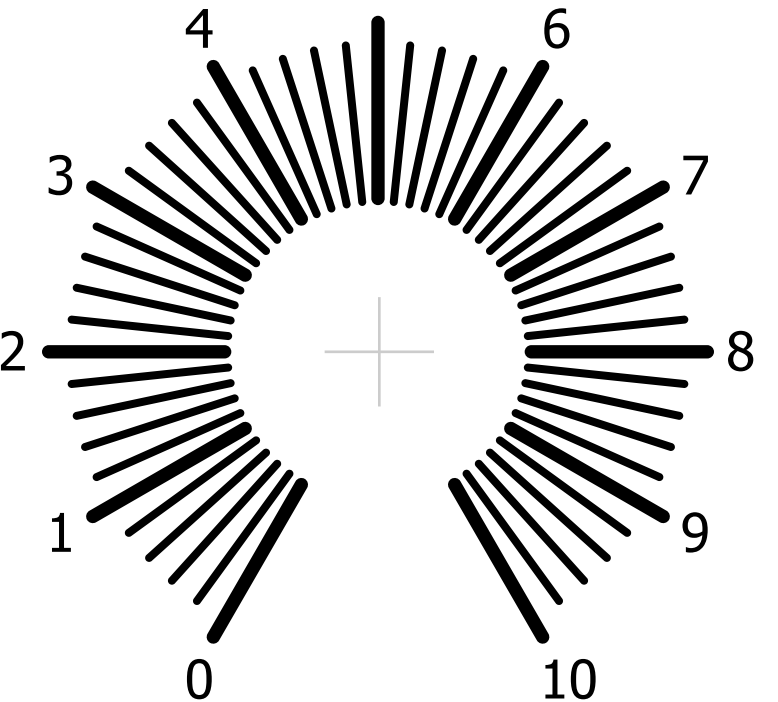
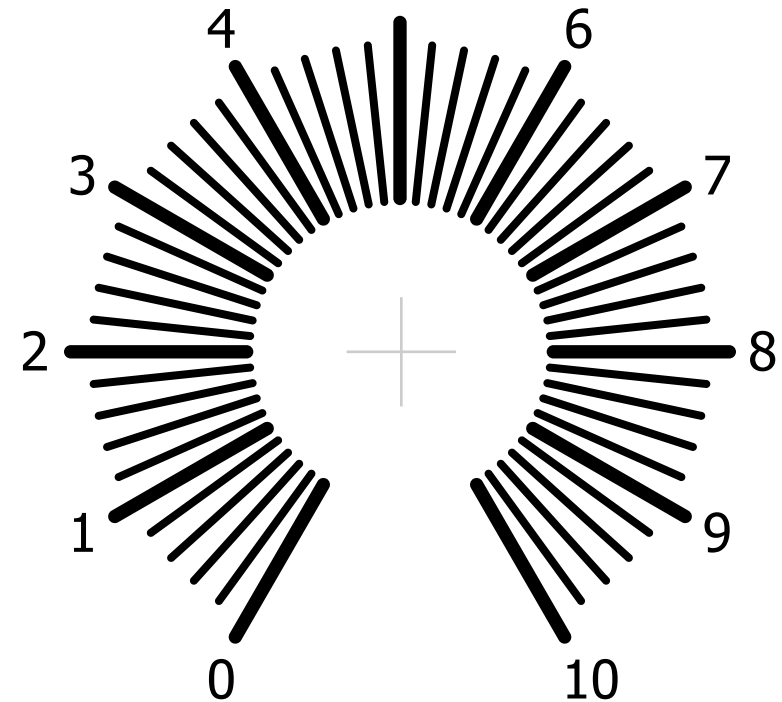
Fine 12

Fine 13

Fine 14

Fine 15

Fine 16



Duration 1

Duration 2

Duration 3

Duration 4

Duration 5

Duration 6

Duration 7

Duration 8

Duration 9

Duration 10

Duration 11

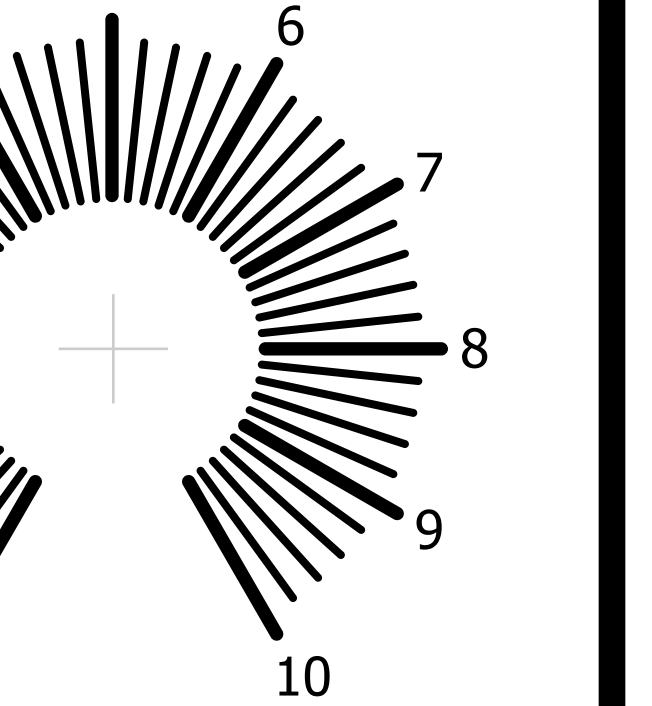
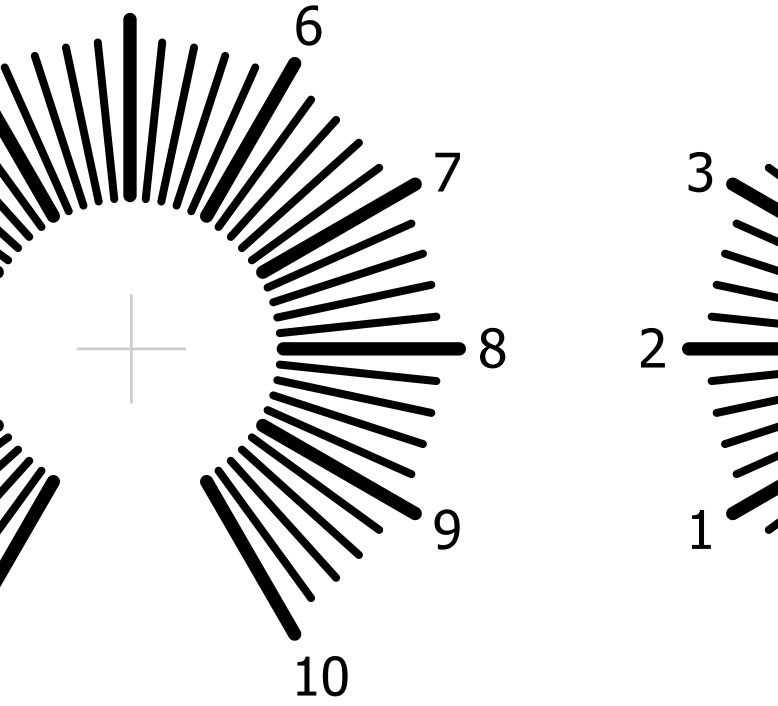
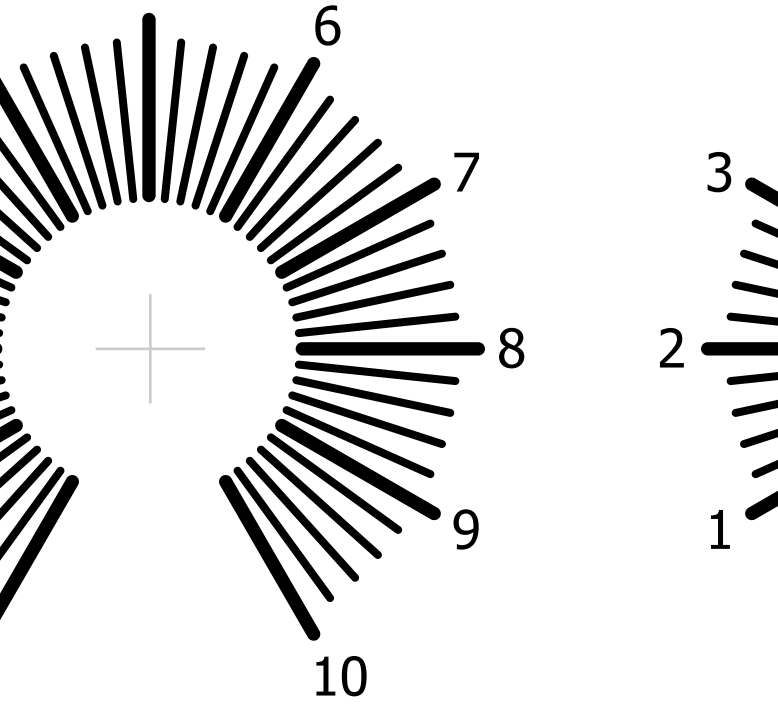
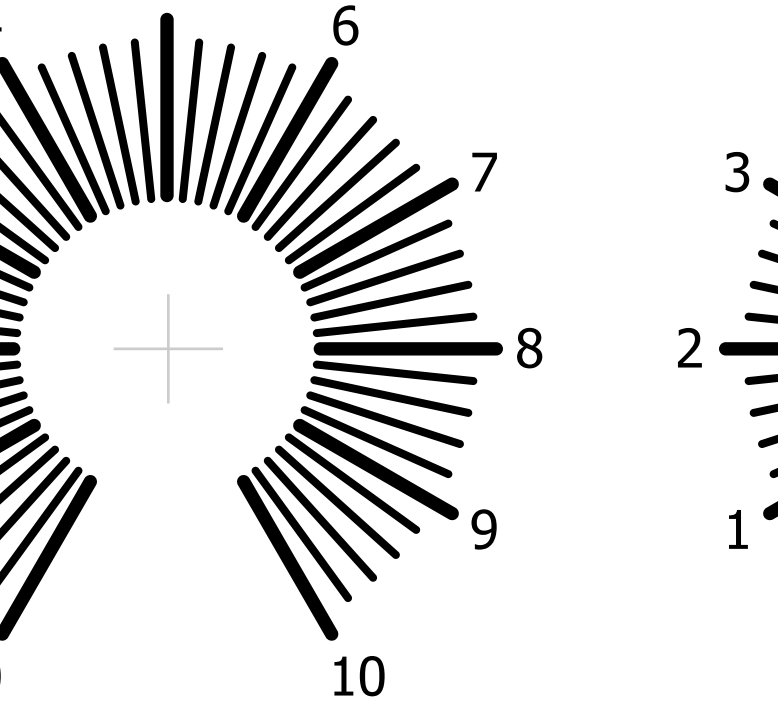
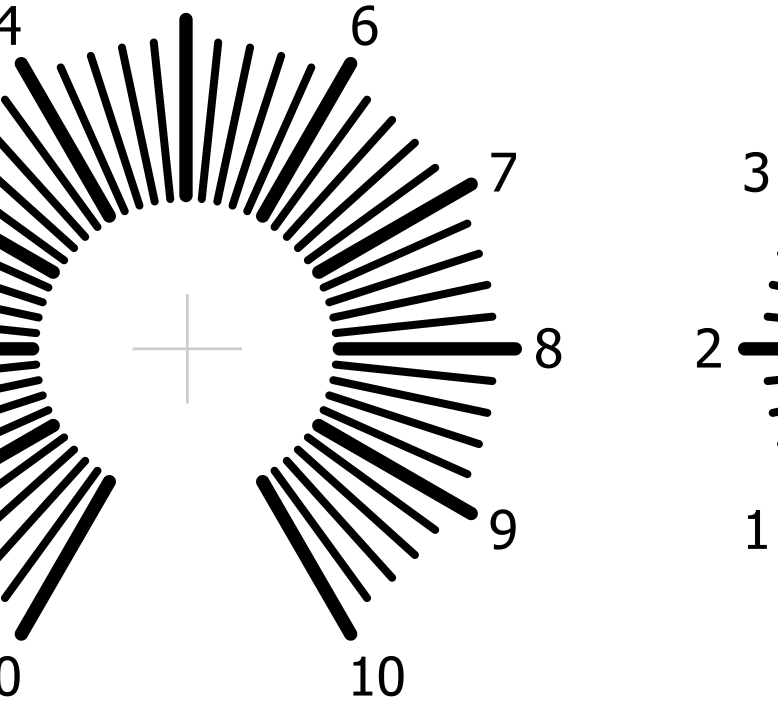
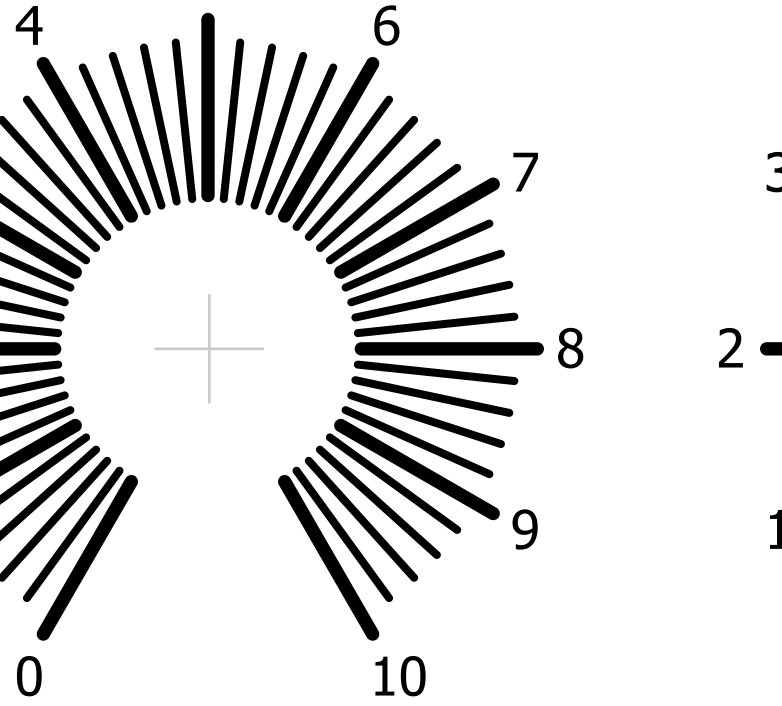
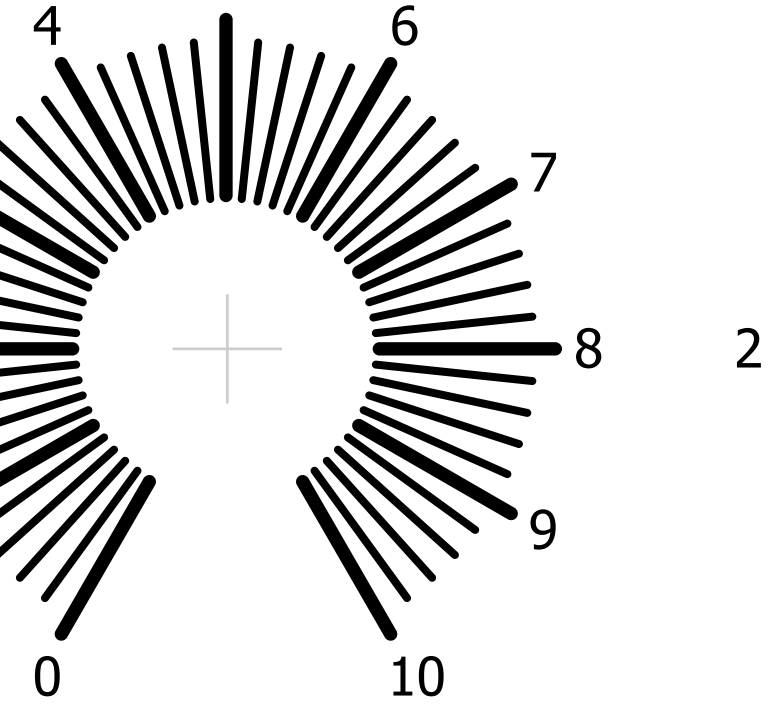
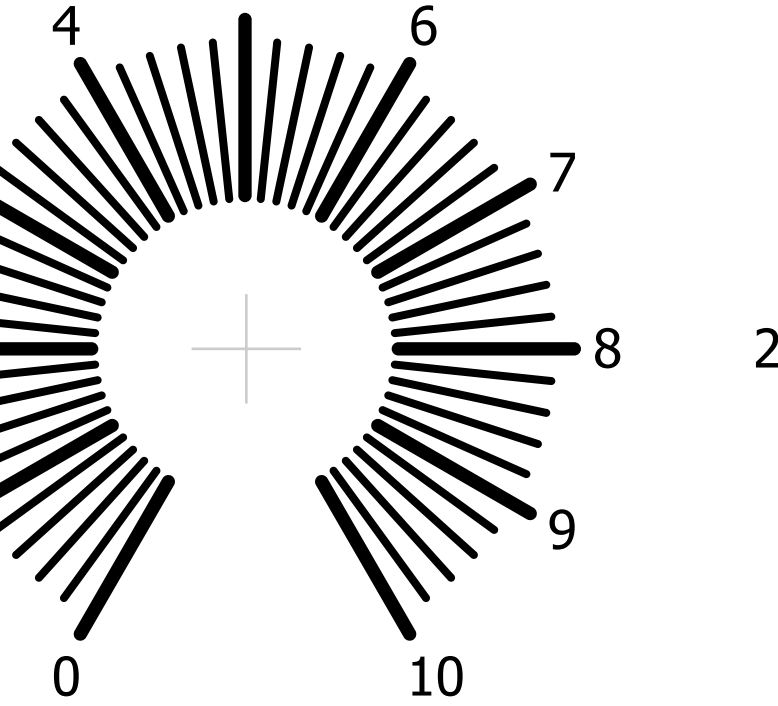
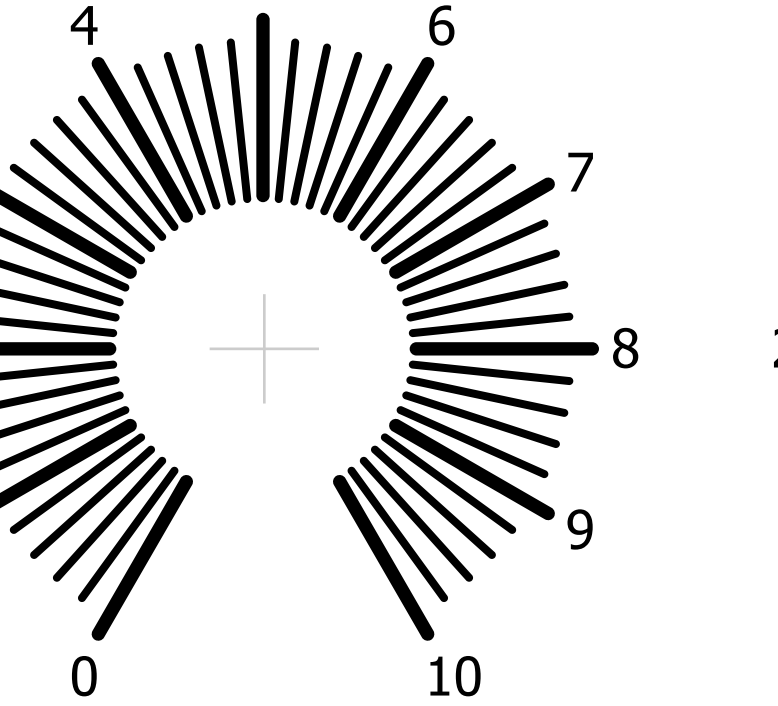
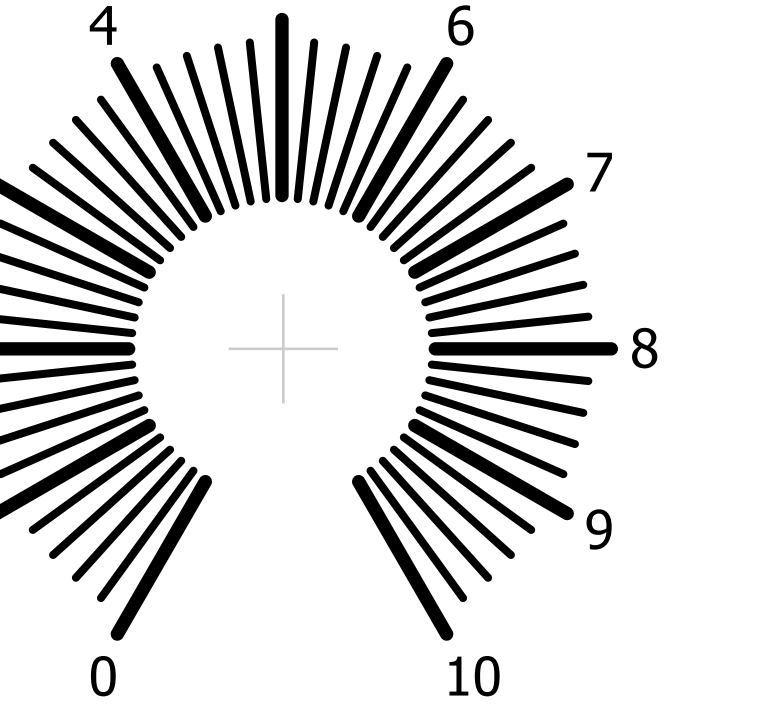
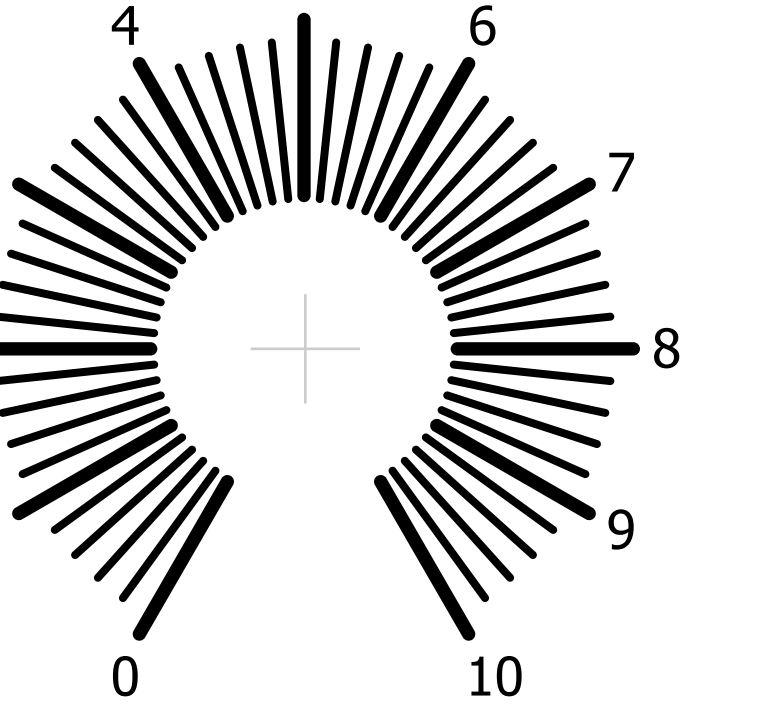
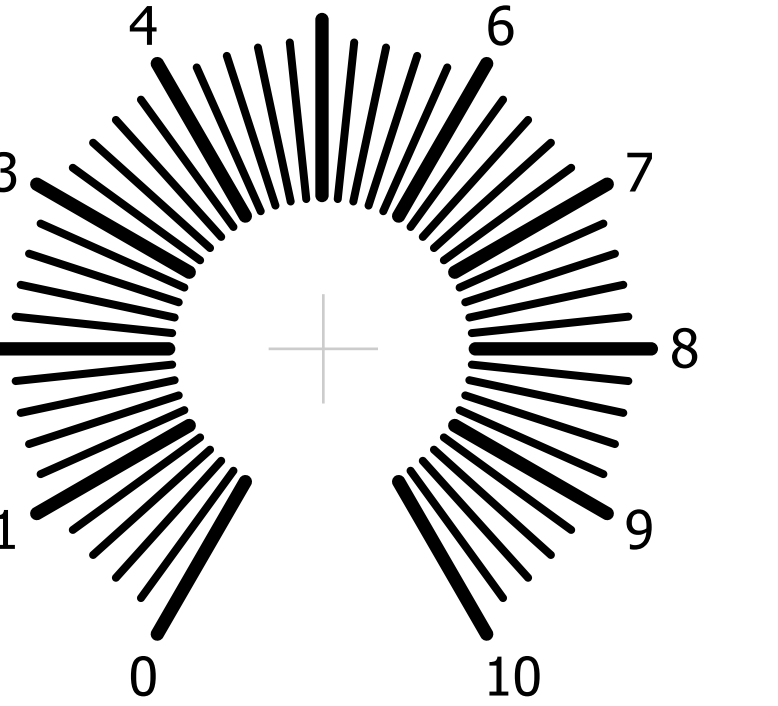
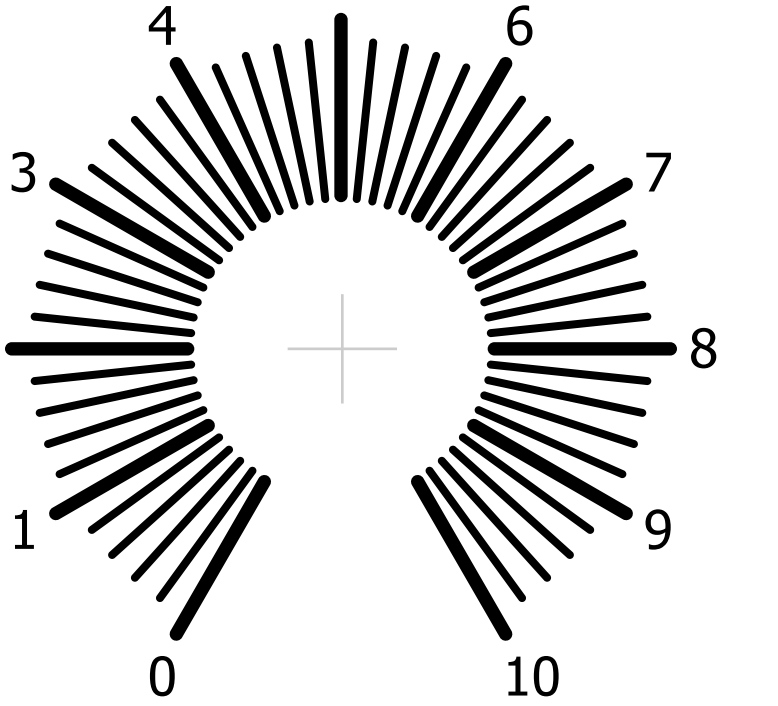
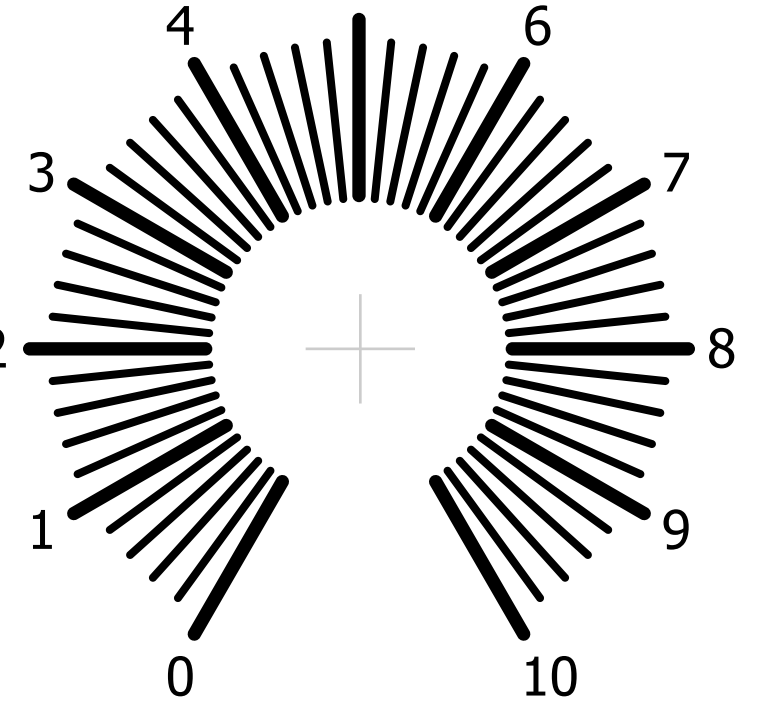
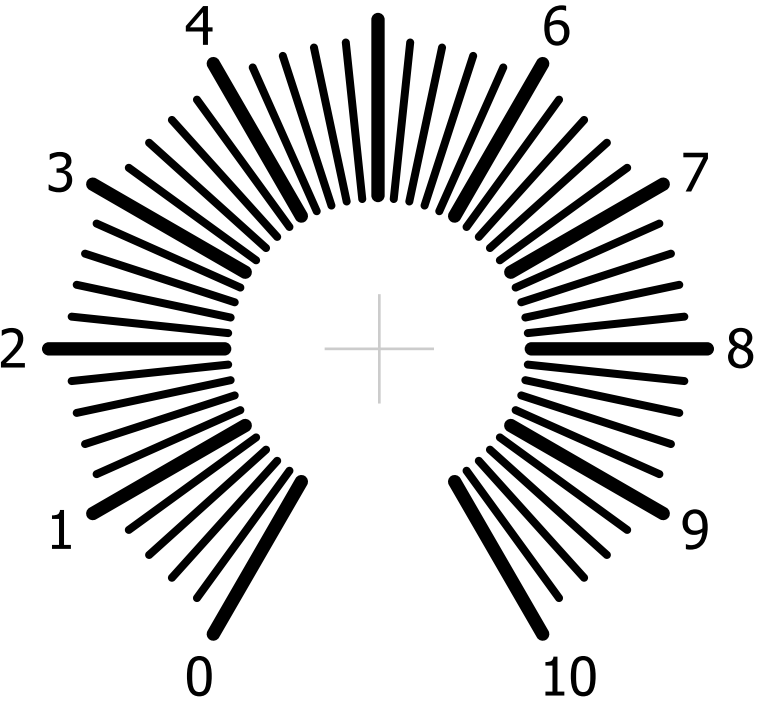
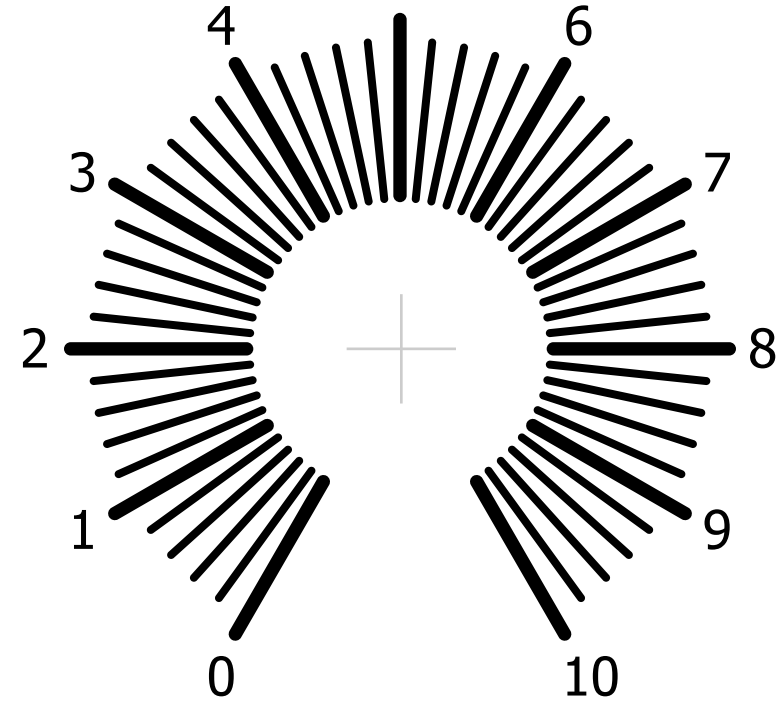
Duration 12

Duration 13

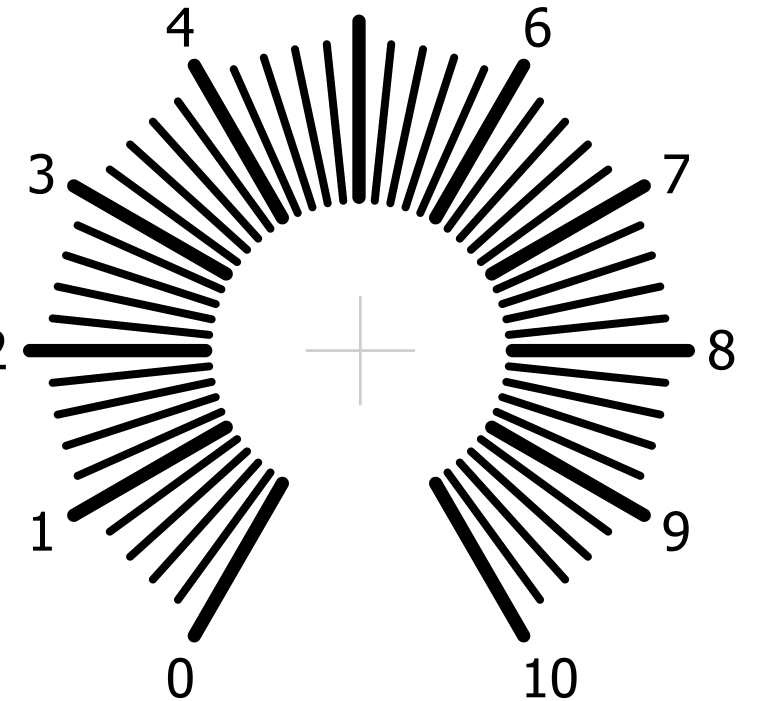
Duration 14

Duration 15

Duration 16



Clock Rate



Trigger Out

Gate Out

Gate Mode

Multi

Normal

Trigger Out

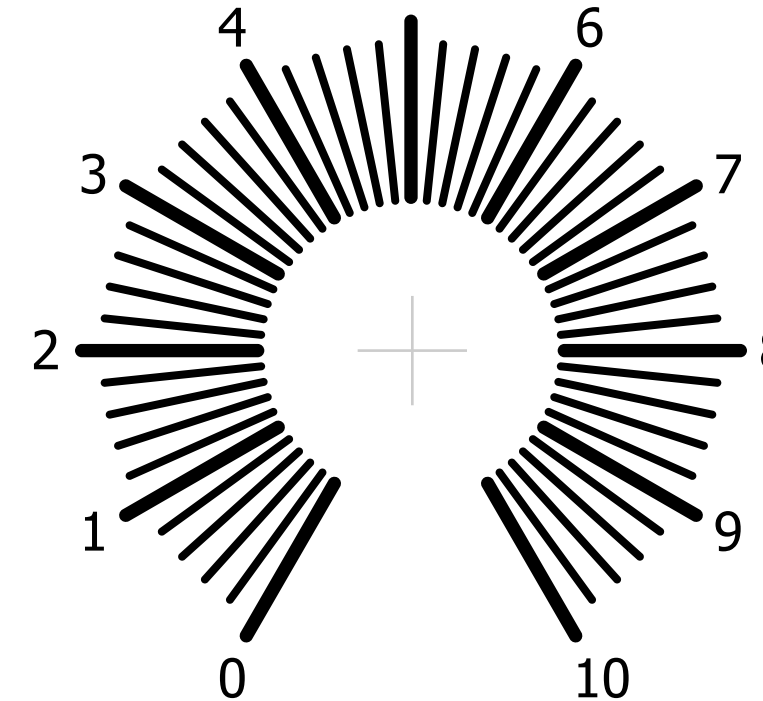
Gate Out

Trigger / Gate Outputs

Glide CV Out 2

Glide

Glide CV Out 1



Portamento

MUSIC FROM OUTER SPACE