

Module: Russian Roulette

Description: This module tries to emulate a game known as "Russian Roulette" in which players take alternating turns shooting themselves in the head or at least attempt to do so.

Inputs/Buttons:

[Step] advances the cylinder (clockwise) of the imaginary revolver. As long as voltage (~3V) is present on the input, an indicator is shown on the top left corner of the screen.

[Trigger] pulls the trigger of the imaginary revolver. As long as voltage (~3V) is present on the input or the button is pressed, the triangle indicating the current chamber (right of the cylinder) is filled. Depending on the current chamber, voltage will be present on the outputs. If the chamber is full, an imaginary bullet is fired and the [HIT] output will be high (indicator top right), if it's empty [MISS] will be high (indicator bottom right). (This may vary depending on the variants)

[Spin] spins the whole cylinder to a new random position. As long as voltage (~3V) is present on the input or the button is pressed, an indicator will be shown on the bottom left corner of the screen.

[Insert] will insert a bullet into the current chamber or remove it if it is already full. This happens on rising voltage (~3V).

[Add] will add a chamber to the cylinder - the maximum is twelve chamber, the minimum is two. It will cycle through those in ascending order. This happens on rising voltage (~3V)

Outputs:

[HIT] outputs ~5V if trigger is pulled on a full chamber

[MISS] outputs ~5V if trigger is pulled on an empty chamber. (This may vary on variant)

Encoder:

[Left/Right] either rotates the cylinder of the revolver or cycles through the variants

[Press] switches between the normal mode and the variant selection. Press the encoder to select a variant.

Variants:

Variant #0: Manual

Step: advances cylinder by one chamber

Trigger: pulls the trigger (full->HIT/empty->MISS), removes the bullet if present

Spin: spins the cylinder

Insert: inserts/removes bullet

Add: adds a chamber

Variant #1: Vanilla

Step: advances cylinder by one chamber

Trigger: pulls the trigger (full->HIT/empty->MISS), removes the bullet if present and advances the cylinder by one chamber, if the last bullet is fired, the cylinder will be spun with one full chamber.

Spin: spins the cylinder

Insert: inserts/removes bullet

Add: adds a chamber

Variant #2: Vanilla No Removal

Step: advances cylinder by one chamber

Trigger: pulls the trigger (full->HIT/empty->MISS) and advances the cylinder by one chamber

Spin: spins the cylinder

Insert: inserts/removes bullet

Add: adds a chamber

Variant #3: Vanilla Respin

Step: advances cylinder by one chamber

Trigger: pulls the trigger (full->HIT/empty->MISS), removes the bullet if present and spins the cylinder, if the last bullet is fired, the cylinder will be spun with one full chamber.

Spin: spins the cylinder

Insert: inserts/removes bullet

Add: adds a chamber

Variant #4: Vanilla Respin No Removal

Step: advances cylinder by one chamber

Trigger: pulls the trigger (full->HIT/empty->MISS) and spins the cylinder

Spin: spins the cylinder

Insert: inserts/removes bullet

Add: adds a chamber

Variant #5: Invert

Step: advances cylinder by one chamber

Trigger: pulls the trigger (full->HIT/empty->MISS), inverts the current chamber and advances the cylinder by one chamber

Spin: spins the cylinder

Insert: inserts/removes bullet

Add: adds a chamber

Variant #6: Invert Respin

Step: advances cylinder by one chamber
Trigger: pulls the trigger (full->HIT/empty->MISS), inverts the
current chamber and spins the cylinder
Spin: spins the cylinder
Insert: inserts/removes bullet
Add: adds a chamber

Variant #7: Random

Step: advances cylinder by one chamber
Trigger: pulls the trigger (full->HIT/empty->MISS) and randomizes
between variants #0 to #6
Spin: spins the cylinder
Insert: inserts/removes bullet
Add: adds a chamber

Variant #8: Output Galore

Step: advances cylinder by one chamber
Trigger: pulls the trigger and outputs on both HIT and MISS
Spin: spins the cylinder
Insert: not available
Add: adds a chamber

NOTES: The module is designed to work with inputs 0-5V
(Trigger/Gate-signals), which will trigger on ~3V, and outputs ~5V
on high.

>Gates on [Trigger] will output gates on [HIT/MISS]
>Variant #8 is basically a Trigger/Gate-Mult
>Variant #2 and #5 will result in repeating patterns
>Respin variants randomize but tend to keep some rhythm.