## On the Subject of Cruel Piano Keys

The devil's interval approaches...

See Appendix A for indicator identification reference. See Appendix B for battery identification reference. See Appendix C for port identification reference. See the third page for serialism & music terminology reference.



- A cruel piano keys module will present with 4 musical symbols in the top indicator and a 12-note keyboard to input with.
- Each rule consists of one or more required symbol(s) and optional further requirements based on the bomb casing.
- Follow the list of rules down in Table 2 until one matches the criteria for the module and bomb.
- Then use the lookup criteria to find the prime 12-tone row from Table 1.
- Then apply the according transformation from Table 2 to the 12-tone row, and execute this final sequence.
- A failed attempt will require re-entry of the entire note sequence.

## Table 1.

<u>#</u>	Prime 12-tone Sequence	<u>#</u>	Prime 12-tone Sequence
0	F D F# G# C B A# C# G E D# A	5	C D# F# D F C# B A G A# E G#
1	A <sup>#</sup> A C E C <sup>#</sup> D D <sup>#</sup> G B F <sup>#</sup> G <sup>#</sup> F	6	G# C A# C# E G B D# A D F F#
2	F# B A G# D C G C# F D# E A#	7	E A C <sup>#</sup> B G G <sup>#</sup> A <sup>#</sup> D <sup>#</sup> F <sup>#</sup> F C D
3	E D# D F# F A# G# C# C B G A	8	G <sup>#</sup> D <sup>#</sup> D E A <sup>#</sup> C <sup>#</sup> F <sup>#</sup> G F A C B
4	D E A A# C B C# G# F F# D# G	9	D# G# C B D C# F# A# F G A E

Table 2.

Required Symbol(s)	Further Requirements	Lookup Index	Transformation
o   and ∞	2 or more indiciators (lit or unlit)	Left-most digit in serial number	RI
# or×	An empty port plate	Number of battery holders	P, transpose down by 'x' semitones, where 'x' = number of minutes remaining
∩ or ⊓	2 or more of a certain type of port	Least significant digit of number of completed modules	I
3 and $3$	2 or more port plates	9 minus the number of unlit indicators	R
¢ or C	Serial contains 1 or more vowels	Least significant digit of number of strikes	R, transpose down by 3 semitones
♯ or ❤	Even number of batteries	DVI-D present: 7 Otherwise: 3	P, transpose up by 'x' semitones, where 'x' = number of ports*
þor }	An indicator with no vowels in the label	8	I
n or 4	Less than 2 ports	4	R
∞ or ×	(No other requirements)	5	P

If none of these rules apply, revert back to the <u>Normal</u> Piano Keys ruleset and play the given note sequence normally.

## Notes:

<sup>\*:</sup> The Stereo RCA port does not count as 2 separate ports; the Red & White connectors are part of the same singular port.

## Serialism & Music Terminology

To clarify, the note below a C would be a B, and similarly, the note after a B would be a C. The 12 tones on the piano essentially wrap around.

The <u>Prime</u> sequence (or 'P' for short), is the original or base form of the 12-tone row. No transformation takes place.

The <u>Retrograde</u> sequence (or 'R' for short), takes the <u>Prime</u> sequence, but executes it in reverse order. For example, the Retrograde of the Prime row A B C D E would be E D C B A.

The <u>Inverse</u> sequence (or '**T**' for short), takes the <u>Prime</u> sequence, but the intervals between the notes are inverted. For example, take the interval from A to B; the interval is +2 semitones, as it takes you 2 semitones to get from A to B (A goes to A<sup>#</sup> then B). The inversion of this interval would be -2 semitones. Therefore, the inverted sequence would be A then G, as G is -2 semitones away from A (A goes to G<sup>#</sup> then G).

As an extended example, the Inversion of the Prime row A B C D E would be A G  $F^{\sharp}$  E D; the first note always remains the same, and all the other notes get inverted relative to that note.

The <u>Retrograde Inverse</u> sequence (or '**RI**' for short), takes the <u>Inverse</u> sequence in Retrograde. For example, the Retrograde Inverse of the Prime row A B C D E would take the Inverse first (which is A G F<sup>#</sup> E D), and then the Retrograde of this Inverse would be D E F<sup>#</sup> G A.

<u>Transpositions</u> apply a translation of the tone row up or down by a given number of semitones. For example, the Prime row A B C D E transposed up by 1 semitone would be  $A^{\sharp}$  C  $C^{\sharp}$   $D^{\sharp}$  F.

An <u>Interval</u> is the tonal distance between two distinct notes and is usually measured in semitones. For example, the interval from G to B is up 4 semitones.