

On the Subject of Piano Keys

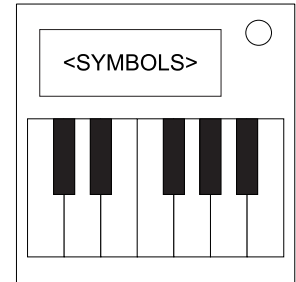
What do you get when you drop a piano down a mine shaft? A flat minor.

See Appendix A for indicator identification reference.

See Appendix B for battery identification reference.

See Appendix C for port identification reference.

See the next page for piano/keyboard reference.

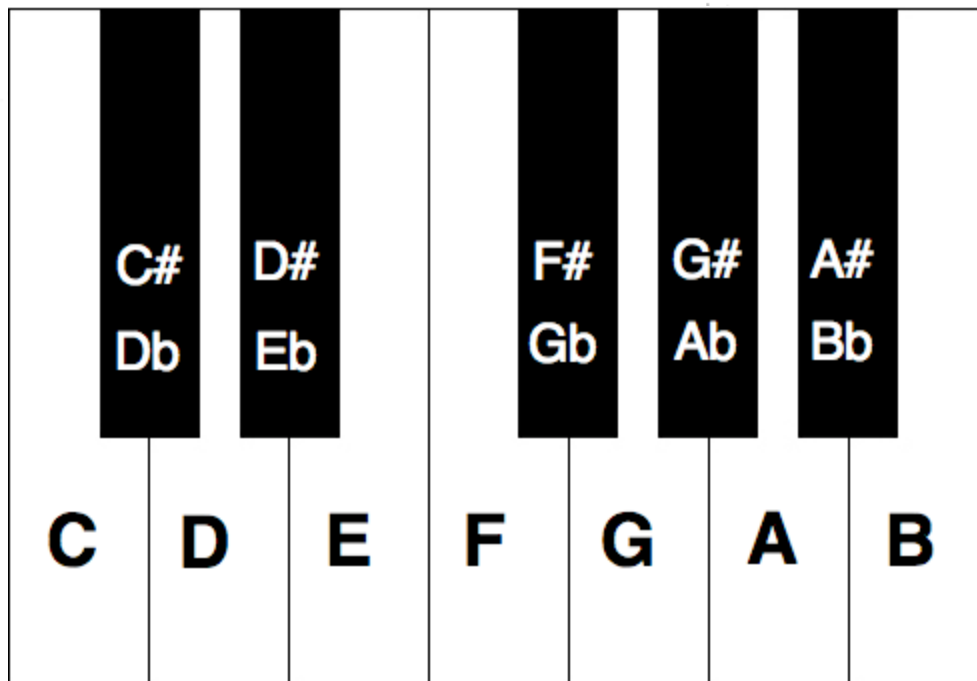


- A piano keys module will present with 3 musical symbols in the top indicator and a 12-note keyboard to input with.
- Each rule consists of one or more required symbol(s) and optional further requirements based on the bomb casing.
- Follow the list of rules down until one matches the criteria for the module; then execute the sequence of notes listed.
- A failed attempt will require re-entry of the entire note sequence.

<u>Required Symbol(s)</u>	<u>Further Requirements</u>	<u>Note Sequence</u>
\flat	Last digit of serial number is even	$B^b B^b B^b B^b G^b A^b B^b A^b B^b$
C or \sharp	2 or more battery holders	$E^b E^b D D E^b E^b D E^b E^b D D E^b$
\natural and \ominus	(No other requirements)	$E F^\sharp F^\sharp F^\sharp F^\sharp E E E$
C or \sim	RCA port is present	$B^b A B^b F E^b B^b A B^b F E^b$
B	SND indicator is present and lit	$E E E C E G G$
w or \ominus or C	3 or more batteries	$C^\sharp D E F C^\sharp D E F B^b A$
\flat and \sharp	(No other requirements)	$G G C G G C G C$
C or w	Serial number contains a 3, 7 or 8	$A E F G F E D D F A$
\natural or \sim or B	(No other requirements)	$G G G E^b B^b G E^b B^b G$
(No requirement)	(No other requirements)	$B D A G A B D A$

Piano/Keyboard Reference

Use the following graphic as a reference to how tones are mapped onto a standard 12-note piano/keyboard.



On the Subject of Cruel Piano Keys

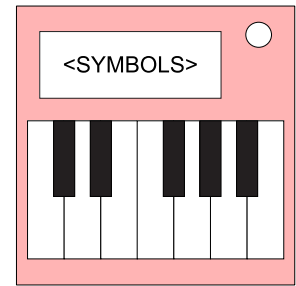
The devil's interval approaches...

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>Prime 12-tone Sequence</u>	#	<u>Prime 12-tone Sequence</u>
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# A C E C# D D# G B F# G# 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# B G G# A# D# F# F C D
3	E D# D F# F A# G# C# C B G A	8	G# D# D E A# C# F# 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.

<u>Required Symbol(s)</u>	<u>Further Requirements</u>	<u>Lookup Index</u>	<u>Transformation</u>
and ~	2 or more indicators (lit or unlit)	Left-most digit in serial number	RI
# or x	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
and ∕	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*
⌋ or {	An indicator with no vowels in the label	8	I
□ or ∕	Less than 2 ports	4	R
or x	(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:

*: 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 Prime sequence (or 'P' for short), is the original or base form of the 12-tone row. No transformation takes place.

The Retrograde sequence (or 'R' for short), takes the Prime 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 Inverse sequence (or 'I' for short), takes the Prime 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[#] 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[#] then G).

As an extended example, the Inversion of the Prime row A B C D E would be A G F[#] E D; the first note always remains the same, and all the other notes get inverted relative to that note.

The Retrograde Inverse sequence (or 'RI' for short), takes the Inverse 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[#] E D), and then the Retrograde of this Inverse would be D E F[#] G A.

Transpositions 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[#] C C[#] D[#] F.

An Interval 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.