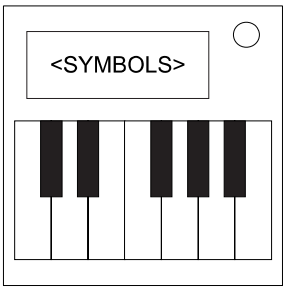
On the Subject of Piano Keys



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

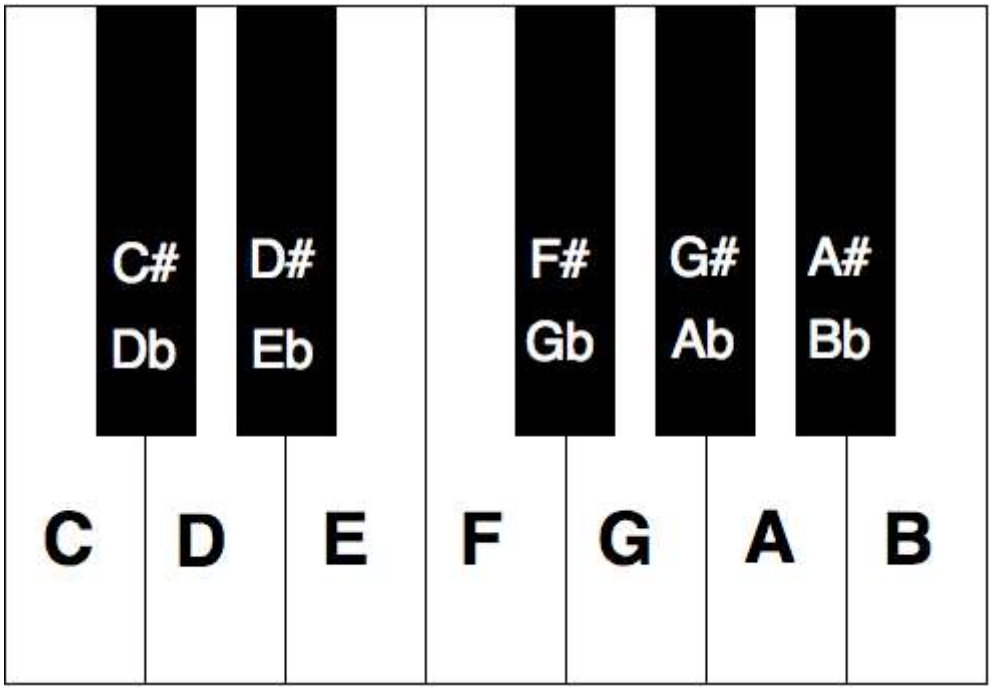
See Appendix A for indicator identification reference.
See Appendix B for battery identification reference.
See Appendix C for port identification reference.
See the next page for piano/keyboard reference.

- 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.

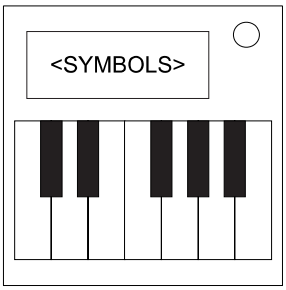
Required Symbol(s)	**Further Requirements**	**Note Sequence**
♭	Last digit of serial number is even	B♭ B♭ B♭ B♭ G♭ A♭ B♭ A♭ B♭
𝄡 or ♯	2 or more battery holders	E♭ E♭ D D E♭ E♭ D E♭ E♭ D D E♭
♮ **and** 𝄐	*(No other requirements)*	E F♯ F♯ F♯ F♯ E E E
¢ or ≈	RCA port is present	B♭ A B♭ F E♭ B♭ A B♭ F E♭
𝄢	SND indicator is present and lit	E E E C E G G
𝄻 or 𝄐 or 𝄡	3 or more batteries	C♯ D E F C♯ D E F B♭ A
♭ **and** ♯	*(No other requirements)*	G G C G G C G C
¢ or 𝄻	Serial number contains a 3, 7 or 8	A E F G F E D D F A
♮ or ≈ or 𝄢	*(No other requirements)*	G G G E♭ B♭ G E♭ 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.

#	Prime 12-tone Sequence	#	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♯ 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.

Required Symbol(s)	Further Requirements	Lookup Index	Transformation
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**
and	2 or more port plates	9 minus the number of unlit indicators†	**R**
or	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	*(No other requirements)*	5	**P**
If none of these rules apply, revert back to the Normal Piano Keys ruleset and play the given note sequence normally.			

Notes:
*: If the number of battery holders exceeds 9, continually subtract 10 until you have a result in the 0 to 9 range (inclusive).
†: If the result is negative, continually add 10 until you have a result in the 0 to 9 range (inclusive).
‡: 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.