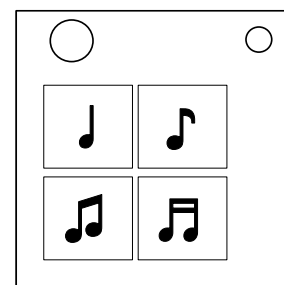# On the Subject of Rhythms

Have you ever taken a music theory class where you had to count and clap rhythms? This is just like that, only here your suffering <u>ends</u> when you get it wrong.

See the next page for musical note durations.

1. The colored indicator light will flash in one of the rhythms shown below.
2. To defuse this module, two buttons will need to be pressed in succession, each held until the correct number of beeps are heard.
3. The button order and length is specified in the table below.

Each button press is represented by a musical note and an alphanumeric digit. The musical note is the label of the button that must be pressed, and the digit is the number of beeps that must be heard before the button is released, or P if the button should be pressed and released immediately.

Rhythm of Light Flashes	Color of Indicator Light			
	Blue	**Red**	**Green**	**Yellow****
𝄞 4/4 ♩ ♫♫ ♫♪ (triplets)	♩2/♪P	***	♬2/♪P	♫2/♪P
𝄞 4/4 ♩ ♩ ♩♪	♩1/♬P	♪P/♩P	♫P/♪1	♫1/♬1
𝄞 4/4 ♪♩ ♪♩ ♩	♫1/♪P	♪1/♬1	♩P/♬P	♬P/♬1
𝄞 4/4 ♩. ♪♩ ♫♫	♪P/♫P	♬1/♩P	♬1/♬P	♫1/♪P
𝄞 4/4 ♫ ♩ ♩	♪1/♫P	♬P/♫P	♩1/♪P	♬P/♫1
𝄞 4/4 ♩ ♩ ♫♫	♩1/♬1	♪P/♪1	♫P/♪P	♫P/♩1
𝄞 4/4 ♩ ♩ ♩ ♩	♩P/♪1*	♫P/♫1*	♬P/♬1*	♪P/♪P*

*Use the first button press in place of the second if there is more than one battery on the bomb

**Hold both buttons for one additional beep per lit indicator on the bomb

***Press buttons as quickly as possible until module is disarmed

Musical Note Duration Reference

Musical notes have many important properties, but for this module only their
duration is important. Every pattern shown above consists of four beats, and
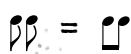they are distributed between the following notes:

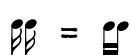**Half Note:** This note lasts for two beats, exactly half of a measure.

Dotted Quarter Note:* In-between a quarter note and a half note, the
dotted quarter note lasts for one and a half beats.

Quarter Note: The most common note, the quarter note lasts for one beat.

Eighth Note: The basis of syncopation, the eighth note lasts for half of a
beat.

Sixteenth Note: The bane of woodwind players everywhere, the sixteenth
note lasts for a quarter of a beat.

Beamed Eighth Notes: To enhance clarity, successive eighth notes are
often drawn with a single beam connecting them.

Beamed Sixteenth Notes: Similarly, successive sixteenth notes are
often drawn with two beams connecting them.

Eighth Note Triplet:* Each note in this triplet lasts for a third of the
beat.

*Dots and triplets can be added to any note durations, but this module only uses dotted quarter notes and
eighth note triplets.

If all else fails, then you can trust the spacing of the notes to guide you.