# On the Subject of Color Decoding

The colors, Simon; what do they mean!?

This module is comprised of three stages, where each stage contains a 4×4 indicator grid above a 6×6 display grid. Each grid is comprised of five colors: Red, Green, Blue, Yellow, and Purple. In each stage you must select a number of rows and/or columns from the 6×6 grid. You can select a row or column by pressing the arrow button at the end of that row or column. The selections you must make can be determined as follows:
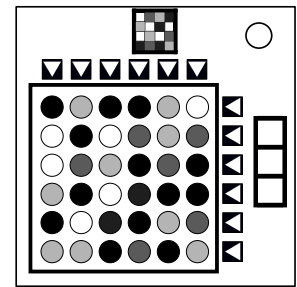
- From the pattern of the indicator and the state of the bomb, determine the row in the next table to use for the stage.
- For the Venn line patterns section, consider the colors present in the indicator. For every color that is present in both the indicator and the table row for the stage, obtain the line pattern above that color in the column. Use that pattern or patterns in the Venn diagram on the following page to determine the correct constraint table number.
- Go to that constraint table. For each constraint in that table from top to bottom, select the row or column which satisfies that constraint from the 6×6 grid. Skip the constraint labels described in the skip section, based on the current stage.
- When you have completed all three stages, the module will be disarmed.

Indicator Pattern	Bomb/Module State	Venn Line Patterns				Skip Section		
		●	■▪	▬	▪▪	Stage 1	Stage 2	Stage 3
Checkered	≤2 Batteries	R	G	B	Y	A, C	B	B, E
	>2 Batteries	P	B	Y	R	B, D	D	C, E
Vertical	≤2 Ports	G	R	P	Y	C	A, D	A, B
	>2 Ports	B	Y	G	P	A, E	B, D	A, D
Horizontal	≤2 Lit Indicators	Y	P	R	B	D	A, C	B, E
	>2 Lit Indicators	G	B	P	R	C, E	A	C, D
Solid	Stage 1 or 3	P	G	B	R	A, E	B, D	C
	Otherwise	Y	R	G	P	E	A, D	B, C
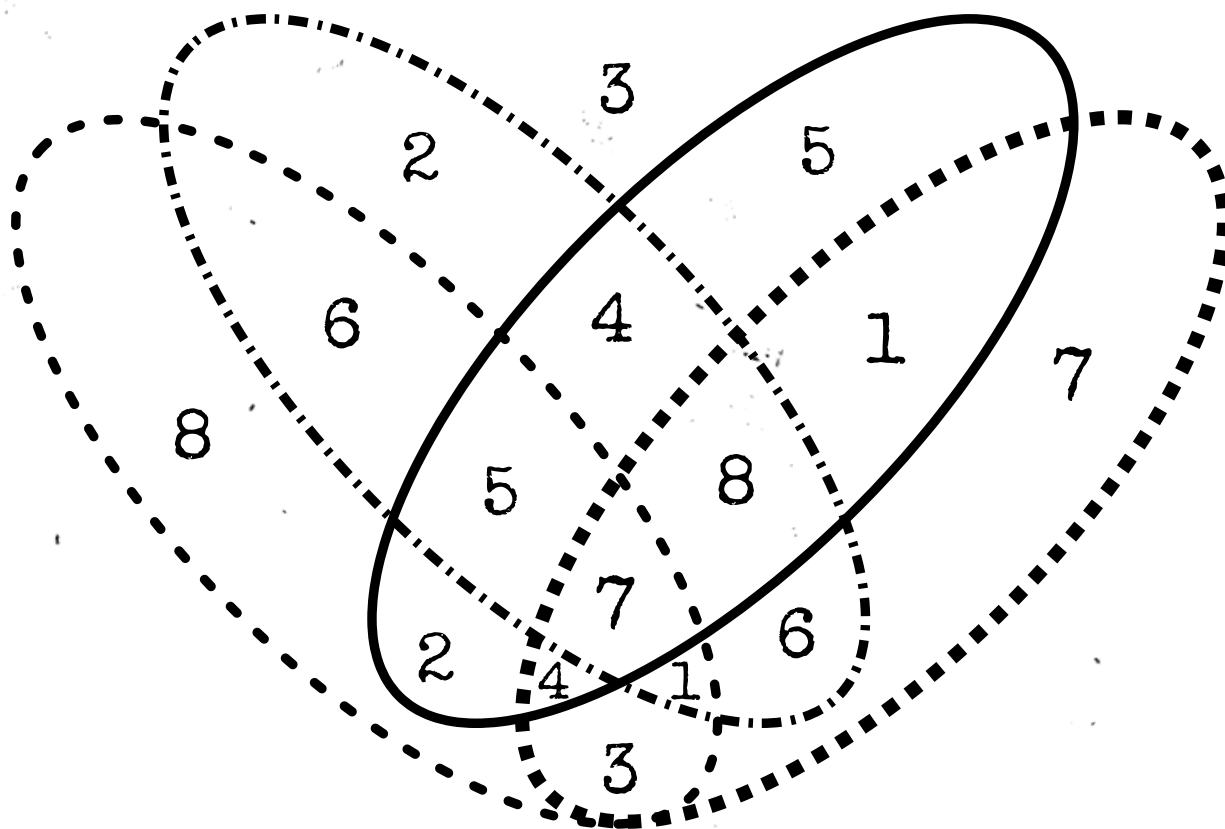
Note: Sequence constraints are reversible; e.g. BRR and RRB are equivalent on the display.

Constraint Table 1

Label	Constraint
A	BGB in sequence.
B	BBY in sequence.
C	R is not present.
D	YPG in sequence.
E	YGB in sequence.

Constraint Table 2

Label	Constraint
A	PYP in sequence.
B	G is not present.
C	YYR in sequence.
D	RPY in sequence
E	BPR in sequence.

Constraint Table 3

Label	Constraint
A	BPY in sequence.
B	PPB in sequence.
C	PRP in sequence.
D	G is not present.
E	RBR in sequence.

Constraint Table 4

Label	Constraint
A	GGB in sequence.
B	YRG in sequence.
C	P is not present.
D	BYB in sequence.
E	RGB in sequence.

Constraint Table 5

Label	Constraint
A	GGY in sequence.
B	RGG in sequence.
C	YRP in sequence.
D	PRR in sequence.
E	B is not present.

Constraint Table 6

Label	Constraint
A	PGG in sequence.
B	YRR in sequence.
C	B is not present.
D	YYG in sequence.
E	YGR in sequence.

Constraint Table 7

Label	Constraint
A	BBG in sequence.
B	BYG in sequence.
C	PYY in sequence.
D	R is not present.
E	YBG in sequence.

Constraint Table 8

Label	Constraint
A	PGB in sequence.
B	Y is not present.
C	PPG in sequence.
D	BRG in sequence.
E	RGR in sequence.