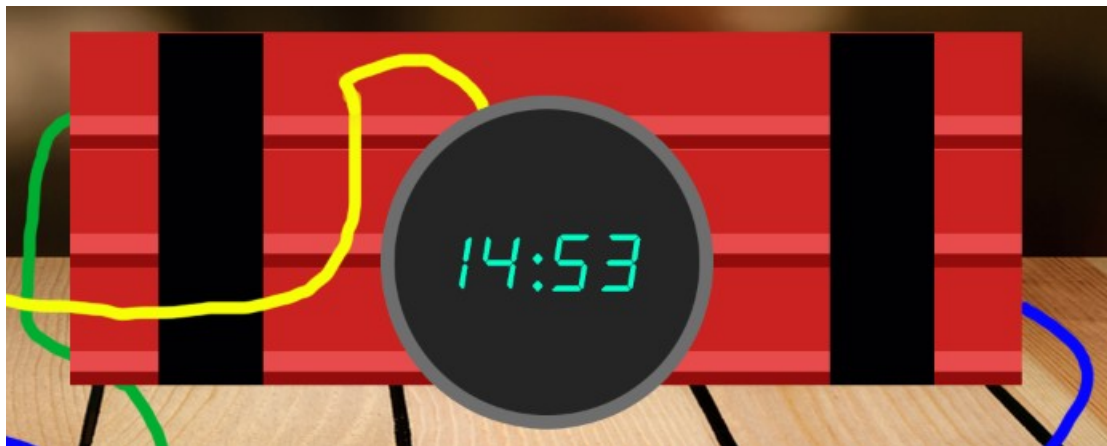# DEFUSING A MODEL-4000 BOMB

INTRODUCTION

Over the years, the Model-4000 has become a staple bomb for terrorists, criminals, pranksters and angry marketeers all over the world. The Bomb Engineering Taskforce (BET) saw about 1337 of them throughout the whole 2019, so it is a bomb everyone should be familiar with.

BOMB OVERVIEW

The Model-4000 has a clock timer and three wires. The clock has a minute timer and a second timer ticking down, and when this reaches 0, the bomb will explode.

There is also a yellow, green and blue wire hooked up from the bomb. These wires are hooked up to a circuit board, and the circuit board itself is hooked up to our very own BET Terminal.

THE CIRCUIT BOARD

The circuit board varies from model to model in size, but most consists of a grid roughly the size of 5x7. Internally, we use a coordinate system which consists of letters and numbers when referring to the circuit board. In the picture above, you can see a 6x3 circuit board labeled.

The circuit board is also where wires from the bomb are hooked up, where power can flow through and finally where the BET Terminal is hooked up. Power can be created through the use of the terminal, and can flow through generators or capacitors.

THE TERMINAL

In the picture above, we can also see the BET Terminal input interface. You can type and press "Enter" to pass commands through the terminal. If you pass in a wrong command, you will see the text "Invalid Command!" as in the picture. The terminal has a wide array of usage, and we will document the commands below:

GENERATOR(COORDINATE)
This command will set up a slot on the circuit board as a *generator*. If a power current passes through a generator, new power current will be generated in the three remaining cardinal directions.

For instance, passing in the command GENERATOR(B2) will slot a Generator at B2 on the circuit board. If a power current passes into this generator from the south, new power currents will be generated in the directions east, west, and north.

CAPACITOR(COORDINATE)
This command will set up a slot on the circuit board as a *capacitator*. If a power current passes through a capacitor, it will be reflected to run in a different direction. Which direction the power current is reflected in is determined by the direction set by the *CDIR*-command. The default capacitor direction is north.

CDIR(COORDINATE, DIRECTION)
This command will set the capacitor direction to a cardinal. The cardinals/directions can be either NORTH, SOUTH, EAST or WEST.

For instance, CDIR(B3, RIGHT) will set a Capacitor at B3 (if it exists) to reflect a power current towards the right.

REMOVE(COORDINATE)
This command will remove a generator or capacitor from the circuit board at the specified coordinate.

POWER(START)
This command will generate a power current at the specified start. The START parameter can either be A, B, C, D, E or F, and will create a power current travelling north from A1...F1 respectively based on START.

For example, START(A) will generate a power current at A1 which will be travelling north.

DEFUSING THE MODEL-4000

In order to defuse the Model-4000, a power current has to be sent through all three wires at exactly the same time. Your job as a technician at BET is to work with the BET Terminal to set up generators and capacitors, and then send power currents through the circuit board so that all three wires will be hit by power currents at the same time.

If a power current is sent through some, but not all of the wires, the clock will short. This results in the clock loosing 3 minutes in our experience, but your mileage may wary.