Space Brawls User Manual

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1. About the Game

1.1 Introduction:

You are the commander of the defence grid of the planet Dirt. The Evil Space Dominion is attacking you with large space stations known as the Death Moons that utilize 10 different types of deadly weaponry. Fortunately, you have countermeasures for each type of weapon, but each countermeasure only works against one attack, and if you fire the wrong counter Measure, the resulting shockwave temporarily interrupts your ability to fire more countermeasures. How long can you survive against the onslaught?

1.2 Game Play:

The Death Moon will launch 10 different kinds of weapons at planet Dirt, these will be represented by the numbers 1-10. The weapons it will fire are chosen at random though it will never fire a weapon in two subsequent steps. As the commander of planet Dirt's defence grid it is your duty to stop these weapons before they reach Dirt and destroy planet. To stop a weapon you must launch a counter measure of the corresponding number, e.g. to stop the Death Moons '1' you would launch a '1' to counter it. Your counter measure will then travel along the screen until it meets and destroys the Death Moons weapon. However if you launch the wrong counter measure, not only does it have no effect on the weapon, the resulting shockwave from the explosion when it meets the Death Moons weapon will temporarily disable your defence systems. Counter measures that reach the Death Moon have no effect. You have three bases which you must protect against the Death Moons weapons. Each time a weapon reaches Dirt you lose a base. However after successfully completing a level you regain a base (max 3).

1.3 Controls:

- PB0 is used to start the level
- PB1 is used to skip the level
- The keypad is used to launch counter measures

1.4 Levels:

When you start a new game of Space Brawls you begin on level 1. The Death Moon will fire 15 weapons in each level and you only progress to the next level if you survive them all. The level you are currently on determines a number of things. It determines how long each step takes (a step involves each weapon and counter measure moving 1 space as well as the firing of new weapons and counter measures). It also determines the probability that the Death Moon will fire a weapon and how many points you score.

Statistics for each Level			
Level	Time Step Duration (s)	Probability of Firing	
1	1	1/8	
2	0.9	1/4	
3	0.8	3/8	
4	0.7	1/2	
5	0.6	5/8	
6	0.5	3/4	
7	0.25	3/4	
8	0.125	3/4	
9 onwards	Half of previous level	3/4	

1.5 Scoring:

You score points for every weapon you successfully intercept as well as for completing levels. The amount of points you score is determined by what level you're up to. For intercepting a weapon you score 10 points times your current level. For completing a level you score another 100 points times your current level.

2. Setting up the Game

To play the game you must connect your game board to a power supply and make the following connections:

- PB4 => Mot
- PB7 => AIn
- PD0-1 => PB0-1 (push buttons)
- PD3-6 => BE-RS
- PC0-7 => D0-7
- PA0-3 => R0-3
- PA4-7 => C0-3

If desired the LCD backlight can be connected to the Potentiometer, to provide a switchable backlight.

3. Playing the Game

During game play, the LCD screen will display the current state of the game. The top row displays the game board, with the planet Dirt on the left and the Death Moon on the right. The bottom row of the LCD displays the Player Lives, Current Score, and Current Level.

