

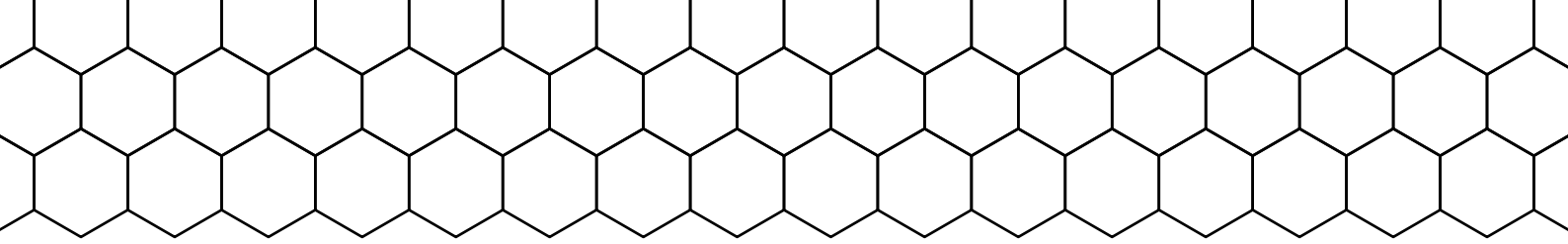


Cyberpong

2021

Game Manual

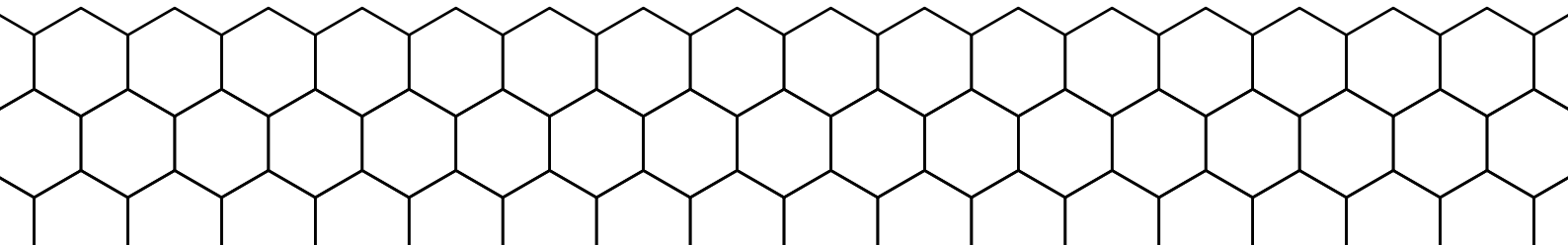
v1.0



a game by

Neon Interactive

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Game-Concept

CyberPong 2021 is a reimagination of the famous 2-Player game Pong, one of the first video games ever created. In pong, the players can move a paddle vertically on their baseline. They use the paddles to hit a ball back and forth. If a player does not succeed in hitting the ball and the ball moves over the baseline, the other player scores a point.

Cyberpong expands this concept for up to six players. The playfield is also no longer rectangular, but instead hexagonal. And to make things even more interesting, this hexagonal field is further divided into 271 smaller hexagonal Cells.

At the beginning of the game, each player gets a certain number of lives. When the ball passes over the player's own baseline, a life is subtracted from said player. If the player has no more lives, he is game over and out of the game. The last player remaining wins.

Alongside this so called Free-for-All gamemode, where each player plays against every other player, there are also Team-Modes. In these the game goes on until there is only one team remaining.

Cyberpong has many more exciting things to offer. We recommend you to learn about them by just playing the game. If you prefer to have a more in-depth explanation of the game, just continue to read this Manual!

We hope you enjoy playing our game!

How to Get to Play

At first there must be a server running on which the game will be played. If a server already exists, a client can join it by starting the jar with the following arguments:

client, the ip-address of the server, the port of the server and an optional **username of the client**.

This could look like this:

```
java -jar CyberPong-1.0.0.jar client 29.32.188.172:8090 Peter
```

If such a server doesn't already exist a client himself can create one, by using the following arguments: **server**, and a port:

```
java -jar CyberPong-1.0.0.jar server 8090
```

After successfully connecting to a server, each user first enters a global lobby. From here it is then possible to chat with other users, join an existing game lobby or create a new game lobby with a gamemode of choice, depending on the number of other users the user wants to play with.

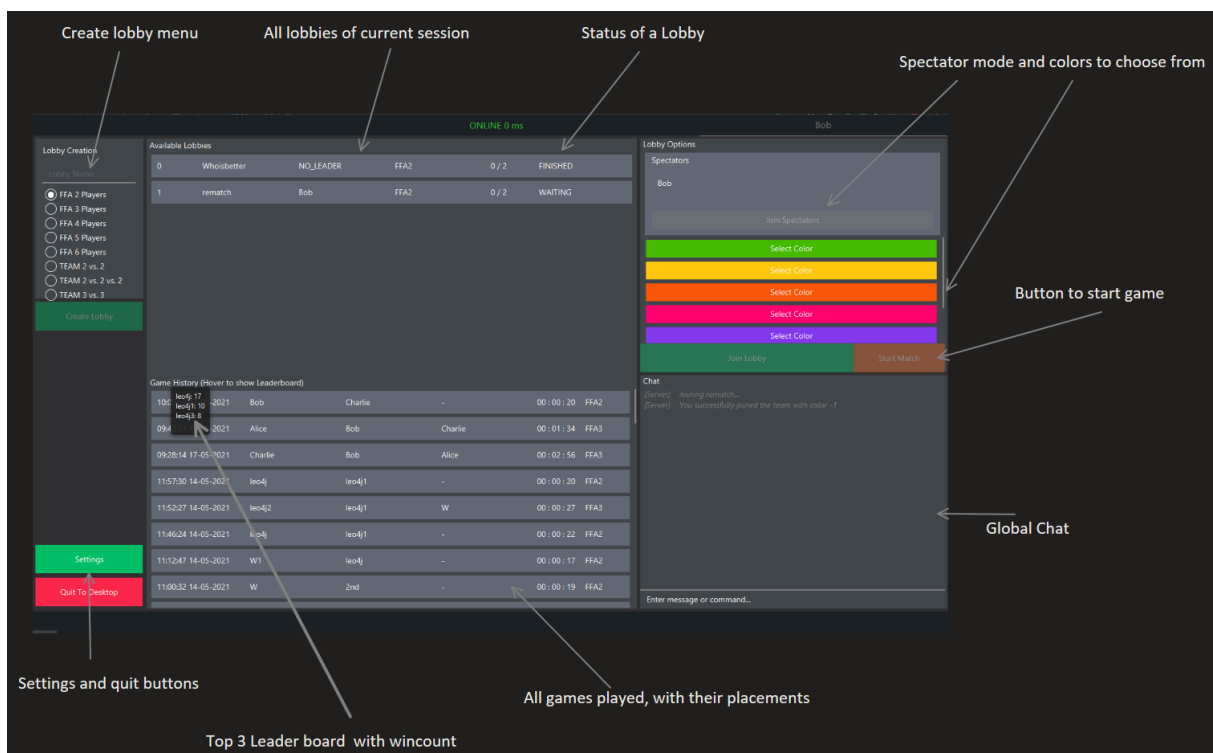


Image 1: Screenshot of the Global Lobby, with its functionalities.

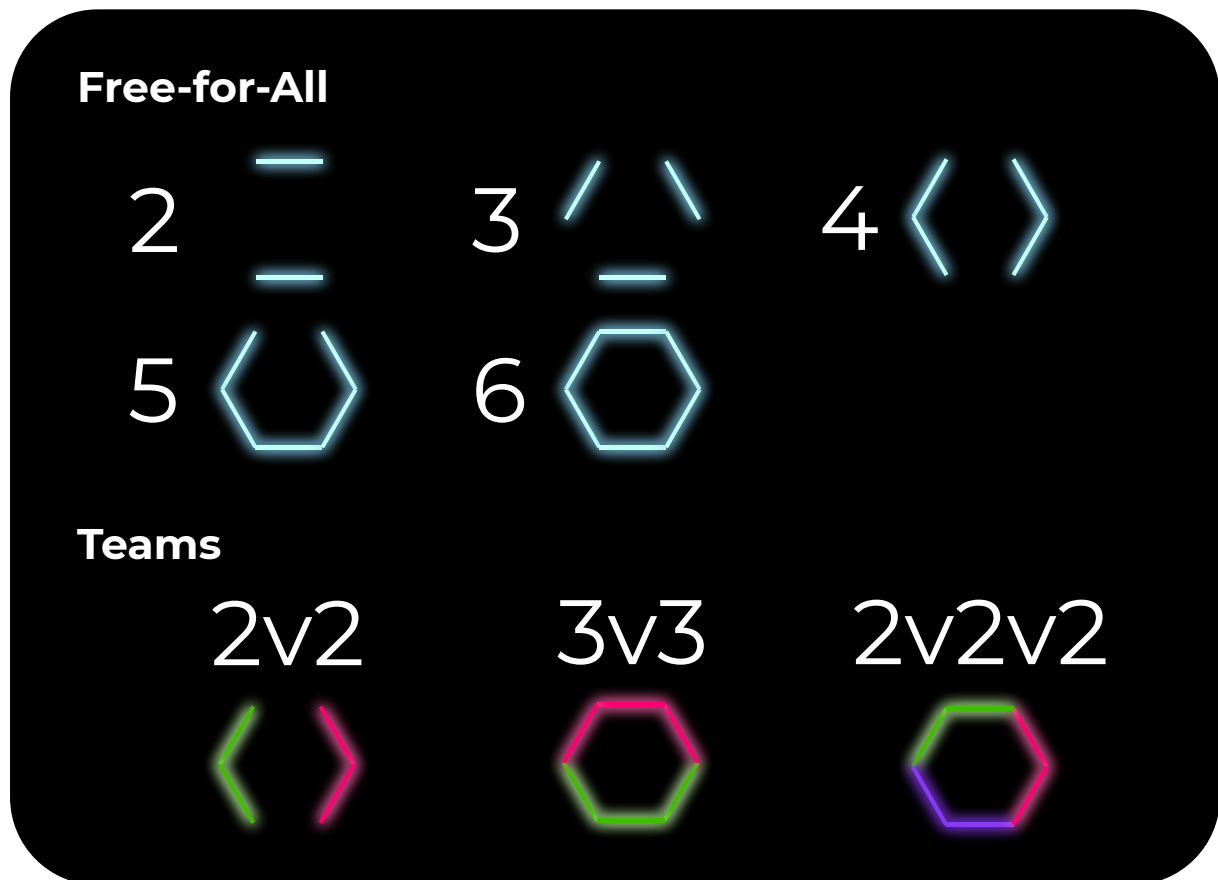
Game Modes

The game can be played from 2 up to 6 players in a Free-for-All mode. In this mode, each player plays on his/her own. The last remaining player wins the game.

With 4 players, the game can also be played in a 2v2 Team mode, where two players form a team and the goal is to knock out the other team.

With 6 players you can expand the whole thing by another team of two players or you can even play in the exclusive 3v3 team mode.

The following Diagram shows which edges of the field are occupied in the different game modes.



Controls

The game window is started in the dimensions of the computer screen, but it can be rescaled later at will. In addition, **the F11 key can be used to switch to the fullscreen view.**

Each player participating in the game has control over his own paddle and over his available power ups. It is also possible for everyone to write a message in the chat. The default keybindings are the following:

- ⬡ Move Paddle to the left: **A**
- ⬡ Move Paddle to the right: **D**
- ⬡ Use PowerUP number 1: **1**
- ⬡ Use PowerUP number 2: **2**

If you don't like these keybindings however, there is a settings menu accessible from the main menu, where each player can customise his controls and volume levels.

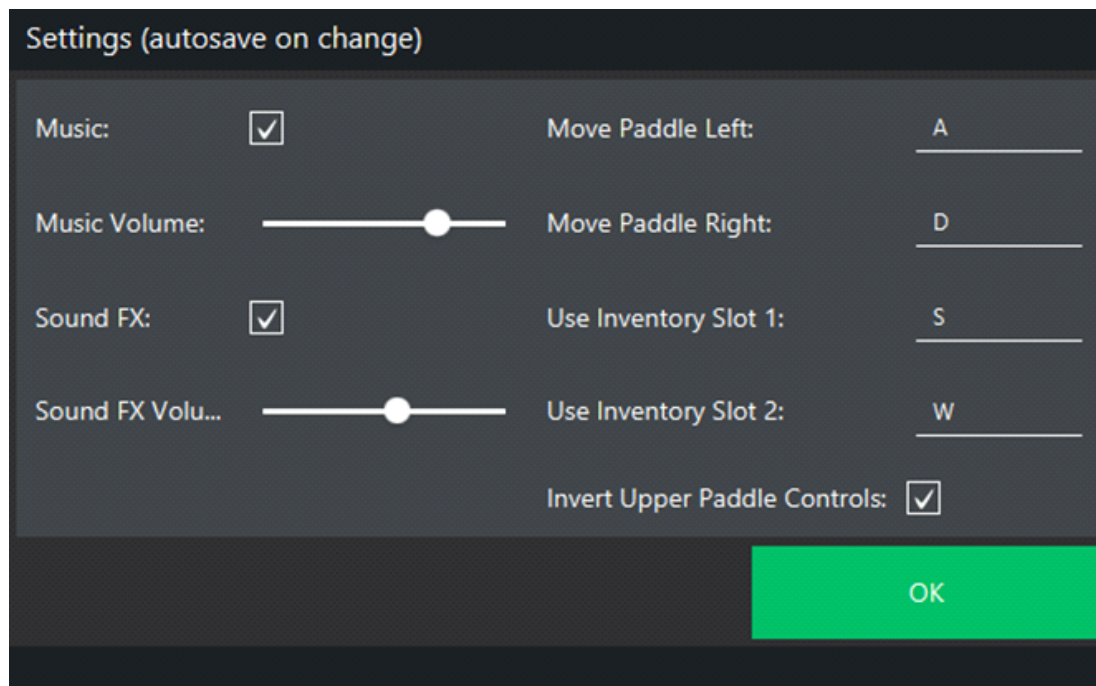


Image 3: *View of the settings menu with its options*

Playing Field

The hexagonal playing field is divided into many small hexagonal Cells. These cells are not static: During the game, so-called **Action Cells** can spawn on these cells. This can happen randomly or when a player activates an item that they got from a PowerUp. For example, a player can build a wall to protect himself.

Action Cells can be placed in any empty cell, except for a safe area in front of each player's baseline. This prevents a player from completely blocking their baseline. All Action Cells are listed in a separate chapter of this manual.

Where there is no baseline, the playing field border is a zig-zag pattern (according to Cell edges).

After each goal, the playing field is reset, the ball appears in the middle and after a short pause, starts moving in a random direction.

If a player runs out of lives, he becomes a spectator and his baseline is replaced by an ordinary field border.

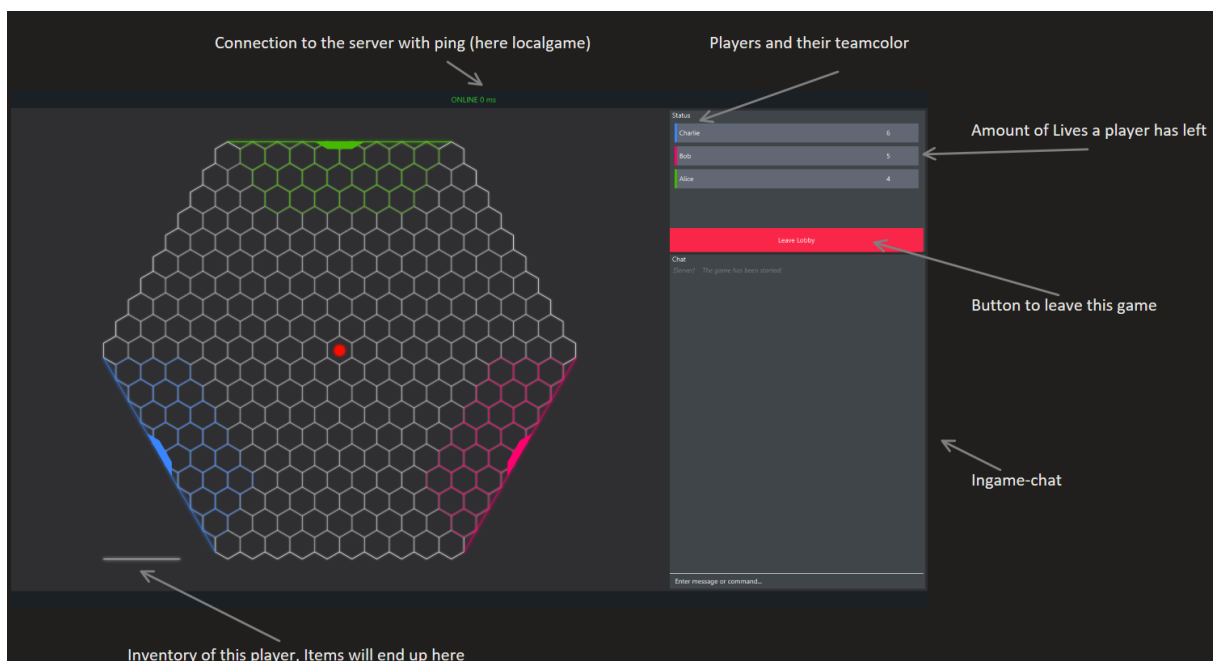


Image 2: This image shows our Playfield, as it appears after a point was scored and the field is reset.

PowerUps & Items (1)

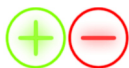
PowerUps are round objects, which spawn in the middle of the playing field and move to random points on the baseline of a random player. If said player catches (=touches) the PowerUp with the paddle, it's effect is either triggered immediately or it is moved into said player's inventory. PowerUps in an inventory are called **Items**. Whether a PowerUp becomes an item depends on its type.

Some PowerUps have different variations and it's not that easy to know whether you should try to pick it up or not. To make things simpler, these PowerUps are color-coded. Remember:

You want to catch the green PowerUps, which give you a reward.

You want to avoid the red PowerUps, which give you a penalty.

List of all PowerUps



The strongest PowerUp there is: The green plus gives you one **life** and the red minus takes one life away from you.



Paddle Speed PowerUp:



#1 gives the opponents a higher paddle-speed



#2 gives the opponents a lower paddle-speed



#3 gives yourself / your team a higher paddle-speed



#4 gives yourself / your team a lower paddle-speed



These two are items, which on activation spawn an **Attractor** (orange) or **Repeller** (blue) ActionCell, both of them have their own respective influence on the ball.



The green R **reverses** the paddle controls of your opponents.

The red R reverses your own paddle controls

PowerUps & Items (2)



The green **snowflake** freezes your opponent's paddle so it can't move for a short duration, while the red one freezes yours.



This green flame gives the ball a boost the next time your paddle touches the ball. This is then called a **smash**.



These are the different types of **rerouting** power ups, they spawn a respective cell and upon contact the ball moves in the direction of the more aligned arrow.



This is a **trampoline** item which on activation then places a trampoline cell, which can reflect the ball once like a wall, but gives the ball an additional speed boost.



This becomes a **wall** item, which then upon activation places the wall cell on the field. The ball can bounce up to three times from this wall until it is destroyed.



Paddle Size PowerUp:

#1 gives the opponents a smaller paddle

#2 gives the opponents a bigger paddle

#3 gives yourself / your team a smaller paddle

#4 gives yourself / your team a bigger paddle

Action Cells

Action Cells are generated on random cells outside the players' safezones. They disappear when the ball passes over them and trigger an effect on the ball. Another way for Action Cells to spawn is if certain items are activated from a player. The cell will then appear where the ball currently is and will be activated as soon as the ball is far enough away from the cell.

The Cells have the size of one little hexagon on the playfield, even though the effect can reach further.

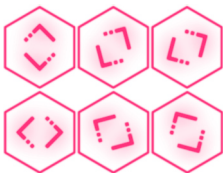
List of all Action Cells



Walls with three different damaged stages.



The **Trampoline**: reflects the ball and gives it a speed boost



Ball Redirection: Redirects the ball into the specified direction.



Portals: Creates a passage for the ball between the two portals of the same color.



Attractor: Pulls the ball towards it



Repeller: Pushes the ball away from it



Speed Boost: Gives the ball a higher velocity for a short period of time.

Bonus: Cheat Codes

If you don't like losing or if you and your friends are just bored, why don't you spice the game up with some Cheat Codes?

Cheat Codes can be activated via the Chat Window. Simply type ***\$cheat*** followed with the ***name of your desired Cheat Code***.

This could look like this (codes don't have to be written uppercase):

```
$cheat INFINITE_HP
```

All available Cheatcodes are listed below. But be warned: using cheat codes will have consequences!

INFINITE_HP

Gives the player or his team an extremely high amount of lives.

ATTRACTOR_PARADISE

Spawns several attractors in random locations that will cause a lot of chaos.

THE_GREAT_WALL

Spawns up to 80 walls on the field in random places.

DISORIENTATION

Spawns up to 50 random rerouters in random places.

INTERFERENCE

Spawns up to 32 attractors and repellers in random places.

ELASTIC_SHOCK

Spawns up to 5 trampolines in random places.

WHERE_THE_F_IS_THE_BALL

The ball turns invisible until this command is used again.



CyberPong 2021 was created by

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Attributions

The vast majority of all assets used in this game were created by us, Neon Interactive. Other assets that were used are either free to use with no attributions necessary or the creator is listed below.

Soundeffects

- SFX by Circlerun
- mixkit.co
- zapsplat.com
- SFX by Dan Knoflicek

Music

- soundcloud.com/alumomusic
- soundcloud.com/alumomusic/sets/synthwave

Graphics

- Freepik from flaticon.com
 - Pixelmeetup from flaticon.com
- 