Boom Box
Instruction Manual

Dream | Build | Play

WARNING:
TRAINING DEVICE
Please use responsibly

Disclaimer: This device is to be used for training simulations or for a prop only. The user is liable for any public disturbances that their Boom Box may cause. Use extreme caution when transporting the device from location to location. Remove the lithium-polymer battery after each use.

Safety Guidelines

Do:

- Store all products safely – out of the sun, cold, rain, etc.
- Only use recommended batteries and follow all manufacturer instructions for charging and storage of batteries.
- Keep all products closed or in a container/bag until ready for use.
- Only use products with authorization of the property owner.
- Notify anyone nearby that replica's and props are in use.

Do not:

- Use products in ways not intended.
- Use products to threaten, scare or intimidate anyone.
- Display products publicly or leave unattended.

Thank you and congratulations on purchasing your Boom Box! We've spent a lot of time building what we think is a great addition to your airsoft or paintball skirmishes. If you have any questions, comments, or suggestions for new features, please reach out to us at support@hobbyforge.tech. Stay safe and enjoy your Boom Box responsibly.

Introduction

The Boom Box was designed to facilitate small, objective-oriented matches as an alternative to repeated Team Death or Free-For-All games. Keep in mind that this may be entirely new to some players, referees and fields, so you will need to help them understand how to use the Boom Box and how to run the games. Before we begin, a few **safety tips**:

- The Boom Box is strictly for simulation purposes – any other use is not recommended.
- Treat the Boom Box the same way you would treat any replica firearm – do not display in public, keep the case closed during transport, and avoid calling the device anything but "Boom Box".
- The Boom Box is battery-powered and special care should be taken with lithium-polymer (LiPo) batteries. Please refer to the battery and/or charger manufacturer for any warnings and instructions.

Game Modes

There are 3 game modes that come pre-loaded with each Boom Box: Bomb Mode, Domination Mode and Virus Mode. Bomb mode is a gameplay scenario that puts two opposing teams against each other to plant and defuse the device. Domination mode is a twist on the traditional King of the Hill mode in which teams vie to rack up the most points at the end of the game by controlling ownership of the Boom Box. Virus mode is a scenario where terrorists attempt to steal a virus sample and transport it safely to their base.

Bomb Mode

In Bomb mode, players are split into two teams – one team's goal is to plant and detonate the device while the other team should try to keep the device from detonating. You are encouraged to create your own, unique gameplay scenarios but here is an example:

Scenario 1:

"Separatist Forces plan to disrupt the peace talks by assassinating the country's leaders using a dirty bomb they have built. They will attempt to infiltrate, plant and detonate the bomb at the meeting site. Your objective as the Security Forces is to prevent the Separatist Forces from planting the bomb. If however, they do manage to plant the device, you must reach the device and disarm it before it explodes."

The referee will start by designating a target building (where the meeting is being held) and headquarters for both the Separatist and Security Forces (start and respawn point). The Boom Box will start at the Separatist HQ along with the Separatist Forces. Once the game is started on the Boom Box, the Separatists will carry the Boom Box to the target building. If the player carrying the Boom Box is hit, they must put the Boom Box on the ground and head back to their HQ to respawn. Once the Separatists reach the target building, they must place the Boom Box on the ground, unlock the device, arm it, and activate the device (thus starting the bomb countdown timer). *See Arming/Disarming Modes for more detailed instructions on how to unlock the device.*

After the Bomb Timer is started, the Separatists must prevent the Security Forces from reaching the Boom Box and disarming it. Once the Bomb Timer has been started, any movement will put the Boom Box in warning mode. If the device remains in warning mode for more than 10 seconds, the game will end and result in a win for the Separatist Forces. If the Security Forces reach the Boom Box and successfully disarm it before the Bomb Timer reaches zero, they win. *See **Arming/Disarming Modes** for detailed instructions on how to disarm the device.*

Other twists on this scenario could include each designating a single player as the only people who know the PIN to arm/disarm the device. One team could hide and then arm the device anywhere on the field and the other team must find and disarm it. Let your imagination run wild; take inspiration from your favorite video games or movies!

Arming/Disarming Modes
The device can be set to arm/disarm in a few modes: PIN mode, hold mode, and decode mode. PIN mode requires the correct set of four numbers to be entered in order to engage and to defuse the bomb. Hold mode requires the user to hold the outer buttons for an allotted time until it is engaged/defused. Lastly, decode mode is the hardest and combines the PIN and hold modes.

- PIN Mode:
  - In PIN Mode, you will be prompted enter a 4-digit code at the start of the game. Both the planting team and defusing team will need to memorize the PIN at the start of the. To start PIN mode:

    1. On the Main Menu, press the '1' key to enter Bomb Mode.
    2. On the Bomb Mode menu, press the '1' key to select PIN mode.
    3. Set bomb access code by entering a 4-digit PIN code on the keypad. It will display the digits on the blue digit display and confirm the code once it is entered.
    4. Once accepted, it will say Ready.
    5. Press the Start Button to start the game.

  - The game will start with the device in the LOCKED state. In order to unlock the bomb, the planting team will need to enter the PIN Code programmed at the start as follows:

1. Enter the PIN code on the keypad. The indicator lights will turn yellow to confirm that the device is now unlocked.
2. Flip the red toggle switch cover open and toggle the switch upwards. The indicator lights will turn red to show that the device is now armed.
3. Press the start button to activate the device and start the bomb count down.

- To Disarm the bomb the defusing team will need to enter the correct PIN code. If the incorrect pin is entered, it will display an ERR1 on the display and the timer will begin to count down more quickly. If an incorrect PIN is entered 3 times, the defusing team will lose.
  Note: Be sure to avoid moving the device excessively. If it is moved, the indicator lights will turn from green to yellow to red. If the device is moved too much, the game will end, and the planting team wins.

- **Hold Mode:**
  - Hold mode is similar to PIN mode except slightly harder in that it takes time to unlock or disarm the bomb. Players will need to free both hands in order to do so, rendering them defenseless.

  1. On the Main Menu, press the '1' key to enter Bomb Mode.
  2. On the Bomb Mode menu, press the '2' key to select Hold mode.
  3. Press the Start Button to start the game.

  - The game will start with the device in the LOCKED state. In order to unlock the bomb, the planting team will need to hold the two outer buttons simultaneously until the loading bar in the graphics window is filled up. Planting procedure is as follows:

  1. Hold the outer buttons until the loading bar in the graphic window is complete.
     Note: If either button is released before the bar has completed, the progress will reset.
  2. The indicator lights will turn yellow.
  3. Flick the red toggle switch and the indicator lights will turn RED.
  4. Press the middle button to start bomb count down.
  5. The count down will begin.

  - To Disarm the bomb the defusing team will need to hold the outer buttons until the loading bar on the graphic window is filled the device is defused. Make sure that the device is not moved too much. The indicator lights will turn from green to yellow to red. If the device is moved too much, it will Fail.

- **Decode Mode:**

Domination Mode

Domination mode has 2 teams that need to hold the area where the Boom Box is located. Each team is designated a color. To capture a point, the team will hold their colored button until they have captured the unit. At that point, their score counter will being/continue to increment. At the end of the game, the referee can take count of the points to announce the winning team. It is encouraged to have multiple Boom Boxes on the field to allow more capture points. During Domination mode, music will be playing to allow users to locate the Boom Box.

Virus Mode

In Virus mode, players are split into two teams – one team's goal is to infiltrate the enemy building, capture the virus sample and transport the sample safely back to their base. You are encouraged to create your own, unique gameplay scenarios but here is an example:

Scenario 1:

> *"We, the Brotherhood of Nod, are looking to steal the sample of a recently developed virus that has the ability to spread rapidly and has an effective 95% mortality rate. It is so deadly that it is stored in a secure facility and in a special containment field. This field will instantly destroy the sample if the battery runs out or if the case is shaken excessively.*
>
> *Your mission is to infiltrate the building where it is being stored and gain access to the sample. You will have 15 minutes to get the sample back to our headquarters before the battery runs out and the sample is destroyed. Additionally, avoid excessive shaking of the sample as it can trigger the self-destruct as well.*
>
> *Our fate is in your hands."*

The referee will start by designating a target building where the sample is stored and headquarters for both the Nod and GDI Forces (start and respawn point). The Boom Box will start at the storage facility. Once the game is started on the Boom Box, both forces will attempt to reach the sample facility and either defend or steal the case. Once the Nod forces reach the Boom Box, they must disconnect it from the building's power supply (*see Connecting/Disconnecting from the Power Supply for more detailed instructions on how to disconnect the device*).

Once the Nod forces have disconnected the Boom Box, they have 15 minutes (adjustable via the menu) to safely transport it to their headquarters. The Boom Box will audibly notify the carrier if they are shaking it excessively and continued shaking will result in the virus being destroyed and GDI forces winning. If the player carrying the Boom Box is hit, they must put the Boom Box on the ground and head back to their HQ to respawn.

Lastly, once the Nod forces reach their headquarters, they must reconnect it to a power supply similar to how they disconnected it. Once that is complete, the Nod forces will have won the scenario.

During the scenario, GDI forces must protect the Boom Box and prevent Nod from taking it back to their base. If Nod succeeds in removing it from the storage facility, GDI should attempt to recapture the device and carefully transport it back to the storage facility. Once there, they can reconnect it to the building's power supply, thus winning the scenario.

Connecting/Disconnecting from the Power Supply
In order to remove the capsule from the storage facility, the system must be disconnected from the building's power supply and switched to battery operation. To do so:
1. Hold the outer buttons until the loading bar in the graphic window is complete.
   Note: If either button is released before the bar has completed, the progress will reset.
2. The indicator lights will turn yellow.
3. Flick the red toggle switch and the indicator lights will turn RED.
4. Press the middle button to disconnect the system from building power.

To reconnect the capsule:
1. Hold the outer buttons until the loading bar in the graphic window is complete.

Settings Menu:
The Boom Box was designed to be easy to use out of the box but allow customizations as you get acquainted with the game play. All of the settings are saved directly to the microcontroller and the current value of the setting is indicated by a '>' next to the value.

On the Main Menu screen, press the '#' key to enter the Settings menu:

1. Game Options
2. System Options
to Exit

Game Options

1. Bomb Mode:
    a. Game Clock – this setting controls how long the overall game lasts. The planting team must plant the bomb within this time or the disarming team wins.
    b. Bomb Clock – this setting controls how long the disarming team has to deactivate the bomb. If this reaches zero, the planting team wins.
    c. Hold Length – this setting controls how long the pair of outer buttons need to be held down (consecutive seconds) to unlock/defuse the bomb.
2. Domination Mode:

a. Game Clock – this setting controls how long the overall game lasts. The points leader when this clock reaches zero is the winner.

System Options

1. Volume Controls – this setting will determine how loud the beeps and background music will be during games.
2. Brightness – this controls the overall brightness of most lights on the Boom Box.
3. Accelerometer – this determines the sensitivity of the accelerometer built into the Boom Box. This is mostly used in Bomb Mode where excessive movement can cause the bomb to detonate.
4. Batt. Status – this will give you a quick glance at the power level of the battery. The % reading is primarily for LiPo batteries and indicates the approximate remaining battery relative to a minimum safe low voltage. For example, a 3-cell LiPo has a maximum voltage of around 12.6V and should not drop below 9V. When the battery reaches 10.8V (halfway between 12.6V and 9V), the % displayed will be 50%. Again, **this is just an estimate** which is why we also display the raw voltage that you can use to determine the correct time to swap batteries.

Battery Installation

The Boom Box can be powered by any battery that provides over 5V and uses a Deans connector. We generally recommend a small, stick-shaped lithium-polymer battery (either 7.4V or 11.1V is fine). The following batteries are a good example of size:

https://hobbyking.com/en_us/turnigy-nano-tech-1200mah-3s-25-50c-lipo-airsoft-pack.html

Please refer to the manufacturers for safety information and instructions regarding the use, charging, and storage of LiPo batteries as incorrect use may be dangerous.

1. Turn the key switch to the 'Off" position and lift the core out of the case using the handles.
2. Flip the core onto it's front to expose the battery compartment.
3. Slide the battery cover open.
4. Connect a freshly charged, stick-type LiPo battery using the Deans connector.
5. Slide the battery into the compartment and tuck the wires away next to it.
   Note: It will be a tight fit for most batteries. Be careful with the wires and battery when attempting to insert them.
6. Slide the battery cover closed.
7. Flip the core over and insert it back into the case.

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