LaserInvasionMobile/LaserInvasionRecreation

User Manual / Game guide

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How to run a successful game

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1A. Overview

This Manual is a brief, but also comprehensive booklet to help you become a better Gamemaster for Laser Tag. It includes information on how to run the games, and tips on how to make it the most enjoyable that it can be. It is not a perfect document and may have errors, this is only the first copy.

Don't be overwhelmed, the equipment is easy to learn, and the games almost run themselves. But should you need any help, the answer is likely within these pages. You can also always contact the LaserInvasion member who helped you get this far, with any additional questions.

Thank you for your support with our business, we truly hope everyone has a blast using our equipment and makes some memories they won't forget soon.

Layne Henriksen

1B. General suggestions

A quick read of some important points recommended for a fun and balanced game. Most points are covered in more detail in the remaining sections.

- A fair game is always more enjoyable for everyone. Pick teams fairly, with age, ability, and experience in mind. Additionally important is picking the locations for each team's spawn, and the objective. Each team should be placed equal distances from the objective (if there is one) and both teams should have relatively equal terrain/cover to help them. Do not be afraid to move a team's spawn or an objective mid game to make the play fairer. Make sure players are made aware of changes made so they do not become confused when their objective or spawn is moved.

- The equipment is easy to use, but there is important information EVERYONE needs to know before they play. Ensure everyone who is playing listens to the briefing before each game, so they understand how their gun works, and how to play the objective. Try to limit players joining mid match as this can unbalance the teams and they may not be up to speed with the rules and how to operate their equipment.

- Establish a schedule. For example, play a round or two, and then have a break for water/snacks etc. Having a bunch of players coming and going mid round and before a new round will unbalance the teams, and cause confusion. Multiple players coming and going throughout a match will also require more time spent setting up equipment and getting players up to speed, which means less time can be spent refereeing the game or playing in it.

Summary: The game is most enjoyable when it is fair for all. The main job of the Gamemaster(s) is to ensure everyone has a fun and fair game. Make necessary changes on the fly to make the game fair. Ensure everyone who is going to play attends (and listens to) the briefing and plans to play the round through. The better everyone listens to the briefing, the smoother the game will go, and less problems will arise.

2. <u>Equipment / guns set-up</u>

Choose a location to set up the equipment that is equal distance between each teams' spawns if possible. This will allow you to monitor the game best and decreases the amount of time players spend returning to the base area between games. If a table is available, set up the equipment there. If not the ground works well too! Ensure the guns are placed in a clean spot so guns and headbands remain as clean as possible.

- <u>EQUIPMENT PAIRING:</u>

  - Use the barrel key to turn on the gun (It will announce team color)
  - Hold down the button on the headband to turn it on (It will beep)
  - It should take between 3-10 seconds for the gun and headband to pair (The headband will flash purple as it looks for the gun to pair to, it will begin to flash the gun's team color once it is paired)
  - Once the gun and headband are paired, put the headband around the gun and lay it on the ground. It is ready for action.
  - Move onto the next gun and headband.

- Some important things to note while pairing the guns. Pair the guns one at a time. Turning on multiple guns and headbands at once will cause confusion as to which gun is paired to which headband. Once they are paired keep them together. Set up enough guns for all the players, and if possible, a few extra just to have in case they are needed.

- Some information regarding the equipment: The headband connects to the gun via Bluetooth. For this reason, they must always remain within 10-15' of each other. If someone wants to switch guns, they MUST switch headbands too. The guns are relatively sturdy and can handle light rain. If it begins to pour, they must be removed from play and put underneath cover. We have used them without issue in temperatures as low as -15 Celsius. The battery life for the guns is approx. 6-8 hours of use.

- EQUIPMENT SET UP

  - Smart remote: Each Gamemaster needs a smart remote to run the game. A smart remote and barrel key should always be kept on person. The smart remote has menus and sub menus. It is used for respawning players, killing players, changing the team color of players, giving power ups, etc. Point remote at players headband and press "OK" to execute command.

    Navigate the menus with the up/down arrows, OK, and ESC buttons. Below are a list of the most common uses for the Smart remote.

    Team color > Red, Blue, Yellow, Green
    Healing > Full health, Respawn, Double health
    Stop the game > Game over (To kill player)
    Start a new game > Start game (Used for refilling medic remote and Smart kit box)
    Characters > Permanent > Classes (Use only if familiar with equipment)
    Characters > Within 1 game > Terminator (Gives player extra health, Power up)

  - First Aid Boxes: Turn on with barrel key. Pressing the button will revive any dead player(s) within range. Unlimited use. Use the First aid boxes for any game you want to have **unlimited respawns** for.

  - Smart Kit: Turn on with Barrel key. Use Smart remote, point remote at colored lights on front of box and press "Start a new game". This refills the box. Pressing and holding button (or flipping toggle switch) on the Smart kit will revive any dead player(s) within range. The Smart kit holds 10 revives. So it can be used 10 times before it becomes empty. It can be used to revive multiple people at once. There is a small light at the top of the front of the box, that display's which team it belongs to. If the light is red, only the red team can use it. A player can also reach the enemies Smart kit and destroy it. This is done by shooting directly at the lights on the box. Use the Smart kit for any game you want to have **limited respawns** for.

  - Ammo boxes: Turn on with barrel key. When a player who is still alive presses the button, it will refill their ammo. Unlimited use. Give each team one ammo box to keep near their spawn to refill ammunition.

- X-Towers: Turned on by flicking switch underneath the top of the tower. Used for game scenarios like Domination, Capture the flag and Outposts. Use the arrow buttons, OK and ESC buttons to navigate menu. The X-Tower will start on the game selection screen. Choose your game by pressing "OK", this will begin the round. Modify the settings of the game by pressing "ESC" while on the game selection screen, and then selecting "Scenario" and then the game you would like to modify. Here you are given options to change things like round time, team color, and impulse time (Respawn rate). Make desired changes and then press "ESC" to return to game selection screen.

  The X-Towers need to be started at the beginning of the round, this can be done by the Gamemaster by running between towers and pressing "OK" on the desired game when the round starts, or have a player stand next the tower and press it for you to help out. The only way that the players are to interact with the tower is by shooting into the target on the very top and center of the tower, which depending on the game chosen, will either capture the objective, or capture a flag. If the X-Tower is being used as a respawn point, a blue button (Shape of a thumb print) will glow. Pressing this blue button will respawn any players (On the appropriate team) whose headbands are above the tower and within range. At the end of the round the X-Tower will display the score, whether it be time the objective was held by each team, or the amount of flags deposited etc.

  It is recommended to familiarize yourself with the X-Tower before using it.

- Bomb: Open the case and turn on the bomb with the barrel key. Press "11111111111" then "*" to enter Admin menu on the bomb, which allows you to change the round time and the bomb code. Use the buttons to select and then input the code and/or round time, and press "*" to save the selection.

  The attacking players are given the code. When they reach the bomb site they enter the code and press "*" to arm the bomb. At this point the team attempting to disarm the bomb must, through trial and error, guess the code to disarm the bomb. Every incorrect digit guessed, will cause the bomb to beep and the digit to clear. Every correct digit entered will remain on screen. Once the entire code has been entered the bomb will automatically be defused and the round will end.

  It is also recommended you familiarize yourself with the bomb before use.

3. Game scenarios

With this equipment, the limit is the imagination. There are so many ways to play and things to try, so feel free to experiment or listen to suggestions from the players! Below is a list of games scenarios that are already established and fully supported with the equipment we have.

- Team Deathmatch: This is your classic, the bread and butter of shooting sports. Two teams face off where the only objective is to eliminate enemy players. Works well in every location. There are two ways to play, the simplest way is to use the First aid boxes as respawns for each team. This will allow for unlimited respawns and the game will go on forever in theory, so a time limit is needed. If you use the Smart Kit boxes as respawns for each team, each team will be limited in the amount of respawns they have. Eventually one team will run out of respawns, and the game will end when one team has been fully eliminated. The Smart Kit boxes can also be destroyed by shooting them directly, which means one team can work their way into the enemies' spawn and destroy it.

- Domination: Another classic, easy to understand and easy to set up. Use between 1-3 X-Towers and set them to "Capture point". Placement of the X-Towers is very important. They need to be an equal distance between each team's spawns, and need to be placed fairly, so that each team has a proper chance of capturing and holding them. To capture the point (X-Tower), a player needs to shoot it directly in the center from over top of the device. It will turn that team's color, meaning it has been captured. It can be captured back by the other team at any point, meaning a battle will ensue for control of that position. At the end of the round, the X-Towers will display how long each team held control of them. The team with the most minutes controlling each tower will win the round. Use the First Aid boxes as spawns for the team or use the Smart Kit boxes as spawns if you would like to limit the respawns of each team.

- Capture the flag: Using the X-Towers, set them to "Digital Flag". Each team must reach the other team's X-Tower (Flag) and shoot it directly in the center from above to capture a flag. At that point the lights on the X-Tower will disappear for ten seconds, before another flag can be taken. The player who took a flag, will not be able to shoot. Their headband will light up their team color (showing they have a flag), until they die (and lose the flag) or until they return to their X-Tower (Flag) and deposit the flag they are carrying. To deposit the flag, the player shoots the top of the X-Tower just the same

as they did to capture the flag. In summary, get to the enemies' tower, capture the flag, return to your tower and deposit it. Note: Taking a flag from the enemy team doesn't count for anything unless it is deposited back into your X-Tower. At the end of the round the X-Towers will display how many flags were deposited into it, the team with the most deposits wins!

The game is played two different ways. The first is by using the X-Towers as the teams respawn. In settings you can adjust the "Impulse" > "Impulse time" to change the respawn rate. You can make it, so each team must wait 20 seconds or even 2 minutes between respawns. By pressing the BLUE button on the X-Towers, it will send out 3 revive signals. Any player whose headband is above the tower (assuming it is their tower and not the enemies), will be revived. The Impulse countdown will then reset, and any dead players will have to wait for the timer to expire before they can revive again. The second way to play is by using the First Aid boxes or Smart Kit boxes as team spawns. If you play using these alternative spawns, it is important to play them a reasonable distance behind the X-Tower. Each team needs to be able to move in on the other team's X-Tower to capture a flag. If the enemy team's spawn is too close to the X-Tower, or if the respawn timer is too short, it will be impossible to reach the other team's X-Tower to capture a flag. For this reason, Capture the flag can be a very difficult scenario to play. If not set up correctly, it can end with a score of 0-0. The location, ability of the players, and experience of the Gamemaster should all be considered before choosing to play Capture the flag. IT IS NOT A GAME FOR EVERY SITUATION. Alternatively, you can play Capture the flag using a physical flag instead of the X-Towers, the original way!

- Hostage rescue / VIP escort: Both style games use the "Hostage/VIP headband". Turn on the Hostage headband, use the smart remote to "respawn" it. It will glow white. Whichever team the hostage/VIP is on, the headband needs to be set to that team. Do this by shooting the headband while it glows white. If you want the VIP to be on the blue team for example, have a blue player shoot it. It should turn blue and glow. Use the smart remote to double the health of the hostage/VIP if you see fit. When the hostage/VIP is killed, the headband will go back to white.

Let your imagination run wild. You can do a hostage rescue, where one team must reach a specific player, the hostage, and lead him to safety. The other team must hold position around the hostage and/or prevent his evacuation to safety. Alternatively, you can do a VIP situation. Where one team has a VIP or "President" that they have to escort to a

specific location. The other team can go and set up an ambush or use whatever strategy they see fit to try and kill the VIP. Use your imagination to set up any kind of scenario you like!

Not every location works well for this kind of game, for example if you are playing in a forest without clear and definite buildings/paths or land features, it may not be the best choice. However, if there is a road, or path, or building that is easy to follow/recognize, this can be a very fun scenario. You can play these matches with or without respawns. They are generally shorter games, which means you can do two rounds, giving each team a chance with the hostage or VIP.

- <u>Medics:</u> Simple, easy, fun. Turn on the medic remote by removing the cardboard on the battery (Behind the back cover, just like a TV remote). Make sure the medic remote is fully charged by using the Smart Remote (Start a new game> Start game) on the colored portion of the Medic remote. It will beep, flash colors, and eventually turn green. Each team will pick their medic. (The players shouldn't know who the other team's medic is). The medic will press and hold the button on the remote and point it at a dead teammate's headband to revive them. It is important to have a medic on each team who won't cheat by reviving themselves if they die. THE MEDIC IS THE ONLY PLAYER ON EITHER TEAM THAT DOES NOT RESPAWN. The medic for each team is the only way each team can respawn. So, when a medic dies, that team loses the ability to respawn, and will eventually be killed to the last man, losing the round. The goal is to kill the enemy medic without losing your own.

  A fun twist that is optional, is to play by the rules of "Dr. Dodgeball". When a player dies, they MUST remain where they are. Dead men can't walk. A teammate must move to them, grab their shirt (or just tap them), and lead them to their medic. Or the medic must move to the dead player and revive them where they lay.

  This is a great game for every location and group. It is easy to set up and easy to understand. But note if both medics play very defensively, it can turn into a very long round. Adding a second objective, such as a X-Tower set to "Capture point", can force there to be a winner if the round ends and both medics are still alive.

- <u>Bomb scenario:</u> Open the bomb case and turn it on with the barrel key, enter "111111111111111" then "*" (as many "1's" as the screen will let you. " * " is the " Enter " button on the bomb). Adjust the timer on the bomb (Should be between 3-10

minutes). Put in the desired code (Should be between 3-4 digits). The teams are separated into an attacking and a defending team. One or two locations are chosen as bomb sites. (Where the bomb must be brought and armed.) The bomb site(s) should be easily recognized, such as a building or vehicle. The attacking team is under a time limit to get the bomb into position at the bomb site, and then arm it. (Enter the chosen code and press " * " to arm the bomb. The countdown (bomb timer) will begin). At that point, the defending team is under pressure and must disarm the bomb before it detonates. They disarm the bomb by guessing the code. Every incorrect guess will cause the bomb to beep and will clear the wrong digit. Every correct digit will remain on the screen. Once all 3-4 correct digits are pressed, the bomb will automatically disarm. If the attacking team arms the bomb within the time limit (approx. 5-10 min), and then defends the bomb long enough for it to detonate, then they win. If the defending team prevents the attacking team from moving the bomb to the bomb site and arming it within the time limit, OR, if they defuse the armed bomb, they win.

There are important things to note with this. First, the defending team has a chance before the game to set up around the bomb site(s). The attacking team has to decide who will carry the bomb. If the bomb carrier dies, they leave the bomb where they died. The defending team can cover the bomb but can never pick it up or move it. ONLY the attacking team can move the bomb and ONLY when that player is alive. Once the bomb is armed at a bomb site, IT DOES NOT MOVE. The defending team must disarm it where it sits. And finally, ONLY a LIVING defending player can work to disarm the bomb. The Gamemaster must pay attention and make sure that a dead player isn't working on disarming the bomb.

This makes an awesome scenario, but it isn't for every location and is definitely not for every group. It requires everyone to understand fully how it works. Young children may struggle with this game. It also requires moderate attention from the referee, you must ensure there is no cheating, as well as have a timer set for the attacking team to arm the bomb. When a code is chosen, the Gamemaster tells the attacking team only what the code is. The defending team can be given a hint or even a digit of the code at the discretion of the Gamemaster. It is generally a short round. For example, if you give the attacking team 7 minutes to arm the bomb, and give the bomb a 5-minute timer, the round will last 12 minutes maximum, but usually less. Because it is a shorter round, play it twice, giving both teams an opportunity to attack and defend. Use a respawn box at your discretion, the game can be played with or without respawns.

- Outposts: Each team has a First Aid box for their respawn. 1-3 X-Towers are placed in the play area, equal distance from each team, and set to "Outpost". Each Outpost has health that slowly regenerates. Starting out neutral, the Outpost has to be shot several times in a short time period to destroy/capture it. Once an Outpost has been captured for your team, it operates as a timed respawn point for your team. Time can be adjusted in the settings of the X-Tower. This is Domination with a twist. It takes more time to capture the Outpost, but once it is captured, it allows for a tactical advantage for your team as a forward spawn. However, if the enemy team gets the upper hand, and destroys your outpost, it will become theirs. At the end of the round, the team with the most outposts/most time holding outposts will win.

  This is another easy game to play, like Domination. The one thing the Gamemaster has to be aware of is that the game can easily become lop sided if one team captures all the outposts and therefore has all the respawn points. At this point it is very difficult for the other team to capture anything and will end up pinned down near their spawn. A remedy for this is to give power ups such as Terminator or extra health to the disadvantaged team. (See Smart Remote for more information about how to do that).

- Last stand: A true test for the players who like to talk smack. The objective of this game is simple. The defending team has to survive till the end of the round. (5-15 minutes). The attacking team should outnumber the defending team by a factor of 2-1 or even 3-1. However, the defending team should be given a very well defensible location to mount a last stand. The attacking team must eliminate the defending team within the time limit. The attacking team has respawns. (Either unlimited respawns via the First Aid box, or limited respawns via the Smart Kit). The defending team only have themselves. If anyone on the defending team still remains in the defendable position by the end of the round, they win.

  Use your imagination. Give the defenders extra health if you want, or claymores to set up, or even make one of them a Medic remote and make them a medic! Location is important. This simply can't be played in a plain forest. It requires a properly defensible and clearly marked location.

- Zombies: The last suggestion in this manual. As the name suggests, this is zombies, and requires 1-4 zombie headbands depending on the number of players. Generally, 8-10 humans per zombie. Turn on the Zombie headbands and use the Smart remote to revive them. Once they are glowing green, use the Smart remote to give them extra health!

(Healing > Double Health). Give them LOT'S of extra health, there isn't too much. The humans are to be put all on one team. The zombies should start within 20-30' of the humans. Start the round and the Zombies will begin to chase the humans, their headbands emit a signal that will slowly infect the humans. Once a human is infected, their gun will tell them they are turning into a zombie, and for 30 seconds they cannot kill or be killed. At the end of the "transition", they will be a zombie with a gun. If they shoot and kill a human, that human will begin their transition into a zombie. Only the original zombies (Who start the match with the zombie headbands and no guns) have extra health. The match is played until everyone is either a human or a zombie. If the humans killed the original zombie(s), and whoever else became a zombie, the humans win. Alternatively, if everyone ends up a zombie, the zombies won. Because of the extra health, the original zombies will be tough to kill, but not impossible. When 20 people are shooting you at the same time you tend to die quick!

A few tips with zombies. It's generally a game for kids, as it involves a lot of running around and hiding, and less shooting. KEEP DISTANCE between the zombies and humans before the round begins. If the zombies are too close to the humans, they will begin to infect them before the round has even begun. It is fun to not give any warning before starting the round. By suddenly yelling "GO!", the humans will be caught off guard and will really panic and flee. It gives the zombie(s) (who you make aware beforehand that you will be suddenly starting the round without warning) a head start on the humans. It is best done as a last game, as it tires everyone out, and because it doesn't require much attention from the Gamemaster, it is a chance to begin packing up the gear. It is generally a very short round, lasting only 5-10 minutes, so it is easy to play multiple rounds.

Final points. It is important to survey the area and decide early on what games you want to try and play. If you start with team deathmatch (recommended), while they play, take a walk around and see which area you can place objectives. Learn the area and see what will work well and what won't. It is also important to let the players choose what they want to play! If all they want to do is play Team Deathmatch for two hours, who are we to stop them! We have found 30 minutes is a good round time for the longer matches (Domination, Outposts, Capture the flag), 15-20 minutes is a perfect middle ground for games like Medic, Hostage/VIP, or Bomb. In a two-hour session, you should be able to play 2 long games and 2 medium-length games.
Finally, use your imagination! Modify games and try out different pieces of equipment. There are many different ways to play.

4. Game set-up

- <u>Briefing:</u> Once you have set up your equipment and surveyed the play area, you will need to bring all the players together and brief them. The brief doesn't need to take a lot of time, but there are some important points that need to be covered. Make sure you have everyone's full attention while briefing them. Below is a list of things to cover during the brief.

  - Every player needs to understand that the gun and headband are Bluetooth connected, and must remain together at all times
  - Every player must be familiarized with the headband, how to put it on (Use Velcro band INSIDE the headband), how to wear it without cheating (covering it with a hoodie or wearing it around the neck etc.
  - Every player must be shown how to operate the gun, including turning on the red dot sight (if applicable) and shown how to reload the gun
  - Every player must be shown how the headband reacts to being shot, and how to use the respawn boxes (First aid or Smart kit) and any other equipment that is in use. (X-Towers or Bomb).
  - Every player must be told about boundaries or hazards that are in the play area. Examples could include barbed wire fences, hidden bodies of water like a marsh or creek, and even wasp nests or spots of poison ivy.

- <u>Team set up:</u> Once everyone has been briefed, separate them into two teams. You can either do this, or have the players choose their own teams. Make sure to do a head count of the players and ensure both teams are even based on skill level, age, experience and player count. Have each team take a mental note of who is on their team.

- <u>Gear up the players:</u> After the players have been briefed and split into teams, let them grab the gear and put on the headbands. Separate them back into teams and pick one team to be red and the other blue. Use the Smart remote to set each player to the correct team.

- IMPORTANT TIPS FOR STARTING A GAME:

  - Get the gear set up for all the players and the first match that you will play. THEN bring everyone over and brief them.
  - Make sure when they pick up the equipment that it is all dead. If they grab the guns and can shoot them, they will immediately do so and stop listening to you. This makes for chaos.
  - Have each team check out each other's headbands to ensure they are all on the correct team.
  - Find someone who you can trust and rely on, on each team. Use that person to bring the respawn (First aid box or X-Tower or Smart kit etc.) for their team to their spawn. Give them the responsibility to keep their team in position by their spawn until the start of the game. Having a person helping you on each team makes a world of difference as you can't be in multiple places at once.
  - Make sure everyone on each team starts next to their spawn. It is important they remain there till you start the round. Use your helper (or ask someone capable on that team) to make sure each team is in their starting position when the game starts.
  - Have a clear and concise way to start the game. Whether you use the air horn or just your yelling voice, there should be no confusion when the game is starting, and when it ends.

- IMPORTANT TIPS FOR ENDING THE GAME:

  - Announce the end of the game is coming before it happens, give the players a chance to wrap things up. For example, yell out to the players when there is 1 minute left.
  - End the game in a clear concise way. Use an air horn and/or yell "Game over!" multiple times.
  - Have an established area for the players to come after the game ends, usually the set-up area.
  - As the players trickle back from the field of play, use the remote to kill them. If they come back, and are still alive, they will shoot each other to bits. While they are doing this, it is nearly impossible to control them and talk to them.

- Once you have everyone's attention, give them the final score and tell them who won. Spend a minute or two and ask everyone what they thought and how everything went. See what can be done to make the next round better
- Introduce the next round, whether you choose the scenario or let them.

- At the end of the last round, have everyone drop off the gear on the ground with the headband and gun together, exactly as it was when they grabbed it. This makes the process of putting the gear away much easier.

Putting the gear away is as easy as turning everything off. But there are some important things to note. Turn off one headband and gun at a time. This way you don't accidently leave one of them on. MAKE SURE THE RED DOT SCOPES ARE TURNED OFF. The batteries don't last forever.

5. <u>Managing the game</u>

<u>Goal:</u> Your goal is to make sure the game is both fun and fair.

Be aware and involved. Patrol the field, keeping an eye on the objective(s). This is the best part of being the game master. Like a UN White helmet, you get to walk the battlefield and observe.

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People generally will tell you if there are fairness issues, such as someone cheating or if their team is being dominated and can't get out of their spawn area alive. If someone is cheating (most often by covering their headband or using the other team's equipment), find that person, and make it clear that their cheating will not be tolerated. Cheating is uncommon, and seldom persists after confronted. Make sure everyone is following boundary and property rules. Watch for any hazards.

If a team is being dominated, especially if it has been for a while, intervene in small quiet ways. For example, you can find players on the losing team and using the Smart remote give them power-ups or extra health. Or you can revive dead players closer to the objective.

" For a small moment, I become a god "

\- Layne Henriksen

Don't be afraid to move the objectives and/or spawn boxes around to help even the odds. It is important that the changes in position are subtle enough that players don't get confused or lost when trying to find them.

People will come to you with equipment malfunctions, and more common, user error causing equipment malfunctions. These will be covered in the second last section of this manual "Common problems". But 95% of these issues can be remedied with the barrel key and/or the Smart remote. That is why it is important to carry both at all times. In "Equipment set-up" it was suggested that extra guns were set-up at the beginning. When a problem isn't resolved easily, offer to swap them guns with one of the extra you set up. The issue can always be sorted out after the game.

Finally, as mentioned, you should be attentive to the game, what is working and what isn't. What game scenarios will work well and what don't. How to make the next round even better.

6. Common problems

- ### Gun/Headband problems

  - **Disconnection:** The most common issue, half of the time it is an equipment malfunction, and the other half of the time it is user error. If the player separated their gun and headband too far or for too long, it will disconnect. You will know a headband disconnected when it is beeping and flashing rapidly and/or the player cannot use their gun.

    REMEDY: Turn off and then back on both the headband and the gun. They should reconnect and the player can be put back into the game. If they don't pair back up, replace the player's gun and headband. Try to resolve the issue later.

    IMPORTANT NOTE: This problem is most common for the metal "Bullpup" style assault rifles, and the small metal sniper rifles. For whatever reason they will intermittently disconnect. It usually doesn't happen more than once in a 2 hour play period, so re pairing the gun and headband is usually the best solution.

  - **Wrong team color:** When someone is on the wrong team, it manifests in a couple different ways. They can't hit the enemy, and/or they can do damage to their own team. Also if they are not able to respawn with their team's respawn (Smart kit or X-Tower only), they may be on the wrong team.

    REMEDY: Kill the player. Their headband will show the team color. If they are on the wrong team, change it with the Smart remote and put them back in play. If they are on the correct team, investigate yourself if their gun isn't working properly. If it is in fact not working, replace the gun and headband with an extra and resolve the issue later.

- **No Ammunition:** Someone might come to you and claim they cannot shoot, or they cannot reload. Often they will think there is a problem with the gun. Usually they are just out of ammo, but it can also mean something broke inside the gun.

  REMEDY: Use the Smart remote to fill their ammunition and then have them try it. If it still doesn't work, look down the barrel of the gun and see if it lights up orange as they pull the trigger. If it does, but the gun doesn't make a sound, the speaker may have blown. Check this by turning the gun off and one again. If it makes no sound when turned on, likely the speaker is blown. Replace the weapon and get the player back in action, then set the gun aside for repair.

- **Not able to respawn:** This is usually player error. The player will claim they didn't come back to life when they should've. Sometimes the brim of a ball cap or something else will obstruct the path of the laser that should reach their headband and revive them. If they have a hat on or something similar, as them to take the headband off and hold it over whatever equipment they are using to respawn.

  REMEDY: Respawn the player with the Smart remote. If it does not work, turn both the gun and headband off and then on again. Once it re pairs, try again to revive them. If it still doesn't work, replace both the gun and headband with an extra. If it did work the first time and they did respawn with the remote, send them to spawn to try it again (They will have to be killed first).

- <u>Equipment problems:</u>

  - <u>First aid boxes:</u> There are no common problems with these boxes. Fool proof! If one isn't working to revive players, ensure it is turned on, and if it still isn't working, replace it.

  - <u>Smart Kit:</u> The only problem we see with these boxes pertain only to the boxes with the toggle switch. If the toggle switch is left on, it will continue to use the revives in the box, and the box will shortly be empty. Use the Smart remote to refill the Smart Kit by pressing "Start a new game" and point the remote at the colored lights on the box.

    IMPORTANT: Whichever team has a Smart kit with a toggle switch MUST be made aware of this fault. They must be told to toggle the switch back off after use. Failure to listen to this can ruin a game and it will have to be restarted.

  - <u>X-Towers:</u> The most common problems with the X-Towers are user error or player error. That is why it is important for the game master to familiarize themselves with the different functions and settings of the X-Tower.

    The X-Tower will only revive players on the team it is associated with. Red team's X-Tower will not revive a blue player.

    Another issue we have seen with the X-Towers is that they will not revive a player that hasn't already been in play. For example, if you set up the guns, and start the game with a round of Capture the flag. The players will not be able to spawn on the X-Tower unless they have already respawned once before.

    If a player presses any buttons on the X-Tower (Except the big blue thumbprint button), it may stop the game on the X-Tower. It cannot be resumed and must be restarted at that point. Any score up to that point will be lost. It is very important players are made aware that you are the only one to touch buttons on the X-Tower.

While playing Capture the flag, someone might capture a flag (Lights on the X-Tower disappear), but that player's headband doesn't light up and they can still shoot. This is caused when their gun properly shot the tower to grab a flag, but the tower wasn't able to communicate that to the player's headband. This can once again be a ball cap obstructing the laser from reaching the headband, or it can mean that the player captured the flag in a position where they weren't in range of the X-Towers laser. (For example if they were crouched low next to the tower.) There is no remedy for this, only prevention. Make sure the players know that their headband needs to be directly above the tower when they capture a flag.

- <u>Bomb, Medic remotes, Zombie and VIP/Hostage headbands</u>
  There are no common problems with these pieces of equipment. Most errors will be player or user errors. As long as they are used properly, they have only ever worked

7. Additional weapon/equipment information

- ## Additional equipment information:

    - Headbands – Turn on by holding button, flashes purple (Pairing). Once it flashes either blue or red it has paired to a gun.
        - Flashing purple – Pairing
        - Flashing blue or red – (Dead) Color denotes team color
        - Not flashing at all – Either turned off, or that player is alive
        - Lights up blue or red once – That player was just shot
        - Beeping and/or flashing rapidly – Disconnected from gun

      Battery life approx. 6 hours

    - First aid box – Unlimited use. Will revive any player. Turn on with barrel key.
      Battery life approx. 10 hours

    - Smart kit – Limited use (10 respawn uses). Can revive multiple people at once. Will only revive players on one team if light is on (Red team only if red light is on). Turn on with barrel key, uses Smart remote ("Start a new game") to refill. Can be shot and destroyed by shooting at lights on front.
      Battery life approx. 10 hours

    - X-Towers – Multipurpose. Can be used as respawn point and/or objective. Turn on with switch underneath top base. All settings can be changed.
      Battery life approx. 3 hours

    - Medic remote – 100 respawns. Will revive any player. Will only revive, not heal players. Always turned on. Refill respawns with Smart remote. (Point at remote and press "Start a new game")
      Battery life unknown

    - Zombie headbands – Starts with 100 health points. Infects human's headbands within approx. 10' (Depending on lighting).

Battery life approx. 6 hours

- Bomb – Turn on with barrel key. Enter "111111111111" then "*" to enter admin mode and change settings like the bomb timer or the arming/disarming code.
Battery life approx. 6 hours

- Claymores – Turn on with switch underneath. Set still to arm. Trigger radius is approximately 3'. Explosion radius is approximately 10'. Does not discriminate, will kill any player. Re usable
Battery life approx. 12 hours

- VIP/Hostage headband – Turn on by holding button. Flashes white. Does not pair to a gun. Respawn player. Have the Hostage's/VIP's teammate shoot the headband once to mark it on that players team.
Battery life approx. 6 hours

- Additional weapon information:

All guns pair the same way, turn on the headband, turn on the gun, wait for the headband to begin flashing the color that the gun called out when it was turned on.

Turn on red dot scopes by turning the large dial on the top. "5" is the brightest setting

All players start with 100 HP

Battery life for all guns is approximately 6-8 hours

- Assault rifles – Turn on with barrel key. Reload with button on left side of gun. (Some assault rifles have an alternate mechanical reload located on the rear or the right side of the gun). Fully automatic fire.
  - Damage: 25 HP (Base, Trooper settings)
  - Damage: 35 HP (Hardcore, Hardcore assault rifle settings)
  - Ammo: 30 rounds per magazine, 30 magazines
  - Range: Approx. 150m

- Submachine guns – Turn on with barrel key. Reload with button on left side of gun. Fully automatic fire
    - Damage: 25 HP (Base, Trooper settings)
    - Damage: 25 HP (Hardcore, Hardcore submachine gun settings)
    - Ammo: 30 rounds per magazine, 30 magazines
    - Range: Approx. 150m

- Handguns – Turn on with switch underneath base. Reload by pulling back on slide. Semi-automatic fire.
    - Damage: 35 HP (Base, Medic settings)
    - Damage: 35 HP (Hardcore, Hardcore Medic settings)
    - Ammo: 12 shots per magazine, 30 magazines
    - Range : Approx. 50m

- Sniper rifles – Turn on with barrel key. Reload on with button on left side of gun. Semi-automatic fire.
    - Damage: 50 HP (Base, Sniper settings)
    - Damage: 75HP (Hardcore, Hardcore sniper settings)
    - Ammo: 10 shots per magazine, 30 magazines
    - Range: Approx. 200m

- Character (Weapon settings)(Smart remote : Character > Permanent)
    - Base
        - Trooper (Use with assault rifles and sub machine guns)
        - Medic (Use with handguns)
        - Sniper (Use with sniper rifles)

    - Hardcore mode
        - Custom #9 (Hardcore assault rifle)
        - Custom #10 (Hardcore sniper rifle)
        - Custom #11 (Hardcore sub machine gun)
        - Custom #13 (Hardcore pistol/medic)

Hardcore mode was developed for an older, more experience player group. It makes changes such as including friendly fire, faster time to kill, and bleed out. It is still being tweaked, but feel free to try it out for a more real experience!