



Laser Tag and Theme Parks

Laser Tag on Steroids!



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Must-haves for theme park success

It is critical in the planning stages to factor in the following for a Laser Tag attraction in a Theme Park. Without these vital elements, the Laser Tag feature will fail to reach its potential, becoming one of the drawcards to your Theme Park.



Theming

Extensive arena theming is utilized in Theme Park Laser Tags to differentiate the attraction from the local Laser Tag business. There are two approaches:

Non-Licensed Theming

Generic, non-licensed theming can be integrated into the arena design and layout to create an “other world” experience. These experiences may include Wild West, Egyptian, Pirate, Science Fiction, Jungle, Urban, Knights, Ocean and more.

Licensed Theming

For operators with grand ambitions, an attraction that has been themed with a well-known studio brand gains tremendous kudos with customers. There is the obvious benefit of immediate recognition of characters and environment, as well as the promise of a familiar story line that your guests can participate in.

Depending on the theme parks operational model, the income generated by a licensed theme can often out-weigh the licensing fees.

To support theming consider tailoring the following:

- Sounds and messages on weapons
- Messages throughout the game over the main sound system
- Arena music
- Decals on equipment
- Styles of weapons available to players

Above all, you need to theme your gameplay structure and mission goals, expanded on overleaf.

Storyboard game design

Inviting thirty guests into a well themed environment does not make for a world class Theme Park attraction. Visitors to a Theme Park Laser Tag attraction expect to be immersed in another world, enveloped in an unforgettable adventure. You need to offer them a rescue mission, an opportunity to save the planet or to escape from the bad guys. The story should match your theme, be it adventure, science fiction or haunted house.

It is the “story” that will make the Laser Tag attraction a talking point and differentiate it from the Laser Tag Center down the road at the local Family Entertainment Center.



Storyboard Game Design:

A Theme Park requires Laser Tag software that offers more than just the standard ‘shoot and tag’ style games. The software should allow gameplay to be created, complete with beginning, middle and end.

Events such as voice messages, lighting effects and power-ups should be able to be woven into the timeline. The designer should be able to vary the game intensity and take the visitor on a journey through the attraction.

Professional Support

Your Laser Tag supplier should be able to work with you and/or your designer to create a suitable “story” that matches your theme and offers your visitors depth and engagement.

Designing a laser tag game theme is an exciting part of the process. However, having a knowledgeable experienced professional is imperative in the execution of game design.

Sample Game Storyboard

Phasers Activated  0.00	Haze Machine On  0.01	Music Starts  0.02	Base Stations On  0.03	Strobe lights On  4.00
Dispense Rapid Fire  4.30	Activate Energy Gates  4.50	Target 2 Activated  5.10	Start Countdown  8.30	Phasers Deactivated  10.00

Fast throughput

Offering visitors an unforgettable journey is only part of the solution for a Theme Park Laser Tag attraction. For Theme Park operators, customer throughput is the number one consideration when determining an attraction's viability.

Historically, Laser Tag systems simply could not provide the throughput required by Theme Parks. However, recent technological advances have transformed the speed and efficiency with which visitors to Laser Tag attractions can be processed. **Dreamworld** in Australia, **Six Flags** in Mexico and **Ocean Park** in Hong Kong introduced Laser Tag to the theme park sector in conjunction with Delta Strike. All attractions were resoundingly successful.

These are the requirements to ensure fast throughput for your Theme Park Laser Tag installation:

Automation:

at the push of a button, a Laser Tag system needs to:

- Start the Laser Tag vests
- Start the music
- Activate the arena lighting
- Operate haze machines
- Create game events during the game
- Stop the game
- Stop the arena music
- Announce the game is over
- Print score sheets
- Display the score on the score screen



- **Easy to handle and lightweight vests:** not only should they look impressive, but they should also be easy to put on and take off, and lightweight enough for younger children to wear.
- **Auto color select:** team colors should be automatically allocated at the push of a button, greatly decreasing the time to sort groups into teams.
- **Game start and stop:** ensure that vests are activated and de-activated using Radio-Frequency (RF) rather than Infrared. Infrared systems can only activate one vest at a time, rather than all simultaneously.
- **Fast score download:** your system will need to upload scores wirelessly (RF) so that, by the time the players have taken off their vests, their score sheets are already being printed.
- **Use events to direct the visitors:** event-based software is a must-have, automatically broadcasting announcements over the sound system such as count-downs to the end of the game. This will migrate visitors towards the vesting room, encouraging quicker game turnarounds.

Interactive arena components

Theme parks need to be different. They need to be Laser Tag on steroids. Arena components can provide that difference.

Picture this: the teams are briefed on their mission – to destroy ‘Totem-King’, whilst defending themselves against other hostiles in the area (the other teams). The game begins. Three minutes later the lights start flashing, the music lowers to a quiet heartbeat. The message “Defend yourself. King-Totem’s gaze is dangerous” is announced over the sound system. Suddenly the Totem prop lights up, starts to make tribal chanting sounds and sends laser lights into the haze. Any players in the vicinity are tagged.



Players then proceed to try to tag the Totem King. The team that tags the King the most will earn points. In fact, the Totem will be lit with their team color. At the same time players can still tag each other. The game concludes and the teams score points not only for tagging other teams but also for completing the mission to destroy the Totem King.

This “story” is simple but effective and achieved by intelligent game control software that will run DMX lighting, animatronics, haze machines, lasers, relays and more. The game control software should allow you to program events to occur when and how you desire. Your arena becomes your story aided by interactive arena components and lighting. Some examples of how they can be used are detailed below.

Types of Arena Components

Interactive Prop Kits

A Prop Interactivity Kit will bring your prop to life. Theme Parks often use props such as rockets, generators, UFOs, dragons or similar. Interactivity kits can control lighting, animatronics, lasers, relays and more.



Energy Gates

Perfect for implementing a dynamically changing doorway e.g. if the spotlights are green, then only green team members may pass through this gateway, other team colors will be tagged.



Types of Arena Components Ctd.



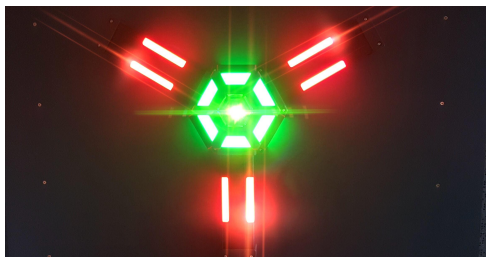
Targets

Targets can be used to activate third-party props in your arena, as well as set off audio and voice messages, and power other lighting devices.



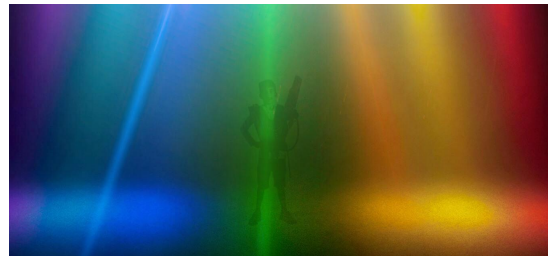
Laser Shooters

When the laser beam sounds a warning, players know the turret is about to tag them. With certain games, players can also fire back to disable the laser turret.



Base Stations

Players can tag the base station and capture it. It will change to their team color and can earn points for the team. Some special bases can even fire back at players.



Spotlights

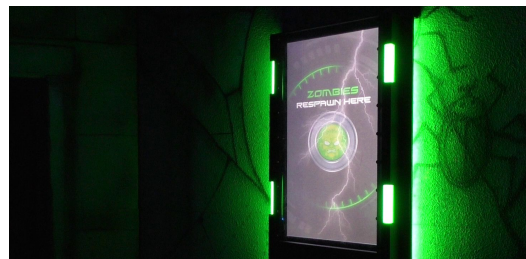
Spotlights are used to project colored light and can be used to light up walls, props and other features in the arena. They can flash, dissolve, dim and strobe between colors, all depending on what is happening in the story. These can be used in combination with a haze machine for optimal visibility.



Video Base Stations

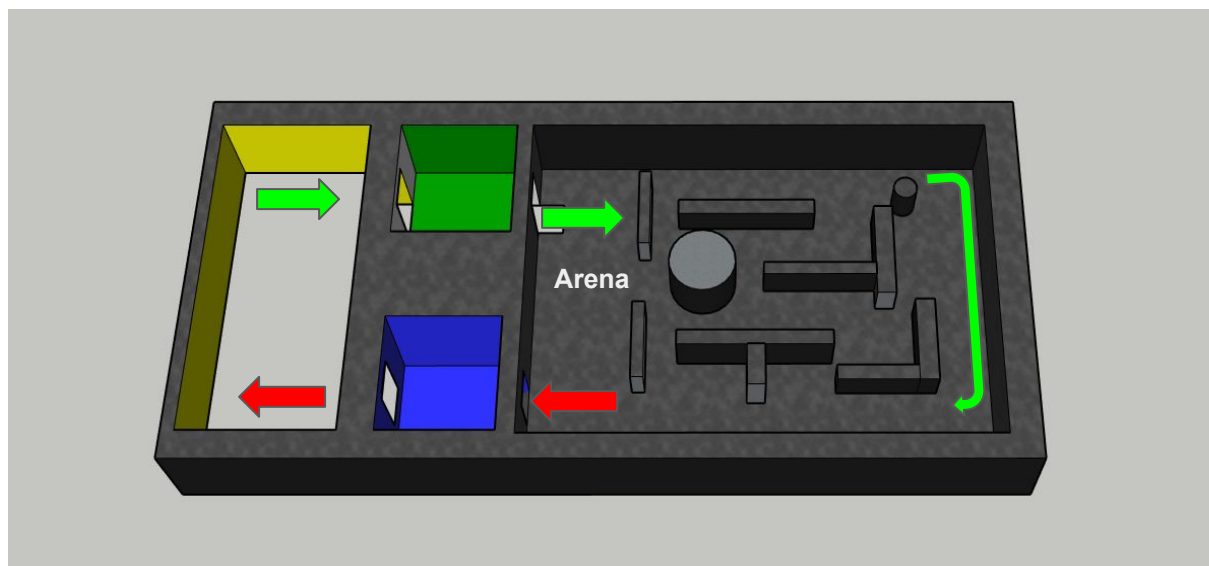
Video Base Stations are the latest in arena components, introduced to the Laser Tag industry by Delta Strike. They provide onscreen guidance with voiceover, to explain each arena component as encountered. Since it is a video image, it can potentially be used as any of the following:

- Ammunition or Power-Up dispenser
- Weapons dispenser
- It can be a base station or a goal
- Players can pick up collectables
- In-game hints



Theme Park Design Concepts

There are several design concepts that Delta Strike has worked on in conjunction with Theme Parks. Each of them has its' pro's and con's. Game design seems to be one of the most important factors here. See the following digrams for examples.



Standard Laser Tag Model (120 people/hour)

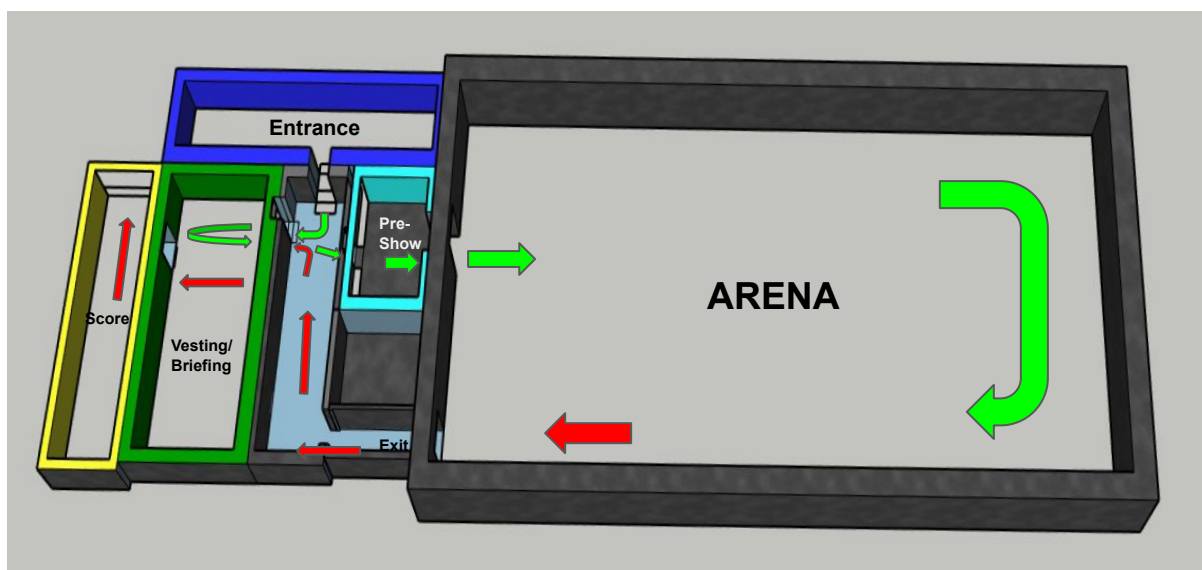
The Standard Laser Tag format is utilized within Family Entertainment Centers and Stand Alone Centers worldwide. The standard format has not been as successful for permanent attractions within Theme Parks. This is due to low throughput capabilities and no point of difference from local Laser Tag businesses. However, it does have a low set up cost. If this is the only option for your Theme Park Laser Tag, consider the following:

- Making the attraction a short-term attraction – this assumes the attraction will be a lot more popular when first installed due to its novelty element. In this case arenas are often made of non-permanent materials.
- Improving throughput with a double set of phaser/vests.
- Utilizing Interactive Arena Components to “amp” up the interactive experience.
- Using event-based game play programming to create games based on the main theme.

Theme Park Model: 300 people/hour

With the Theme Park Model, four or five groups are processed at a time. Each group is assigned a specific actor who manages and entertains these groups as they go from room to room (briefing, vesting and arena rooms).

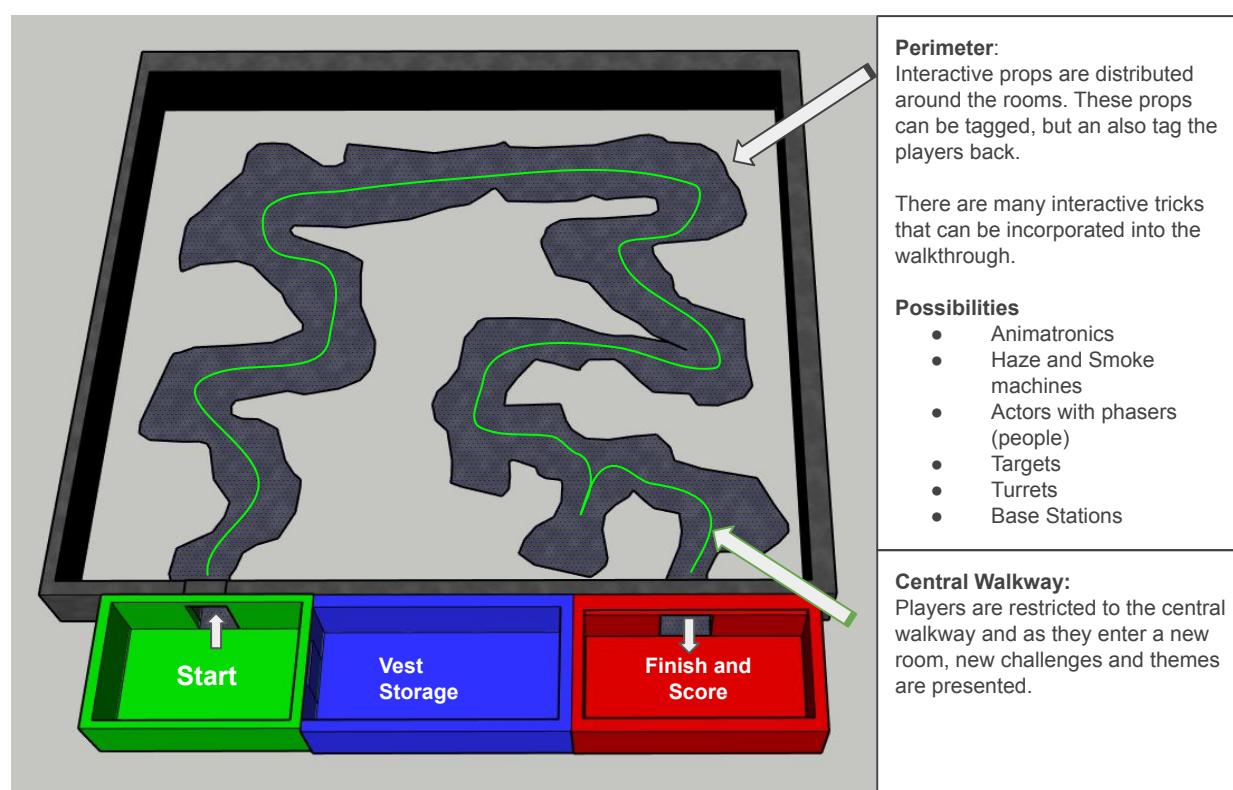
This model has the bonus of extending the entertainment experience from the arena to the briefing and vesting rooms and therefore significantly increasing player throughput and perceived entertainment experience. This will help establish the Laser Tag attraction as a key feature of your Theme Park.



Target shoot- dark ride or walk through people/hour:800

This concept utilizes many highly themed and interactive rooms that players can tag as they go from room to room. As players enter a new room, they are presented with different targets that they can tag to gain points. Rooms can contain many items such as props, animatronics and targets. As these items are tagged they can respond with movement, voice, lighting, sound, haze, video etc. to indicate a hit. The items in the rooms can also be programmed to tag players as they walk through. Often actors with phaser guns are also employed within rooms to add a surprise element to the experience.

This concept offers very high throughput and a unique entertainment experience. However, there are higher equipment and building costs.



Our global network of Delta Strike consultants is available to advise on design concepts and assist anyone considering establishing a Theme Park Laser Tag Center.

Please visit our website www.deltastrike.com to contact your local consultant.

If you have any questions on how to set up your laser tag business, you can call us direct - simply go to the **contacts** page on our website, www.deltastrike.com and call the sales representative closest to you.

We hope this paper has been helpful and informative. There are many other white papers that can be downloaded free of charge from **Downloads** section of our website.



All the Best,

Doug Willems

CEO

Delta Strike

A handwritten signature in black ink, appearing to read 'Doug Willems'. The signature is stylized and cursive, written on a light-colored background.