The Crystallite LaserTag Pack

Maintaining all the functions of the very successful Crystal Phaser, the Crystallite offers a new and improved level of functionality, coupled with extremely low weight and aesthetic appeal. Key features of the Crystallite Phaser and Vest are:

- The lightest lasertag pack on the market
- Slimline vest plastics
- Enhanced LED vest displays
- Easy-fit vest
- Ultra-low battery consumption
- Multiple sensors (11 in total)
- Grenade function

The Crystallite Pack

Consists of a phaser and vest connected by a flexible umbilical. An LCD display on the phaser, plus LED arrays on chest, back and shoulder* modules ensure that all players can see who has hit who, what their score is, and everything else that they need to know.

* no shoulder modules on basic system

One Size Fits All

The easy-grip phaser and fully-adjustable vest make the Crystallite pack suitable for use by all ages from adults down to six years.

Real Time Scoring

Scoring is in real time, using a UHF radio loop system with approvals for all countries. You do not have to wait for players to pass IR ‘checkpoints’. A 24 pack system is polled every six seconds. The system will handle up to 80 packs.

Remote Score Display

Scores can be displayed separately from the main control program by using a second monitor or TV. Scores are also available on the Results tab of the control program, Atrium Plus.
Background Music

You can automatically play different music tracks at game start and stop and during games, also between games. You can also create playlists of tracks to suit different types of player, so that customers can express a preference for the music to be played during their game. Editing of tracks is simple and comprehensive.

Scoreforms

You can set the system to print a full set of scoreforms, or just one, automatically or manually, at the end of each game. You can use pre-printed scoreforms, personalised to your site, or let AtriumPlus print the whole scoreform.

The Phaser

The Crystallite Phaser uses a two part shell, consisting of a transparent, slightly UV responsive upper shell made of high impact PETG, and a black ABS lower shell, joined by a buffer strip. The clear PETG top shell allows the ‘works’ can be seen and contributes to the style of the product. This in itself is a testament to our pride in the product – how many other manufacturers would like you to see how their phasers are built?!

The ABS lower shell houses the battery, front and rear triggers, and a grenade button. The electronics uses a switched-mode power supply for optimum battery life, and Surface Mount Technology for light weight and the highest possible electronic integrity.

The rear of the phaser is fitted with an LCD display which illuminates during gameplay. This shows the player’s name or their alias, shots, lives and other information such as remaining lives, unexpired game time and so on.

Phaser operation is easy. There are four triggers; a rear trigger, two front triggers (for easy left-handed operation) and a grenade trigger. Players can fire single shots or bursts. The maximum length of a burst can be set at the main control PC, as can many other features.

Players can also fire grenades by holding down the grenade trigger with one of the other triggers. All features like this (and many, many more) can easily be set globally at the PC.
**The Vest**

The vest is constructed using lightweight polypropylene webbing, affording easy head access and adjustability for all ages.

Unlike many other lasertag products, the vest is designed to keep the wearer as cool as possible and to minimise perspiration.

The slim stylish vest housings gently glow in the dark, under UV lighting.

The chest and back modules contain a twelve LED display and the shoulder sensors a four LED display. All packs can adopt either a red or green team identity. The enhanced LED displays vary in pattern according to the current condition of the phaser, ie active, red or green, hit etc.

The phaser is attached to the vest by a data cable which is protected by a narrow webbing belt. A wriststrap helps the player retain his/her grip on the phaser even during the most energetic of games.

Each module on the vest has dual wide-angle IR sensors ensuring that hits are picked up from all angles.

As well as adjustable waist straps, with quick-release buckles, there is a restraint strap at the back to cater for the smallest shoulder sizes.

The Crystallite pack is the culmination of eighteen years experience in the world of lasertag.

LaserVenture are possibly the only company today that manufactures all the parts of its products, right from the printed circuit boards to the mouldings. This enables us to carefully monitor product quality and also keep prices to the lowest possible levels.

All software and firmware is also written ‘in-house’ – we have total control over our products.
Atrium Plus

Atrium Plus is the control program for the Crystallite system. It will operate up to 80 phasers and 16 Radio-Link Intelligent Targets. You may have up to six separate games being booked in at any one time, plus a game playing in the arena, and a finished game having scoreforms printed.

Full handicapping or ‘as simple as possible’ – Atrium Plus gives you the choice, plus you can import csv game files from external sources if you wish.

Individual Player Booking

Use this option to book in players individually, assigning different handicaps, aliases and so on, to each player. One of ten handicaps can be assigned at the click of a button.

Select a Gameplan – Team, Solo, Highlander, Dracula, Samurai, Tug Of War.....

If you turn on Quick Enter then you can still assign individual handicaps while entering players very quickly.

Players can be entered in any order and existing entries can be edited and/or deleted.

Games on booking tabs can be started in any sequence.
FastTrack Operation

Use the FASTRACK option if you want the simplest operating lasertag system in the world. Just ONE button press starts the game and the music. At the end of the game the phasers will be turned off, the game stopped and scoreforms printed (if you wish).

Whichever your choice of operating mode you will find that Atrium Plus offers all you need to get the best out of your lasertag system.

You can use as much or as little of the provided facilities and, unlike many systems, you are supported by a comprehensive help file.
Set Up

Using the comprehensive set up utility you can:

- Edit Music Files...

Create your own playlists.......

[Game Setup - Atrium Game Parameters window]

- MP3 Files: Select Track
  - Background: C:\AtriumPlus\MP3Files\04 - Fight in the Dungeon.mp3
  - Game Start: C:\AtriumPlus\MP3Files\02 - Main Title - Approaching the Death Star.mp3
  - Game End: C:\AtriumPlus\MP3Files\11 - Into the Trap.mp3

- Play Game Start Track for 10 Seconds
- Play Game End Track for 10 Seconds

[Game Setup - Atrium Game Parameters window]

- Edit Existing List
- Delete Current List
- Browse Files
- Delete Entry
- Clear All
- Save Playlist

[File paths]:
- C:\AtriumPlus\MP3Files\03 - Han Solo Returns.mp3
- C:\AtriumPlus\MP3Files\04 - Fight in the Dungeon.mp3
- C:\AtriumPlus\MP3Files\05 - The Return of the Jedi.mp3
Set your own Handicaps.....

And much, much more, including but not limited to:

- Password access to Set Up
- Editing of Aliases and Scoreform Player Rank messages
- Results File generation
- Management Data generation
- Display of current and finished Game Results
- On board In Circuit Programmer for phaser firmware upgrading

**Installation**

Installation is extremely simple. Here are the steps:

- Fix the vest hangers to the vesting room wall (2 screws per pack)
- Fix the chargers into place and plug into the mains supply
- Hang the vests on the hangers, plug in the charging leads and leave to charge
- Mount the arena transceiver in the centre of the arena and run the supplied Cat5 cable back to the control PC
- Plug the Cat5 cable into the Interface supplied
- Plug the Interface lead into the PC and connect to a mains supply
- Power up the PC and the system is ready to operate.
Intelligent Targets

Intelligent Targets (Its) are an optional extra for your LaserVenture lasertag system. They can be supplied with a radio link to the system, or as a lower cost stand-alone version.

ITs perform a variety of functions. They can be used as:

- **Home Base (Radio Link version only)** - the IT will require the players to perform a variety of solo and team tasks, such as ‘Capture The Flag’
- **Recharge Stations** – If you do not have Auto-Recharge switched on in AtriumPlus, then players who are ‘killed’ will go to a Recharge Station to replenish shots and lives
- **Wildcard Grenades** – cost a hit player one life
- **Timebombs** – Players who stay in the vicinity too long after the audio and visual warnings risk being ‘killed’
- **Fatal Mines** – ‘kill’ without any time delay
- **Lives Top Up** – two choices of value of top up when a player hits the IT
- **Shots Top Up** – three choices of value of top up when a player hits the IT

ITs will enhance your lasertag system, however they are not necessary to its correct operation. LaserVenture recommend approximately one IT per 4 - 6 packs. For instance, a 24 pack system might have between 4 and 6 ITs.

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