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# **WARNING**

READ AND FOLLOW ALL  
INSTRUCTIONS CAREFULLY  
BEFORE OPERATING THE LASER  
PROJECTION SYSTEM

Use of controls or  
adjustments of  
performance or  
procedures  
other than those specified herein  
may cause hazardous radiation exposure.  
21 CFR 1040.10(h) (iv) CD



## Introduction

Congratulations on your purchase of the PartyBlaster' or ClubCat! Laser Projection System. Your new laser is a full-scale laser light projection system harnessed into a compact, air-cooled, low maintenance unit. Easy to use, the system sets up in approximately 30 minutes and can be mounted to a standard lighting truss.

The CDRH-certified system plugs into any standard household outlet with supplied adapter. Technological Artisans, LLC. has manufactured your laser projection system to bring you years of use. Similarly, your owner's guide has been designed with easy-to-follow explanations and directions. Please read all of the instructions regarding your PartyBlaster or ClubCat! Laser Projection System and retain this manual for future reference.

Thank you for selecting PartyBlaster! Or ClubCat

- |                                                       |                                    |
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| 2. Unpacking The Laser Projection System              | 7. <u>Technical Specifications</u> |
| 3. <u>Getting To Know The Laser Projection System</u> | 8. <u>Labeling Requirements</u>    |
| 4. <u>Mounting The Laser Projection System</u>        | 9. <u>Warranty</u>                 |
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## 1. Safety Considerations

**PLEASE READ ALL INSTRUCTIONS CAREFULLY REGARDING THE SET-UP AND USE OF YOUR PARTYBLASTER OR CLUBCAT LASER PROJECTION SYSTEM.**

Avoid direct  
eye  
exposure to  
laser beam.



**FOLLOW ALL WARNINGS AND INSTRUCTIONS.**

### Follow Instructions

All set-up and operating instructions should be followed carefully for safe operation of your laser system.

#### 1. Power Source

This projection system should be operated only from the type of power source indicated on the power supply of the laser. If you are not sure of the power at your location, consult an electrician or your local power company.

#### 2. Grounding And Polarization

This system is equipped with a polarized alternating-current line plug. This plug will fit into the power outlet only one way. This is a safety feature. Never bypass any grounding connections on the unit—electric shock may result.

#### 3. Overload of circuits

Do not overload wall outlets and extension cords as this may result in a risk of fire or electrical shock

#### 4. Object and liquid Entry

5. Never push objects through openings on the projection system as they may touch dangerous voltage points or short-out parts that could result in a fire or electrical shock. Do not spill liquids of any kind on or into the projection system.

#### 6. Servicing

Do not attempt to service this projection system yourself as opening or removing covers may expose you to dangerous voltage or laser radiation and voids warranty. Refer all servicing to PartyBlaster! or PartyBlaster! or ClubCat! qualified technician

7.

#### Damage Requiring Service

Unplug the projection system from the outlet and refer servicing to PartyBlaster' or ClubCat! qualified service personnel under the following conditions:

- \* When the power-supply cord or plug is damaged.
- \* If liquid has been spilled or objects have fallen into the projection system.
- \* If the projection system has been exposed to rain or water.
- \* If the projection system does not operate normally by following the operations instructions. Adjust only those controls that are covered in the operating instructions. An improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the system to its normal operation.
- \* If the projection system has been dropped or the housing has been damaged.
- \* When the projection system exhibits a distinct change in performance. This indicates a need for service.

# PartyBlaster HP & ClubCat HP Class IV Laser Operations Manual (2.0)

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## 8. *Power-cord Protection*

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon them or against them, paying particular attention to cords at outlets, convenience receptacles, and the point where they exit the projection system.

## 9. *Scanners*

Do not alter the scanner modules in any way. Do not insert any diffraction unit that is not recommended by PartyBlaster! or ClubCat! into the beam aperture path.

## 10 Placement Of The Unit

Place the unit in an area of the ceiling where the temperature does not exceed 84 degrees F. Temperatures above this have been found to cause the lasers performance to degrade. Install the unit as instructed on a lighting truss capable of handling the additional weight of the projection system, or use the mounting yoke to install the unit on a support beam. Make sure the unit and all accessories are securely fastened so the system does not fall causing injury.

## 11 Ventilation

Fans, Slots and openings in the unit housing are provided for ventilation to protect it from overheating and to ensure reliable operation of the projector system. To ensure longevity of the projection system, these openings must not be blocked or covered.

## 12 Laser Precautions

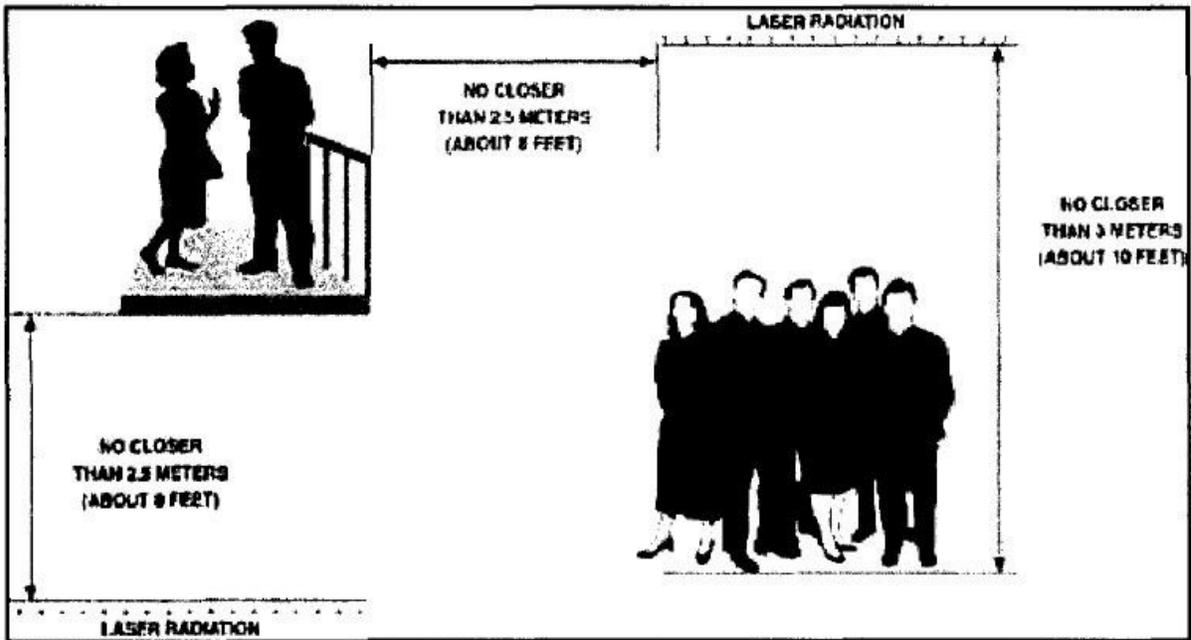
If exposed, the lasers short wavelength poses **EXTREME HAZARDS**, even at great distances:

- **Never** expose eyes by looking directly into the laser beam.
- Never use eyes to align or orient the beam by looking into its source.
- **Avoid** exposure to direct or collateral radiation from the laser.
- Make sure that **ALL** warning labels are in place and easily seen.

## Laser Safety

here are several regulations that must be followed when using a laser projection system. Under FDA regulations, any laser system emitting above 1mW (such as this one) must be no closer than 3 meters (about 10 feet) above or 2.5 meters ( about 8 feet) on the sides or below the floor ( such as through a catwalk or grated dance floor) where an audience would be, and must be under continuous control by a qualified operator. If the system is not under continuous control, double these safety guidelines to comply with FDA standards. Exercise common sense. If you consider the laser beams to be somewhat like a firearm (the bullet synonymous with the laser beam path ), then it should not be difficult to eliminate the chance of accidental human exposure to laser radiation.

Always have an operator present to monitor the safety of the laser projection system. In the unlikely event of a bounce mirror slipping, or a stray beam projecting into an area where human exposure may occur, the operator must immediately shut down the system and correct the problem before continuing with the operation of the laser projection system. Extreme caution must be taken to insure that proper safety procedures are used by the operator during set-up and while the laser projection system is in use. Insure that all beams are terminated in a safe location, and avoid physical contact with the laser beams.



## 2. Unpacking The Laser Projection System

As you unpack your new laser projection system make sure that all parts are included and are not damaged. (See packing slip for list of shipped items)

A few suggestions:

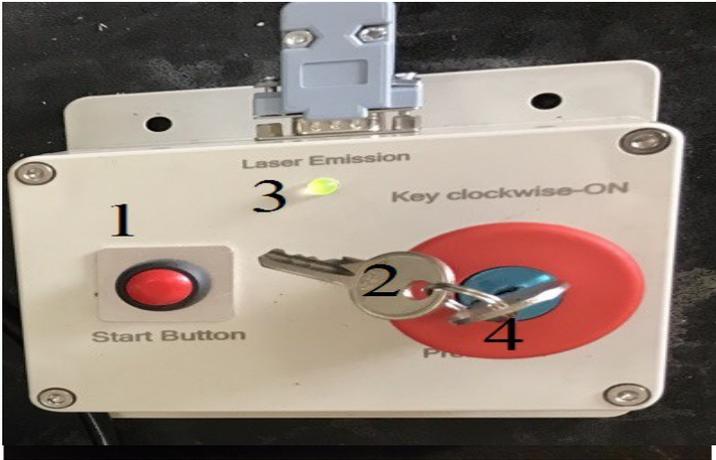
Be sure to save the box in which your projection system was shipped. Also save the packing material. In the unlikely event your new projection system must be returned it should be transported in its original box. Before you hook up the system, please take a few minutes to:

- Complete the registration card and send it back to us immediately.
- File your sales receipt in a safe place.
- Write down the serial number and keep it in a safe place for future reference.

Now that you have unpacked your PartyBlaster! or ClubCat! Laser Projection System and read through the safety information, it's time to become familiar with the system.

*Please Note: Technological Artisans is not responsible for damage, insufficient parts or failure not reported within 48 hours of receipt*

### 3. Getting To Know The Laser Projection System



ESTOP

- 1 **Start Button** pushing this button after all interlocks are satisfied will start a 5second delay then the system will turn on at this point laser emission is possible
- 2 **Key** used to release estop button
- 3 **Remote Emission indicator /interlock** led is off if all interlocks are not satisfied led is green when all interlocks are satisfied led flashes red /green when start button is pushed and all interlocks are satisfied led will stop flashing and stay red after 5 second start up delay when led is red emission is possible
- 4 **ESTOP Button** used to stop all laser emission in the event of a failure or dangerous situation ( push to stop laser use key to release )



ESTOP REAR

**DB9 connector** connect this to the DB9 connector on the projector



FRONT

1. **Emission Indicator LED** - Glows red to indicate that the power switch is engaged and the laser/s is energized and ready to emit laser beams.
2. **Output Aperture and aperture warning labels** Laser beams/ are emitted from this window, located on the front of the unit
3. **Output Aperture upper and lower Cover/Baffle** used to protect scanners/window during transportation and also used as a safety mask when slid into position just under and above the laser scan and tightened into place



Side

**Classification Label** Specifies the type of laser and power. See Labeling Requirements for more information

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## REAR

1. **Power In** PartyBlaster! or ClubCat! is designed to plug into a 110 VAC receptacle and is supplied with a 110 VAC USA powercon style plug. The unit can be configured to work on other voltages. Please contact your dealer for details.
2. **Identification Model and series**
3. **Serial Number And Manufacture Date Label** - I, date that the unit was manufactured, as well as its own unique serial number, which is needed for the warranty (removing this label voids warranty).  
See Labeling Requirements for more information.
4. **CDRH Conformance Label** - Indicates that the PartyBlaster! or ClubCat! Laser Projection System complies with the CDRH Center for Device and Radiological Health requirements governing laser products manufactured in the United States.  
**See Labeling Requirements** for more information
5. **ILDA IN/through DB 25** in and out for ilda signal from laser software DAC must be connected to DAC to provide ilda cable interlock or the system will not start and if removed during operation it will shut the system down and it would need to be restarted
6. **Non-Interlock Label** CDRH required non-interlock label. Exposure to laser light may occur if panels are removed. See Labeling Requirements for more information  
Located On top of projector
7. **Power Switch** When activated this switch supplies power to the laser system and lights up red when power is on
8. **Rear emission indicator/ laser status** off indicates no power or all interlocks are not satisfied  
green indicates all interlocks satisfied and ready to start  
red indicates emission is possible
9. **Remote Interlock Connector** must be connected to remote ESTOP to operate.
10. **Interlock key switch** Must be in **on** position for laser to operate and the Key is **NON** removable in the on position
11. **Fans** Keep fans un obstructed and clean filters regularly
12. **Pangolin FB4** see Pangolin FB4 and pangolin quickshow manuals for more info

## 4. Mounting The Laser Projection System

To determine the final performance location of your laser projection system, it is necessary to understand the laser and how it functions. Your PartyBlaster! or ClubCat! Laser Projections System incorporates a Class IV air-cooled diode or semiconductor laser. Laser light is a narrow and intense beam of light. For a laser beam to be seen, there must be some particles in the air to reflect the light, making the beams visible. ( For example . smoke or haze.) However, you must be aware that a high volume of particles in the air will scatter the light shaft making it a diffused light source not unlike an incandescent lighting effect. Therefore, if you have smoke effect generators it would be best to wait a few minutes for the smoke to dissipate before you activate the laser light show.

Finding the best placement for the laser projection system is critical in maximizing the enjoyment of the laser show. To extend the life of the laser unit, the system should be located in an area with at least 12 inches of ventilation space and have adequate air flow. Preferably the system should be located in an area where maximum visibility can be attained. You should be able to see the laser from every corner of your site. The longer the beams can travel, the more the laser is visible to you spectators. The laser should be considered the centerpiece of your lighting effects. To take advantage of this, it would be best to mount the unit in the center of attention, like at the front-center edge of the dance floor.

Once you have decided where the safest (see Safety **Considerations** ) and most advantageous location to place the laser projection system, you can then mount the system. This can be done in several ways.

- If you have a lighting truss that can support the additional load of the laser projection system, you can mount the system to your truss with standard c-clamps.
- The projection system can also be mounted onto non-truss systems through the 1/2" mounting holes on the systems yoke. Secure mounting of the system can also be done easily and inexpensively using components sold in any local hardware store. If you have questions about the safety of the installation, please contact a local contractor or professional for advice or suggestions.

Make sure that the laser projection system is mounted securely and that it will not come loose and thereby cause a safety hazard. Use of safety hardware (including safety cables) is strongly recommended. After the system is mounted in its permanent location, install cables for control and power.

## Setting Up the Projector

### Adjustments OF PartyBlaster! or PartyBlaster! or ClubCat!

After the laser projection system has been mounted, the unit will need to be aligned. A standard procedure is as follows:

**WARNING:** make sure the projection area is free and clear of any personnel before proceeding.

- Before the unit is activated, loosen the mounting screws on the sides of the yoke
- Adjust the PartyBlaster! or ClubCat! Unit so that the beam will be directed to a safe location. (Pointing the mounts towards the ceiling is usually the safest direction.)
- Connect ILDA cable from the laser to Computers laser software DAC
- Connect the db9 to the remote ESTOP and to the DB9 remote connection on the laser system
- Make sure the ESTOP button is in the released up position (twist button to release)
- Turn on the power switch of the laser projection system.
- Turn both keys to ON position (one on the remote and one on the laser system)
- Push start button on remote and wait 5 second(safety delay) then the system will fully power on for
- Bring up the desired alignment pattern on the computers laser software
- Slowly turn up the GAIN control until you start to see a picture of the alignment pattern projected in laser light.
- Slightly loosen the top and side screws and position the PartyBlaster! or ClubCat! unit to correctly project into the desired horizontal and vertical position.
- Adjust the GAIN controls until the alignment pattern is the desired physical size.
- Make sure the pattern stays within the required **Safety Areas**.
- Tighten the unit's mounting screws.
- Using the POSITION controls and GAIN controls fine tune the projects alignment image size and position for the optimal performance.
- Check that projected alignment pattern is still within the desired safety area.
- The unit is now aligned.
- Exit the alignment pattern on the computer

### Running a Show on PartyBlaster! or ClubCat!

- Make sure that the unit has been aligned according to the above instructions.
- Make sure that the PartyBlaster! or ClubCat! computer is booted and running.
- Turn on the MAIN power
- Start the LASER (as in the instructions above)
- In the PartyBlaster! or ClubCat! software, load up the desired show.
- Press the indicate keys to run the show.
- Verify that the PartyBlaster! or ClubCat! laser displays the show correctly.

## 6. Service And Maintenance

It is important to maintain your PartyBlaster! or ClubCat! Laser Projection System in proper operating condition to optimize the life of the laser. It is also important to perform regular checks of the system's cleanliness and ventilation.

### Cleaning The Projection System

8. Make sure the laser projection system is turned off.
9. Make sure that all ventilation holes and fans are clear of any obstructions such as lint or dirt.
10. Wipe down the system with a damp cloth. If you experience greasy residue or smoke deposits, spray a clean cloth with a solvent such as glass cleaner and wipe down the unit. Be careful not to spill any liquids into the system.

### Cleaning Beam Aperture And Dichroic Mirrors

Now that the projector system has been wiped down, obtain a supply of cotton swabs and glass cleaner. These supplies will be necessary for cleaning the small dichroic mirrors on the scanner modules.

Apply glass cleaner to the end of a cotton swab, and shake off any excess.

NOTE: Be very careful when cleaning the dichroic mirrors as they are very fragile and can break off easily and are not covered by the warranty. With an up and down motion, use one cotton swab for every mirror. Clean the upper mirror first, then the lower mirror. This will ensure that if any dust has settled on the lower mirror, from the cleaning of the upper mirror, it is cleaned off.

Check the laser projection system frequently. Immediately replace any broken parts, keep all optical components clean, and check all cables and the strain reliefs regularly.

At Technological Artisans, LLC we take pride in the durability and reliability of our products. A great deal of emphasis has been placed on controlled manufacturing methods and on quality control throughout the manufacturing process. Despite this fact, occasionally projectors break down in operation. We feel that our units have a favorable service record and highly economical prices when compared to other competitors. We hope to demonstrate in the long run, that we always provide the customer with above average service, quality and turnaround time. We not only want to ease your economic burden, but also make our facilities available to get your system operating again in the shortest amount of time possible. If you have any questions please feel free to contact us.

7. Technical Specifications

PROJECTOR MODEL ClubCat
PROJECTOR SERIES HP
PROJECTOR SERIAL NUMBER 817001

SCANNER TEST
Scanners type DT40
Speed PASS 30K (@8 °) -40k (@6°)
Scanners test date 9/7/2017

Laser interlocks TEST
KEY SWITCH Pass
ILDA INTERLOCK Pass
REMOTE ESTOP TEST Pass
Remote KEY Pass
Remote Start button Pass
Remote Estop Pass

Remote emission indicator/status led Pass
Emission and status LED TEST
Front laser emission LED Pass
Rear emission/status LED Pass

Clubcat-HP 10W RGB serial # 817001
All Test Passed 9/7/2017
John Loughlin
John Loughlin



# PartyBlaster HP & ClubCat HP Class IV Laser Operations Manual (2.0)

## ***LASER/S power readings and modulation test***

**RED**

**Laser Wavelength** . 638nm 2.87W ..

**Laser Power** . Pass ..

**Laser modulation Test** . 9/7/2017 ..

**GREEN**

**Laser Wavelength** . 520nm 2.93W ..

**Laser Power** . Pass ..

**Laser Modulation Test** . 9/7/2017. ...

**BLUE**

**Laser Wavelength** . 445nm 3.86W ..

**Laser Power** . Pass ..

**Laser Modulation Test** . 9/7/2017 . ...

Full compliance with US, FDA, & CDRH requirements

Patent pending

Power supply —90v-240v @ 50/60hz

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Clubcat-HP 10W RGB serial# 817001

All Test Passed 9/7/2017

John Loughlin

*John Loughlin*

## 8. Labeling Requirements

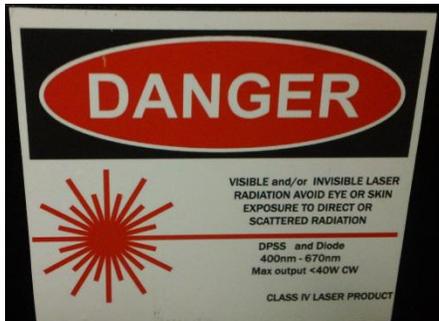
### Located On Side or TOP Of Projector (depending on model/sub model)

CDRH Non-Interlock  
Warning 1040.10(9) (4)  
CDRH

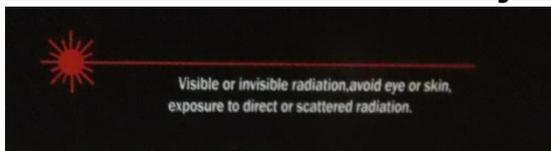


Statement of Maximum  
Output  
1040.10(9) (4) CDRH

Laser Classification  
Warning 1040.10(9) (1) (I)  
CDRI-I



### Located On Front Of Projector



Aperture Warning Label 1040.10 (g) (5) CDRH

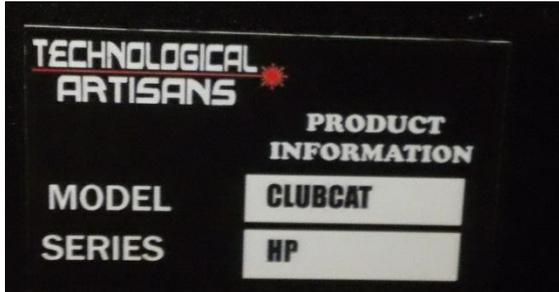


**Located On Rear Of projector**

**Laser System  
Identification**

**1010.3 CDRH**

**Model and series  
label**



**CDRH Conformance  
Certification**

**1011.2 CDRH**



**Serial number and date of  
manufacture label  
Projector manufacture id  
and address**



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## PartyBlaster or ClubCat Limited Warranty

Technological Artisans, Inc. warrants that the PartyBlaster! or ClubCat! Series Laser Projectors are shipped from the factory free from defective materials and workmanship with a limited warranty under normal use and service of two (2) years from the date of purchase. Lasers, modules, and accessories are warranted for one (1) year from the date of purchase to the original end user when purchased from an authorized PartyBlaster! or ClubCat! dealer and is not transferable.

This express warranty is provided by Technological Artisans, LLC., 16 Seba Ave Brooklyn NY 11229 347-606-1076

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL TECHNOLOGICAL ARTISANS, LLC. BE LIABLE FOR ANY LOSS OF USE, LOSS OF TIME, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW

This warranty sets forth the full extent of Technological Artisans, LLC. responsibilities regarding product repair or replacement as the exclusive remedy.

In the event of a defect, malfunction, or failure to conform to specifications during the warranty period, Technological Artisans, LLC. at its option, will either repair, or replace parts or boards with functionally equivalent new or reconditioned parts or boards. Replaced parts and boards are warranted for the balance of the original warranty period. All parts and boards removed in the replacement process shall become the property of Technological Artisans, LLC. Transportation charges to and from an authorized dealer or the Technological Artisans, LLC. factory for repair shall be the responsibility of the owner. All products returned to Technological Artisans, LLC. must have a factory return authorization number for return prior to shipping. For further information and special shipping instructions, please call 347-606-1076

This warranty does not cover defects, malfunctions, performance failures or damage to the unit resulting from use in other than normal and customary manner, misuse, accident or neglect, the use of non-conforming parts, or improper alterations or repairs. This warranty does not cover wear and tear on covers, housings, items such as knobs, jacks and switches, and optical components including mirrors, diffraction gratings, and windows.

### **WARRANTY WILL BE VOID IF ANY OF THE FOLLOWING CONDITIONS OCCUR:**

1. Projectors that are incomplete such as those in which boards or components are missing and/or incompatible
2. Projectors whose serial numbers have been removed, altered or do not match with the laser with which it was manufactured.
3. Projectors that have been opened by, or had work performed by anyone other than an authorized PartyBlaster! or ClubCat! service center.
4. Projectors received with non-conforming or non-PartyBlaster! or ClubCat! housings or parts.
5. Projectors with an extreme accumulation of fog or haze fluid buildup. The purchaser is responsible for completing and mailing to Technological Artisans, LLC. within fifteen (15) days of purchase the warranty registration card enclosed with each product.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, THEREFORE THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY.

**This warranty gives you specific legal rights and you may have other rights, which vary, from state to state.**

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**CLUBCAT**

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