

ARCADE GUNS[®]



**User Manual
(v2.4)**

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Congratulations on your new Arcade Guns™ light guns purchase!

We know you will enjoy them as much as we do!

Recommended Links

Arcade Guns™ Home Page

<http://www.arcadeguns.com>

Arcade Guns™ Pro Utility Software (Windows XP, Vista, 7, 8, 10 32/64bit)

<http://www.arcadeguns.com/download/ArcadeGunsProUtilitySetup.zip>

Arcade Guns™ User Manual (updates to this manual)

<http://www.arcadeguns.com/download/ArcadeGunsUserManual.pdf>

Ultimarc® AIM-Trak® Setup Guide

<http://www.arcadeguns.com/download/AimTrakSetupGuide.pdf>

MAME Information

<http://mameworld.info/>

MAME (Multiple Arcade Machine Emulator)

<http://mamedev.org/>

MAME UI

<http://www.mameui.info/>

MAME Plus!

<http://sourceforge.net/projects/mameplus/files/releases/>

M2 Emulator

<http://nebula.emulatronia.com/>

TroubleShooter - Light Gun Compatibility Patch

<http://thetroubleshooter.home.mindspring.com/index.htm>

Supported Operating Systems

Microsoft Windows® 7 32/64bit, Vista 32/64bit, XP 32/64bit, Plus Linux

Quick Start Guide

Thank you for choosing Arcade Guns™ light guns! We are sure that you are eager to start playing with your new light guns, which is why we have created a quick start guide. With your purchase we have included two user manuals; the Arcade Guns User Manual (this manual), and the Ultimarc AimTrack Setup Guide. Both manuals offer plenty of information to help you get the most out of your new light guns. We have summarized some important sections listed below that you can follow without reading each manual cover to cover. You may want to read through everything later if you want to learn even more about what your light guns are capable of doing!

Get started quickly by reading these sections:

- 1) Start with the Arcade Guns User Manual (this manual):
 - a. Default Light Gun Settings: Default mouse and joystick buttons that are assigned to each button on your light gun(s).
 - b. Positioning the IR Sensor Bar: Where to place the light bar on your monitor or TV.
 - c. Light Gun Calibration: How to calibrate the light guns for better accuracy. This must be done at least once before you can use your light gun(s).
 - d. MAME Setup: The basics on how to get MAME configured correctly with your light gun(s).

- 2) Secondly look at the Ultimarc AimTrak Setup Guide:
 - a. MAME Configuration: Game specific configuration and settings to get the light gun(s) working.

Default Light Gun Settings

- 1) Trigger on screen = Left Mouse
Trigger off screen = Right Mouse
- 2) Small button on/off screen = joystick 1
- 3) Large button on/off screen = joystick 2 (Hold for 5-10 seconds to calibrate gun)



All of the light guns' functions (trigger and buttons) are fully programmable for both on and off screen shooting by using a simple configuration utility. It also gives you the ability to assign device IDs to each gun so that you can use up to four guns on one computer. The configuration utility can be found here:

<http://www.arcadeguns.com/download/Aimtrak.zip>

Your Arcade Guns™ light guns come to you already configured with the most relevant default settings which include button assignments (listed above), newest available firmware, and unique device IDs for each light gun! These default settings are strongly recommended since the majority of PC and emulator gun games use the trigger as a left mouse button and reload as a right mouse button. However, if you want to change the configuration, please be our guest! It is important to know if you do change the guns' settings, make sure each gun has a different device ID assigned to it when you are finished. All of these settings can be changed by using the Ultimarc AimTrak software.

We wanted the best and simplest light guns possible, which is why our light guns come with two buttons and a trigger. We believe this is the best configuration due to the fact that most PC and arcade gun games only use a single trigger and in some cases one additional button or pedal. Our light guns have more than enough buttons to play your favorite shooter games while keeping it uncomplicated just like in the arcade!

Keeping the default settings listed above makes it easy to configure individual shooter games. Obviously we like to use the trigger for firing our main weapon in a game. Most games support off screen reload which means when you point the gun away from the screen and pull the trigger it will reload the gun for you! We like to use the small button as a secondary weapon such as a rocket launcher or in some games we use it for ducking/hiding or reloading the gun (a few games don't support off screen reload). Every game has slightly different requirements but with these light guns you can handle them all! Finally we use the large button as a start button in most games which can be used for starting a game, joining a game after you die or skipping cinematic in some cases. It's really up to you how you want to configure your games to work with these guns, but we just thought you might want to know how we like to configure ours!

Positioning the IR Sensor Bar

The IR sensor bar (light bar) should be centered on top of your monitor or television. For the best results place it as close to the top of the picture on the screen as possible. The light bar WILL NOT WORK if it is placed on the bottom or side of the monitor or TV. Double sided tape can be used to keep the light bar in place on top of your monitor or TV. Then plug the light bar's USB cable into an empty USB port on your computer.

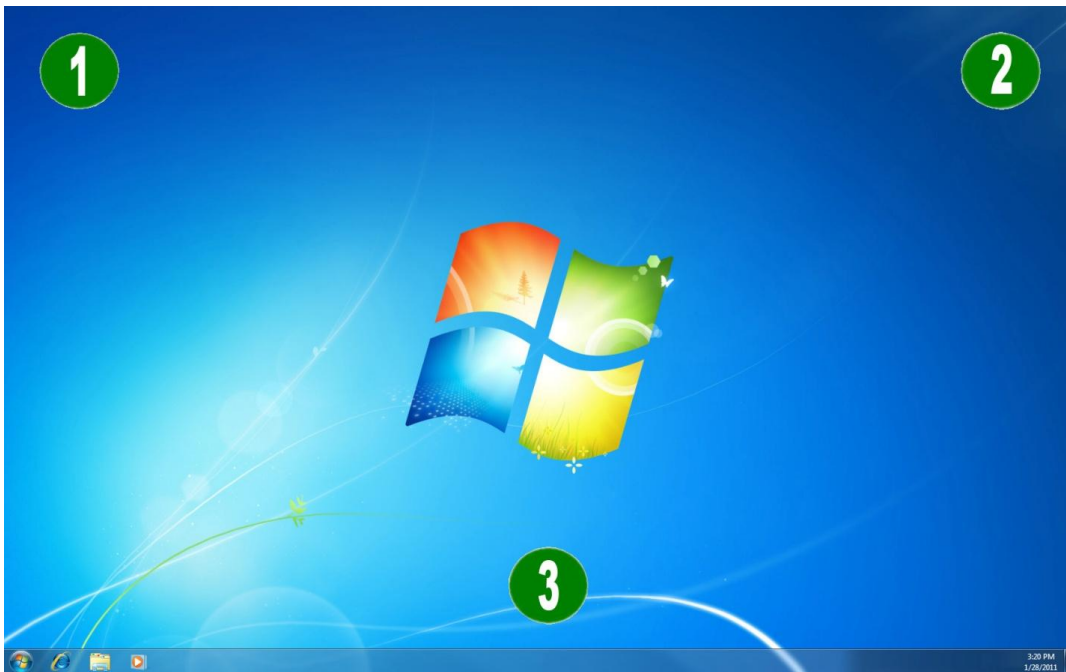
Note: We now offer different types of light bars. Our regular cased light bar is recommended for screen sizes up to 40 inches diagonal; while our new super light bars work on larger screen sizes. The super light bars are great for large screen TVs and projectors.

Light Gun Calibration

Before you begin calibration, check your surroundings to make sure light isn't reflecting off of your monitor or TV screen from an external source such as a lamp or sunlight coming in from a window. These light guns work best with the absence of external light sources interfering with the IR tracking camera module in the nose of the gun. Simply drawing the blinds on a window or dimming the lights in a room can easily eliminate these issues.

To get the best calibration possible you should hold the light gun the way you will be holding it when you are actually playing your games. The position you hold the gun and the distance you are from the screen should be taken into consideration when calibrating the gun. If most of the time you plan on standing 4ft from the screen and holding the gun neck high you should calibrate it the same way to get the best accuracy.

Let's start the calibration process from the Microsoft Windows® desktop screen! By default hold the large button for 5-10 seconds until the mouse cursor moves to the upper left corner of the screen and then release the large button. Point the gun at the mouse cursor and pull the trigger. Do the same for the upper right and bottom center.



If your calibration was accepted you should be able to control your mouse cursor with the light gun.

If your calibration was not accepted the cursor will return to the upper left corner of the screen for re-calibration. If this happens, don't be alarmed. Move a foot or two farther

away from the screen and try calibrating it again. If you are already more than 7ft away (7ft for Regular Sensor Bar; 17ft for Super IR Sensor Bar) from the screen you should move closer to the screen instead of away from it.

Once the calibration is accepted move the cursor around and see if it is accurate enough for your liking. If you find that it isn't quite right, start the calibration process again. This time you might try aiming slightly above or below the mouse cursor or tipping the nose of the gun upward or downward during calibration. Also consider stepping a foot or two away or towards the screen from your previous location. These small adjustments should end up with a perfectly calibrated Arcade Guns™ light gun!

MAME (Multiple Arcade Machine Emulator) Setup

MAME is a fantastic emulator that allows you to play many classic arcade light gun games. It can be downloaded as a windows command-line version or better yet a GUI frontend version such as MAME UI or MAME Plus!. You will also have a choice of 32bit or 64bit versions of MAME. If you are running a 64bit version of Microsoft Windows then we would recommend using a 64bit version of MAME to match your OS. If you already have MAME installed make sure that you are using MAME version 0.131u1 or newer since there were many important bug fixes in that version. New versions of MAME are always being released on what seems to be a weekly basis. Additional game support and other game fixes are always being added so it's a good idea to start with the newest version of MAME available.

The following instructions will walk you through updating your mame.ini file so that MAME is setup properly to work with your Arcade Guns™ light guns!

We highly recommend using a GUI frontend version of MAME since you get a nice graphical user interface which is easier to use, plus you also get the flexibility of running command-line arguments too:

- 1) Download and unzip MAME into a directory of your choice on your computer.
- 2) In that directory you should see a MAME executable file named something like mame.exe or mameui.exe along with a file named mame.ini.
- 3) If the mame.ini file does not exist in the MAME folder, launch the MAME executable and modify one of the properties; then it will be created.

Options->Default Game Options->Control

We aren't going to talk too much about the command line version of MAME which should only be used by people who know a little bit about MAME already; mainly because it requires additional knowledge about running command line arguments. Just in case you are interested it would go something like this:

- 1) Download and unzip MAME into a directory of your choice on your computer.
- 2) Start->Run->Type "cmd".
- 3) Use the command prompt window to find the directory that MAME is located on your computer.
- 4) Type "mame.exe -createconfig" which will create the mame.ini file.

Next we will want to open the mame.ini file in a text editor such as WordPad. We are going to make some updates to the following entries. Some of them will already be set correctly by default and some will not. Make the necessary updates to your mame.ini file so that they match the following entries:

mouse	1
joystick	1
lightgun	1
multimouse	1
offscreen_reload	1
lightgun_device	lightgun
mouse_device	mouse
dual_lightgun	0

By default your light guns are configured to work in mouse mode for cursor x and y movements. If you change your light guns to work in joystick mode for the cursor movements then you will also need to set the dead zone to 0 in your mame.ini file:

joystick_deadzone	0
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This concludes our MAME section in this manual. To continue configuring MAME open the Ultimarc AimTrak Setup Guide and start reading from page 11.

PC Shooter Games Setup

PC shooter games, also known as rail shooters, typically work with a mouse right out of the box. Since your Arcade Guns™ light guns also work as a mouse they can be used to play these classic shooter games just like in the arcade! One drawback however is that they only support one mouse or light gun at a time by default. The second player is usually stuck using a keyboard to play, which is no way to play a shooting game!

If you only plan on playing these games in single player mode, you can ignore the following setup. If you want to play these games with dual light guns you will need to install a program called “The Trouble Shooter”. The Trouble Shooter is a program that will patch a specific list of games to work with more than one light gun.

First step is to download The Trouble Shooter software patch here:

<http://thetroubleshooter.home.mindspring.com/downloads.htm>

Before you begin make sure that your Arcade Guns™ Light Guns are plugged into your computer. Install the software patch listed above and then reboot your computer. Open the control panel and switch it to classic view so that you can see all of the programs. There will be a new program labeled “Light Guns” which needs to be configured to work with your Arcade Guns™ Light Guns. Launch the program by double clicking on it.

Use the drop down box shown in the following example and select:

“Dual Act Labs PC USB Light Guns”.

Then select:

“USB Human Interface Device (1)” for player one

“USB Human Interface Device (2)” for player two

For complete instructions please follow this link:

<http://thetroubleshooter.home.mindspring.com/instructions.htm>

Note: The image shown on the next page was taken from a 32bit Windows XP Machine. The Trouble Shooter program was written for windows XP originally but will also work on Windows Vista and 7. In Vista and windows 7 the program has a small bug which causes the names of the devices to not display correctly and shows up as gibberish. If you are using Vista or 7 you will need to select a device for player 1 and player 2 by guessing. If you guess wrong you can change your selection later.



When you launch each game you will need to configure that game to work as a keyboard for both players. This may sound strange since the light guns were designed to work as a mouse. Basically, this patch translates mouse movements into keyboard commands that the game and software patch use to give you dual light guns! Note: In dual light gun mode with this patch you will not have a crosshair on the screen that moves with your gun. To verify everything is working correctly you can fire the gun at the screen by pulling the trigger; if you see the buckshot from the gun hit where you were aiming at, then you know everything is setup correctly! These games also support off-screen reload!

Here is a cheat sheet for popular light gun games supported by the Trouble Shooter:

House of the Dead

Device Select: Options -> Controller Config – Update Player 1 = Keyboard,
Player 2 = Keyboard

Display Settings (Direct Draw Mode Only): Options -> Resolution

Player 1 Start: [Space bar]

Player 2 Start: [Tab]

Pause: [P]

Exit Game: [Esc]

House of the Dead 2

Device Select: Config.exe – Update Player 1 = Keyboard, Player 2 = Keyboard

Player 1 Start/Pause: [Enter]

Player 2 Start/Pause: [Tab]

Exit Game: [Esc]

House of the Dead 3

Device Select: hod3launch.exe -> Controller Settings – Update Player 1 =
Keyboard, Player 2 = Keyboard

Display Settings: hod3launch.exe -> Graphic Settings

Player 1 Start/Pause: [Enter] or [Q]

Player 2 Start/Pause: [T]

Exit Game: [Enter] then select “Return to Main Menu”

Virtua Cop (Virtua Squad)

Device Select: [F5] – Update Player 1 = Keyboard, Player 2 = Keyboard

Display Settings: [F6]

Player 1 Start/Pause: [Space bar]

Player 2 Start/Pause: [Enter]

Pause: [F3]

Exit Game: [Alt-F4]

Virtua Cop 2

Device Select: [F5] – Update Player 1 = Keyboard, Player 2 = Keyboard

Display Settings: [F4]

Mode Settings: [F6]

Menu: [F10]

Player 1 Start/Pause: [Space bar]

Player 2 Start/Pause: [Enter]

Pause: [F3]

Restart Game: [Alt-F2]

Exit Game: [Alt-F4]

PlayStation 2 Console Games Setup

Your Arcade Guns™ light guns can be used to play Guncon 2 games on your PlayStation 2 console (Guncon 1 & 3 games are not supported).

Here is a quick setup guide to get your started:

Hold the two buttons (large and small) on the gun(s) while powering on the PlayStation console and continue to hold these buttons until the calibration screen appears. The gun should be recognized by the PlayStation console once you see this screen. Now hold the large button on the back of the gun for 5-10 seconds to calibrate each gun. After the gun(s) are calibrated you are ready to play!

The LED light bar will also need to be connected to a USB port for power. You can use the second USB port on the PlayStation or a powered USB hub.

Button configuration for PlayStation:

Trigger:	Guncon Trigger
Small Button:	Guncon Button A
Large Button (on-screen):	Guncon Button B
Large Button (off-screen):	Guncon Select
Small & Large Buttons pressed together:	Guncon Start

Note: These buttons cannot be changed

- 1) Boot into the game. The game will display a calibration screen.
- 2) At this point you should calibrate the gun(s).
- 3) Aim the gun in the center and hold the large button for 10 seconds. If this doesn't work, try holding the trigger for 5-10 seconds.
- 4) Cursor will move to the upper left corner of the screen. Aim at this point and pull the trigger.
- 5) Do the same for the upper right and lower center. Pulling the trigger after each.
- 6) Press a button to proceed into the game.

Thanks Again for Choosing Arcade Guns™!

Happy Gaming!

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