FIREFLY and MOONTANG User Manual v3.50

(These instructions apply to both Fireflies and Moontangs. Where the text refers to Fireflies, you can substitute "Moontang". Some information only applies to one or the other and is noted accordingly.)

*** EASY START ***

Just rez the Firefly Rezzer in the center of the area where you want your Fireflies. That's it!!!

For Moontangs, rez them over SL Water then say /7water to position them just under the water surface.

Note that AUTO ON is the default setting. In this mode, the Firefly Rezzer waits for Sunset before it generates Fireflies. If it's daytime, and you want to see them right now, then touch (left click) the rezzer, choose ON/OFF from the menu, then Always ON.

*** OPERATING INTRUCTIONS ***

There are TWO Firefly Rezzers in each box. You can configure them separately, and differently. Together the two can cover up to 800 square meters.

The Firefly Rezzer listens on Channel 7 for Show, Hide and a few other commands. Say

/7show	to SHOW the Firefly Rezzer
/7hide	to HIDE the Firefly Rezzer
/7locate	to have the rezzer shout its current location and show a 30 second particle beacon.
/7help	to show this notecard.
/7water	to position the rezzer just under the surface of the water (Moontangs only)
/7up	to raise the rezzer up one meter above of the water or ground level.
/7ffmenu	to show the Firefly Menus

All other control is thru the MENU system. TOUCH the Firefly Rezzer to display the Main Menu. Note that when in Menu mode, the Firefly Rezzer will stop generating new Fireflies. When you exit the Menu, it can take up to 30 seconds for the Firefly Rezzer to resume generating fireflies. Changes to the settings always take 60 seconds to completely change.

If you do not click a menu button within 30 seconds of the menu display, the Firefly Rezzer will stop listening to the Menu and resume what it was doing before. Touch the Firefly Rezzer again to continue using the Menu.

When in Menu mode, the listener is disabled. Wait for the rezzer to resume normal operations before saying the show/hide/locate commands.

ON / OFF

There are four ON/OFF settings:

AUTO ON: is the default setting. In this mode, the Firefly Rezzer waits for Sunset before it generates Fireflies. Because the SL sun varies a bit from day to day, the Fireflies also vary their start and stop times. Usually, Fireflies begin just after Sunset, and stop just before Sunrise.

TEMP ON: Suppose you normally set your Fireflies for AUTO ON. Also suppose that it is noon in SL. You want to set your environment to night and you want to see Fireflies. The TEMP ON option will turn the Fireflies on during the daytime, and they will resume AUTO ON at the next sunrise.

ALWAYS ON: This is a manual override to turn the Firefly generation ON regardless of sun position. Use this setting if you sim does not have a moving sun, or if it is always night. Or use this just because you like the Fireflies.

ALWAYS OFF: the Firefly Rezzer is turned OFF and not generating Fireflies.

COLOR

Choose from 10 colors, or choose Random colors. Firefly color is the default.

NUMBER

Select how many Fireflies to produce. You can select from 5 to 50. See the notes below regarding prim counts. The default is 50.

SIZE

(Fireflies only) Select one of the four sizes. “Firefly” is the smallest and the default.

RANGE

You decide how far to make the Fireflies go from the Firefly Rezzer. Use the RANGE menu to spread the Fireflies out as far as possible, or to adjust the range to fit in a more confined space. The rezzer is at the center of a rectangle or square. If the range is 10x10 then the Fireflies range is a 10M square with the rezzer at the center and the rezzer is 5M from each edge of the square. The default range is 15x15.

Use the ADJUST submenu to fine tune the range from 20x20 down to 0x0. Use the VERTICAL submenu (Fireflies only) to control the vertical range. The vertical default range is 3M above the rezzer. Moontangs have no vertical motion (Z-axis).

BE CAREFUL not to place the rezzer too close to your property line. Attempts to rez Fireflies into your neighbor's parcel could a) fail, or b) create annoyed neighbors. The RANGE will help control them.

ADMIN MENU

Some of the Admin Menu options are also available in chat. See above.

SHOW will show the rezzer.

HIDE will make the rezzer invisible.

LOCATE will cause the rezzer to shout its current position and send up a particle beacon for 30 seconds to help you find it. The beacon is also useful to show you how efficiently your viewer displaying particles. If you are rendering particles well, you will see a steady unbroken stream of particles rising vertically. See more information about particles below.

HELP will give you this notecard.

WATER is for Moontangs only. Since they are designed to run just under the surface of ocean water, the WATER command will submerge the rezzer to the correct level.

UP will raise your rezzer up one meter so that it is easier to access. Moontangs will raise to one meter above water level, Fireflies will raise to one meter above ground level. If your Fireflies are in a skybox, the UP command will raise the rezzer one meter from its current altitude.

LOCK is available to the owner. If you lock the rezzer it will listen only to you, and allow only you to operate the menus.

UNLOCK will unlock the rezzer, allowing everyone to operate it.

STATUS ON/OFF will toggle informational text over the rezzer. Normally you will keep it off, but the information in the display can be useful if you have questions for support.

KILL SCRIPT/KEEP SCRIPT: Normally you will want to kill the emitter scripts. If the button label reads "Keep Script" then you are currently set to kill (delete) the scripts. You should not change this setting. You can also see the current setting by turning Status ON (above). See the Script Limit information below if you want to know more.

RESET

Use RESET to go back to the original default settings.

DENSITY

You control density with the NUMBER and RANGE menus. To make the display MORE dense, either increase the number or decrease the range. To make the display LESS dense, either decrease the number or increase the range.

Why TWO rezzers?

- Use two rezzers with the same size/color settings to cover a larger area.
- Put two rezzers together to increase density.
- Put two rezzers together with different size or color settings.
- Use two rezzers with long thin rectangle ranges in an "L" shape to rez Fireflies on the edges of a corner lot.

*** MORE INFORMATION ***

If you get error messages saying "Cannot create Firefly Emitter",

1. Make sure you have the ability to Rez/Build on the land.
2. Make sure you are not trying to rez the fireflies in your neighbor's parcel. Reduce the RANGE.

On GROUP OWNED LAND, you might see your Fireflies performing wonderfully, but when you leave they might stop. To prevent this, Edit the rezzer, then on the General Tab, set the rezzer's Group to the land group. That should be enough. If not, check the Share with Group box. You should not have to deed it.

Two things make the Fireflies work: TEMP prims and PARTICLES. This information can help you get the most out of your Fireflies.

TEMP PRIMS

The Firefly Rezzer is a single prim object. The Fireflies are created as TEMP objects, which means they do not use your allotted prim count and they go away after 60 seconds (as of June 2010 current release). While this is not a "temp rezzer" in the normal sense, it does generate up to 60 TEMP prims at a time.

How many TEMP prims are you allowed? Andrew Linden posted this on February 3, 2009 at http://forums.secondlife.com/showthread.php?t=305651

"There was recent confusion about the formula for calculating how many temp-on-rez prims can exist on a parcel. I looked it up and thought I would post it here for those who are curious…

"The formula is:

“temp_prim_limit = (regular_prim_limit - current_regular_prims) + minimum(0.5 * regular_prim_limit + 400, 1000)” - Andrew Linden

This means that if your parcel allows you 100 regular prims, you are allowed about 500 TEMP prims, more than adequate for Fireflies.

If you have a temp rezzer on your parcel, and/or if you are near the max of your temp prim allotment, you might not see as many Fireflies as the “Number” setting indicates.

PARTICLES

The slider on your Graphics tab in Preferences controls the maximum number Particles your viewer will process. The highest setting for this used to be 4096 but is now 8192. This setting controls how many particles your viewer will process, WHETHER OR NOT is actually displays them.

If you set your Max Particles to 1000 and your draw distance to 128, then your viewer will process up to 1000 particles within that 128 meter radius. You want 50 Fireflies. Your neighbor has a particle crazy waterfall over the hill that you cannot even see from your parcel, but it is within the 128M draw distance. If the waterfall emits 2000 concurrent particles you will not see all of your fireflies. You can only process 1000 particles and some of the fireflies will be lost in competition with the waterfall even though you cannot see it.

You can test your particle flow by using the Firefly rezzer’s LOCATE command. The Rezzer will send up a particle beacon for 30 seconds. If you are rendering particles well, you will see a steady unbroken stream of particles rising vertically (four particles per second). If the stream is not steady, there are a few things you can try.

First, you can decrease your draw distance. Do you need a 128 distance at home? Decreasing the draw radius will descrease competition from your neighbors particles.

Second, you can increase your particles, but you are asking your viewer to do more work.

Third, as nicely as possible, ask your neighbor to turn off heavy particle scripts when he is not using them.

SCRIPT LIMITS

In 2010, Linden Labs announced that script limits will soon be used to help fight lag. This is a good thing.

Firefly/Moontang release version 3.50.1 has changed to be more efficient and compliant with these new rules. The Firefly emitters each contain a script. This script does little more than start the particles and they serve no more purpose over the temporary life of the emitter. In older versions, these scripts remained in the emitter, doing nothing but still using memory and sim resources. When running 50 concurrent emitters, they consumed over half a megabyte of memory.

In release 3.50.1, the emitter scripts delete themselves as soon as they start the particles, so they do not waste memory.

If you have an older version and have script limit problems, please visit www.PrimitiveChemistry.com to find out how to upgrade to a newer version.

KEEP EMITTER SCRIPT

There is an option in the Admin menu to KEEP the emitter script. Generally you want to avoid using this. Why have this option? The script does two things. First, it starts the particles. Second, if the script is kept (not deleted as normal), then it forces the emitter to die (de-rez) after 60 seconds. Since the emitters are temporary prims, the sim server should delete them on its own after about 60 seconds, and it should not need the script to perform this task. We have seen one case on Mainland where the server did not delete temporary prims (i.e. rez a box, mark it as temporary, and it never goes away). While we have only seen this once, we have given you the option of keeping the scripts so that the script can do the job the server failed to do.

If you think you need to KEEP the scripts in your rezzer, please do not hesitate to contact us to discuss your situation.

NIGHT AND DAY

Night in SL lasts one real hour, and occurs every four real hours. There are 6 SL days per real day. The times of the sunsets are roughly 3:30, 7: 30, and 11:30 SLT (one hour earlier during USA Standard Time).

Please contact Dashiell Slade for help, or see www.PrimitiveChemistry.com