

Create a meteor VFX shot

Discover how *Digital-Tutors* created a fake meteor in After Effects, and how you can replicate the sequence for your own projects



AUTHOR PROFILE

Digital-Tutors

For over 14 years, Digital-Tutors has been an online training site, run by artists who are passionate about helping people learn the skills they need to create stunning work and pursue their creative careers.

www.digitaltutors.com

It's amazing to think about how far technology has come over the past couple of decades. With the tools we have at our fingertips today, it's now easier than ever to create awe inspiring effects.

To showcase that creativity it doesn't require a lot of fancy equipment. The team at Digital-Tutors recently created four different VFX shots of a meteor streaking across the sky, using a very simple set of tools.

We started our planning by setting the project's deadline. We wanted to release during the Leonid meteor shower in 2014 so it would be more realistic. In our case, this meant our deadline was a little over a month away, so we had plenty of time to do some research and development ahead of time.

We didn't want to shoot our actual plates until closer to the date, so the weather in the footage would look more realistic. However, we took advantage of the extra time by shooting some test shots using cell phones and building out what our pipeline would look like.

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About a week before the Leonid meteor shower, four of our team members volunteered to get up early at exactly the same time and use their own cell phones to shoot in the exact same direction as if capturing an actual meteor.

These were our background plates. After we had our plates, we used the steps you'll find in this tutorial to create our final meteor shots.

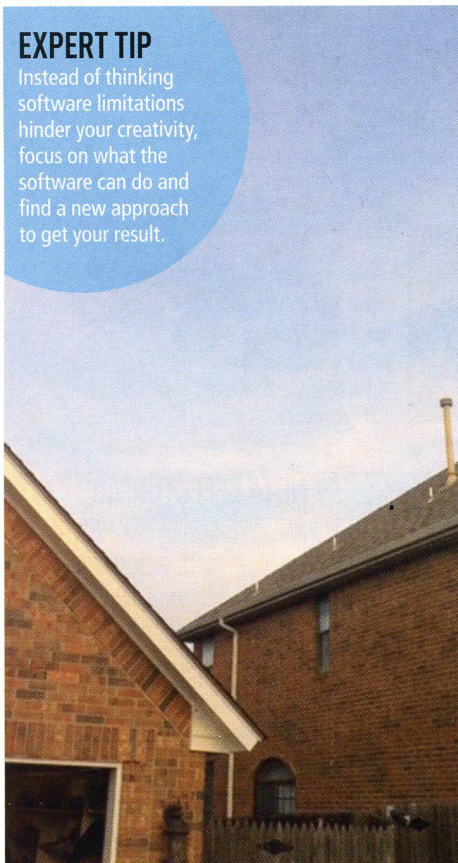
A week later, we released the videos and within a matter of a few days they had been picked up by news outlets around the world, had hit the number two spot on Reddit's homepage, racked up over 500,000 views and spawned a variety of creative creations from others.

On the following page you can read a short breakdown of how we created the meteor sequence, but we go into more detail in the video training accompanying this tutorial, it can be downloaded from this issue's online Vault.

 Download the video training at creativebloq.com/vault/3dw194

EXPERT TIP

Instead of thinking software limitations hinder your creativity, focus on what the software can do and find a new approach to get your result.

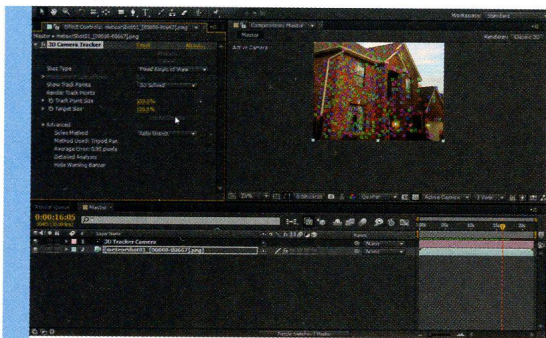


The Digital-Tutors team used a simple set of tools to create their meteor shots



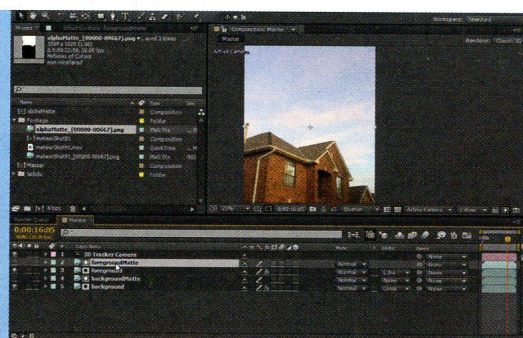
PROCESS: CREATING A METEOR IN AFTER EFFECTS

Digital Tutors' process for creating a meteor VFX sequence so real it will cause worldwide headlines



ONE TRACKING YOUR SHOT

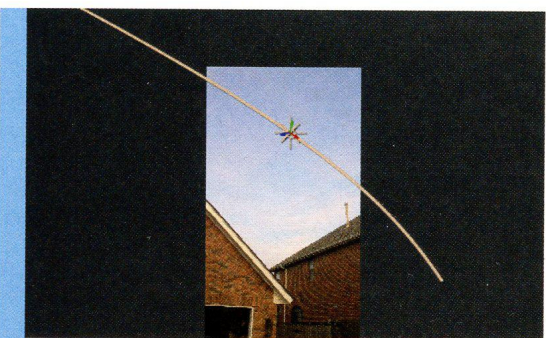
Import the two sequences in the Project Files folder from the Vault at creativebloq.com/vault/tdw194. Create a new comp with the meteorShot01 sequence and go to Window>Tracker. In the Tracker panel, with the sequence selected, click Track Camera. Let After Effects track the footage, click Create Camera in Effect Controls to make a 3D camera from the tracking data.



Separate the foreground from the background so you can have the meteor go behind the house

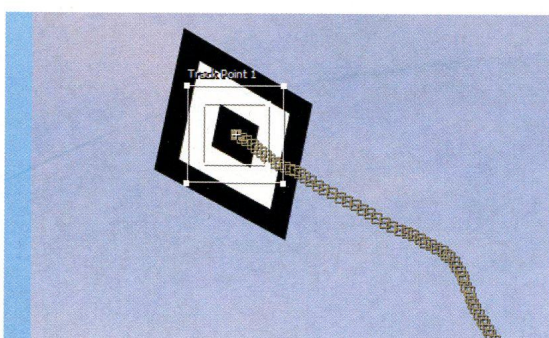
TWO ADDING YOUR ALPHA MATTE

Add the alphaMatte sequence to the comp and set it up as a Luma matte for meteorShot01. Then duplicate the sequences in your comp and use the alphaMatte as an Inverted Luma matte of the duplicate meteorShot01 sequence. The end result is the foreground separated from the background, so your meteor can go behind the house in the shot.



THREE CREATE THE METEOR'S TRAJECTORY

Create a new point light and on frame 0, add a keyframe at the top left of the frame. Then move the light across the frame until the light ends up on the right side at the end of the shot. Your end result will be the light moving across the frame from left to right. Finally, go back and clean up any unnecessary keyframes.

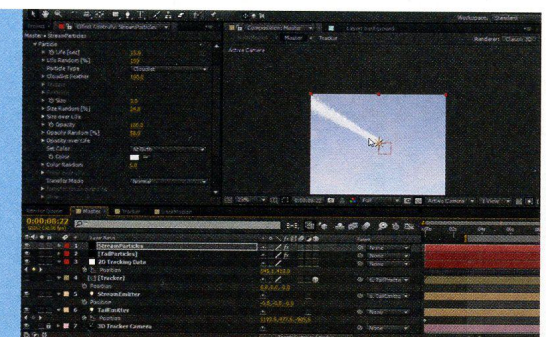


EXPERT TIP

When you think your shot is done, get someone else to take a look. If they notice something that looks off, take the time to go and fix it.

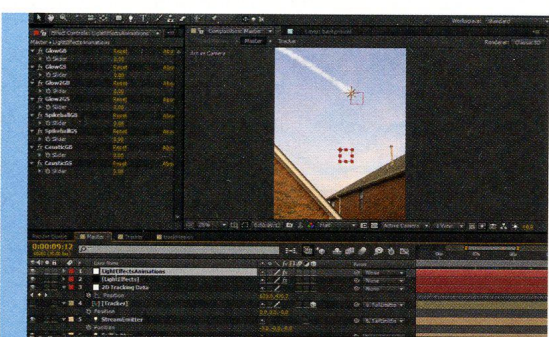
FOUR CONVERTING 3D TRACKING DATA TO 2D

Knoll Light Factory 2.7.2 doesn't support 3D positions, so we need to convert the XYZ tracking data to XY. Create a comp of solids and parent it to the light so it moves along on top of the light. Pre-comp and then go to Window>Tracker and Track Motion to create a 2D track. Finally, copy the XY data to a new Null in your Master comp.



FIVE SETTING UP THE METEOR EFFECT

Now that you have everything set up, create a new solid for Particular. Hook Particular up to the TailEmitter's Light Intensity using the Options of the Particular effect. Repeat these steps with a StreamEmitter light and Particular layer. Finally, add in some Knoll Light Factory lights whose position is driven by the XY data in the Null from the previous step.



SIX CREATING THE METEOR EFFECT

The key to a successful effect is to overlap multiple light types and layers of particles. Always add variation and don't keep anything at their defaults. You can add realism by adding slight animation to the different effects. Play around with different settings to get different results. Have fun with it! To see our final settings, open 14_End.aep from the Vault.

REAL OR FAKE?

Read people's reactions to the fake meteor CG sequence on YouTube: bit.ly/194-meteor

Animating different light types at different times throughout the shot helps to make it more realistic

FOLLOW
THE VIDEO

www.creativebloq.com/vault/3dw194