Adobe After Tracking & Null Objects

Tracking is a process of automatically locating a point or a series of points from a frame to frame to frame sequence.

Single point tracking Multi - point tracking

The tracker is made up of two boxes and an attach point.

The *outside box* is called the *search region* and defines what type of data to search for.

The *inside box* is called the *feature region* and it looks for the features that are similar to the attach point

You can expand and contract both of those boxes to try for the best tracking

Auto tracking is handled by After Effects. To get a good track, keep in mind:

- 1. Good contrast is important
- 2. Work in full resolution
- 3. Start with high quality footage

Putting it in practice (single point tracking):

in class, I used a video from Pexels of a drifting car.

If we add text we can see that the text does not move with the car, instead it is plastered in position and never changes. A nice effect is to tie the text movement with the position of the car. I

In this example, it will be the position that we will be tracking. But we could also track rotation and / or scale.

What should we do:

- 1. Import footage to After Effects
- 2. Open Tracker panel on (check the windows menu if you do not see it)
- 3. Select Motion Tracking
- 4. Using the Tracker box, move it to an area that has high contrast (in our example, we put the tracker on the grill of the car)
- 5. Choose the forward play button (this will track all footage automatically forward)
- 6. If the tracker data looks good, move on to the next step, otherwise try again
- 7. Create new Null Object
- 8. Choose Edit Target and select the Null Object as the target. Then click Apply
- 9. Create Text layer
- 10. Position the text where you like
- 11. Parent the text to the Null Object

Multi-Point Tracking

Putting it in practice (Multi-point tracking):

For example, if we use a video of a person on a scooter

As the scooter moves through the video, the person gets larger. If we add text or an object to this motion, we can make the scale change in relation to the scooter.

In this example, it will be the position & scale that we will be tracking.

What should we do:

- 1. Import footage to After Effects
- 2. Open Tracker panel on (check the windows menu if you do not see it)
- 3. Select Motion Tracking and choose the Position & Scale Boxes
- 4. Using the Tracker boxes, move each to an area that has high contrast
- 5. The tracker will measure the change of distance between the boxes.
- 6. Move your play head to the end of the clip.
- 7. Choose the reverse play button (this will track all footage automatically backward)
- 8. To improve chances, option the options button in the Tracker panel and choose the Adjust Feature and choose continuous, the start the track
- 9. If the tracker data looks good, move on to the next step, otherwise try again
- 10. Create new Null Object
- 11. Choose Edit Target and select the Null Object as the target. Then click Apply
- 12. Create Text layer
- 13. Position the text where you like
- 14. Parent the text to the Null Object
- 15. Scrub through the clip and you will see that the text changes in scale

Perspective Tracking (4 points)

You see in movies and TV lots of examples of screens with custom data on it. For example, someone on their phone or in the office. In most cases that content is created outside the shot and then masked into the scene.

Perspective tracking can also be used to create unique backgrounds and set design.

What should we do:

- 1. Import footage to After Effects
- 2. Open the Tracker panel (click on windows if you do not see the panel
- 3. Select Motion Tracking
- 4. Import footage to After Effects
- 5. Open Tracker panel on (check the windows menu if you do not see it)
- Select Motion Tracking and then Choose Perspective Corner Pin under the Track Type drop down
- 7. Using the Tracker boxes, move each to an area that has high contrast
- 8. The tracker will measure the change of distance between the boxes.
- 9. Move your play head to the end of the clip.
- 10. If the tracker data looks good, move on to the next step, otherwise try again
- 11. Choose Edit Target and select the Your other video clip. Then click Apply
- 12. Adjust scale if necessary