

Using the BCC Corner Pin Filter

The BCC Corner Pin filter allows you to map media to a specific area on a moving object in a media file. In this exercise, you will use the Corner Pin filter to pin a clip to a panning shot of an empty monitor.

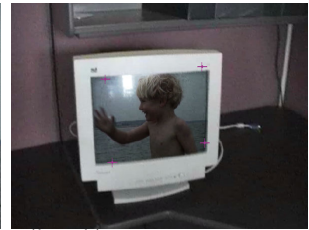
In version 4.0, the Motion Tracker includes a number of improvements that increase the accuracy and efficiency of tracking. You can now process your image to improve the tracking results. You can also specify which channel to track and define a tracking range. These improvements are included in the new Corner Pin filter.



Original image

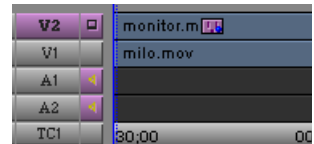


Corner Pin Image



Filtered image

1. Create a new sequence and edit two clips into the sequence. You can use any media of any duration that you like. The easiest method is to edit the background track on V2 above the corner pin image on V1. If you are using the supplied movies, edit the *Monitor.mov* onto V2 and the *Milo.mov* on V1.
2. Choose **Tools > Effect Palette**.
3. Click to select the **BCC Distortion & Perspective** category on the left of the Effect Palette. Drag the icon for the **BCC Corner Pin** effect onto the V2 clip and enter Effects mode.
4. Choose the track that you want to use to replace the moving area from the **Corner Pin Source** menu. In this example, you would choose *1st Below*.
5. Click the **disclosure triangle** to open the **Motion Tracker Preprocess** parameter group. You will adjust the Motion Tracker Preprocess parameters to make your source image easier to track.
6. Click the **View Preprocessed Source** checkbox. This lets you view the preprocessed source image as you adjust it. When you select this checkbox, the chosen effect does not display in the Effect Preview window. Once you finish adjusting the Preprocess parameters, deselect this checkbox to view the applied effect.
7. Depending on your footage, adjust the **Input Black**, **Input White**, **Gamma** and **Blur-Sharpen** parameters to adjust contrast and eliminate noise. With the example footage, **Blur-Sharpen** was set to a value of 26 and **Input Black** was increased slightly.



Video shot at night or in poorly lit settings often contains noise in the dark areas which can interfere with accurate tracking. Increasing Input Black removes this noise by treating all areas darker than the Input Black setting as black.

- Once you finish adjusting the Preprocess parameters, deselect the **View Preprocessed Source** checkbox to view the applied effect.



You should deselect the **View Preprocessed Source** checkbox before you select the **Track On-the-Fly** checkbox and begin tracking.

- Move the position indicator to the first frame and click the **disclosure triangle** to open the **Motion Tracker** parameter group. You will use the parameters in the Motion Tracker parameter group to setup the Target. The Target indicates the area in the media to track.
- Select the **Track On-the-Fly** checkbox and use the onscreen controls to position the four motion trackers on each of the four corners of the region to replace.

When you select this checkbox, the chosen effect does not display in the Effect Preview window. Once you finish tracking, deselect this checkbox to view the applied effect.

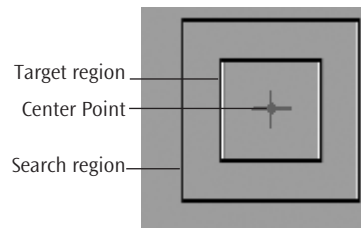
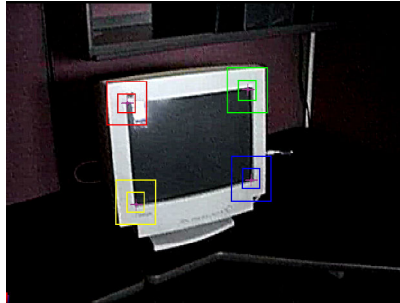
When you finish, your Effect Preview window should appear similar to the example at right.

- Click the **disclosure triangle** to open the **Tracker 1** parameter group.
- Increase the **Target Width 1** and **Search Width 1** parameters. The example uses a **Target Width 1** value of 8 and a **Search Width 1** value of 21.

Target Width 1 sets the size of the area to track. **Search Width 1** sets the size of the search area. The search region should be large enough to accommodate the movement of the target region in the subsequent frame. Increasing these values increases preview time but can increase the accuracy of the tracking.

Because the **Use Width 1 for All** checkbox is selected, the **Target and Search Width** parameter values set in Tracker 1 apply to all trackers.

- Generate the tracker data using by pressing **Play**. The filter calculates the tracking data.



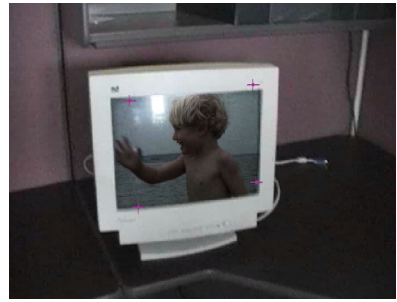
- 14. Deselect the **Track On-the-Fly** checkbox to view the applied effect.

The Corner Pin media is automatically positioned in the region defined by the four corner trackers. The media distorts as necessary to fit the region as it moves and changes shape. As you can see in the example at right, the image appears a little flat. You will use an apply mode to make the composite look more realistic.



- 15. Click the **disclosure triangle** to open the **Composite** parameter group.

- 16. Press the **Apply Mode** menu and choose **Overlay**. This setting controls how the source and Corner Pin images are composited. When you change this, you can now see the light that is reflected on the monitor, which creates a more natural composite. The Corner Pin filter is most useful with Apply Modes other than **Normal**.



- 17. If your image appears too dark, you can use **Apply Mix** to soften the affect of a given apply mode.

The example at right uses a value of **60**.

Apply Mix blends the Apply Mode menu setting with the **Normal** apply mode. For example, if the Apply Mode menu is set to **Overlay**, an Apply Mix value of 0 uses the Normal apply mode, and an Apply Mix value of 100 uses the Overlay apply mode. An Apply Mix setting of 50 blends the two apply modes equally.



- 18. Render your effect.