How to work with other motion effects and features

The picture-in-picture (PiP) technique is one of the most frequently uses of the Motion effects. To make PiPs look realistic, you can give them special features such as beveled edges and drop shadows. This guide shows you how to use presets to create PiPs and how to apply some extra effects.

The Adobe Premiere Pro Motion effect offers many parameters, but it also has a couple of limitations:

- It's always the last effect applied to a clip. That means if you apply the Drop Shadow effect to a clip and use Motion to rotate it, the shadow rotates with the clip as a single unit. That's unrealistic. It should always fall away from the rotating clip in the same direction.
- The Motion effect cannot skew (stretch), swivel, or tilt your clips to give them a 3D look.

You can remedy those limitations by using Basic 3D, Camera View, or Transform. We cover all three in this guide.

We recommend you complete the "How to apply and adjust video effects" guide and the "How to use the Motion effect" guide before completing the tasks in this guide. Those guides cover Motion effect basics as well as video effect properties and keyframes, which are used in this guide. We also recommend you complete the "How to work with alpha channel transparencies" guide. It introduces *compositing*: the process of creating a compound image by superimposing one or more clips on another clip, a technique used in this guide.

To complete the tasks in this guide, you need a background video clip and at least three video clips you can place in video tracks above that background to create several PiPs.

Using the picture-in-picture technique

Video producers use PiPs frequently. To save you time and effort, Adobe Premiere Pro has nearly 40 PiP effect presets. You apply and customize some of them in this task. That is the typical scenario: select a preset and then adapt it to your needs. For example, you might change the size of the PiP, its start and end locations, or how it moves on or off the screen.

To use the picture-in-picture technique:

- 1. Start Adobe Premiere Pro and start a new project. Import the background clip and three other video clips needed for this task.
- **2.** Drag the background clip to Video 1.
- **3.** Drag another video clip to Video 2, directly above the background clip on Video 1 (**Figure 1**).

This should be a clip you want to put in a PiP over the background clip.



Figure 1 Timeline panel, two-clip sequence

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- 4. In the Effects panel, expand these bins in order: Presets, PiPs, 25% PiPs, and 25% UL (Figure 2).
 - All the PiP presets that come with Adobe Premiere Pro display clips at 1/16th their normal size. (Reminder: 25% refers to clip perimeter, not area.)
 - LL, LR, UL, and UR refer to screen locations: lowerleft, lower-right, upper-left, and upper-right.
 - Each PiP set offers a slightly different grouping of PiP moves: Scale In or Out, Scale Up or Down, Spin In or Out, Slide In or Out.
 - The 25% Motion bin presets move PiPs from one screen quadrant to another.

Note: There is no 25% Center preset. You can use one of the existing presets to create one by changing the End Position keyframes to 360, 240.

- 5. In the 25% UL bin, drag PiP 25% UL Slide In Right to the clip on Video 2.
- 6. Play the sequence.

The clip on Video 2 slides in from off the right edge of the screen and settles in the upper-left corner of the screen (**Figure 3**).

7. In the Effect Controls panel, display the Motion effect options (Figure 4).

Scale is set to 25 and Position has two keyframes: one at the In point and the other at one second into the clip.

8. Drag two more clips to the sequence, putting one each on the Video 3 and Video 4 tracks above the two clips on Video 1 and Video 2 (**Figure 5**).



Figure 2 Effects panel PiPs bins



Figure 3 PiP example in the Program Monitor

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Video Effects				video_A.avi
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Scale	25.0			
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	🗹 Unife	orm Scale		
Notation	0.0			
🐞 Anchor Point	360.0	240.0		
Anti-flicker Filter	0.00			

Figure 4 Motion effect in the Effect Controls panel

Video 4	<u>video C.avi</u> [V]
▶ Video 3	<u>video B.avi</u> [V]
▶ Video 2	<u>video A.avi</u> [V]
▶ Video 1	background video.avi [V]

Figure 5 Timeline panel with four-clip sequence

9. In the Video 4 track header, click the Toggle Track Output button (**Figure 6**).

The Video 4 track display switches off.

Note: The clip on the highest-numbered video track covers what's below it in the sequence. To see what's on Video 3, you must switch off the track output on Video 4.

- In the Effects panel, expand the 25% LR bin and drag PiP 25% LR Spin In to the clip on Video 3.
- **11.** Play the sequence.

The second clip spins in from infinity and appears in the lower-right corner of the screen (**Figure 7**).

12. In the Video 4 track header, click the Toggle Track Output button (**Figure 6**).

The Video 4 track display switches on.

- **13.** Apply a PiP preset of your choice to that clip and any other clips you care to add to the sequence.
- 14. Play the sequence to see how the clips move together (Figure 8).

Note: You can customize the behavior of the PiP presets applied to the clips by changing the keyframe timing and the Scale, Position, Rotation, or other parameters.



Figure 6 Toggle Track Output button



Figure 7 Two PiPs displayed in the Program Monitor



Figure 8 Four PiPs displayed in the Program Monitor

Enhancing PiPs with the Bevel Edges and Drop Shadow effects

PiPs have a realistic feel when they have drop shadows or beveled edges.

To apply Bevel Edges and Drop Shadow effects:

- **1.** Continue where you left off in the previous task.
- **2.** Drag the CTI past the point in the clips where all the PiPs have settled into position.
- **3.** In the Effects panel, expand the Presets bin, expand the Bevel Edges bin, and drag Bevel Edges Thin to the clip on the highest-numbered video track.
- **4.** In the Program Monitor View Zoom Level menu, select 150% and use the scroll bars to get a closer look at this effect (**Figure 9**).



Figure 9 PiP with Bevel Edges preset

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- **5.** In the Effect Controls panel, expand the Bevel Edges effect options and change the options values as follows (**Figure 10**):
 - *Edge Thickness*: Increase slightly.
 - *Light Angle*: Leave at -45° (equivalent to 315°) to illuminate the beveled edges at the top and left side of the clip.
 - *Light Color*: Change by dragging the eyedropper to a distinct colored area of the clip in the Program Monitor.
 - *Light Intensity*: Increase to about 0.5 to emphasize the beveled edges.
- **6.** In the Effect Controls panel, click the Bevel Edges name to select the effect.
- 7. In the Effect Controls panel menu, select Save Preset.

The Save Preset dialog box appears (Figure 11).

8. Give your preset a name, leave Scale selected, and click OK.

This preset shows up immediately in the Presets bin in the Effects panel.

- **9.** In the Effects panel Presets bin, drag the newly created bevel edges preset to each of the remaining PiP clips in the sequence (not to the clip on Video 1—it's the full-screen background clip).
- **10.** In the Program Monitor View Zoom Level menu, select Fit.

All the PiPs now have the same beveled-edge look (**Figure 12**)

11. In the Effects panel, expand the Video Effects bin, expand the Perspective bin, and drag Drop Shadow to any clip in the sequence (other than the background clip on Video 1).

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	►	🕉 Scale	25.0			
	►					
			🗹 Uniform Scale			
	Þ	location	0.0			
		🐌 Anchor Point	360.0 240.0			
	Þ	🐌 Anti-flicker Filter	0.00			
►	fx	Opacity				
►		Time Remapping				
▼	fx	Bevel Edges				
	Þ	🌢 Edge Thickness	0.10			
	▼	🍅 Light Angle	-45.0 °			
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Figure 10 Bevel Edges effect in the Effect Controls panel

Save Preset	×
Name:	Bevel Edges Preset
Туре:	 Scale Anchor to In Point Anchor to Out Point
Description:	
	OK Cancel

Figure 11 Save Preset dialog box



Figure 12 PiPs with beveled edges

- **12.** In the Effect Controls panel, display the Drop Shadow options and change the values as follows (**Figure 13**):
 - *Distance*: Increase until you can see the shadow (you might need to adjust the View Zoom Level of the Program Monitor to see how this works).
 - *Color*: Use the eyedropper to select a dark color from the background in the Program Monitor.
 - Opacity: Adjust if needed.
 - *Softness*: Adjust if needed to make the shadow look more realistic. Generally, the greater the Distance parameter, the more softness you should apply.
 - *Direction*: 135° (or –45°).

Note: You want the shadow to fall away from any perceived light source. In this task you set the light direction for Bevel Edges to -45° (or 315°). The drop shadow should fall away from the light source (either add or subtract 180° from the light source direction to calculate the direction the shadow should fall).

- **13.** In the Effect Controls panel, click the Drop Shadow name to select the effect.
- **14.** In the main menu, select Edit > Copy.
- **15.** Click on another PiP clip to display its effects in the Effect Controls panel.
- **16.** In the main menu, select Edit > Paste.

The Drop Shadow effect appears in the Effect Controls panel with the option values you set for the other clip.

- **17.** Select the other PiP clips one at a time and apply Drop Shadow to them by selecting Edit > Paste.
- **18.** In the Program Monitor View Zoom Level menu, select Fit.

The PiPs should look something like the example (**Figure 14**).

▼	fx	Drop Shadow	w		
		🍯 Shadow Color	*		
	►	🍈 Opacity	63 %		
	Þ	Direction	<u>135.0</u> °		
	Þ	🐌 Distance	58.0		
	►	🍯 Softness	94.0		
		🍅 Shadow Only	Shadow Only		

Figure 13 Drop Shadow effect in the Effect Controls panel



Figure 14 PiPs with beveled edges and drop shadows

Using other motion effects: Basic 3D, Camera View, and Transform

If you apply any number of video effects to a clip, Adobe Premiere Pro applies the non-fixed effects first (in order from the top of the non-fixed effects list to the bottom) and then applies the fixed effects of Time Remapping, Opacity, and Motion.

That means if you apply the Drop Shadow effect to a PiP (or any other clip) and then use the Motion effect to rotate the PiP, the PiP and its shadow will rotate as a single object. That's unrealistic. The shadow should always fall away from the rotating clip in the same direction. To get a realistic drop shadow with rotation applied to a clip, you can use the Transform (the non-fixed version of the Motion effect), Basic 3D, or Camera View (Windows only) video effects and apply them before you apply Drop Shadow.

Those effects also have other features that set them apart from the Motion effect:

- *Transform*: The non-fixed version of the Motion effect. It offers four additional options: Skew, Skew Axis, Opacity, and an anchor-point cross-hair display in the Program Monitor. With Skew, you can stretch clips to give them a greater sense of perspective.
- *Basic 3D*: Your best bet when trying to give a clip a 3D look. Its Swivel option moves a clip's left and right sides back and forth, and its Tilt option moves the top and bottom. In addition, Basic 3D has a specular highlight option that creates the impression that a bright white light is shining on the surface of the clip. That light reflects off the clip surface and moves along the surface as you animate the clip.
- *Camera View (Windows only)*: Similar to Basic 3D. It gives you more control over the clip movements along various axes (you can roll and stretch a clip), but you cannot change the clip's center point in the screen. In addition, Camera View has an option for placing the clip on a solid-color background.

To use Basic 3D, Camera View, and Transform:

- **1.** Start Adobe Premiere Pro and start a new project. Import the background clip and one other video clip to composite above the background.
- **2.** Drag the background clip to Video 1 and the other video clip to Video 2, directly above the clip on Video 1.
- **3.** In the Effects panel, expand the Video Effects bin, expand the Distort bin, and drag Transform to the clip on Video 2.
- In the Effect Controls panel, expand the Transform effect options, select Uniform Scale, and set Scale to 50% (Figure 15).

•	f×	1	‡► Transform		
		Ö	Anchor Point	360.0	240.0
		ö	Position	360.0	240.0
		ö		✓ Unifor	m Scale
	►	ö	Scale	50.0	
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	۱.	ö	Skew Axis	0.0	
	۱.	ö	Rotation	0.0	
	►	Ö	Opacity	100.0	
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	►	ö	Shutter Angle	0.00	

Figure 15 Transform effect

5. In the Effect Controls panel, click on Transform to select it and display its Anchor Point and Position cross hair controls in the Program Monitor.

Note: You may not be able to see the crosshairs if the center of your video image is white or another light color. Just follow the next step as if the controls were there, and they will become visible as you drag from the center.

6. In the Program Monitor, drag the Anchor Point cross hair from the center to the lower-left corner of the Program Monitor screen (Figure 16).

Three things happen:

- Moving the cross hair reveals the Position cross hair below it in the Program Monitor. The Position cross hair remains centered in the screen.
- The Anchor Point value in the Effect Controls panel changes to 0.0, 480 (or something close to that).
- The clip moves to the upper-right corner because the anchor point has been moved to the lower-left corner and the Position cross hair remains centered in the screen.

Note: The Transform effect Anchor Point position in the Program Monitor screen actually represents its location in the clip (with the screen edges representing the edges of the clip). This might seem counterintuitive, but it works this way for a practical reason. If you were to shrink the clip even more, it would be impossible to move the anchor point within the small clip.

- 7. In the Effect Controls panel, expand the Transform options area and set two keyframes for Rotation—one at the In point and another about 2 seconds into the clip. Add a 2x rotation at the second keyframe (Figure 17).
- 8. In the Effects panel, expand the Video Effects bin, expand the Perspective bin, and drag Drop Shadow to the clip.

Note: In the Effect Controls panel, make sure the Drop Shadow effect is below Transform. If it is not, then drag it below Transform in the Effect Controls panel. (It may be helpful to collapse the Transform options.)

- **9.** In the Effect Controls panel, expand the Drop Shadow options and set the Distance value to 50 (**Figure 18**).
- **10.** Play this clip.

The drop shadow always falls in the same direction, down and to the right.

11. Change the Skew and Skew Axis settings (in the Transform effect) to distort the shape of the clip.

The drop shadow changes accordingly (Figure 19).



Position crosshair



Figure 16 Transform effect



Figure 17 Rotation settings

▼	fx	D	op Shadow		
		Ö	Shadow Color	*	
	Þ	Ö	Opacity	50 %	
	Þ	Ö	Direction	<u>135.0</u> °	
	Þ	Ö	Distance	50.0	
	►	ö	Softness	0.0	
		ö	Shadow Only	Shadow Only	

Figure 18 Drop Shadow effect



Figure 19 Transform effect with Skew applied

- **12.** In the Effect Controls panel, delete Transform or click its Toggle The Effect On Or Off button to switch it off.
- **13.** In the Effects panel, expand the Video Effects bin, expand the Perspective bin, and drag Basic 3D to the Effect Controls panel above Drop Shadow.

Note: If you place it below Drop Shadow in the effects list, the drop shadow will stick to the clip, just as it does when you use the Motion effect.

- In the Effect Controls panel, expand the Basic 3D options and select the Show Specular Highlight option (Figure 20).
- **15.** Adjust Swivel and Tilt until you see the highlight moving across the clip (**Figure 21**).

Note: The highlight gets very bright when centered on the clip. When using Basic 3D, it's best to swivel and tilt the clip so the specular highlight moves along the edge of the clip.

16. In the Effect Controls panel, delete Basic 3D or click its Toggle The Effect On Or Off button to switch it off.

Note: The remaining steps are for Windows only.

- **17.** In the Effects panel, expand the Video Effects bin, expand the Transform bin, and drag Camera View to the Effect Controls panel above Drop Shadow.
- **18.** In the Effect Controls panel, click the Camera View Setup button (to the right of the words "Camera View").

The Camera View Settings dialog box appears (**Figure 22**).

Note: Camera View gives the impression of a camera looking at your clip from different angles. It works a lot like the Basic 3D effect in that it rotates, flips, and zooms a clip. It also has a settings dialog box and you can display the clip on a solid-color background.

- **19.** In the Camera View Setting dialog box, change Longitude and Latitude to have the clip tilt away from the viewer.
- **20.** Reduce the Focal Length amount to stretch the clip.
- **21.** Leave Fill Alpha Channel selected (if deselected, you will see the background clip on Video 1), click the color swatch to select a color for the background, and click OK to close the dialog box

Ŧ	fx	Ba	asic 3D	
	►	Ö	Swivel	0.0
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		Ö	Preview	Draw Preview Wirefra

Figure 20 Basic 3D effect



Figure 21 Basic 3D effect with a specular highlight

Camera View Settings						
Settings		Sample				
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/ Distance 1						
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Reset		OK Cancel				

Figure 22 Camera View Settings dialog box