



Image Capture **Best Practices Guide**

For video walkarounds and still photography



Index

Pages 1-2 -- **Preparing the Environment for a Great Shoot**

Pages 2-3 -- **Preparing the Vehicle for a Great Shoot**

Pages 3-4 -- **Best Practices for a Fantastic 360° WalkAround**

Pages 4-9 -- **Capturing Amazing Exterior & Interior Still Images**

Images and video are the most impactful and foundational elements of effective digital merchandising on your dealership website. Ensuring quality image capture leveraging the Impel platform and vehicle photography best practices will result in higher engagement with your inventory and greater conversion from your dealership's VDPs.

Remembering all the details and tips that make vehicle imagery great doesn't have to be hard. With this guide, your photographer will be able to quickly learn and incorporate the best ways to capture vehicle photos and videos.



Preparing the Environment for a Great Shoot

These image capture tips will help ensure you are mindful of all of the elements that are within your control. Proactively implementing these practices will ensure your images and spins focus only on the vehicle with no distractions, making each car the star.



Watch the background. If at all possible, choose a spot with low vehicular and pedestrian traffic. Things like other vehicles, signage, unpleasant surroundings, containers, garbage, or other visual distractions and “noise” can detract from the quality of the photo and disrupt the shopper’s focus, which impacts results. Find a place with minimal distractions or better yet, move all disruptive elements out of the frame.

Secure room to shoot and smooth footing. Ensure you have room to move and try to avoid areas with obstacles such as potholes, curbs, large pavement cracks, columns or others. Obstacles like these can cause choppiness and unevenness during shooting (particularly during video spins) due to differences in the height of the camera and/or distance from the vehicle and uneven footing.

Watch the light. Cloudy days or shooting indoors are optimal conditions for image capture as the light is neutral and even, resulting in more natural images with less bright spots, reflections or contrasts. However, when it’s bright, you can still capture amazing images and spins. Here are some tips that will help.

- Overhead light is best. When possible, it’s best to capture images when the light source is directly above the vehicle. This helps avoid direct sunlight in the camera’s field of view. Additionally, since cars are so reflective, more light tends to come through the aperture of the camera, which can result in washed out imagery on very sunny days. Taking this step helps reduce reflections and lens flares, producing a better-looking interior panoramic.
- However, you can also choose a spot close to the dealership that offers full shade which covers the whole vehicle. If feasible, you could consider shooting inside the service bay, delivery bay or showroom floor.
- There are also certain products that can help: a lens hood can help eliminate sun flares, and a circular polarizer lens can help reduce glare from windows. Both are available for purchase online or in a camera shop and are compatible with the Beast Grip Kenko Pro Series 58mm lens.



Watch the shadows. If you’re close to a large building or a tall sign, the resulting shadows can interfere with a clear view of the vehicle and obscure important details. The photographer’s shadow itself can also be a hindrance. Even passing clouds can create surprise shadows! If possible, ensure you are in a clear, neutral space where shadows won’t be cast partially or completely over the car and be sensitive and aware of temporary or mobile shadows.

Pay attention to the ground. For example, during the summer, make sure that puddles from the AC do not show, as they could be confused with oil or fluid leaks. Also watch for rain puddles, water runoffs or other stains that could also be mistaken for vehicle fluids.

Be careful of reflections. You never know what surprising things can sneak into the reflections on a car's surface – the photographer included! Assess the surroundings and your angles to ensure no unwanted reflections are in the images. Watch out for things like trash, street or retail signage, competitive signage, industrial buildings, etc.



Preparing the Vehicle for a Great Shoot

Your environment is ready, and you know what to anticipate and look for. Let's turn our attention to preparing the vehicle itself for a premium quality shoot.

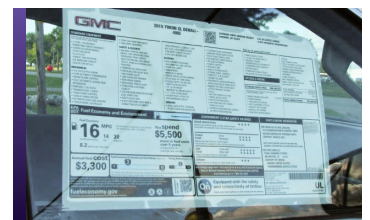
Vehicle Exterior

- Turn on all exterior lights to create contrast and visual interest. During the day, use the high beams for maximum effect, but remember this can affect your light metering, so adjust accordingly.
- Shoot pictures at normal eye height relative to the section of the car, close-up or feature you are capturing. Too high and it looks awkward, too low and it looks menacing.



Ensure a consistent wheel angle. Angling the wheels toward the camera provides a more dramatic, sporty effect, while keeping the wheels straight emphasizes safety and stability. Whichever approach your dealership chooses, keep the angle consistent across your inventory for a uniform look on your website.

- Clean debris from under the hood before taking a picture of the engine.
- Clean all items from the trunk before capturing images.
- Ensure you take a picture of interesting, unique or necessary external features, such as a roof rack, spare tire, spoiler, and others. These features drive consumer interest and further affirm the vehicle's value.
- Capture vehicle window stickers. Though these are optional, they help drive dealer transparency and provide valuable information to an interested shopper.



Vehicle Interior

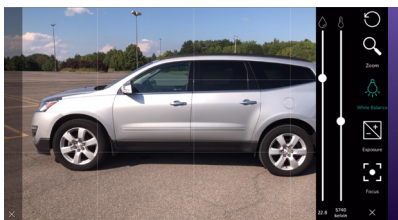
- Never face the car windshield directly into the sun to avoid glare, lens flare or a washed-out interior.
- Turn on instrument panel lights inside the vehicle to dial up the vibrancy and detail of interior dashboard and console features. Do not turn on cabin overhead lights, however, as they can cause flares in the interior panoramic image.
- Keep the steering wheel straight and unobstructed so that the logo is straight and very readable in the photo.
- Turn the radio, navigation, and back-up screens on before capturing images.
- Make sure the dashboard, all borders, edges and the center console are clean.
- Make sure it is easy to read the odometer.
- Remove paper floor mats before shooting.



Let's get to it! The following step-by-step guide provides useful tips and best practices we've developed during our work with thousands of retailers, auctions and OEMs around the world. These guidelines will help you consistently capture premium quality, beautiful images to feature your vehicles in the best light possible.

Importantly, the sequence of shots follows what we have found to be the most logical and efficient order of exterior and interior image capture. However, if your dealership or photographer has an order of photography that works for your particular business, or if you don't have the time or capacity to re-learn the sequence, don't fret! Though we have built in an automated, step-by-step process on our Capture app, we can customize the sequence to reflect the order you feel is most effective or easy for your photography while still providing a superior digital showroom experience.

Best Practices for a Fantastic 360° WalkAround



Use photography controls before shooting. The Capture App features built-in camera controls to help with exposure, white balance, contrast, focus and other areas. You can certainly tap on the screen to help fix these issues after recording. However, it's easier and a best practice to adjust these areas and additional elements like lighting and color balance before capturing an image. This will ensure consistency from shot to shot and reduce post-capture editing time.

Keep the vehicle in frame. As you make your way around the vehicle, ensure the entire vehicle is inside the camera frame. Fill as much of the frame as possible while keeping a little margin around the edges, which will give you some latitude and also provide space in case stabilization cropping is needed.



Learn the walk. Our Capture App includes computer vision and stabilization technology to help ensure a smooth spin. However, in addition to ensuring your surroundings and the ground are clear of obstacles, the following great tip will help you ensure the spin is even smoother:

- When recording, keep your lower body and feet facing the direction you're walking in, while keeping your upper body is turned toward the vehicle as you record with the camera.
- Additionally, keep your steps measured and even with a relaxed walk that's not too fast. It should take you about 30 seconds to complete a spin.



This approach will make your recordings more even, smooth and jitter-free. Avoid sidestepping or excessive speed because they increase shakiness and heighten the probability of tripping over your feet or any uneven ground.



Get a grip. The best way to hold the device when walking around the vehicle is about chest height, with your arms extended at about 45 degrees. This will allow you to view the camera well while ensuring maximum stability. It will also help you effectively preview images, use photographic controls and make edits while in the middle of a capture without losing your frame position.

Use the zoom for shadows. If your shadow is showing up in the image, use the zoom function and adjust your physical distance appropriately. This can help you capture the vehicle fully in the frame while eliminating the shadow problem.

Capturing Amazing Exterior & Interior Still Images

Exterior Still Images

360° WalkArounds replicate the physical lot experience for the shopper and are essential for an effective visual experience. However, still images give the prospective buyer the ability to stop, inspect, zoom in, pan out and explore. The following step-by-step guide will help ensure great exterior photographs.

These guidelines apply to all images as you prepare to shoot:

- **Distance.** Always ensure you are at enough of a distance from the vehicle that you leave a little margin around the edges of the frame. This allows room for stabilization cropping (if necessary), gives you some margin of error, and makes the image look more professional with "room to breathe."
- **Centering.** In every image, make sure the car is centered in the frame, both horizontally (left-right) and vertically (top-bottom).
- **Customization.** As you capture a spin and then transition to still images, remember that the Capture App provides you with the ability to add in custom photos using the Plus button. See a unique or interesting feature you want to capture that's not on our list? Simply add it and capture it!
- **Auto enhance!** Impel's app features a one-touch Auto-Enhance function which really makes photos pop and sharpens detail. Using this to quickly optimize photos right in the app will add flair and clarity to your images.

Following are tips and examples for a perfect frame-by-frame image capture session.

1. Ensure vehicle brand emblem is centered in the frame. Remember to center horizontally and vertically.



2. Maintain the vehicle level in the frame and follow the above centering guidelines.



3. Align with the edge of the driver side door. Vehicle centered in frame (top-to-top and side-to-side).



4. This angle is more unusual. Aligning the vehicle horizontally and vertically will ensure best results. Show as much of the vehicle side and rear.



5. Ensure vehicle brand emblem is centered in the frame. Remember to center horizontally and vertically.



6. This angle is more unusual. Aligning the vehicle horizontally and vertically will ensure best results. Show as much of the vehicle side and rear.



7. Align with the edge of the passenger side door. Vehicle centered in frame (top-to-top and side-to-side).



8. Maintain the vehicle level in the frame and follow the centering guidelines.



Exterior Close Up Still Images

On general principle for exterior close-ups, shoot pictures at normal eye height relative to the section of the car, close-up or feature you are capturing.

9. **Wheel:** Ensure you include the entire wheel and that you do not crop the top or bottom of the wheel. Include some of the wheel well for context. As discussed above, it's important to get as level as possible with the wheel emblem or hub so the image is clear, and details are fully appreciable.



10. **Engine:** Try to zoom in close enough that the consumer can see the engine details while still capturing as much of the engine as possible. Capture the image with an overhead angle that allows for the most complete view of the engine. Keep the camera level horizontally.



11. **Trunk:** Ensure you capture enough of the car's frame for context, so that the consumer immediately recognizes it's a trunk (not too close), but close enough that the interior of the trunk and other details are appreciable. The trunk should be clean and totally empty and decluttered. Finally, make sure the lighting is even and free of shadows.



Interior Still Images

Your interior images provide a virtual, immersive tour of the interior details of the vehicle. While the 360° interior panoramic view is essential to provide that “in the cockpit” perspective, it’s the close-up interior photographs that will really communicate beauty, uniqueness and key features the shopper will dwell on. That’s why it’s important to ensure these images really shine!

The following list represents the most critical interior highlights and is not exhaustive. By following the best practices below, however, you’ll ensure a great photo no matter what interior element you are capturing.

1. **Driver’s Seat.** This shot should be just above eye level to enable you to capture both seats. Too high and it looks awkward, too low and you lose perspective and detail. Ensure seats and console are clean and free of clutter. Minimize outside objects in the frame to keep the focus on the subject of the image.



2. **Optional: Driver’s Door.** Keep enough distance so that there is no warping to the image, then zoom in slightly as needed. Keep the image shadow-free (including your own shadow). Capture the entire door from bottom to the top of the door panel before the window begins. Keep the top of the door panel aligned with the top of the frame.



3. **Steering Wheel.** Ensure this image is level and completely unobstructed, with a clear view of the brand emblem and the odometer. Make sure the steering wheel is level horizontally.



4. **Optional: Steering Wheel Details.** If the vehicle has unique, value-added features reflected in steering wheel controls, it might be good to include more detailed close-ups of those controls. Continue to ensure the steering wheel is level and the view unobstructed.



5. **Console/Entertainment Center.** The intent is to feature the front entertainment panel. As always, keep the image level, clear and free of clutter. Align the top of frame with the dashboard/window line to exclude the windshield and excess light. Include the air vents for context as applicable. If there are many features, consider breaking this area up into several photos.



6. **Navigation/Rearview Camera.** Keep this image level and align the top of frame with the top of the navigation screen. Fill up as much of the frame as possible with the navigation screen but provide enough of the surrounding area so that the shopper can understand where the screen is located relative to the front console area. Repeat for the rearview camera view close-up.



7. **Shifter/Cupholders.** Additional images to capture if there are areas of visual interest or features to highlight. Keep the area very clean and free of any clutter. Watch for glare or glinting off of shiny or metal surfaces and keep the camera level to the extent possible.



8. **Sunroof/Moonroof.** This shot will be important to “frame” with enough of the car’s area to show the sunroof/moonroof in context. The best angle is usually down low, looking up, photographing about sideview mirror height, from close to or just “behind” the steering wheel area so that you can include as much of the seats and roof as possible. Keep the camera level horizontally – this is extremely important to reduce awkward angling. Try to capture the entire frame of the sunroof/moonroof if possible.



9. **Bird's Eye Cockpit View.** This image provides the shopper with a “global” perspective of the vehicle’s interior front. Ensure you capture the entirety of the steering wheel, keeping it as much to the upper left as possible. Include as much of the entire driver side and passenger side as possible. It’s important that the seat backs and the bottom cushions are even with each other. Lastly, minimize exterior lights or distractions by lining up the top of the frame with the edge of the dashboard (where it meets the windshield).



10. **Optional: Front Passenger Door.** Keep enough distance so that there is no warping to the image, then zoom in slightly as needed. Keep the image shadow-free (including your own shadow). Capture the entire door from bottom to the top of the door panel before the window begins. Keep the top of the door panel aligned with the top of the frame.



11. **Front Passenger Seat.** This shot should be just above eye level to enable you to capture both seats. Too high and it looks awkward, too low and you lose perspective and detail. Ensure seats and console are clean and free of clutter. Minimize outside objects in the frame to keep the focus on the subject of the image.



12. **Optional: Rear Passenger Doors.** Keep enough distance so that there is no warping to the image, then zoom in slightly as needed. Keep the image shadow-free (including your own shadow). Capture the entire door from bottom to the top of the door panel before the window begins. Keep the top of the door panel aligned with the top of the frame.



13. **Rear Seats.** Similar to the front seat images, this shot should be just above eye level to enable you to capture the entirety of the back seat. Too high and it looks awkward, too low and you lose perspective and detail. Ensure seats are clean and free of clutter. Make sure you do not cut off the head rests by aligning the top of the frame with the top of the head rests. Minimize outside objects in the frame to keep the focus on the subject of the image. Importantly, decide whether you will put cup holders and/or arm rests up or down. Once you do, ensure you stay consistent with all of your backseat images.



14. **Optional: End-to-End (Back Seat View).** This is a global view of the back-seat area in its entirety, which is particularly important in larger passenger vehicles and those with third-row seats. To the extent possible, line up the top of frame with the top of the headrests, and the left of frame with the front seat backrests. Ensure the front seats are flush and aligned.



Incorporating these best practices will ensure beautiful high-quality spins and photos that distinguish your dealership from the competition and make your vehicles come to life online. And don't worry – these tips will become second nature within weeks of using our Impel Capture App – if not sooner!

If you have any questions, please contact your Customer Success Manager, send an email to cs@impel.io, or simply call 1-84 GETIMPEL.

