

Pentax 21790

Pentax SMC DA* 55mm f/1.4 SDM Prime Standard Lens Instruction Manual

Model: 21790

INTRODUCTION

This manual provides essential information for the proper use and care of your Pentax SMC DA* 55mm f/1.4 SDM Prime Standard Lens. This high-performance lens is designed for Pentax Digital SLR Cameras, offering exceptional image quality with its advanced optical elements and coatings. It features a fast f/1.4 aperture, weather-resistant construction, and a Supersonic Direct-drive Motor (SDM) for quiet and precise autofocus.

SETUP

Attaching the Lens

1. Ensure both the camera and lens are powered off.
2. Remove the rear lens cap and the camera body cap.
3. Align the red mounting index mark on the lens barrel with the corresponding mark on the camera body.
4. Insert the lens into the camera's lens mount and rotate it clockwise until it clicks into place. Do not force the lens.

Detaching the Lens

1. Ensure the camera is powered off.
2. While pressing the lens release button on the camera body, rotate the lens counter-clockwise until it stops.
3. Carefully remove the lens from the camera body.
4. Attach the rear lens cap to the lens and the body cap to the camera to protect them from dust and damage.

Attaching the Lens Hood and Cap

The PH-RBH lens hood is designed to reduce flare and protect the front element. Align the hood with the front of the lens and twist until it locks securely. The O-LC58 objective cap protects the front element when the lens is not in use.



Image: Angled view of the Pentax SMC DA 55mm f/1.4 SDM lens, showing the focus ring, AF/MF switch, and distance scale.*

OPERATING THE LENS

Focusing

- **Autofocus (AF):** Set the AF/MF switch on the lens to 'AF'. The lens utilizes a Supersonic Direct-drive Motor (SDM) for quiet and fast autofocus.
- **Manual Focus (MF):** Set the AF/MF switch on the lens to 'MF'. Rotate the focus ring to adjust focus manually.
- **Quick-Shift Focus System:** This system allows for instant switching between autofocus and manual focus without changing the AF/MF switch position on the lens, provided the camera body supports this feature. After autofocus has locked, you can fine-tune focus manually by rotating the focus ring.

Aperture Control

The lens features a fast maximum aperture of f/1.4, allowing for excellent low-light performance and shallow depth-of-field effects. The aperture can be stopped down to f/22. The 9 rounded diaphragm blades contribute to a smooth, circular bokeh (background blur) at wider apertures. Aperture control is fully automatic and managed through the camera body.

Weather-Resistant Construction

The lens is equipped with a water- and dust-resistant seal, providing reliable operation in challenging environmental conditions. While resistant, it is not waterproof; avoid submerging the lens in water.



Image: Front view of the Pentax SMC DA* 55mm f/1.4 SDM lens, highlighting the distance scale and AF/MF switch.

MAINTENANCE

Cleaning the Lens

- **Lens Elements:** The objective lens surface is treated with Pentax's Super Protect (SP) coating, a fluorine compound that repels dust, water, and grease. For cleaning, use a soft, clean lens cloth. For stubborn smudges, use a specialized lens cleaning solution applied to the cloth, not directly to the lens.
- **Lens Body:** Wipe the lens body with a soft, dry cloth. Do not use organic solvents like paint thinner or benzene.
- **Dust:** Use a blower brush to remove dust from the lens surface.

Storage

When not in use, store the lens with both front and rear caps attached in a cool, dry place away from direct sunlight and extreme temperatures. Avoid storing the lens in areas with high humidity to prevent mold growth.

TROUBLESHOOTING

- **Autofocus is slow or inaccurate:**

Ensure the AF/MF switch on the lens is set to 'AF' and the camera body is also set to autofocus. Check lighting conditions; very low light can affect AF performance. If issues persist, try cleaning the lens and camera contacts. Some users have reported inconsistent SDM performance; if this occurs, contact Pentax customer support.

- **Image quality is soft or blurry:**

Verify that the lens is properly focused. Check your camera's shutter speed to avoid motion blur, especially in low light. Ensure the aperture setting is appropriate for your desired depth of field. Clean lens elements if smudges are present. If softness persists across all settings, the lens may require servicing.

- **Lens not recognized by camera:**

Ensure the lens is securely mounted to the camera body. Clean the electronic contacts on both the lens mount and camera body with a clean, dry cloth. Power cycle the camera.

SPECIFICATIONS

Feature	Detail
Focal Length	55mm (equivalent to 84.5mm in 35mm format)
Maximum Aperture	f/1.4
Minimum Aperture	f/22
Lens Construction	9 elements in 8 groups (including ED optical elements)
Angle of View	28.6 degrees (with Pentax DSLR)
Diaphragm Blades	9 (rounded)
Minimum Focusing Distance	1.48 feet (0.45 meters)
Maximum Magnification	0.173x
Filter Diameter	58mm
Diaphragm Control	Fully automatic
Lens Hood	PH-RBH (included)
Mount	Pentax KAF3
Objective Cap	O-LC58 (included)
Case	S90-100 (included)
Dimensions (Diameter x Length)	2.8 inches x 2.6 inches (71mm x 66mm)
Weight	13.2 ounces (374 grams)

WARRANTY AND SUPPORT

This Pentax lens typically comes with a **one-year limited warranty** from the date of purchase. Please refer to the warranty card included with your product for specific terms and conditions. For technical support, service, or warranty claims, please contact Pentax customer service or visit the official Pentax website for your region. Keep your proof of purchase for warranty validation.

