

Canon AE-1 Program

Canon AE-1 Program 35mm SLR Camera Instruction Manual

Model: AE-1 Program

1. INTRODUCTION

1.1 Product Overview

The Canon AE-1 Program is a 35mm single-lens reflex (SLR) camera designed for use with Canon's FD mount lenses. Introduced in 1981, it features advanced exposure control options, including a Program AE mode, Shutter Priority AE mode, and full manual control. This camera is suitable for both beginners and experienced photographers seeking a versatile film photography experience.



Figure 1.1: Front view of the Canon AE-1 Program camera with the 50mm f/1.8 lens.

1.2 Key Features

- **Program Mode:** Automatically selects optimal shutter speed and aperture for correct exposure, ideal for ease of use.
- **Manual and Shutter-Priority Modes:** Offers creative control for advanced users, allowing manual setting of exposure or priority for shutter speed.
- **TTL Metering:** Center-weighted Through-The-Lens (TTL) metering system provides accurate exposure readings in various lighting conditions.
- **Interchangeable Lenses:** Compatible with a wide range of Canon FD mount lenses, expanding photographic possibilities.
- **Built-in Features:** Includes a self-timer, depth of field preview button, and a hot shoe for external flash units.

2. SETUP

2.1 Battery Installation

The Canon AE-1 Program requires a 6V 4LR44 alkaline battery (not included). To install the battery:

1. Locate the battery compartment on the front bottom of the camera body.
2. Use a coin to unscrew the battery compartment cover counter-clockwise.
3. Insert the 6V 4LR44 battery with the positive (+) terminal facing outwards.
4. Replace the cover and screw it clockwise until secure.



Figure 2.1: Bottom view of the camera, highlighting the battery compartment.

2.2 Lens Attachment

The camera uses Canon FD mount lenses. To attach a lens:

1. Align the red dot on the lens barrel with the red dot on the camera's lens mount.
2. Insert the lens into the camera mount.
3. Rotate the lens clockwise until it clicks into place. Ensure the lens is firmly seated.

To detach a lens, press the lens release button on the camera body and rotate the lens counter-clockwise until it disengages.

2.3 Film Loading

The Canon AE-1 Program uses standard 35mm film. To load film:

1. Open the camera back by pulling up the film rewind knob.
2. Place a new film cartridge into the film chamber on the left side.
3. Pull the film leader across to the take-up spool on the right, inserting the tip into one of the slots.
4. Advance the film slightly using the film advance lever to ensure it catches on the take-up spool's teeth.
5. Close the camera back firmly.
6. Advance the film two frames, pressing the shutter button after each advance, until the frame counter shows '1'. The film rewind knob should rotate as you advance the film, indicating proper loading.



Figure 2.2: Rear view of the camera, showing the film door.

3. OPERATION

3.1 Setting Film Speed (ISO/ASA)

Set the film speed (ISO/ASA) on the camera to match the film loaded. This is crucial for accurate exposure metering.

1. Lift and rotate the outer ring of the shutter speed dial to align the correct ISO/ASA value with the index mark.



Figure 3.1: Top view of the camera, showing the shutter speed and ISO dials.

3.2 Exposure Modes

The Canon AE-1 Program offers three primary exposure modes:

- **Program AE Mode:** Set the shutter speed dial to 'PROGRAM'. The camera automatically selects both the shutter speed and aperture for optimal exposure, with a slight bias towards shutter speed. This mode is ideal for quick shooting and beginners.
- **Shutter Priority AE Mode:** Set the desired shutter speed on the dial (e.g., 1/125s, 1/500s). The camera will then automatically select the appropriate aperture. This mode is useful for controlling motion blur or freezing action.
- **Manual Mode:** Set the shutter speed dial to a specific speed and the lens aperture ring to a specific f-stop. You have full control over both settings. Use the camera's meter (visible in the viewfinder) as a guide to achieve correct exposure.

3.3 Focusing

The AE-1 Program features manual focus. To focus:

1. Look through the viewfinder.
2. Rotate the focusing ring on the lens until your subject appears sharp in the split-image or microprism focusing aids in the center of the viewfinder.

3.4 Metering

The camera uses a center-weighted TTL (Through-The-Lens) metering system. When you press the shutter button halfway, the meter activates and displays recommended exposure settings in the viewfinder. Adjust your settings (in Manual or Shutter Priority mode) until the needle aligns for correct exposure.

3.5 Self-Timer

To use the self-timer, move the self-timer lever on the front of the camera. Press the shutter button, and the camera will delay firing for approximately 10 seconds.

3.6 Flash Usage

The AE-1 Program has a hot shoe on top for attaching external flash units. Mount a compatible flash unit onto the hot shoe. Refer to your flash unit's instruction manual for specific settings and synchronization details. The camera's flash sync speed is 1/60s or 1/250s, depending on the specific model and flash type.



Figure 3.2: Angled front view, showing key controls.

4. MAINTENANCE

4.1 Cleaning

- **Camera Body:** Wipe the camera body with a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, but ensure no moisture enters the camera.
- **Lens:** Use a lens brush or blower to remove dust. For smudges, use a clean microfiber lens cloth and a small amount of lens cleaning solution. Avoid touching the lens glass with your fingers.
- **Viewfinder:** Use a soft brush or air blower to remove dust. Avoid harsh cleaning agents.

4.2 Storage

- Store the camera in a cool, dry place, away from direct sunlight and high humidity.
- If storing for an extended period, remove the battery to prevent leakage.
- Keep the lens capped and the camera body cap on when not in use to protect the sensor and lens elements.

5. TROUBLESHOOTING

5.1 Common Issues and Solutions

- **Camera not powering on:** Check if the battery is correctly installed and has sufficient charge. Replace the battery if necessary.
- **Shutter not firing:** Ensure the film advance lever is fully wound. Check if the battery is dead. In Program or Shutter Priority mode, the camera may prevent firing if exposure is impossible (e.g., too dark).
- **Film not advancing:** Verify that the film leader is properly engaged with the take-up spool. Re-load the film if needed.
- **Exposure problems (too dark/light):** Confirm the ISO/ASA setting matches the film. Check the metering in the viewfinder and adjust settings accordingly in Manual or Shutter Priority mode. Ensure the lens aperture is not stuck.
- **Light leaks on film:** Inspect the camera back seals for wear or damage. These may need replacement by a qualified technician.

6. SPECIFICATIONS

Feature	Specification
Model Name	AE-1 Program
Brand	Canon
Compatible Mountings	Canon FD
Photo Sensor Technology	CMOS
Supported File Format	JPEG (for digital conversion, original is film)
Image Stabilization	No
Maximum Focal Length (with included lens)	50 Millimeters
Maximum Aperture (with included lens)	1.8 Millimeters
Expanded ISO Minimum	100
Metering Description	Center Weighted
Are Batteries Included	No
Battery Type	Alkaline (6V 4LR44 recommended)
Shooting Modes	Program, Shutter Priority, Manual
Maximum Shutter Speed	1/250 seconds
Minimum Shutter Speed	0.004 seconds
Viewfinder	Optical
Focus Type	Manual Focus (MF)

Feature	Specification
Material	Likely metal

7. WARRANTY AND SUPPORT

7.1 Warranty Information

This product typically comes with a 90-day limited warranty. Please refer to your purchase documentation or seller for specific terms and conditions regarding warranty coverage and claims.

7.2 Customer Support

For technical assistance, service, or further inquiries, please contact the retailer or the authorized service center where the product was purchased. Keep your purchase receipt and warranty information readily available.