

COMTAL User's Note No. 2

Taking Pictures from
the COMTAL

Jeffery R. Madden
Michael O. Collins

Laboratory for Applications of Remote Sensing
Purdue University West Lafayette, Indiana 47906 USA
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by Jeffery R. Madden, Michael Collins, and Shirley Davis

The purpose of this User's Note is to acquaint the user with the standard procedure for taking pictures from the COMTAL screen. This note is designed to be used in conjunction with the camera Owner's Manual and is not in-depth instruction on how to use the camera. Some knowledge of 35mm photography is helpful, though not required.

Equipment available

Camera: Canon AE-1 with an 85mm lens. The camera is usually stored in the filing cabinet in the room with the COMTAL. The key to the cabinet may be signed out from the computer operators between the hours of five P.M. and eight A.M. If you wish to use the camera during normal working hours, please make arrangements a day in advance with J. Madden or S. Davis. There is film (Kodak Ektachrome) located in the cabinet with the camera. Currently there is no charge for film, but we would like those who use it to fill out the information sheet which is kept with the film. This will help us keep track of film usage.

Accessories: Tripod, cable shutter release, data back, and power winder are all available with the camera. The Owner's Manual is also with the camera. See appendices for further information.

Loading the film: (for detailed instructions, see pages 23-25 of the Owner's Manual)

To open the back cover lift up on the rewind crank and the back cover will pop open.
CAUTION: To prevent damaging the film; after closing the back cover, take up the slack in the film with the rewind crank before advancing the film. Please keep the film advance lever pushed fully forward (NOT in the 30 degree standoff position) to prevent excessive drain on the battery.

Tripod Set-up

Since the shutter speed will usually be rather slow, the tripod will have to be used to prevent blurring of the photograph. The tripod is stored next to the filing cabinet. Adjust the height of the tripod so the center of the camera lens is level with the center of the COMTAL image.

Focusing and Framing the Camera

Focusing the camera is explained on page 33 of the Owner's Manual. There are two devices used to focus the

camera. The center ring in the viewfinder is a split image focusing screen. It is surrounded by a microprism ring.

Either the split image or the microprism ring may be used for focusing with the same results. The choice is up to the photographer.

If you use the split image to focus with, try to find a straight line near the center of the screen (such as the grid for the histogram graph, or type A BA for add bars, focus, then type SU B to remove the bars). Turn the lens until the lines come together. Your image should then be in focus.

The microprism ring will cause the image in the viewfinder to be blurred and shimmering when out of focus. Again you can focus the camera by rotating the lens until the image is clear and steady.

To frame the image properly, the camera should be 3 to 5 feet from the COMTAL. The COMTAL image should fill the camera viewfinder from top to bottom but not side to side (this is because the film is rectangular and the image is square). If desired, the green command lines on the bottom of the image may be included in the photograph. Because of their contrast the lines show up quite well and can be utilized as a labeling device (see sample slides). If you wish to remove the lines type SU A.

Exposure Settings

Based on experimentation by various persons, the following conditions have been determined to produce the best results for shooting slides:

Room Illumination: the COMTAL room should be as dark as possible. All the lights should be turned out and the door should be closed. If you are going to take very many photos, it is advisable to put a sign on the door. Having the door open in the middle of an exposure may cause the image to be overexposed.

Camera setting: manual (pg. 51), do not leave on automatic.

Aperture Setting: f/5.6 (pg. 51)

Shutter Speed: 1/2 sec. (light colored "2" on camera)

ASA 64 (Ektachrome, slides)

You are welcome to experiment with various settings and we would appreciate hearing about your results (see sample slides).

Activating the Shutter

There are 3 ways to activate the shutter:

- 1) Pressing the black shutter release button on top of the camera.
- 2) Using the cable release
- 3) Using the self-timer

The cable release screws into the top of the shutter

release button. To activate the shutter, simply press the plunger down until you hear the shutter snap. You should then release the plunger. If the plunger does not release, rotate the chrome locking washer near the black handles of the plunger. There have been some problems reported in the use of the cable release, and if you should have any, please report them to Jeff Madden.

The use of the self-timer is described on pages 52-53 of the Owner's Manual. It has a 10 second delay and can be used to avoid shaking the camera when you press the shutter release.

If you have any questions on taking pictures from the COMTAL, see J. Madden or S. Davis.

The following appendices explain some methods which could be helpful in taking the photographs.

Appendix A Using the Data Back

Appendix B Using the Power Winder

APPENDIX A

Using the Data Back with the Canon AE-1 Camera

Instructions for the use of the data back are covered on pages 12 through 28 in the DATA BACK OWNER'S MANUAL. The instructions are in five different languages: Japanese, English, French, German, and Spanish, with two identical sets of instruction (e.g. English and French) next to an illustration. Please read through these instructions before using the data back.

The data back replaces the normal back of the camera. It causes a set of numbers and/or figures to be imprinted on the lower right hand corner of the film. The printing may be a day/month/year identification or some other numbering system.

REMEMBER: The data back must have the battery in place, the synchronization cord plugged in, and the on/off switch on if you want the data to be automatically superimposed on the film. If you forget, you can activate the data back manually before you advance the film by pressing the small gray button marked "M" on the top left side of the data back.

Use the light intensity knob at position 2 (for ASA 64 and 100 FILM).

If you are planning to use the data back as a sequential counter, you must reset the figures manually each time.

PLEASE REMOVE THE BATTERY AFTER YOU HAVE FINISHED USING THE DATA BACK.

APPENDIX B

USING THE POWER WINDER WITH THE CANON AE-1 CAMERA

Attaching the power winder is explained on pages 6 and 67 of the camera Owner's Manual. The power winder is a very useful way to avoid moving the camera when you manually advance the film. After the shutter has been released, the winder automatically advances the film to the next frame. You do not have to advance the film manually.

The on/off switch is on the left side of the winder.

If the shutter is not cocked when you turn on the winder, the winder will advance the film one frame and cock the shutter. If the shutter is cocked, the winder will not advance the film until the shutter is snapped.

There are usually 4 AA batteries already in place inside the power winder. A spare set of batteries is kept in the cabinet with the camera. If the batteries are not in the camera, insert them as shown on page 6 of the camera Owner's Manual. Be sure to install the batteries in the proper direction or you may damage the winder.

The winder attaches directly to the bottom of the camera. Remove the winder coupler cover on the bottom of the camera with a dime and line the prongs of the winder up with the notches in the camera. Then turn the attaching screw until the winder is snug against the base of the camera.

Caution: When depressing the shutter release button, do not hold it down as it may cause the camera to take several shots in a row.