N90 Buddy User Manual

DESIGNED FOR™

PALM COMPUTING® PLATFORM

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Introduction

N90 Buddy is a shareware replacement for Nikon's obsolete AC-*n*E/Sharp Wizard combination and a portable substitute for Nikon's Photo Secretary software. N90 Buddy provides access to a number of camera customization features, adds additional creative shooting options, and provides easy access to the camera's built-in ability to record shooting data.

N90 Buddy is distributed under the shareware system. Unlike commercial software that you purchase at a retail location, shareware allows you to try before you buy. If you use N90 Buddy, please make sure you support this honor system and pay the shareware fee of $15. To make payment as simple as possible, N90 Buddy is available for purchase through Kagi's Shareware Registration service. Kagi accepts most major credit cards, First Virtual, check, or money orders. Please see http://members.aol.com/khancock/pilot.html#register for the latest details. After registering, you will receive a serial number via e-mail allowing you to remove the registration reminder.

Quick Start

Before continuing, make sure you have the necessary equipment:

- Any Palm Computing® connected organizer
  (Pilot 1000/5000, PalmPilot™ Personal/Professional, Palm III™, or IBM WorkPad)
- Palm Modem cable (3Com part #10111U)
- Nikon MC-31 cable (or equivalent – see Related Information)
- Nikon N90/F90 or N90s/F90X camera

First, install N90 Buddy onto your organizer.

Connect the Palm Modem Cable to your organizer, connect the MC-31 cable to the 10-pin remote terminal on the camera, and connect the two cables together.

To test that N90 Buddy can communicate with your camera, run N90 Buddy and select "Memo Holder Settings" from the "Camera" menu. Whenever the camera receives data from or transmits data to the organizer, the "Organizer" icon will blink on the Nikon's LCD panel.

If everything is hooked up correctly, the "Memo Holder Settings" form should be displayed.

Camera Control

The Camera Control form allows you to control your camera from your organizer and turn on additional creative shooting options such as auto sequence shooting, all-mode exposure bracketing and multiple exposures.

The Camera Control form shows the current frame count, ISO film speed, shutter speed, lens, lens aperture and focal length, exposure compensation*, camera exposure and metering modes, focus area, and motor drive settings. When a flash is attached, the flash icon, flash sync settings, and flash exposure compensation* are also displayed.

** The number in parenthesis following the exposure compensation shows the effective flash compensation. This value includes differences from the camera's Easy Exposure Compensation mode when in Aperture-priority program mode.*

In addition, when any of the creative shooting options have been enabled, one of three icons will appear indicating the mode, number of frames, and exposure compensation for each frame:

3 exp	3/±1.0	3 exp
Auto Sequence icon	*Auto Bracketing icon*	*Multiple Exposure icon*

Once your organizer is connected to the camera and both are turned on, clicking the "Update" button will update the display from the current camera settings. "Set" will set the current shutter speed, exposure compensation, exposure and metering modes, focus area, motor drive, and flash settings.

Clicking the "Focus" button will focus the camera if the camera is currently in auto-focus mode. Clicking the "Fire" button will fire one frame on the camera. The "Fire" button may also first focus the camera if the camera is in focus-release priority. (See the Camera Options section for additional details.) After tripping the shutter, the current settings will automatically be updated. Note that if you are using a slow shutter speed, a serial error may be generated because the camera may be busy exposing the film. No need to panic!

Creative Menu

The "Creative" menu allows you to turn on a number of creative shooting options which are normally unavailable from the camera without the addition of the MF-26 control back or the Nikon Photo Secretary software.

"Auto Sequence Shooting" programs the camera's motor drive to stop firing after a set number of frames. When the specified number of frames has completed, the camera will stop firing until the shutter button has been released. The Camera Control form will show the Auto Sequence icon followed by the number of frames in the sequence when activated. To make effective use of the Auto Sequence Shooting function, the motor drive should be set to either low-speed or high-speed continuous shooting mode.

"Auto bracketing" will automatically adjust the exposure between each of a sequence of frames. Auto Bracketing supports sequences of 2-11 frames with exposure steps of ⅓ to 2 stops per frame. Bracketing can be performed with camera exposure, flash exposure, or both. (Note: flash bracketing may not be available with all electronic flash systems. You should carefully check a test roll before relying on flash bracketing for any critical work.)

Unlike many cameras which start auto bracketing sequences at the normal exposure and alternately shorten and lengthen subsequent exposures, the Nikon N90 series exposes sequences starting at the shortest exposure and progresses to the longest exposure.

"Multiple Exposure" programs the camera not to advance the film after each exposure until the specified number of exposures has been taken. N90 Buddy is currently limited to 10 exposures on a single frame.

Any of the creative shooting options can be cancelled by resetting the default values or by turning the camera off and back on.

Autofocus Options

The Autofocus Options form allows you to customize a number of options relating to the camera's autofocus ability.

Normally when the camera is in Continuous-Shooting mode, lightly-pressing the shutter release button starts the camera autofocus operation and fully depressing the shutter release button will fire the shutter regardless of whether the subject is in focus or not. The first option changes the camera from "release-priority" to "focus-priority" — the camera will not trip the shutter unless the subject is in focus.

When the camera is in single-frame mode, the subject normally must be in focus before the shutter will trip. The second option changes the camera's operation to work similar to the continuous-shooting mode — once the shutter release button has been fully depressed, the shutter will fire regardless of whether the subject is in focus.

The last option affects autofocus when the camera's motor drive has been set to either continuous low-speed shooting or continuous high-speed shooting. Normally, while the shutter release button is fully depressed, the camera will continually fire regardless of whether the subject remains in focus. If the "Lock AF On" option is checked, the camera will pause, if necessary, to relock focus on the subject.

Beep Options

The Beep Options form allows you to link an audible beep to various camera operations. On the N90/F90 series, the camera's audible beeps are controlled by the On/Off switch. On the N90s/F90X, the audible beep is always enabled. Different audible options are available depending on which camera model you are using.

- Any time an error occurs with the film transport system (no film, end of film, jam, etc.)
- During the self-timer countdown
- Whenever an exposure error may occur because of insufficient or excessive light or when an error condition appears in the camera LCD.
- When the subject becomes in focus.

Beep Options for the N90s/F90X

Beep Options for the N90/F90

Camera Options

The Camera Options form allows you to customize a number of camera operations.

Camera Options form for the N90s/F90X

"Dual Release" controls how two cameras will operate when the cameras are connected via a MC-23 Connecting Cord. You may choose from Independent, Simultaneous, Alternate, Disconnect release modes.

"Meter On Seconds" sets the duration that the LCD back-lighting and meter will remain on once activated.

Camera Options form for the N90/F90

"Long Exposures" allows you to switch between Bulb setting (default) and Time. The Bulb setting will keep the shutter open as long as the shutter release button is depressed. The Time setting opens the shutter when the shutter release button is depressed and remains open until the shutter release is depressed a second time. N90 Buddy does not support using the organizer to set timed exposures since serial communications is not available while the shutter is open.

"ISO Priority" allows you to switch between Manual (default) and DX setting. Under Manual mode, the ISO speed set by the command dial will override any DX-coded film speed. Under DX mode, any DX-coded film will override the ISO speed set by the command dial.

"Command Dial" settings allows you to control whether the command dial increments or decrements the shutter speed setting when turned clockwise.

"Slowest Flash Speed" sets the slowest shutter speed to which the flash will sync in normal-sync flash operation. Note that the camera's "Slow-Sync" flash mode will allow sync speeds down to 30 seconds.

Viewfinder Options

The Viewfinder Options form allows you to turn on additional viewfinder features:

Viewfinder Options for the N90s/F90X

"Frame Counter in Ps Modes" replaces the Vari-Program exposure mode indicator (Lo, rE, HF, LA, SL, SP, or CU) in the viewfinder with a frame counter.

"Matrix/Center Meter Delta" turns on a viewfinder display showing the difference in EV between Matrix metering and Center-Weighted metering when the camera is set to Matrix metering mode. A positive value indicates Matrix metering is overexposing relative to Center-Weighted metering. A negative value indicates Matrix metering is underexposing relative to Center-Weighted metering. The display is only available in Program or Aperture-Priority modes.

Viewfinder Options for the N90/F90

"Aperture Mode: Easy +/- Compensation" allows exposure compensation in ⅓ stop increments simply by turning the command dial. When the mode is turned on, turning the command dial clockwise increases the exposure for the current frame in ⅓ stop increments. Turning the command dial counterclockwise decreases the exposure in ⅓ stop increments. Note that the exposure compensation is added or subtracted to any exposure compensation which has been set manually via the exposure compensation button. If the exposure compensation is currently set to +≈ stops and the easy +/- compensation is set to -≈ stops, the net exposure compensation will be 0.

Memo Holder Settings

The Memo Holder Settings form allows you to turn on the camera's built-in ability to record information about each frame which is shot as well as set the level of detail the camera records.

The "Shooting Data" popup menu has four options for determining what level of detail the camera stores with each frame. By default, the camera stores no data.

Minimum stores only the camera's aperture and shutter speed.
Medium adds lens focal length, exposure metering system, exposure mode, and flash mode.
Maximum adds any exposure compensation and flash compensation.

In the event that the camera's shooting data memory fills while in the middle of a roll, the camera offers two options for how the camera will act. By default, the camera simply stops recording data for any subsequent shots. The other option, "Download Data" will force you to either download the information before continuing or turn the camera off and then back on before it will allow any further pictures to be taken.

If your camera is equipped with a MF-26 databack, the "Imprint Data on Frame #0" turns on the databack's function of printing the current roll number on frame #0 each time a new roll is loaded into the camera. Turning on the "Imprint Data" function does nothing if a MF-26 databack is not attached to the camera.

Lastly, you can set the roll number for the next roll. This number is displayed in N90 Buddy's main window listing all the rolls for which you've downloaded data from the camera.

If "Film in Camera" or "Data Stored In Camera" appear near the bottom of the form, the level of shooting data may not be changed until all the data in the camera has been downloaded and there is no film loaded in the camera.

Download Shooting Data

The "Download Shooting Data" downloads all completed rolls to N90 Buddy. Any roll which is in progress is not downloaded until the roll is complete and rewound.

N90 Buddy Companion

The N90 Buddy Companion application allows exporting of shooting data which has been downloaded to the organizer. To export the memo holder data from your Palm Computing connected organizer to a Macintosh or Window 95/NT computer follow these easy steps:

1. Use the "Download Shooting Data" command to retrieve the memo holder information from the camera.
2. Synchronize your organizer using HotSync™. This will create or update the "N90sMemoDB.PDB" file found in your Palm backup directory.
3. Run the N90 Buddy Companion application.
4. Select "Select File…" or "Open…" from the "File" menu and locate the "N90sMemoDB.PDB" file.
5. Choose the export format which best suits your needs: Tab Separated, Comma Separated, or Nikon .NKN format. Nikon format creates one file for each roll. Tab or Comma separated files can either be exported to a separate file for each roll or a single file.

At this time, N90 Buddy Companion is only available for the Macintosh or Windows 95/NT platform. If you are interested in exporting your organizer data for other platforms, sample ANSI C source code is available at http://members.aol.com/khancock/pilot.html#nbuddy.

N90 Buddy Companion for Macintosh

N90 Buddy Companion for Windows 95/NT

Troubleshooting

Cannot communicate with camera	Make sure camera is turned on and all cables are connected to the organizer and camera. Make sure you are using a Palm Modem Cable. The modem cable has the Palm handheld connector on one end and a 25-pin connector on the other..
HarTalk cable does not work	Make sure you are using the HarTalk cable for Palm Computing connected organizers. Older versions of the HarTalk cable for the PC used DTR as a voltage reference. Contact Cocoon Creations for assistance.
N90 Buddy Companion will not export data	Make sure you have synchronized your organizer with HotSync and have not deleted the rolls from your organizer before synchronizing. Once deleted and synchronized, the rolls cannot be recovered.
Creative Shooting options will not stay set.	The Multi-Control back MF-26 overrides any creative shooting options set by N90 Buddy. Use the MF-26 to set Auto Seqeunce, Auto Bracketing, or Multiple Exposures or disconnect the MF-26 back.

Reporting Bugs

If you encounter any problems with N90 Buddy, please report them. Make sure you include at least the following items when reporting a problem or bug:

- Type of Palm Computing connected organizer: Pilot 1000/5000, PalmPilot Personal/Professional, etc.
- Palm OS™ version (shown in the upper-right corner of the Memory application)
- Is the problem reproducible? Does it happen all the time or only sporadically?
- What steps are required to reproduce the problem?
- What were you doing when the problem occurred?
- Any other relevant information you can think of.

Related Information/Links

Ken Hancock's Software for Palm Computing® Connected Organizers
The place to go to make sure you're running with the latest and greatest N90 Buddy software. Also includes links to all the author's other Palm Computing platform compatible software. http://members.aol.com/khancock/pilot.html.

Cocoon Creations
Manufacturers of the HarTalk interface cable (a MC-31 alternative) as well as a line of Wintel software. http://www.cocoon-creations.com/modern/nicomm/nicohome.htm.

Nikon USA
The Nikon MC-31 cable is available as a separate item (despite what your local photo retailer may tell you). Nikon part number 4661. http://www.nikonusa.com/.

B&H Photo
All-around good guys for photo and video supplies. They can order an MC-31 cable for you if you cannot find it locally. http://www.bhphoto.com/.