POCKET READER™ AND
POCKET READER EX™
MANUAL

NICAD CONVERSION
USE ONLY WITH 60mA CP TRICKLE CHARGER SUPPLIED

Identipet
CONTENTS

1. Batteries
   Installation ........................................................................................................... 3
   For best results
   Recommended Batteries ....................................................................................... 4
   Automatic Shut Off Feature
   Low Power ........................................................................................................... 4

2. Scanner Operation
   To activate scanner ............................................................................................... 5
   To scan ................................................................................................................... 5 - 6
   Scanning Area ........................................................................................................ 6
   Injection Sites ......................................................................................................... 7
   To Locate an Implanted Microchip ......................................................................... 8
   Scanning Patterns for Implants
   Injected Mid-scapula .............................................................................................. 8
   Scanning Patterns for Implants
   Injected at the Left Side of the Neck .................................................................... 9
   Turning the Scanner Off ....................................................................................... 9
   To Extend Battery Life ......................................................................................... 9
   Field Programmable Ports ................................................................................... 9
   Resetting the System ............................................................................................ 9

3. Specifications
   Physical and Electronic Characteristics .................................................................. 10

4. EX Reader with Memory
   Functionality ......................................................................................................... 11
   Download Stored ID Numbers ............................................................................... 12
   Delete Stored ID Numbers .................................................................................... 13
   Clearing Scanner Memory ..................................................................................... 14
HOW TO USE THE POCKET READER™ AND THE POCKET READER EX™

1. Batteries - Installing/Replacing the Batteries

Pocket Reader

Remove the door to the battery compartment by loosening the retention screw located on the underside of the reader. Slide 4 AAA alkaline batteries into battery slots. Note proper battery direction. Replace compartment door and firmly tighten retention screw.

Pocket Reader EX

The pocket reader is supplied with a rechargeable battery pack which should only be recharged using the 60mA CP trickle charger supplied.
For best results: We recommend using Duracell® or Energizer® alkaline batteries to operate the Pocket Reader and Pocket Reader EX. **Rechargeable batteries will not provide sufficient power to operate the scanners.** In some cases, when new batteries are installed, they will cause the scanner to indicate “LOW BATTERIES”. Turn the unit on and off three to four times and the low battery display should disappear.

**Important:** If the scanner stops or “freezes” part way through it’s program, reset the program by completely removing the batteries, reinstalling them and following the instructions for Installing/Replacing the Batteries.

**Automatic Shut Off Feature**
The scanners are equipped with an Automatic Shut Off feature. When the battery power level drops to a point that the energy is not sufficient to read an implanted microchip, the scanner will automatically shut off. The Pocket Reader and Pocket Reader EX will display LOW BATTERY, followed by REPLACE BATTERY. The scanner will remain inoperable until a new set of batteries is installed.
2. SCANNER OPERATION

To Activate Scanner
Push the button down once and release. In 2-3 seconds the unit will display the software version, then the unit will display READY.

Searching For Implanted Microchips

To Scan
Push the button down and hold. The unit will display WORKING.
Test Before Scanning an Animal
It is important to test the unit before scanning an animal. Use the test chip provided with each scanner to verify that the scanner is functioning properly. While holding the button down, pass the microchip under the scanning area located at the upper underneath area of the reader. **Verify an accurate scan was achieved before continuing.** If the scanner does not read the test chip, refer to the Installing/Replacing Batteries section in this manual or contact your distributor.

Scanning Area
The units scan for identification codes from the upper underneath area.

**Caution:** Computer terminals and video screens in operation, metal collars, leads, chains or tags within 3 meters (or approximately 10 feet) of the microchip can reduce the read range of the scanner. If possible, turn these devices off, remove the metallic objects, or move farther away from the devices or objects until you are finished reading microchips.
Injection Sites
Subcutaneous, mid-scapula

Southern Africa, Australia, New Zealand, Canada, Japan, New Zealand, United Kingdom, United States.

Subcutaneous, upper half of the left side of the neck, halfway from the ear to the tip of the shoulder.

European Continent.

Note: The Pocket Reader and Pocket Reader EX can identify the presence of other manufacturer’s microchips. However, not all microchips have the patented BioBond® anti-migration cap. Therefore, it is important to increase the normal suggested scan area by scanning the animal down to the elbows and in front of the shoulders as illustrated below:
2. Scanner Operation (continued)

Locating an Implanted Microchip
To locate an implanted microchip, push the scan button and hold until scanner displays WORKING. While continuing to push the scan button, place the scanner flush with the underside flat touching the animal over the injection site. Move the scanner slowly, in a circular motion, following the scanning patterns below. (NOTE: Injection site may vary with species of animal, brand of microchip and country where the animal was microchipped. See Injection Sites for locations.) When a microchip is located, you will hear a beep, followed by the code being displayed on the LCD window. If the scanner shows a numeric or alpha code display (numbers and/or letters) on the LCD window during the WORKING phase of the scanning procedure, it is an indication of the presence of a microchip.

Scanning Patterns for Implants Injected mid-scapula.

**Scan Pattern # 1**

**Scan Pattern # 2**

**IMPORTANT**
Microchip placement may vary per animal.

- Scan slowly with a small, circular motion.
- Scan both patterns as indicated.
- Keep scanner touching animal.
- Hold down button during entire scan.
Scanning Patterns for implants injected at the left side of the neck.

Scan Pattern # 1

Scan Pattern # 2

IMPORTANT
Microchip placement may vary per animal.

- Scan slowly with a small, circular motion.
- Scan both patterns as indicated.
- Keep scanner touching animal.
- Hold down button during entire scan.

Turning the Scanner Off
To turn the unit off when NO ID FOUND is displayed, release the button and the scanner will shut off automatically in 5 seconds.
To turn the unit off when a microchip code is displayed, release the button and scanner unit will automatically shut off after 70 seconds of display.

To Extend Battery Life: After a microchip code is displayed, push the button once and release. The scanner will clear the code and display WORKING, followed by NO ID FOUND. The unit will then automatically shut off in 5 seconds.

Field Programmable Port
The scanners have the ability to be programmed to read future generations of microchips by using the programmable port.

Under some unusual circumstances, the scanner may display uncommon characteristics indicated by:
- a straight solid line across the LCD
- a lit, but blank LCD
- the unit not powering off

These characteristics can normally be corrected by resetting the scanner. To reset the scanner, temporarily disconnect the batteries or external power supply.
3. **SPECIFICATIONS:**

Physical and Electronic Characteristics:

<table>
<thead>
<tr>
<th>Pocket Reader™</th>
<th>Pocket Reader EX™</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Frequency:</strong></td>
<td>125 kHz or ISO 134.2 kHz</td>
</tr>
<tr>
<td><strong>Case Size:</strong></td>
<td>170 mm L x 80 mm W x 32 mm H</td>
</tr>
<tr>
<td><strong>Weight:</strong></td>
<td>308g</td>
</tr>
<tr>
<td><strong>Colour:</strong></td>
<td>RAL 7032</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>ABS Plastic</td>
</tr>
<tr>
<td><strong>Operating Temperature:</strong></td>
<td>0° to 50° C</td>
</tr>
<tr>
<td><strong>Storage Temperature:</strong></td>
<td>-20° to 65° C</td>
</tr>
<tr>
<td><strong>Humidity:</strong></td>
<td>10 - 90% (non condensing)</td>
</tr>
<tr>
<td><strong>Display:</strong></td>
<td>16-character LCD</td>
</tr>
<tr>
<td><strong>Output Port:</strong></td>
<td>Serial field programmable port</td>
</tr>
<tr>
<td><strong>RS 232 Port:</strong></td>
<td>Compatible</td>
</tr>
<tr>
<td><strong>Power Source:</strong></td>
<td>4 size AAA 1.5-volt alkaline batteries</td>
</tr>
<tr>
<td><strong>Accessories:</strong></td>
<td></td>
</tr>
</tbody>
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<tr>
<td><strong>Operating Frequency:</strong></td>
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</tr>
<tr>
<td><strong>Case Size:</strong></td>
<td>285 mm L x 80 mm W x 32 mm H</td>
</tr>
<tr>
<td><strong>Weight:</strong></td>
<td>406g</td>
</tr>
<tr>
<td><strong>Colour:</strong></td>
<td>RAL 7032</td>
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<tr>
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<td>Rechargeable Battery Pack</td>
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<tr>
<td><strong>Accessories:</strong></td>
<td>60mA battery charger</td>
</tr>
</tbody>
</table>

- Avoid storing unit in direct sunlight, excessive moisture or extreme temperatures
- The Pocket Reader and Pocket Reader EX scanners are designed specifically for use with companion animals in a veterinary clinic or animal shelter environment.

*BioBond™ is a registered trademark and Pocket Reader™ and Pocket Reader EX™ are trademarks of the Digital Angel Corporation.*

*Duracell is a registered trademark of Duracell Inc. and Energizer is a registered trademark of the Eveready Battery Co., Inc.*
4. **EX READER WITH MEMORY**

Functionality:

1. Can read and store up to 511 ID numbers.

2. When a new ID number is read, the scanner will automatically store the ID number and indicate the total numbers of IDs stored in the memory.  
   e.g. When a new tag is read, the scanner will display the tag’s ID number (e.g. “9851002003”) and then display the total number of IDs stored (e.g. “3/511”) (3/511 indicates that this is the 3rd ID number stored in the memory that can store up to 511 ID numbers)  
   Note:  
   - if the same ID is read consecutively, the same ID number will not be stored consecutively into the memory (to prevent accidental duplication of the same ID in one scan)  
   - only a new ID that is different from the last stored ID will be stored into a new memory location.

3. When 500 IDs have been stored, the scanner will display a warning of LOW memory.  
   e.g. When the 500th tag is read and stored, the scanner will:  
   - display the tag’s ID number and then  
   - display “LOW MEM 500/511” (indicates that this is the 500th ID number stored in the memory and the memory is LOW)  
   - The same function for tags 501 - 510.

4. When 511 IDs have been stored, the scanner will display a warning of FULL memory.  
   e.g. When the 511th tag is read and stored, the scanner will:  
   - display the tag’s ID number and then  
   - display “FULL MEM 511/511” (indicates that this is the 511th ID number stored in the memory and the memory is FULL)

5. If the scanner scans a new tag after reading and storing 511 IDs (Memory FULL), the scanner will not decode/store the new ID, but instead displays the following warning messages 3 times (accompany with a beep sound), and then shuts itself off automatically.  
   - “MEM FULL 511/511”  
   - “DOWNLOAD/DELETE?”  
   - “SEE MANUAL”
4. EX READER WITH MEMORY (continued)

Download Stored ID Numbers

Procedures to get to the download mode:

1. Connect the scanner to the PC through the serial port:
   Set up communication parametres as follows:
   Baud rate:  <4800>
   Data bits:  <8>
   Stop bit:   <1>
   Parity:     <None>
   Flow control: <None>

2. Turn on the scanner:
   - during initialization of the unit, the scanner displays: “MEMORY INIT” and shows the version number “E419-EEPHIS ENG”
     (E-Revision E, 419-ISO Silver board, EEP-EProm, HIS-HIStorical)
   - Then the scanner will be in an idle mode and displays: “READY”

3. If the user presses <Esc> on the PC keyboard, the scanner will then:
   - switch to Console mode and display this message: “CONSOLE MODE”

4. Once in console mode, the following message will be displayed on the PC screen:
   - “Pocket Reader Console”
   -

5. The user can select any of the following commands by typing the corresponding command character:
   <?>   - Help manual
   <D>   - Download buffer from memory
   <E>   - Erase memory
   <S>   - Memory Stats
   <X>   - Exit console mode

6. If the user types in a character different from the above command character, the following message will be displayed:
   “Unknown command!”
4. EX READER WITH MEMORY (continued)

7. Other messages may occur on the PC screen as various commands are executed:
   “Done”
   “Exiting console”
   “Beginning Download”
   “Erasing memory”
   “Record erased”
   “Valid record(s)”

8. Type <X> to exit console mode.

Delete Stored ID Numbers:

Procedures to get to the delete mode:

**Option 1** (Scanner connected with PC):
- Connect the scanner to PC and set up the communication parameters (4800, 8, 1, N)
- Turn on the scanner
- Type “Esc” on the PC when the scanner displays “READY”
- The scanner will be switched to “CONSOLE MODE” and the PC screen displays “Pocket Reader Console”
- Type “E” to erase all memory.

**Option 2** (scanner disconnected from PC):
- When the version number “E419-E Ephis ENG” is displayed at start up
- If the user press and release the button quickly, those two strings are shown (accompanied by beep sound) one after the other to inform user on how to delete memory without the serial connection:
  “HOLD BUTTON TO”
  “DELETE STORED ID”
- If the user presses the button, the display will show:
  “HOLD TO DELETE”
- Then if the user holds on long enough we will get this message:
  “DELETING ..........” (accompanied by high frequency beep sound)
  “ALL ID DELETED”
- If button is not pressed or if it is released too soon (before the delay expires), the display will show:
  “NO ID DELETED”
4. EX READER WITH MEMORY (continued)

Memory add-on
Scanner may be equipped with a 511 ID-tag memory. If this feature is present, #/511 will be displayed after the ID number. # will be replaced with the number of ID numbers that is currently in memory. When memory is full the scanner will not decode any more microchips. A warning to download and clear memory will display.

Downloading ID Numbers
Connect computer serial port to scanner.
Setup communication parameters as follows:

Baud rate: 4800
Data bits: 8
Stop bit: 1
Parity: None
Flow control: None

With the terminal program running on the computer, turn on the scanner, when it says ready on display, press <esc> key on computer. This should change display of scanner to read “CONSOLE MODE”. Setup terminal program to receive a text file, and then press <D> to start transmission from scanner. When done receiving, close and save computer file.

Commands for scanner are as follows:

- <D> - Download  Scanner sends ID numbers in memory as text to computer.
- <E> - Erase memory  Clear all ID numbers from scanner memory.
- <S> - Status  Report the number of IDs in scanner memory.
- <X> - Exit  Return scanner to normal operation mode.

Clearing Scanner Memory
There are two ways to clear the scanner memory. It can be done through the terminal program by pressing <E> when the computer is connected to a scanner in Console Mode, or without a computer connected in the following manner. During display of the version number on scanner at start up, press and release the button quickly.

While scanner displays “HOLD BUTTON TO” and “DELETE STORED ID” along with a beep, press the button again and hold it down. If button is held long enough, the reader will delete all ID numbers in memory and display:"ALL ID DELETED". If the button is not held long enough, the scanner will display “NO ID DELETED”, and ID numbers will remain in scanner’s memory.