



**InData Systems LDS 7600
Dolphin Portable Terminal**

**With Interchangeable Optics
M3, V2, Shrouded**

Users Manual

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About InData Systems

InData Systems is an engineering, manufacturing and sales organization specializing in bar code and wireless based data collection systems. Our staff has extensive experience in varied wireless/data collection (RF/DC) installations and are qualified to consult, recommend and provide both hardware and software solutions concerning your company's unique requirements. By providing total systems solutions, InData Systems has earned a reputation for dependability, high quality, and an unwavering commitment to excellence. With over twenty years of service, we have developed a broad customer base including many companies of all sizes from manufacturing and distribution facilities to hospitals, universities and others.

Warranty Information – All InData Systems Products carry a standard 1 year warranty against defects in manufacturing.

Our Mission

Our goal is to provide customers with superior products, fully integrated solutions, and premier technical support at an affordable price. Let InData Systems and our resellers' network be your exclusive wireless and bar code equipment supplier, and let your information and data collection systems do what they were meant to do, save time and money.

Introduction

InData Systems has developed optical systems to read some of the most difficult direct part markings. Using the power of the Adaptus™ Imaging technologies developed by Honeywell Imaging and Mobility, formerly Hand Held Products, the leader in the imaging readers and portable data terminals, combined with the patented optical and illumination systems developed by InData Systems, we can tackle the most challenging direct part markings. The ATA (Air Transport Association) Spec2000 is starting to set standards for the industry but varying materials and finishes demand different solutions for reading those marks. The US Government driven UID program as well as Brand Protection schemes of covert UV Bar Code marks are just two of the many areas that InData Systems is solving tough problems.

Our unique optics based scanners and terminals have been developed for the rugged industrial challenges of the manufacturing workplace. Reliable, easy to use scanners and portable data terminals with the same optics, provide high value to companies needing to track direct part marked materials. Invisible UV barcodes are starting to be used for tracking registered brand, security based documents and other high sensitivity items.

Bar codes provide a quick and error free means for inputting data into an application running on a computer. By using bar codes, the potential for errors from manual data input is eliminated. Another typical application for bar codes is therefore for inputting data without having to type.

The InData Systems 4600, 4620, 4800, and FM450 LDS Etched family of Bar Code Scanners are capable of reading otherwise hard to read low contrast data matrix codes. Available with choices for different optics, the LDS product family offers superior performance and feedback to the user.

For more information on the LDS 4600, LDS 4620, and LDS 4800 family of products, see the LDS Product Family Users Guide.

Direct Part Mark Bar Code

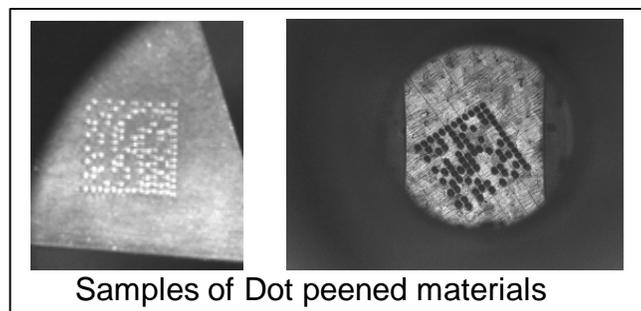
Direct Part marking with a bar code symbol has, in recent years, become the leading solution to unique and permanent component identification. Marks made with laser etching, electro-chemical etching, precision controlled dot peening and ink jet are some examples of permanent direct part mark technologies.



Data Matrix bar code, like that pictured above, can be printed with virtually any size of element as long as the rest of the criteria for the bar code is followed accurately. AIM (Automatic Identification Manufacturers) has established a standard for Data Matrix bar codes and we will assume the use of the ECC-200 (Error Correction Code methodology) standard for this document, although it is really not a restriction. The air transportation industry has adopted their “ATA SPEC2000”, which is one of the first industry attempts to address the quality aspects of direct part marking.

Quality is the biggest issue in the use of the marks. If the mark is printed with a ribbon onto a paper label, there are many software products capable of creating a barcode with very accurate dimensions. The challenge of etching onto a part causes not only the material but also the finish of the material to become part of the “quality” of the imprinting. Based on the metallurgical or chemical composition of the part to be marked, the best method of directly marking it varies. Some materials react very well with a low energy laser beam (like softer metals and some plastics) while other materials require significant care (like directly etching glass due to the “crazing” or micro-fractures that can occur under the instantaneous high heat of a laser).

The accuracy of the etched mark depends on the choices of power, frequency and software, as it relates to the material being etched. The same is true when using lasers and similar considerations must be used when using chemical etching and dot peening. It is easy to under-etch or over-etch a bar code if the process is not monitored closely. Over or under etching causes the individual elements to be outside of the parameters outlined by the AIM and other industry specifications. Some decoding algorithms do not consider a dot peened mark like that below, to be a “legal” formation of the code due to the “L-pattern” (also known as the Finder Pattern for data matrix identification) having breaks between each dot instead of being a continuous, solid line, like the one shown in the image on the right below.

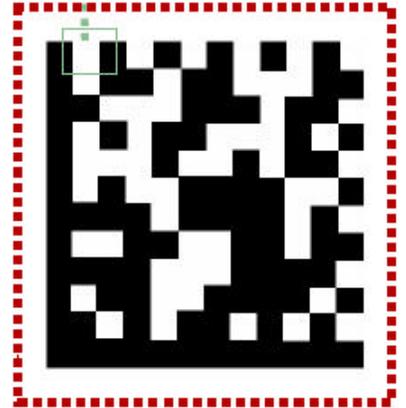


Data Matrix is a high density 2 dimensional matrix style bar code that was first introduced in 1995. It uses symbology that can encode up to 3116 characters from the entire 256 byte ASCII character set. In the United States, and much of the world, data matrix bar code is one of the most widely used 2D barcodes.

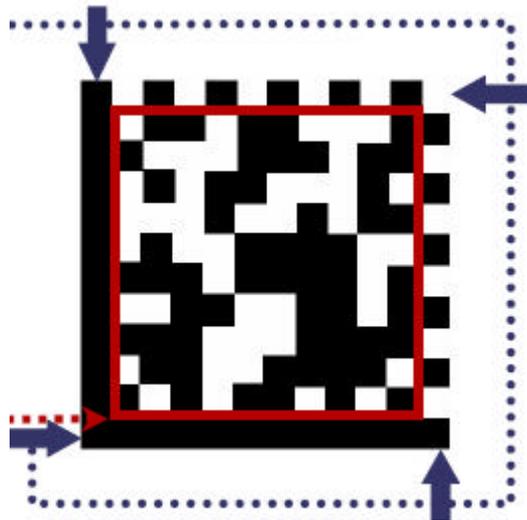
Marks are made with light and dark elements (reversed images are acceptable) but the ratio of dark and light elements should be 50% (with a minimum of 35% to maximum of 65% per the AIM standard). Please consult the AIM standard for more details.

Element (module)

The symbol is built on a square grid arranged with a finder pattern around the perimeter of the bar code symbol which is used for determining size, orientation, and symbol distortion. Around the perimeter is a required 'quiet zone'. Within each bar code is an area known as an element, or a square shaped cell that encodes one bit of binary data.



The symbol is structured with the Finder Pattern comprised of two solid lines and two alternating dark/light lines. It defines the physical size, orientation, distortion, and the number of rows and columns.



The Data Region is inside the pattern finder and contains data and error correction code words.

There are two types (square and rectangular) of Data Matrix symbols (or several if referring to ECC000 to 140 as one) each using a different error checking and correction scheme (ECC). The different types of Data Matrix symbols are identified using the terminology "ECC" followed by a number representing the type of error correction that is used by the encoding software. ECC 000 to ECC 140 are the original type of Data Matrix symbols, and are now considered obsolete. The newest version of Data Matrix is called ECC 200 and is recommended for all new Data Matrix applications.

The ECC 200 version of Data Matrix uses a much more efficient algorithm for encoding data in a symbol as well as an advanced error checking and correction scheme. The symbol can have multiple data regions. The alignment pattern separates the regions. The maximum capacity for a single data region is 88 for numeric, and 64 for alphanumeric. The symbol shape can be square (Figure 1) or rectangular (Figure 2). However, the rectangular shape is only applicable to ECC 200.

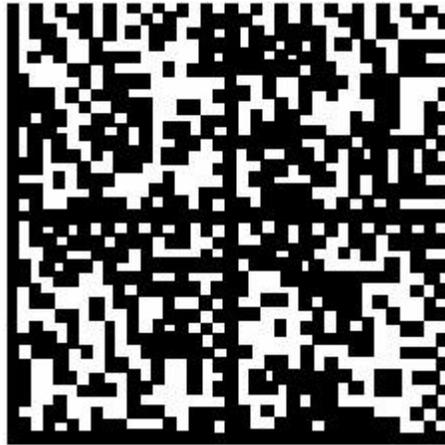


Figure 1



Figure 2

A symbol can encode 50 characters in a 6mm x 6mm square, and is readable in 360° with 2D CCD technology.



Additional Technical Considerations

Due to the wide variety of surface finishes, depths of marks, and consistencies of the marks (voids and breaks in the “L-pattern” being the most detrimental effect) the target may need to be defocused by drawing the scanner back away from the near contact position of the imager.

Additionally, the basis of the specifications that were incorporated into the SPEC 2000 quality standard are VERY relevant to the decode-ability of an etched (or labeled) bar code on a cylindrical object. The spec calls for no greater than 18 degrees of wrap around on a curved object. It may be difficult to figure how large a target mark may be (or small the diameter of the object) before it is un-decodable. The principal problem is the distortion of the straight L-pattern and the timing marks. If the perceived curvature of any side of the bar code mark is greater than one half of an element – i.e. -down on both the left and right and up in the middle (our measurements imply this) then the scanner will probably not be able to read it.

One interesting fact that may be overlooked is that by making the mark smaller, the mark can be put on a smaller diameter object. Accuracy of the mark is still a critical part of the process, however.

Readability

Readability is a challenge in the use of direct part marks. There are software products that can create the barcode with accurate dimensions for code that is printed with ribbon onto a paper label. Etching a code onto the part lends the material and the finish to determine the quality of the imprinting. Based on the metallurgical or chemical composition of the part, the best method of marking it varies. Some materials react very well with a low energy laser beam (like softer metals and some plastics) while other materials require significant care (like directly etching glass due to the “crazing” or micro-fractures that can occur under the instantaneous high heat of a laser).



Sample Data
Matrix Code

The actual accuracy of the etched mark depends on the correct choices of power, frequency and software as it relates to the material being etched when using lasers, and similar considerations when using chemical etching and dot peening. It is easy to under-etch or over-etch the bar code if quality is not monitored closely. Over or under etching causes the individual elements to be outside of the parameters outlined by the AIM and other specifications. Some decoding schemes do not consider a dot peened mark, to be a legal formation of the code due to the L-pattern (which is used as a finder pattern for data matrix identification) having breaks between each dot instead of being a continuous, solid line.

In Summary, InData Systems has developed and continues to refine, optics to read low contrast bar code symbols. We welcome working with resellers, end customers and etched mark producers to improve the ease of reading direct part marks in a variety of environments. Our optics are available with hand held scanners, fixed mount scanners, and Portable data terminals for the most dynamic uses in the field. Please contact your local InData Systems reseller to get assistance in solving your toughest challenges in direct part mark reading.

InData Systems Scanning Options

InData Systems offers several different methods of reading direct marked bar codes depending on the surface finish and curvature.



LDS 7600 with M3 Optic



LDS 7600 with V2 Optic



LDS 7600 with Shrouded Optic

The LDS-V2 optics (patent 6,352,204 B2) are used when surfaces are smooth and the etched area is recessed or roughened. The concept is much like the use of a flashlight held parallel to the floor, showing every crumb and surface scratch as a shadow. With the LDS-V2 Designs, the actual mark usually appears as a white mark on a black background. There are cases where the etched mark needs only to cause the surface to become a different finish to use this method of illumination.

The LDS-M3 design (Patent # 6,854,650) was designed to address a shiny CURVED surface, etched with a bar code. In a surface with an inconsistent background, due to the curvature for use with the low-angle illumination, the LDS-V2 was insufficient. The LDS-M3 has a broad glowing surface that shines onto the surface of the bar coded area with the marked object held at a precise angle relative to the glowing surface. The return optics also held at a precise angle to the imager creates a set of angles causing the shiny background to appear lighter (rather than darker), than the marks, by means of a broad illumination area. This application of a broad glowing surface works especially well on curved surfaces.

There are selected cases where a target can be read with either style of optics due to selected properties of the etched material. Both styles may also use specialty guides customized by InData Systems to assure the correct positioning of the scanner relative to the object.

LDS 7600

Dolphin 7600 Series terminals are Windows Mobile Second Edition-based with a unique, ergonomic shape designed for single-handed use and 64 MB RAM and 32 MB non-volatile Flash memory. To install additional memory, you can use the Secure Digital (SD) memory interface. The industrial, mechanical connector supports serial RS-232 up to 115 Kbps and USB communications up to 12 Mbps. The IrDA port enables you to exchange data with IrDA compliant devices, such as portable printers. For additional functionality, an integrated digital imager is available for imaging and decoding.

The Dolphin 9500 mobile computer delivers unparalleled performance and value for all mobile data collection and communication applications.

Its lightweight, ergonomic, and rugged design provides ease of use and operational reliability in robust mobile applications such as transportation, parcel delivery, retail, field service, route accounting, warehousing, and industrial/manufacturing. "The Dolphin 9500 high-tech architecture – Microsoft® Windows Mobile™ Second Edition, Intel™ XScale™ processor, and integrated Wireless Full Area Networking™ (WFAN) with co-located 802.11b, , and Bluetooth™ radios – provide real-time voice and data acquisition and information access, anytime and anywhere." The Shift Plus high-capacity Lithium-Ion battery enables the mobile computers to operate longer in wireless, scan-intensive environments. Powered by Hand Held Products' exclusive Adaptus™ Imaging Technology, the Dolphin 9500 can be used by the worker to quickly read virtually all bar codes, take photos of damaged goods, capture signatures, and archive and retrieve data quickly.

InData Systems released the LDS 9500 product, the world's first portable, one-piece data terminal specifically designed to address the needs of the new government directive UID (Unique Identification) for government and military equipment in April of 2004. InData Systems patented optics have dramatically expanded the ability to have reasonable cost scanners that can read some of the most challenging of direct part bar code marks.



The new UID directive from the US Department of Defense has mandated that all government property with a value over \$5000 and equipment issued to contractors must be marked with a data matrix bar code (a high density, error-correcting barcode that looks like a miniature postage stamp). This two dimensional bar code contains a dramatic amount of data in a very small area, uniquely identifying the item. This marking requirement is being implemented in one of the most rapid rollouts in recent times, starting January 2004 and is projected to save the US government millions of dollars in lost or misplaced/un-tracked inventory.

The InData Systems LDS7600 system (LDS stands for Light Delivery System) is a compact, rugged portable terminal that has interchangeable optics allowing it to be used to scan etched data matrix marks on shiny curved surfaces, flat roughened surfaces and also conventional linear bar codes on diverse surfaces. With the optional Wireless LAN interface of 802.11b, Bluetooth (short distance wireless) interface and popular Pocket PC programmability, the LDS9500 allows operators to easily collect critical data from the diverse surfaces and materials, which are marked to the directives from the Department of Defense, and seamlessly pass the data into diverse databases and record keeping systems.

The Air Transportation Associations (ATA) Spec2000 (which the UID specification uses as a part of its references for the marking standards) has also cited the need to mark parts, which, up until now, required bulky fixed mount, or two-piece systems, which prevented employees from operating efficiently while collecting data, tracking critical parts. The ATA initiative has outlined that "every part of every aircraft shall be marked with a traceable identifying mark that lasts the life of the part"!

InData Systems has developed this terminal utilizing Hand Held Products Adaptus tm imaging technology. Their worldwide team of regional Value Added Resellers coupled with the flexible reading of difficult marked parts by the LDS 9500, enables customers to easily track their tools and valuable items with a rugged one-piece scanning terminal. Rugged but economical, cabled scanners such as the InData Systems LDS4600 are also available with their interchangeable unique optics allowing rapid data collection into desktop and other computers.

For more information on the UID directive from the Department of Defense, visit www.acq.osd.mil/uid on the Internet.

The information in the manual refers to the LDS unit as it relates to InData Systems decoding. For more in depth information about the use of the Dolphin terminal, please refer to the Dolphin 7600 Users Guide provided on the CD that was shipped with your unit.

InData Systems Optics

LDS – V2

Our patented **LDS-V2** (Light Delivery System) **Optic** is typically used when surfaces are smooth and the etched area is recessed or roughened. The concept is much like the use of a flashlight held parallel to the floor, showing every crumb and surface scratch as a shadow. With this scheme, the actual mark usually appears as a white mark on a black background. There are cases where the etched mark only needs to be causing the surface to be of a different finish to use this method.



LDS-V2

LDS – M3

Our **LDS-M3 Optic** was designed initially, to address a shiny curved surface that had been etched with a bar code. This kind of surface is not of a consistent enough background, due to the curvature, for the low-angle illumination of our V2. Our M3 has a broad "glowing surface" that is shining down onto the surface of the bar coded area with the object that contains the code held at a controlled angle relative to the "glowing surface." This set of angles causes the shiny background to appear



lighter (rather than darker as in the V2 above) than the marks by means of a broad illumination area. This works especially well on curved surfaces.

Ultra Violet (UV) Optics

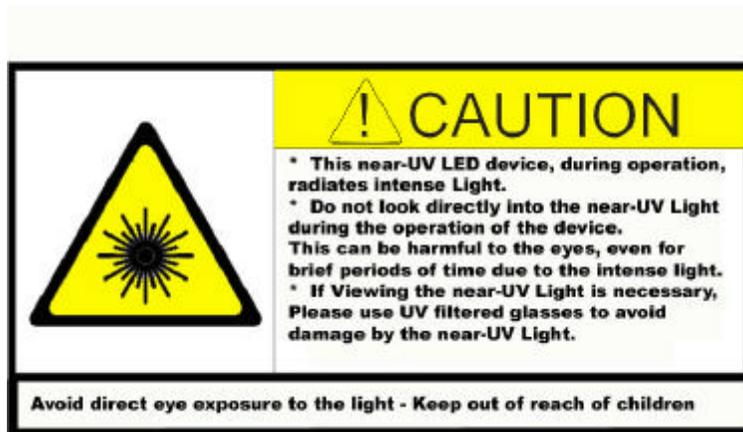
The InData Systems scanners using the InData Systems patented UV optics are very easy to carry around and use. They utilize the Adaptus™ technology from Hand Held products, but uses near-Ultra Violet illumination and enhanced optics to be able to see the "invisible" bar code marks printed with UV fluorescing inks. UV inks are used to mark items with marks that are not noticeable except when illuminated in Ultra Violet "Black Light".



Ultra Violet barcode
and text viewable
with UV optics



Our optics can be mounted on any of the InData Systems “Powered Socket” scanners including the LDS 4600, LDS 4800, LDS 4800, LDS 4620, FM 450, and the Dolphin 9500. For specific information on each scanner, consult the associated brochure or users guide.



Using the LDS 7600

Unpack the Carton and Verify its Contents

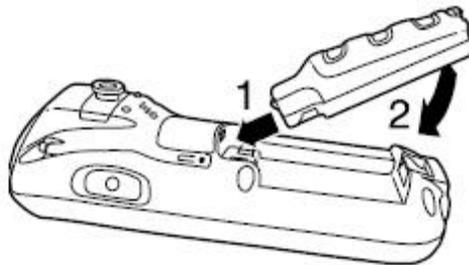
Verify that the carton contains the following items:

- Dolphin LDS 7600 Series mobile computer (the terminal)
- Main battery pack (3.7v Li-ion)
- AC Power Supply
- Localized Plug Adapters
- User CD
- Optic
- Dolphin LDS 7600 Manual

Be sure to keep the original packaging in the event that the Dolphin terminal should need to be returned for service. For details,

If you ordered accessories for your terminals, verify that they are also included with the order.

Install the Main Battery



Note: Use only the Li-Ion battery provided with the terminal. The use of any battery pack not manufactured by Honeywell Imaging and Mobility in a Dolphin Terminal will void your warranty, and may result in damage to the Dolphin Terminal or battery.

Charge the batteries

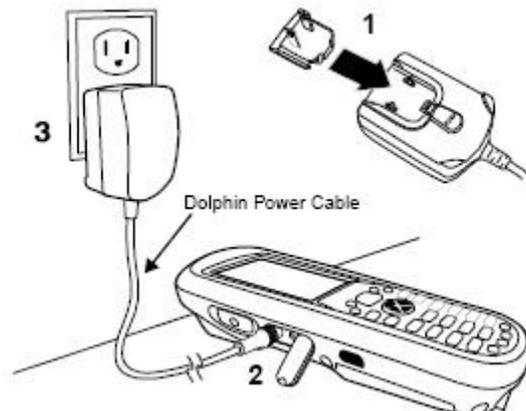
Dolphin Terminals ship with both the main battery pack and internal backup battery significantly discharged of power. Charge the main battery pack with the Dolphin charging cable for a minimum of four hours before initial use.

attach the appropriate plug adaptor to the plug of the power cable.

Plug the Dolphin power cable into the DC power jack on the left side.

Insert the plug into the appropriate power source.

This power cable can also be used to power the Dolphin Home Base.



Boot the Terminal

Windows CE – the terminal begins booting as soon as power is applied and runs by itself. DO NOT press any keys or interrupt the boot process. When the boot process is complete, the Desktop appears and the terminal is ready for use.

Windows Mobile – the terminal begins booting as soon as power is applied and runs by itself. DO NOT press any keys or interrupt the boot process. Only tap the screen when prompted. When the boot process is complete, the Desktop appears and the terminal is ready for use.

For each program that loads, a status bar indicates that the program is loading. Auto install occurs after each hard reset. Do NOT touch the keyboard or the screen while programs are loading. All configurations of the Dolphin 9500 Series install Demos and Utilities. If the terminal is configured with a wireless radio, the appropriate radio drivers and utilities for each radio install. After Auto install is complete, the terminal performs a soft reset automatically. When it finishes booting up after the soft reset, the Today screen appears. You can also display it by tapping **Start** and then **Today**.

For information about the **Desktop** and the **Menu Bar**, refer to the Dolphin 7600 Users Manual on CD that was included with the terminal.

Using the Stylus

The Dolphin LDS 7600 comes with a stylus inserted into the stylus slot in the custom socket. See Figure 3 below for illustration of where the stylus is located.

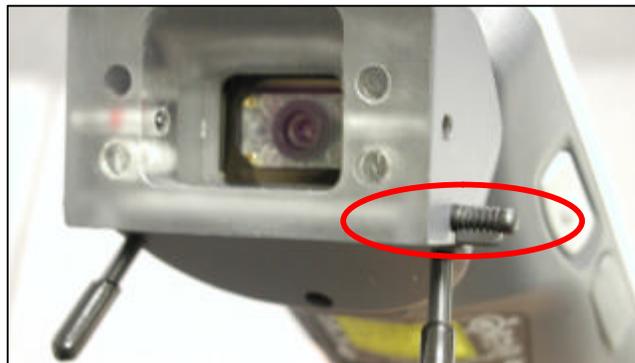


Figure 3

Use the stylus or your finger to select or enter information on the touch screen. The stylus functions as a mouse. Generally, a tap is the same as a click.

For more information about the **stylus** and the **touch screen** refer to the Dolphin 7600 Users Manual on CD that was included with the terminal.

Terminal Hardware

For an overview of the **terminal hardware**, refer to the Dolphin 7600 Users Manual on CD that was included with the terminal.

Resetting the Terminal

There are two ways to reset the Dolphin LDS 7600: a soft reset and a hard reset.

A soft reset re-boots the terminal without losing RAM data.

Perform a soft reset: when the terminal fails to respond
 after installing software applications that require a reboot
 after making changes to certain system settings

To perform a soft reset, press and hold the red button and the ESC keys for approximately five seconds. The screen will turn white and the decode and scan LEDs flash for approximately three seconds. When the reset is complete, the Desktop appears.

A hard reset erases all of the data and applications stored in RAM memory and launches Autoinstall, which re-initializes the terminal. Hard resets automatically launch a soft reset as part of the boot process.

To perform a hard reset, press and hold the red button and the TAB key for approximately five seconds. The screen turns white and the decode and scan LEDs light for approximately three seconds. The terminal re-initializes, which re-installs all programs stored in the \IPSM\Autoinstall folder.

For more information on **resetting the terminal** and using **suspend mode**, refer to the Dolphin 7600 Users manual on CD included with the terminal.

Using the Keyboards

For information on using the **Keyboards**, refer to the Dolphin 7600 Users Manual on CD included with the terminal.

Using the Image Engine

The Dolphin 7600 terminal houses a compact image engine using Adaptus™ imaging technology that instantly reads all popular 1D and 2D bar codes and supports omni-directional aiming and decoding. The image engine can also capture digital images such as signatures and pictures.

Supported Bar Code Symbologies

For information on **supported bar code symbologies**, refer to the Dolphin 7600 Users Manual on CD included with the terminal.

Activating the Imager and Decoding with Demos

Dolphin 7600 Series mobile computers come loaded with Demos that can be used to verify imaging and decoding. The two demos are Image Demo and Scan Demo.

To access these Demos, tap **Start -> Programs -> Demos**

Select the **Scan Demo** to verify decoding or
Select the **Image Demo** to verify imaging.

For more information on **Demos**, refer to the **Dolphin Demos User Guide** which is available for download from www.handheld.com.

Capturing Images

For information on **capturing images**, refer to the Dolphin 7600 Users Manual on the CD provided with the terminal.

To Decode a Bar Code

The Scan Demo enables you to decode a bar code.

With one of the InData Systems optics plugged in to the socket attachment:

1. Tap **Start > Programs > Demos > Scan Demo**.

If using a shrouded optic, approach the bar code with the optic and press the SCAN key. The scan LED lights pulse and the UV light will pulse in the color (wavelength) of the optic.

If using a V2 optic, the red LEDs pulse as you bring the optic to the target.

If using an M3 optic, the red LEDs will pulse as you bring the target to the optic.

3. When a good scan is obtained, the terminal beeps. The bar code readout appears on the screen.

4. Press the ESC key or tap the red x in the upper right of the screen to close the demo.

Sample Bar Codes

Refer to the Dolphin 7600 Users Guide on CD for **sample bar codes** on which to practice or verify that the terminal is reading codes properly.

Suspend Mode

To put the Dolphin terminal into suspend mode manually, press and hold the POWER key. The terminal goes into suspend mode automatically when the terminal is inactive for a programmed period of time.

To wake the Dolphin terminal from suspend mode, press the Power or SCAN key.

Communication Options

Dolphin terminals offer several communication options including Microsoft Active Sync, infrared and wireless radios.

For more information on **communications options** consult the Communications Options section in the Users guide on CD that was included with the terminal.

Installing Additional Software

For information on installing software, refer to the users Guide on the CD provided with the terminal.

Connecting the USB and Power Cables

For information on connecting the USB or power cable, refer to the Users Guide on CD that came with the terminal.

Using Microsoft ActiveSync

To synchronize, Active Sync 4.1 or higher must be installed and configured for the appropriate communication type on the host workstation and the Dolphin terminal. Dolphin terminals ship with Active Sync already installed. If Active Sync is already installed on the host workstation, just connect the Dolphin terminal to the host workstation, using a Dolphin peripheral, to initiate communication.

The most current version of Active Sync can be downloaded from www.Microsoft.com.

For more on **Active Sync**, please refer to the User Guide on CD provided with the Terminal.

Setting Up the Dolphin Terminal

The Dolphin terminal defaults to USB communication out of the box. To verify and/or change the default setting, tap Start > Settings > Control Panel > PC Connections.

For more information on **setting up the Dolphin terminal** please refer to the Users Guide included with the terminal.

Bluetooth Manager

Each Dolphin 7600 Series terminal contains a Bluetooth radio whose driver installs each time the device boots up.

For more information on the **Bluetooth services**, please consult the Bluetooth Manager section of the User Guide on the CD provided with the terminal.

Dolphin HomeBase

As the hub of the Dolphin 7600 system, the Dolphin homebase charging and communication cradle supports full speed USB 1.1 communication with a workstation. A serial RS-232 Dolphin HomeBase can also be purchased.

For more information on the **Dolphin Home Base**, please refer to the Home Base section of the users guide on the CD that was included with the Terminal.

Appendix A – Technical Support

Support by Phone

Please call our customer support department at 315-685-8311. Technical support is available during regular business hours from 8:30am to 5:00pm ET Monday through Friday. A 24-hour message system service is available for calls placed outside of regular business hours. Calls placed to this service are answered within one business day. Please leave the following information if calling outside of regular business hours:

- ? Name and Company Name
- ? Product Make, Model, and serial number (if applicable)
- ? Brief description of support needed
- ? Best time to be reached.

Telephone support outside of regular business hours may be available if arranged for in advance. There is an additional fee for this service. Please contact InData Systems during regular business hours for more information.

Support By FAX

Use our printable fax form Requests for technical support may be submitted by FAX 24 hours a day, seven days a week, at 315-685-8312. Faxed requests for technical support are responded to within one business day. An on-line printable request form is available from the indatasys.com website. To access the online fax form, click on the [click here](#) link under the Support by Fax heading. Simply print the form, fill in the relevant information, and FAX the form to us. If not using the above form, please be sure the following information is on your request for support:

- ? Name and Company Name
- ? Company Phone/Fax Number
- ? Product Make, Model, and serial number (if applicable)
- ? Brief description of support needed

Support By Internet / Email

To use our online support forms go to indatasys.com, and select the Support link on the left of the page. Click on the [click here](#) link under the Technical Support heading, to see the various forms of support available. To access the online support form, click on the [click here](#) link under the Support by Internet / Email heading. Requests for technical support may be submitted electronically 24 hours a day, seven days a week. Electronic requests for technical support are responded to within one business day. If you would rather send an E-mail request, contact us at support@directpartmark.com. Please be sure the following information is included in the request:

- ? Name and Company Name
- ? Company Phone / Fax / E-mail
- ? Product Make, Model, and serial number (if applicable)
- ? Brief description of support needed

Appendix B – Ordering Guide

Hand Held Scanners	
LDS460R52F0	USB Keyboard Wedge Base Scanner with Interchangeable Socket
LDS460R5PF0	USB Keyboard Wedge Base Scanner with Powered Interchangeable Socket
LDS480R52F0	USB Keyboard Wedge Base Scanner with Interchangeable Socket
LDS480R5PF0	USB Keyboard Wedge Base Scanner with Powered Interchangeable Socket
Fixed Mount Scanners	
LDS450R5200	LDS FM450 (Fixed Mt) USB Fixed Mount Scanner with Powered Interchangeable Socket
Portable Data Terminals	
LDS950R02F0-00	Dolphin LDS9500 Batch only, with interchangeable socket
LDS950R32F0-00	Dolphin LDS9500 - 802.11b and Bluetooth radios, with socket
LDS950R0PF0-00	Dolphin LDS9500 Batch only, with Powered Interchangeable Socket
LDS950R3PF0-00	Dolphin LDS9500 802.11b and Bluetooth radios, with Powered Interchangeable Socket
LDS760RB2F0	Dolphin LDS7600 Batch (Bluetooth only) with non-powered socket
LDS760RR2F0	Dolphin LDS7600 802.11 wireless and Bluetooth with non-powered socket
LDS760RBPf0	Dolphin LDS7600 Batch with Bluetooth, powered interchangeable socket
LDS760RRPF0	Dolphin LDS7600 802.11 RF with Bluetooth, powered interchangeable socket
Cordless Scanners	
LDS460R22F0	LDS4620 2D cordless imager – battery – Bluetooth radio – scanner only with interchangeable socket
LDS460R2PF0	LDS4620 2D cordless imager with battery pack and 10m Bluetooth radio - scanner only with powered interchangeable socket
LDS480R22F0	LDS4820i 2D cordless imager – battery – Bluetooth radio - scanner only with interchangeable socket
LDS480R2PF0	LDS4820i 2D industrial cordless imager with battery pack and 10m Bluetooth radio – scanner only with powered interchangeable socket - rugged

Interchangeable Optic Assemblies	
UV Optics	
LDS40G0UB0S	405nm – Ultra Violet illuminated interchangeable optic assembly - RoHS
LDS40G0UF0S	365nm – Ultra Violet illuminated interchangeable optic assembly - RoHS
V2 Versions	
LDS40000600	V2 Interchangeable Optics Assembly with 40mm Lens
LDS40000100	V2 Interchangeable Optics Assembly with 80mm Lens
M3 Versions	
LDS4000070G	M3 Interchangeable Optics Assembly with 30mm Lens
LDS4000030G	M3 Interchangeable Optics Assembly with 40mm Lens
LDS4000090G	M3 Interchangeable Optics Assembly with 80mm Lens
LDS4000170G	M3 Interchangeable Optics Assembly with 30mm Lens Illuminated
LDS4000190G	M3 Interchangeable Optics Assembly with 80mm Lens Illuminated
ESD	
LDS40E00600	V2 Interchangeable Optics Assembly with 40mm Lens ESD Compliant
LDS40E0030G	M3 Interchangeable Optics Assembly with 40mm Lens ESD Compliant
Power Supplies	
PS-5U-4	5V Power Supply for use with RS232 Units as indicated above
PS9U-2	9V Power Supply for 2020-5 Base below
4620 Base unit	
WA-2020-5B	Host interface, Wireless link and charging for 4620 based solutions requires 9V power supply above
WA-2020-CB	Charge Base alone for 4620 solutions requires 9V powersupply above

Holsters/Covers	
9500 Cover	Dolphin 9500 Protective Enclosure with clear front and swivel belt clip
9500 Cover/2	Dolphin 9500 Protective Enclosure with swivel belt clip
9500 Holster	Dolphin 9500 Belt Holster
7600 Holster	Dolphin 7600 Belt Holster
Home Base/Cradles	
9500-HB-1	Dolphin Home Base™ - US kit – Dolphin 9500/9550 charging cradle with USB and serial (RS-232) ports for communication and auxiliary battery well for charging an extra battery. Includes US power cord and power supply.
9500-HB-2	Dolphin Home Base™ - Euro Kit Dolphin 9500/9550 charging cradle with USB and serial (RS-232) ports for communications and auxiliary battery well for charging an extra battery. Includes Euro power cord and power supply.
7600-HBE	Dolphin 7600 charging and communication cradle
80000355E	6 foot USB A – B cable
WA-2020-CB	Charge Base alone for 4620 solutions requires 9V power supply above
Spare Batteries	
20000591-01	Dolphin 9500 7.4 V 14.8 Watt Hour Li-On spare battery
7600 BTSC	Dolphin 7600 7.4 V, 8.1 Watt Hour Li-Ion spare battery
Chargers	
9500-QC-1	Dolphin Quad Charger™ US Kit Dolphin 9500/9550 four slot battery charging station. Includes US power cord and power supply
9500-QC-2	Dolphin Quad Charger™ Euro Kit Dolphin 9500/9550 four slot battery charging station. Includes Euro power cord and power supply

Charging & Communications Cables	
9500 RS232-1	Dolphin 9500/9550 RS-232 Charging and Communications Cable US kit
9500 RS232-2	Dolphin 9500/9550 RS-232 Charging and Communications Cable Euro kit
Stands	
FM450 Flex base	FM450 Flex base
HFStand5-LDS	Hands free stand for InData LDS products
ESD-HFStand5-LDS	Hands free stand for InData LDS products ESD Compliant
Cables	
42206161-01	USB PC or MAC Interface Cable
42204253-04	True RS232 Interface Cable Requires Power Supply
42203758-04	TTL RS232 (for use with (5) Scanners) Interface Cable Requires 5V Power Supply
42206132-02	Keyboard Wedge Mini DIN Interface Cable
42203758-03	Power Link Interface Cable