# Using the DB-5083 with Library Automation Systems

Prior to use it is recommended that the content of the supplied package be inspected so that the purpose and use of each item is understood.
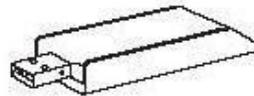
The DB-5083 Wireless Scanner has a Li-Ion rechargeable battery already fitted within the handle of the scanner. The enclosed USB charging cable is used to recharge the battery from a spare USB port when required.
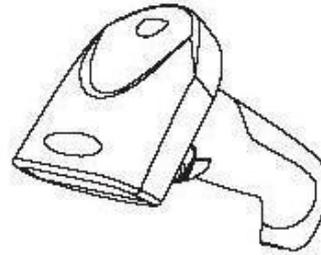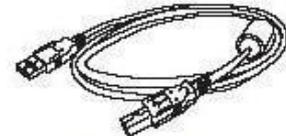
Connect the USB receiver to the computer.

The DB-5083 USB receiver must be connected to a spare USB port on the host computer and provides the path of wireless communication with the DB-5083 wireless scanner and the host computer.

The USB receiver is known as a HID device meaning that data sent from the receiver to the computer is treated the same way as keyboard entry. What this also means is that when the USB receiver is first connected to the computer's USB port the computer operating system recognises this and automatically accommodates for it. This is often referred to as "Plug & Play" and means that **NO** additional software or device driver software is required, the widespread growth and adoption of many USB devices is directly attributable to this simple and user-friendly method of connecting computer peripherals.

Supplied Items illustrated below.

DB-5083 Wireless Scanner

USB Receiver   USB Charging Cable

Once you have connected the USB receiver it should be automatically recognised by the host computer and within a few seconds the USB receiver's blue light will indicate that the initialization is complete and the wireless scanner is ready for use.

If the DB-5083 fails to communicate to the host computer then it may require pairing with the USB receiver.

Two methods of pairing/binding are provided for.

Method 1. When there is only one scanner in local use and **Method 2** when there are more than one DB-5083 in close proximity. Method 2 allows a unique frequency to be allocated to each DB-5083 scanner / receiver in order to prevent data clashing occurring. (See accompanying set up sheet for details on pairing).

Wake up the DB-5083 wireless scanner.

When the DB-5083 wireless scanner is first used it will require waking up, to do this simply press and release the trigger on the scanner to activate it. A green light on the head of the scanner will illuminate when the scanner is ready for use.

After periods of non-use (default of 1 minute) the wireless scanner will enter a sleep mode to preserve battery life. Waking up is the same as first initialization, simply press and release the trigger on the scanner.

The Dataman Operational Setup Guide that accompanies the DB-5083 does provide important detailed information and instructions necessary for the DB-5083 to be customised for personal preference. Dataman Barcode Systems recommend that the DB-5083 is operated on its default settings.

Testing the DB-5083 wireless scanner.

The scanner can now be tested. The DB-5083 is a CCD scanner, when the trigger is depressed it will emit a band of red light that should be positioned equally about and upon the bar code to be scanned.

The DB-5083 should be held a short distance away from the bar code being scanned (50 – 150 mm) and not immediately upon it. The required distance will vary between bar code types and depends upon the original density at which the bar code was produced, generally bar codes produced at higher print densities will require the DB-5083 to be held closer to the bar code. The scanner **SHOULD NOT** be held perpendicularly above the bar code but should be held at a slight angle to the perpendicular for best scanning results.

Initially while scanning with the trigger depressed gradually adjust the distance the DB-5083 is held from the bar code until an audible double beep is heard, this will indicate the optimum focal range for the particular style of bar codes being used. Once this optimum range is discovered this should be the distance the scanner should normally be held away from the bar code during regular use.

Charging and recharging the battery.

When the DB-5083 is first received the on-board fitted battery may only be partially charged and will require topping up, use a spare USB port on the host computer and the supplied USB charging cable for this.

Note: It is possible to continue using your scanner while the battery is being charged and the charging cable is attached, the USB receiver can still remain connected.

While the scanner is being charged a blue light will be illuminated on the head of the scanner, when the scanner is fully charged the blue light will change to green. A fully drained battery could take up to 4 hours to charge, during normal usage if the light on the head changes to red it indicates the battery charge is low.

If the scanning light fails to come on when the trigger is depressed or the wireless range dramatically reduces (usually accompanied with du-du-du sounds) the scanner should be recharged immediately..

About the DB-5083 wireless scanner.

While the DB-5083 is being operated in normal real time mode without cache, it does rely on being in constant wireless communication with the USB receiver.

When a bar code is scanned the decoded data is transmitted directly to the USB receiver and consequently to the host computer without delay. If the scanner is not connected to the receiver or is out of range the data can be lost. (The DB-5083 will emit a du-du-du sound to indicate that the data transfer was not successful).

Optionally the real time operation can be selected to operate with cache where data is stored in memory if out of range and uploaded as soon as communication range is restored, this ensures that data is not lost. Operating in cache mode can sometimes incur a small time delay that reflects in the speed that data can be entered.

The absolute wireless range of the DB-5083 can vary and is dependent upon the surrounding conditions under which it is operating. Line of sight wireless communication range of approximately 30 meters is normal and up to 90 meters in ideal conditions. The range can be improved if the USB receiver is connected to a USB extension cable and mounted in such a way that the USB receiver it is more visible to the DB-5083.

The DB-5083 **does** incorporate internal memory capabilities and can be set to a data collection mode for stocktaking purposes. When the batch memory mode is activated its wireless range no longer restricts the distance the DB-5083 can be remotely taken to collect data. The DB-5083 does however have to be returned to within wireless range to download collected data. The DB-5083's large memory is capable of storing up to 100,000 average library bar codes, it is recommended however that smaller multiple batches are undertaken.

See the included operational barcode Setup Menu for using the DB-5083 for data collection and stocktaking.

A feature available while undertaking stock collections is the "**Retrieve Memory Usage**" command, If this bar code is scanned when in wireless range the DB-5083 will send a message to the computer reporting how many barcodes have been placed in memory. Simply open a blank Notepad window or clear MS Word document, scan the "**Retrieve Memory Usage**" bar code and the information will be displayed.

e.g. Total Counters = 0047

The same feature can also be used when operating in direct cache mode. If any scans have been placed in memory then this command will show the quantity, Using the "**Download Data**" command will send the cached data to the computer. The cache can be cleared with the "**Delete Data**" command.

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Set for Remote Data Collection Mode

Enable Batch Memory Mode

1 |||||||||||||||||||||||||||||||

Note:-

While in remote data collection mode direct and immediate real time communication with the computer will cease.

Set for Normal Operation

Normal Direct Mode (operate without cache)

1 |||||||||||||||||||||||||||||||

Normal Direct Mode (operate with cache)

1a |||||||||||||||||||||||||||||||

Steps for Downloading Data

The host computer software should be set to a prepared state to receive data.

Download Data

1 |||||||||||||||||||||||||||||||

When ready, the above barcode is scanned and the stored batch data is transferred,

When the collected data has been successfully downloaded the storage memory can be cleared.

Delete Batch Data

2 |||||||||||||||||||||||||||||||

The process of collecting data, downloading data and clearing memory can be undertaken in repeated batches as required. Finally, when finished the DB-5083 scanner can be returned to conventional mode by scanning the above barcode listed **"Normal Direct Mode".**

Retrieve Memory Usage

3 |||||||||||||||||||||||||||||||

Sleep Time Setting

Setting an active sleep time will extend battery life between charges.

Set Sleep Time

1a |||||||||||||||||||||||||||||||

60 seconds

1b |||||||||||||||||||||||||||||||

3 minutes

1c |||||||||||||||||||||||||||||||

5 minutes

1d |||||||||||||||||||||||||||||||

15 minutes

1e |||||||||||||||||||||||||||||||

Confirm Sleep Time Setting

1f |||||||||||||||||||||||||||||||

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USB Receiver Pairing Method 1

This pairing method can be used when there is only one scanner in local use or after frequency adjustment.

Insert USB Dongle / Transponder into spare USB socket then scan the following bar code within 20 seconds.

Pair in single step

USB Receiver Pairing Method 2

This pairing method is used when there are more than one DB-5083 scanner in close proximity

Begin Frequency Adjustment

Modulate Frequency

Confirm Frequency Adjustment

If a failure to communicate is experienced after frequency adjustment remove Dongle / Transponder from USB port and re-pair using method 1.

Lights

Enter Setup

Restore to Factory Default

Exit and Save

LED Status	Description
Scanner	
Red light turns green	Power on
Green light blinks once	Successful scan
Green light blinks twice	Failed scan
Green light on	Working normally
Red light on	Low battery
Red light on	or Unpaired
Blue light on	Charging normally
Green light on	Charging complete
USB Receiver	
Blue light on	Working normally
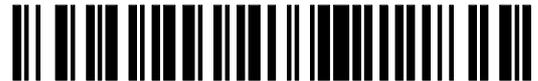
Scanning Method & Distance

The best distance 10 ~ 20CM

Correct   Wrong

121311113
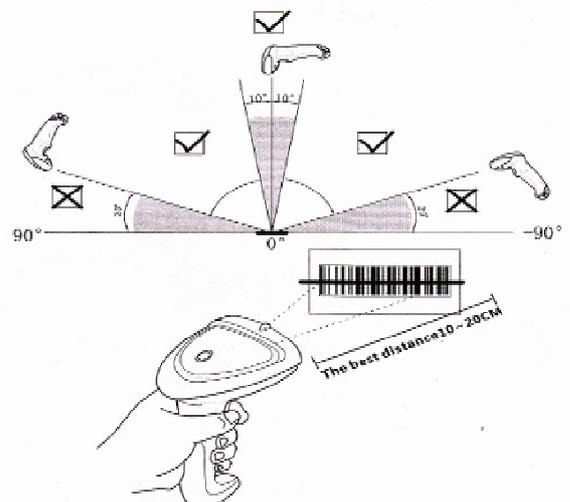
NOTE: LED beam should be full coveraged on the bar code

Buzzer	
Scanner beeper mode	
Four beeps	Power on
Short one beeps (cable)	Scan & upload Ok
Short two beeps (wireless)	Scan & upload Ok
Short three beeps	Data upload failed
Long short beep	Enter setting mode

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