Using the D-Tech DB-6023 with Library Automation Systems

The DB-6023 1D/2D Wireless Scanner incorporates a factory fitted Li-Ion rechargeable battery within the handle of the scanner..

Connect the USB cradle to the computer.

The supplied USB cable should be connected to the matching socket underneath the cradle and the opposite end of the cable must be connected to a **working** USB port on the host computer, This cable provides the path of wireless communication with the DB-6023 1D/2D wireless scanner and the host computer.

The USB cradle is known as a HID device meaning that data sent from the cradle to the computer is treated the same way as keyboard entry. What this also means is that when the USB cradle 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.

(See below:- "Windows Forgets").

Once you have connected the USB cradle it should be automatically recognised by the host computer and the USB cradle's green light will begin flashing, after a period of 30 seconds or so the green light will become steady. This indicates that the initialization procedure is complete and the wireless scanner is ready for use. If the host computer in on a network the auto recognition process may take a little longer time to complete.

If the DB-6023 fails to communicate to the host computer then it may require pairing with the USB cradle.

The method of pairing/binding provided for is.

Method .

After connecting the cradle the bar code underneath the cradle or the "Pair in single step" bar code on supplied operation menu Page 2 must be scanned within 20 seconds of turning on.

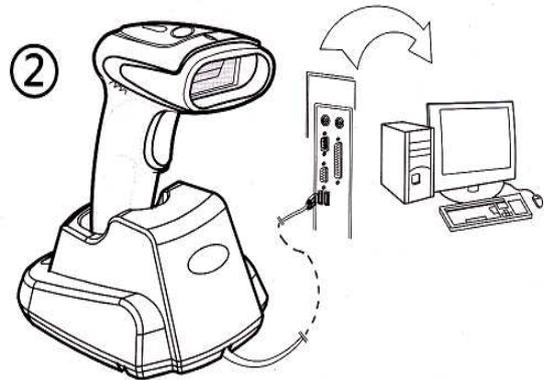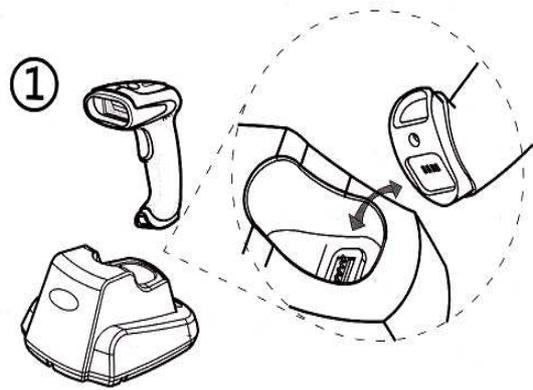## Wake up the DB-6023 wireless scanner.

When the DB-6023 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 3 minutes) 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-6023 does provide other important information and instructions necessary for the DB-6023 to be customised for personal preference. Dataman Barcode Systems recommend that the DB-6023 is operated on its default settings.

Windows Forgets.

The MS Windows Plug & Play feature **is not bullet proof**. Occasionally if a computer has been running for many hours/days without being reset the MS Windows operating system can lose or forget that certain USB peripherals (like bar code readers) are attached. If this occurs a computer re-boot will correct the anomaly.

Testing the DB-6023 wireless scanner.

The scanner can now be tested. The DB-6023 is an Area Image CCD scanner, when the trigger is depressed it will emit a band of red light with white background illumination that should be positioned equally about and upon the bar code to be scanned.

The DB-6023 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-6023 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-6023 is held from the bar code until an audible 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.

Auto Trigger Option

When shipped the DB-6023's sleep setting is set to an active state, this is done to prevent the battery from being over discharged during transit/storage and to preserve the low initial charge on the battery, i.e. It is a safety measure. To awaken the scanner briefly depress the trigger,

The DB-6023 also incorporates an "Auto Trigger" feature that can be initiated by scanning the "Continuous" command bar code on sheet 2 of the supplied operation menu. The auto trigger feature replaces the need to squeeze the trigger for each bar code scan, instead all that is required is to bring the scanner close to the bar code to allow the inbuilt IR detector to initiate the scan process.

Please Note:-

Once scanned it will be necessary to withdraw or turn the scanner away from the bar code to allow the IR detector to reset before another bar code can be scanned,

An additional sub feature of the auto trigger mode is the ability to operate the DB-6023 as a hands free presentation mode scanner when parked in the cradle. If required to operate as a presentation mode scanner it will be necessary to turn the sleep mode **off**. (See operation menu sheet 1 "None Sleep").

Charging and recharging the battery.

When the DB-6023 is first received the factory fitted battery may only be partially charged and will require topping up, Simply sitting the 6023 scanner in the cradle will accomplish this.

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 battery should be recharged immediately..

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About the DB-6023 wireless scanner.

While the DB-6023 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-6023 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-6023 can vary and is dependent upon the surrounding conditions under which it is operating. Line of sight wireless communication range of approximately 50 meters is normal and up to 90 meters in ideal conditions.

Remote Data Collection.

The DB-6023 **does** incorporate internal memory storage 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-6023 can be remotely taken to collect data. The DB-6023 does however have to be returned to within wireless range to download collected data. The DB-6023'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-6023 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-6023 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. BarcodeNumber:XXXXX

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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