

FCC Compliance Information:

# Bluetooth Tag Tracker (BT3) Wireless

## RFID Tag Reader

Bluetooth Communication Model

For more information contact AgInfoLink at

**800-287-8787**



Notes:

## BT3 Reader Specifications:

- Repeated six-foot drop test to concrete
- Physical Shock Test: >500G for 40 milliseconds
- Water- and dust-resistant (NEMA 12 / I.P. 65)
- Infrared trigger
- Power: 9.6-Volt Makita rechargeable battery, model 9000 and 9033
- Multiple hours of continuous operation
- Fast charger recharges battery in under one hour
- RFID Reader: 134.2 KHz, ISO 11785
- Reads Full Duplex (FDXB) and Half Duplex (HDX) tags
- RF communication: Bluetooth™ Class 1
- Bluetooth™ communication settings:
  - 115,200 Baud Standard (Configurable from 244 baud to 1.38 Mbaud in multiples of 244)
  - Parity: None
  - Data Bits: 8
  - Stop Bits: 1
  - “Server” or “Client” device modes
- Communication range: Up to 330 ft., line-of-site
- Factory default communication PIN: 1234
- U.S. Patent No. **6,346,885**

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# BT3 Overview

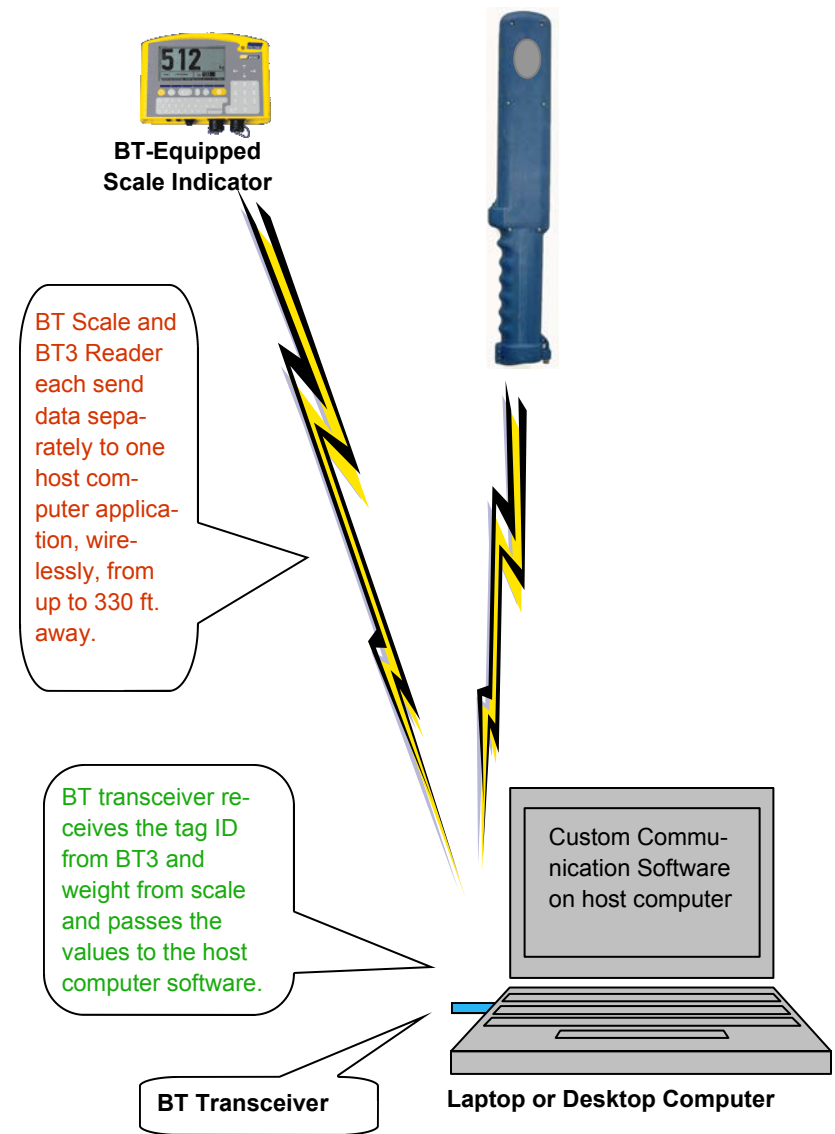
The BT3 Wireless RFID Tag Reader is an environmentally-robust device that reads RFID (radio frequency identification) tags and communicates the tag number, wirelessly, back to a host device such as a computer or PDA. This means you're no longer "tethered" to your computer — you can move about and scan items at will, sending the ID's to the computer, wirelessly. And, if you're using the BT3 with a PDA, you can keep the rugged reader separate from the less-rugged handheld PDA.

BT3's RFID reader is ISO (International Standards Organization) 11785-compliant and is capable of reading all ISO 11784 RFID tags, including both full duplex (FDX) and half duplex (HDX) tag versions.

## Features Overview:

- Rugged construction
- Water and dust-resistant (NEMA 12 / I.P. 65)
- Removable, long-lasting battery
- Infrared trigger doesn't wear out
- Allows for long reach into tight or dangerous areas
- Only one moving part (On/Off switch)
- Communicates wirelessly with host devices via Bluetooth™
- Works with PDA's, peripherals, desktop and laptop computers.
- Can be configured as a Bluetooth™ (BT) Client or Server
- User-definable communication and security settings, including password protection

# Multiple BT Devices Communicating With One Computer



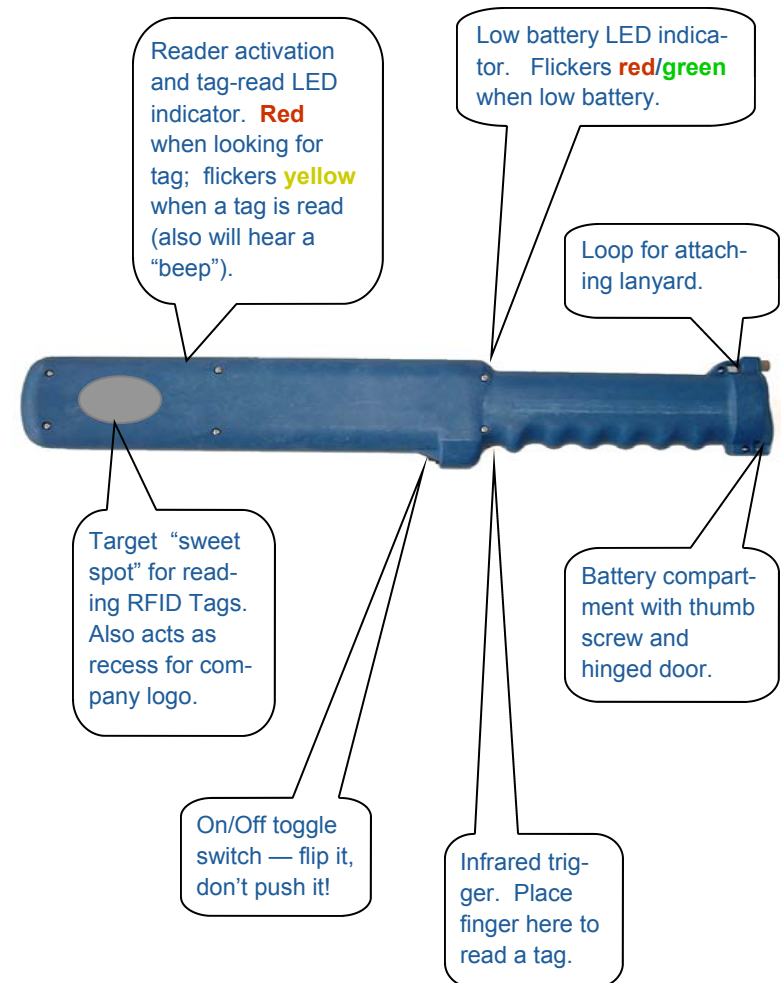
# Using Multiple Wireless Devices With One Computer

- With the right hardware, it's possible to have more than one device communicating with the host computer.
- For instance, two BT3 readers or one BT3 and one scale may communicate with the host computer.
- When setting up a computer that's capable of communicating with multiple BT devices, assign a different COM port to each BT device.

- **Important:**

**Custom host computer software is usually necessary to communicate with more than one device.**

## TT2 Reader Parts



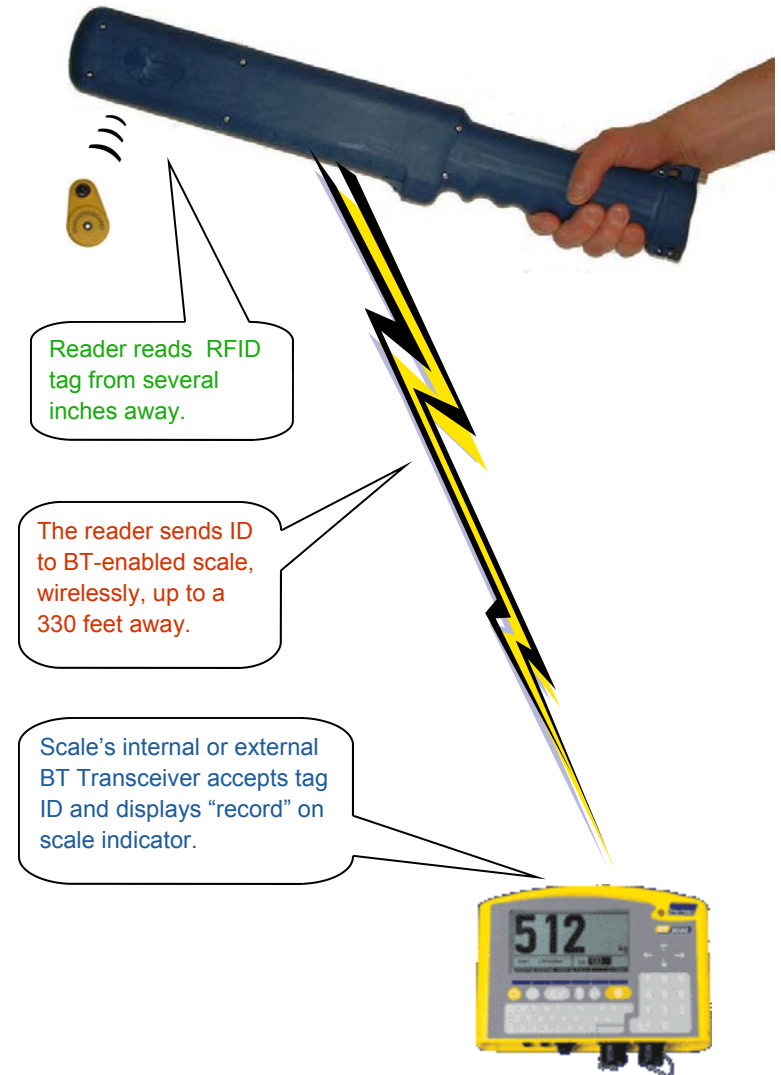
# BT3 Operation Notes

## Important — Notes and Pointers — Please Read

- When turning the reader on, flip (don't push) the On/Off toggle toward the side of the reader showing the metal screw heads.
- The reader "beeps" once when first turned on.
- To trigger a read, grip the reader just behind the On/Off switch to break the infrared beam.
- Once the reader begins looking for a tag, it will remain in the "read" mode for at least ten seconds and the red LED near the end of the reader will remain on.
- If the reader "times out", you will need to grip the infrared trigger again so the reader will begin a new tag search.
- If a tag is read before the reader times out, the reader will stay in read mode and will continue to search for tags.
- When connecting to your computer or PDA you may be asked for a PIN. The **factory default PIN is: 1234**.
- If the reader will be idle for more than a half hour, use the toggle switch to turn the reader off. Also make sure to "Exit" the software application on your PDA or host computer.
- To reconnect, turn on the reader, then re-start your application software and follow the Bluetooth connection instructions.
- The "Low Battery" indicator LED above the trigger will flash red when the battery needs to be charged.
- NEVER turn the BT3 reader off while your host application is running. Always exit the application prior to turning off the reader.

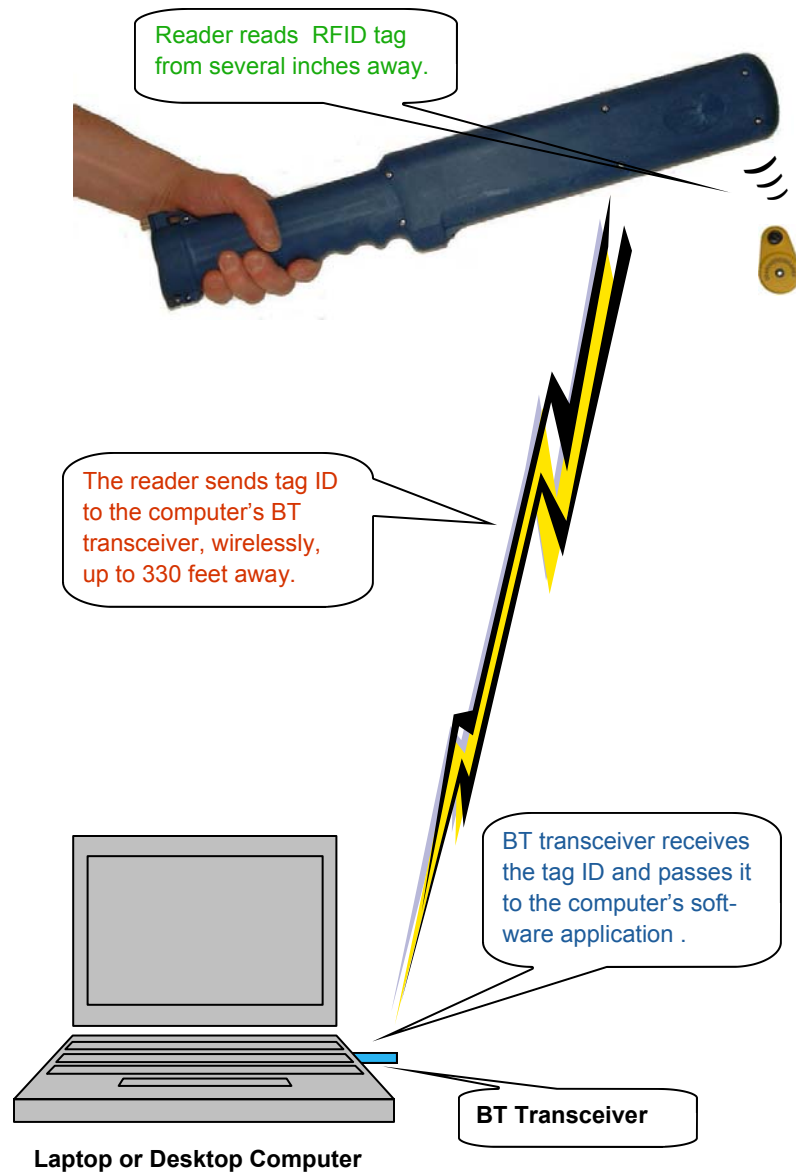
# Communicating With a Scale

- It's possible to send tag ID's directly to a scale or other peripheral device if that device is Bluetooth-capable.



BT-Equipped Scale Indicator

# Communicating With a Computer



## BT3 Battery

- Open the battery door by unscrewing the thumb screw and opening the hinge. If the battery "sticks" in the compartment, tap the butt of the reader (opposite the hinge) lightly to loosen the battery.
- When re-inserting the battery, make sure the battery's key is lined up with the slot in the reader's battery compartment.

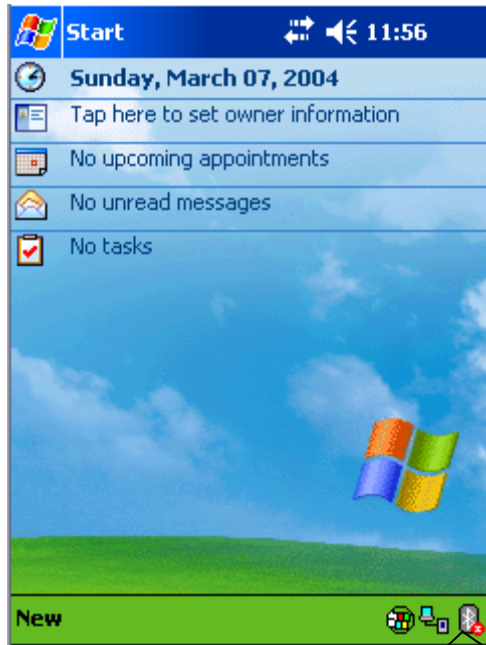



- There are two types of Makita batteries that work with the BT3 reader. A black battery (Makita 9000) Ni-Cad battery and a gray battery (Makita 9033) Ni-MH (high capacity) battery. The gray high-capacity Ni-MH battery is recommended.
- The Makita DC1803 charger works for both battery types.
- When a battery is in the charger, the charger's LED indicator will be red when the battery is charging and green once it's fully charged.
- Batteries usually charge in less than an hour (even when fully discharged).



# Bluetooth™ on a PDA

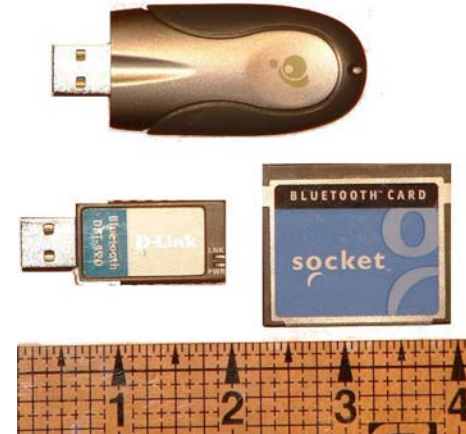
- Today, many personal digital assistants (PDA's) are equipped with internal Bluetooth™ (BT) communication capability. If this is the case with your PDA, simply turn on BT and look to see which BT port your PDA is using. You can also add a BT card to your PDA to add BT capabilities.
- Setting up Bluetooth™ on a Windows™ CE device is done as follows:



First, turn the PDA on and, after several seconds, check to see if Bluetooth is turned on. If it's asleep, there will be a little red "z" in the lower right-hand corner of the screen, next to the BT icon: 

Click on the BT icon to turn Bluetooth on.

## Some Examples of External BT Transceivers Used with Laptop or Desktop Computers:



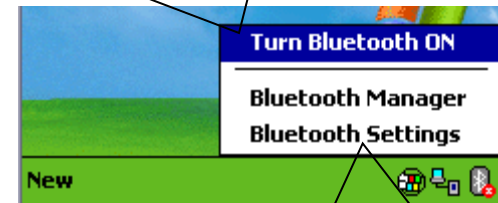
- The transceivers above can be used to add BT communications to a laptop or desktop computer that doesn't have built-in Bluetooth capabilities. They're about the size of your thumb.
- The D-Link and IOGear products on the top and left, respectively, are USB-to-BT adapters that plug into the computer's USB port.
- The Socket product on the bottom right is a Compact Flash (CF) card that can be inserted in a computer's CF slot or slips into a sleeve and plugs into the PCMCIA slot found on most laptops.
- Some transceivers allow communication with more than one Bluetooth device simultaneously, such as two Bluetooth readers or one reader and one Bluetooth-equipped scale. See each manufacturer's instructions for details.



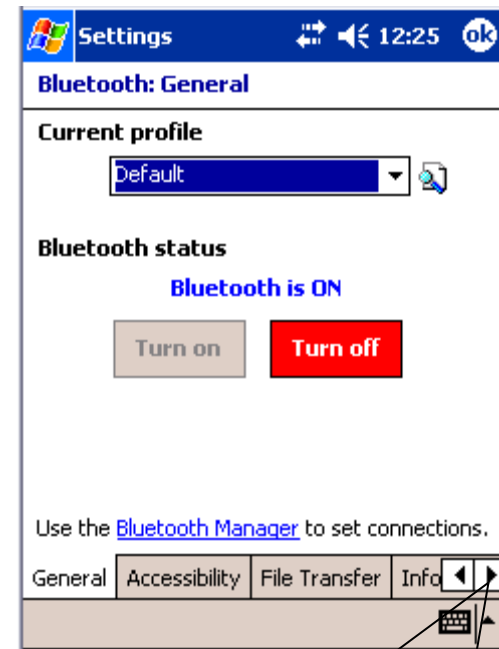
# Bluetooth™ on a Laptop or Desktop Computer

- As with a PDA, Bluetooth communications can either be built into a laptop/desktop computer or can be added with USB or PC-card adapters.
- Setup and communication instructions vary, depending on the BT adapter you're using. Use the instruction manuals with your chosen device to install it.
- With internal BT — in Windows™ XP operating systems — use the Bluetooth Manager to select your settings.
- Make sure to select the “Outbound” COM Port as the port to which your application software communicates.
- Software resident on the computer needs to communicate with and accept information from the computer's communications ports.

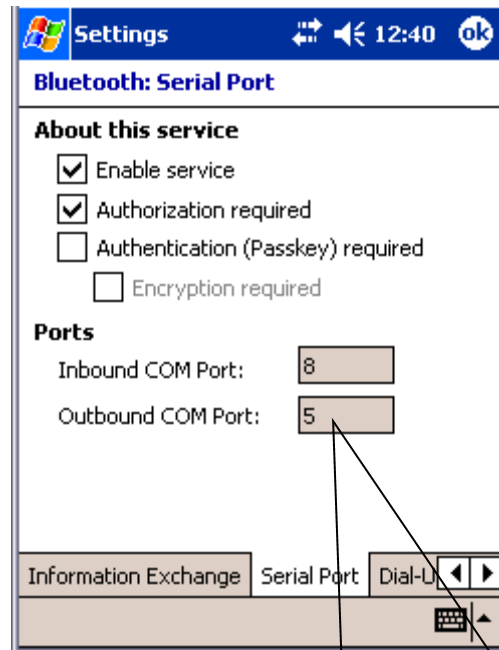
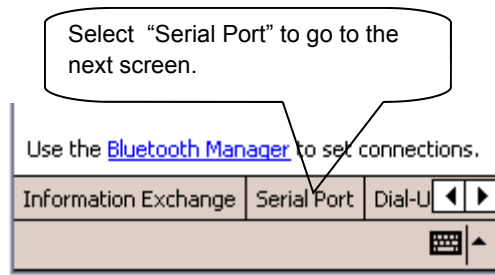
Once you click on the BT icon on the bottom of the CE screen, the menu below will display. Simply select “Turn Bluetooth ON” to complete the task. When complete, the “z” will disappear.



Next, click on “Bluetooth Settings” to display the screen below:



Click on the right arrow at the bottom of the screen to move to more selections.



Once in the Serial Port Settings screen above, check to see which Outbound COM Port is used on your PDA (All we're doing here is looking at the port used — you don't need to do anything here but look). If your BT3 reader is set up as a "server" (the typical configuration), use the *Outbound* COM Port when your application software asks for the COM port. If your reader is set up as a "client", use the *Inbound* COM Port. When done looking, click "OK" to close this screen.

## Communicating With a PDA

