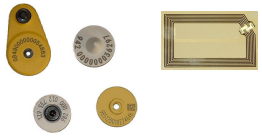
TagTracker 2 (TT2)

Wireless

RFID Tag Reader

Industrial Communication Model



AgInfoLink

For more information, contact AgInfoLink

800-287-8787

TT2 FCC statement of conformance:
FCC ID: ON2TTREADER02
FCC ID: KQL-PKLR2400

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been designed, constructed, and tested for compliance with FCC Rules that regulate intentional and unintentional radiators. The user is not permitted to make any modifications to this equipment or use it in any manner inconsistent with the methods described in this User Manual, without express approval from InfoClip. Doing so will void the user's authority to operate this equipment.

The term "IC:" before the radio certification number only signifies that Industry of Canada technical specifications were met.

This device complies with the FCC rules part 2.1091 for RF radiation exposure in mobile devices. Output EIRP is below the stated levels and operation is generally in excess of 20CM from the body.

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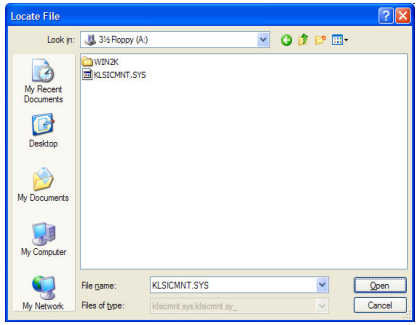
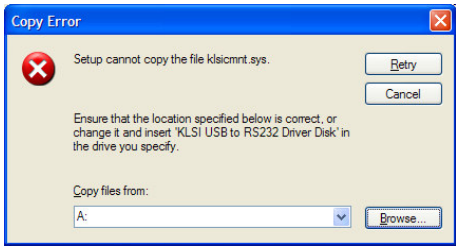
TT2 Specifications:

- Reader: Repeated six-foot drop test to concrete
- Reader: Water and Dust-Resistant (NEMA 12 / I.P. 65)
- Base Station and Remote Units: Office standards
- RFID Reader: 134.2 kHz, ISO 11785, Full and Half Duplex
- RF Communication: 2.402—2.478 GHz, FHSS
- Communication Range: Up to 300 ft. indoors; 2,500 ft. line-of-site
- Data rate: adjustable, from 2,400 to 115,200 baud
- Base Station-to-host communication — Serial: USB
- Channels: Up to 64
- Power: 9.6-Volt Makita rechargeable battery
- Multiple hours of continuous operation
- Fast charger recharges battery in under one hour
- U.S. Patent No. **6,346,885**

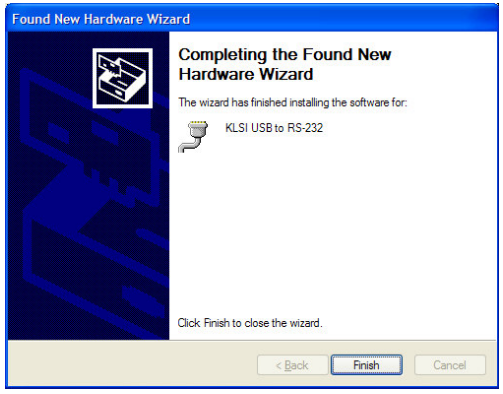


9. Click “Open”.



10. Click “Retry”.

Windows now completes the install of your TT2 drivers.



11. On the final screen click “Finish”. Restart your computer. The TT2 drivers should now be installed.

TT2 Overview

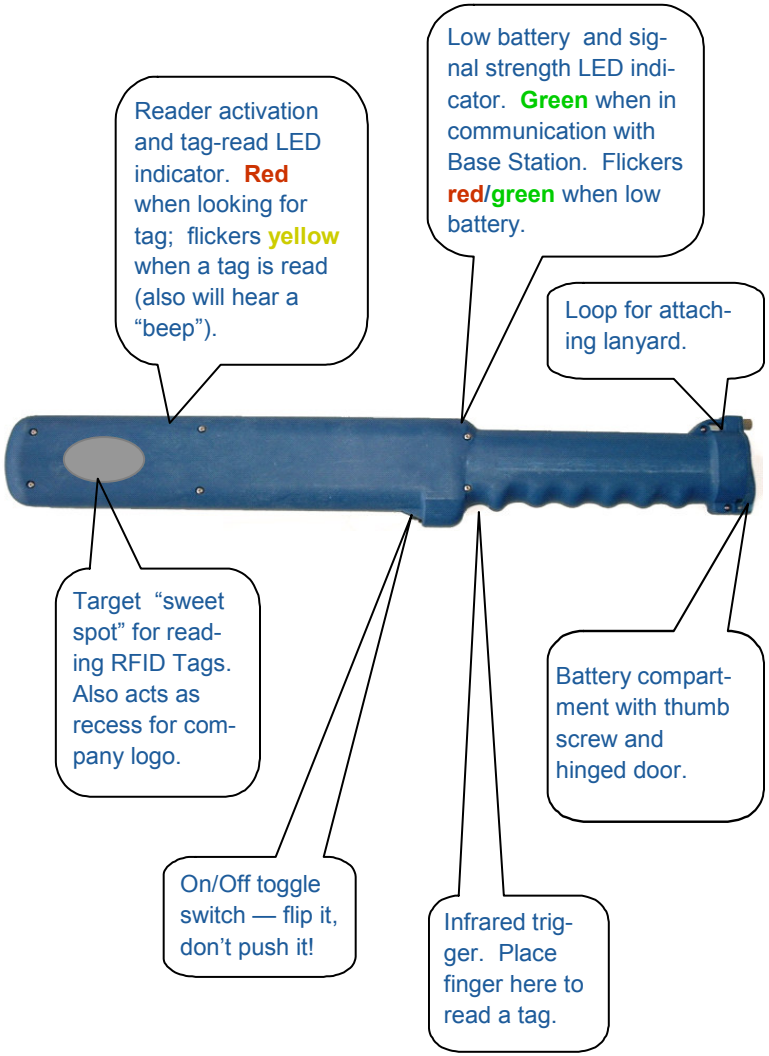
The TT2 Wireless RFID Tag Reader is an environmentally-robust device that reads RFID (radio frequency identification) tags and communicates the tag number, wirelessly, back to a host device such as a computer or scale. This means you’re no longer “tethered” to your computer — you can move about and scan items at will, sending the ID’s to the computer, wirelessly.

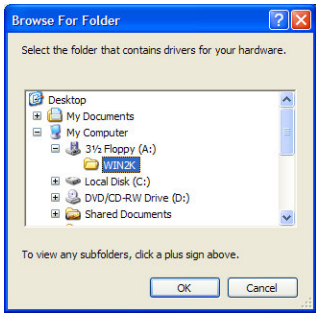
TT2 is ISO (International Standards Organization) 11785-compliant and is capable of reading all ISO 11784 RFID tags, including both full duplex (FDX) and half duplex (HDX) tag versions.

Features Overview:

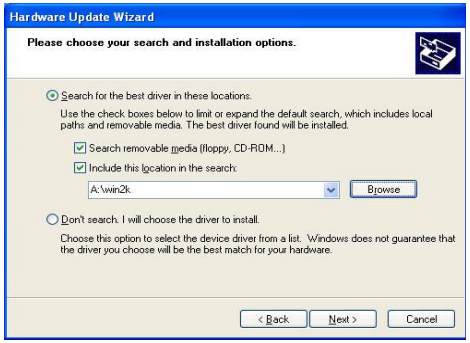
- Rugged construction
- Water and dust-resistant (NEMA 12 / I.P. 65)
- Communicates wirelessly with host device
- Removable, long-lasting battery
- Infrared trigger doesn’t wear out
- Allows for long reach into tight or dangerous areas
- Only one moving part (On\Off switch)
- USB or Serial Base Station for connecting to host
- Remote Base Stations for wireless communication with other devices
- Multiple channels available for paired communications
- User-definable communication settings

TT2 Reader Parts





5. Look in A: drive and click on WIN2K folder, Click "OK".



6. Click "Next".

7. Click "Continue Anyway".

8. Click on "Browse" and Look In: 3 1/2 Floppy (A:)

Appendix:

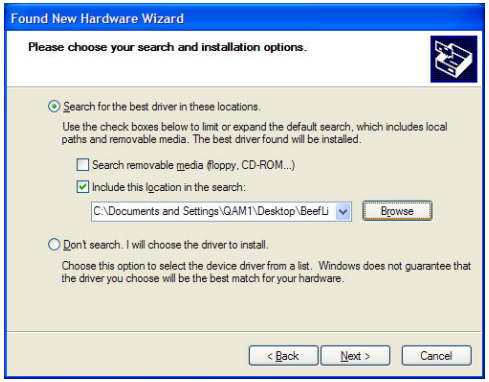
Installing the TT2 USB Drivers on a Host Computer Using Windows XP

1. Put the floppy disk labeled "**Tag Tracker 2 Installation Disk**" into the computer.

2. Plug in the TT2 USB cable to the TT2 base station, then hook the other end of the USB cable up to the computer. Follow the instructions on screens below:

3. Select "Install from a list or specific location (Advanced)" and click "Next".

4. Select "Install from a list or specific location (Advanced)", check the bottom box and click the "Browse" button.



TT2 Operation Notes

Operation Notes and Pointers (Please Read):

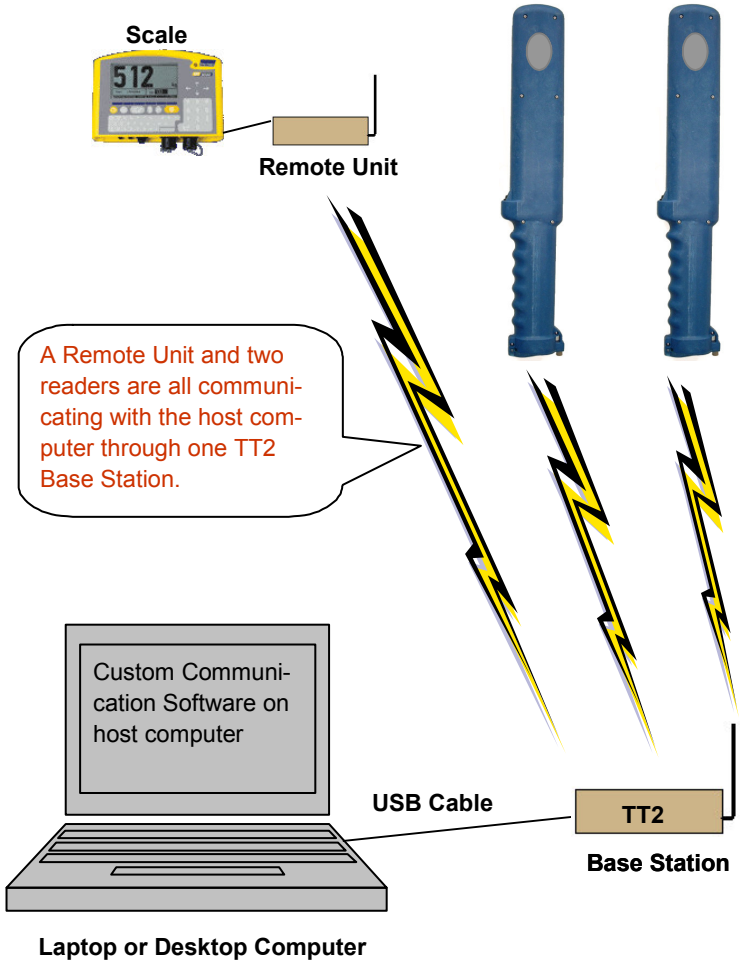
- When turning the reader on, flip (don't push) the On/Off toggle toward the side of the reader showing the metal screw heads.
- To trigger a read, grip the reader just behind the On/Off switch to break the infrared beam.
- The reader "beeps" once when first turned on.
- Once the reader begins looking 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 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.
- If the reader will be idle for more than a half hour, use the toggle switch to turn the reader off. When you're ready to work again, simply turn the reader back on and look for the **green** LED link light above the trigger to confirm that the reader is in contact with the host's base station. The same LED is solid **red** for no RF link present and flashes **yellow** for low RF link.
- The same LED above the trigger acts as the "Low Battery" indicator and will flash red/green when the battery needs to be charged.

TT2 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 TT2 reader. A black Ni-Cad battery (Makita 9000) and a gray Ni-MH (high capacity) battery. The gray Ni-MH battery (Makita model 9034) is recommended.

Multiple Wireless Devices Communicating With One Computer



Using Multiple Wireless Devices With One Computer

- The TT2 system allows for wireless communication between multiple devices and one Base Station.
- Multiple readers and/or Remote Units can all talk to one Base Station connected to a host computer through one USB port.
- When more than one wireless device talks to a Base Station, the data sent to the host computer contains a device ID along with the data being sent.
- The host software can distinguish between tag ID's sent from different readers and weights sent from scales, etc., base on the "Unit ID" that proceeds the data.
- **Important:**

  Custom host computer software is needed to communicate with more than one device through one USB port on the computer.

Charging the Battery

- 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).

USB Base Station

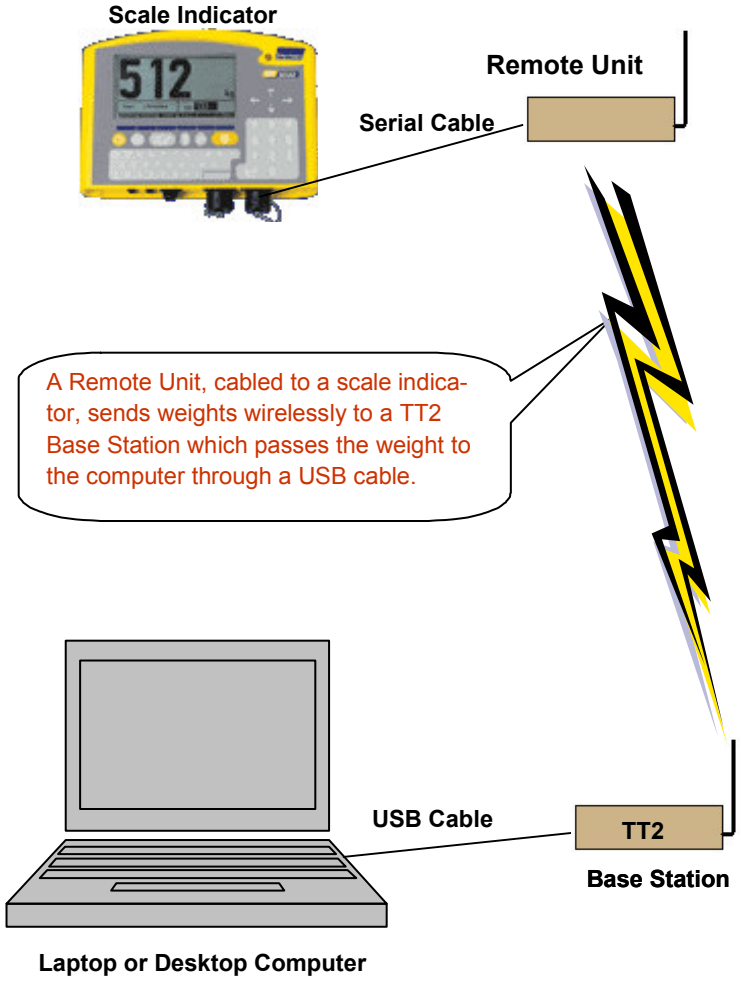
- In order for a reader to send a tag ID to a computer, a Base Station must be cabled to the computer.
- On most computers, the USB port is used to connect a Base Station to the computer's communication ports. The USB port also provides power to the Base Station.
- Software resident on the host computer needs to communicate with and accept information form the computer's USB ports.
- A USB cable 15 feet or shorter in length should be used for this connection.

Base Station End View

Connection to computer. Connect USB cable (15' or less in length) here and to computer's USB port.

- Some computer operating systems require software drivers for USB devices. See the Appendix in this manual for instructions on installing the TT2 USB drivers.

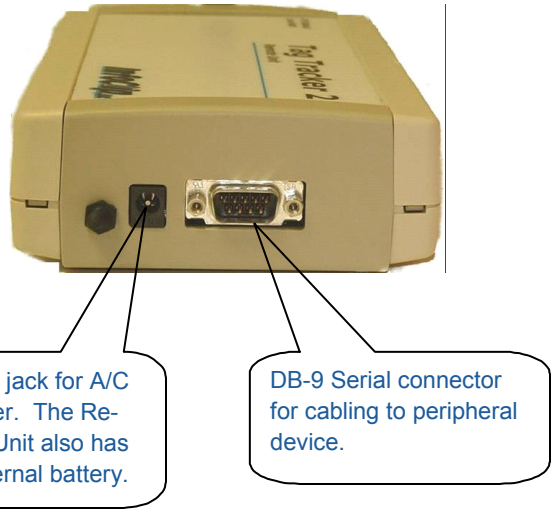
Converting a Cabled Peripheral Device to a Wireless Device



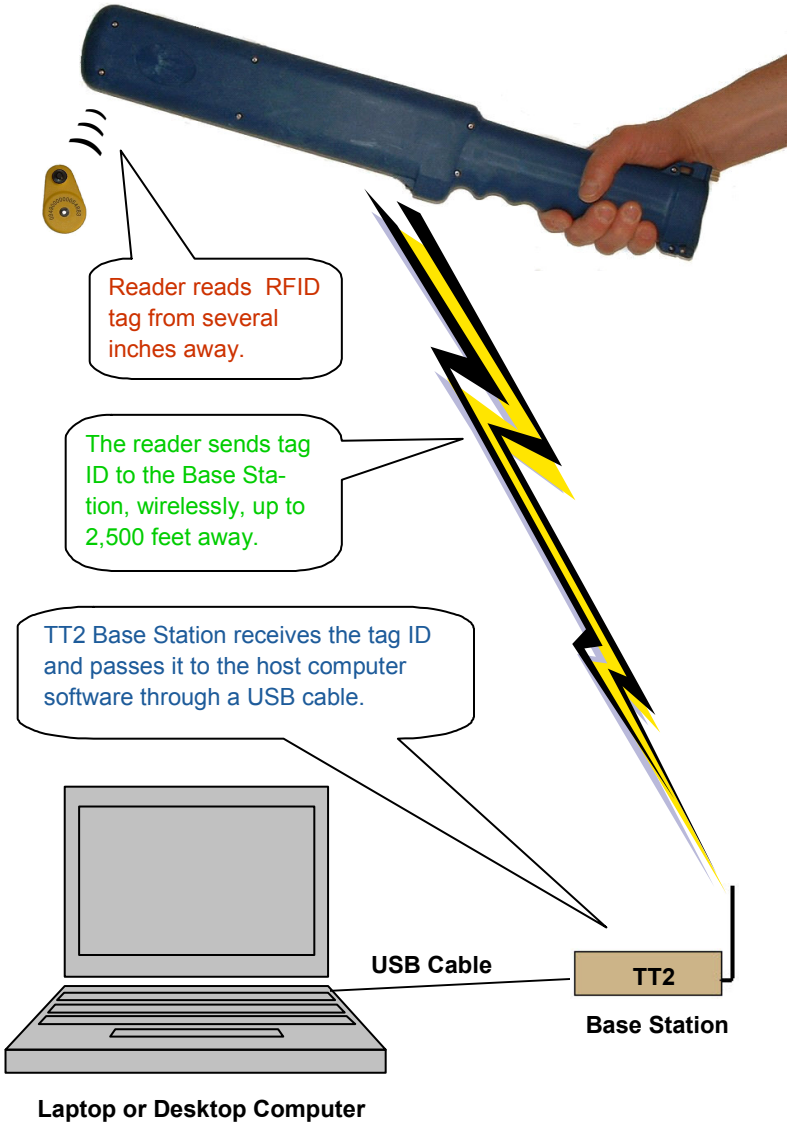
TT2 Remote Unit

- A Remote Unit is used to turn a peripheral, cabled device, such as a scale or bar code reader, into a wireless device.
- Peripheral devices that are hooked to Remote Units communicate with a computer identically as a TT2 reader communicates.
- Remote Units look exactly like Serial Base Stations except that they are set up to send data to a computer instead of receiving data from a reader.

Remote Unit End View



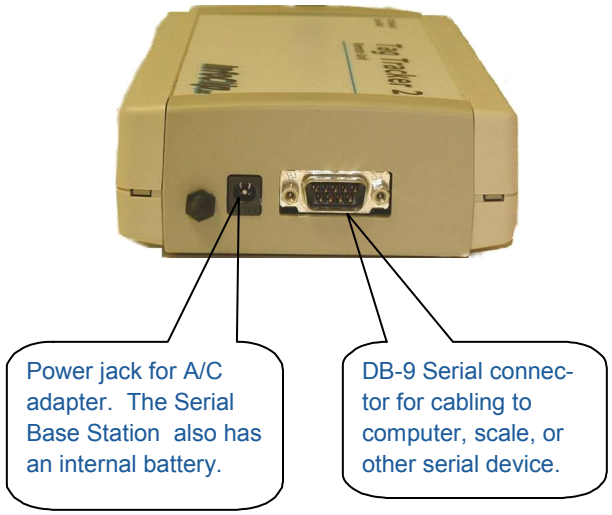
Communicating With a Computer



Serial Base Station

- Older computers and peripheral devices such as “smart” scales may need to be cabled with a standard (DB9) serial cable. A serial version of the Base Station is used for these devices.
- The Serial Base Station is cabled to one of the computer’s available serial (COM) ports.
- Software resident on the host computer needs to communicate with and accept information form the computer’s communications ports.

Serial Base Station End View



Communicating With a Scale