Tag Tracker FCC statement of conformance.

FCC ID: ON2TTREADER01

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.

FCC EMISSIONS COMPLIANCE

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or experienced radio/TV technicians for help.

CAUTION: Changes or modifications not expressly approved or authorized by the manufacturer may violate the compliance of this equipment to the Class B limits for a digital device and could, thereby, void the users authority to operate the equipment.

Tag Tracker Wireless RFID ISO Tag Reader
Quickstart Instructions
(Rev A2 15-11-99)

These instructions are intended to guide the user through the basic setup and operation of the AgInfoLink Tag Tracker.

Preparing For Use

Unpacking
The Tag Tracker and its accessories are packaged in one box.
The box contents can be identified by the label information attached. Remove all items from the shipping box, and compare the contents with the inventory list provided below.

Contents
The AgInfoLink Tag Tracker and accessories are provided with the following components. Please contact AgInfoLink Product Support in the event that the shipping box contents are damaged, deficient or defective at 1 (800) 287-8787.

Table 1 - Contents of AgInfoLink Tag Tracker and Accessories

Component / Item
1 Wireless Tag Tracker RF/ID Wand Reader
1 Tag Tracker Base Station
1 Serial Cable (9-pin)
1 Mouse-port extension cable
1 110-volt 50-60Hz Battery Charger
1 Re-Chargeable Makita 9000 NiCad 9.6 volt Battery
1 Antenna Top

The diagram on the next page illustrates the Tag Tracker's features.

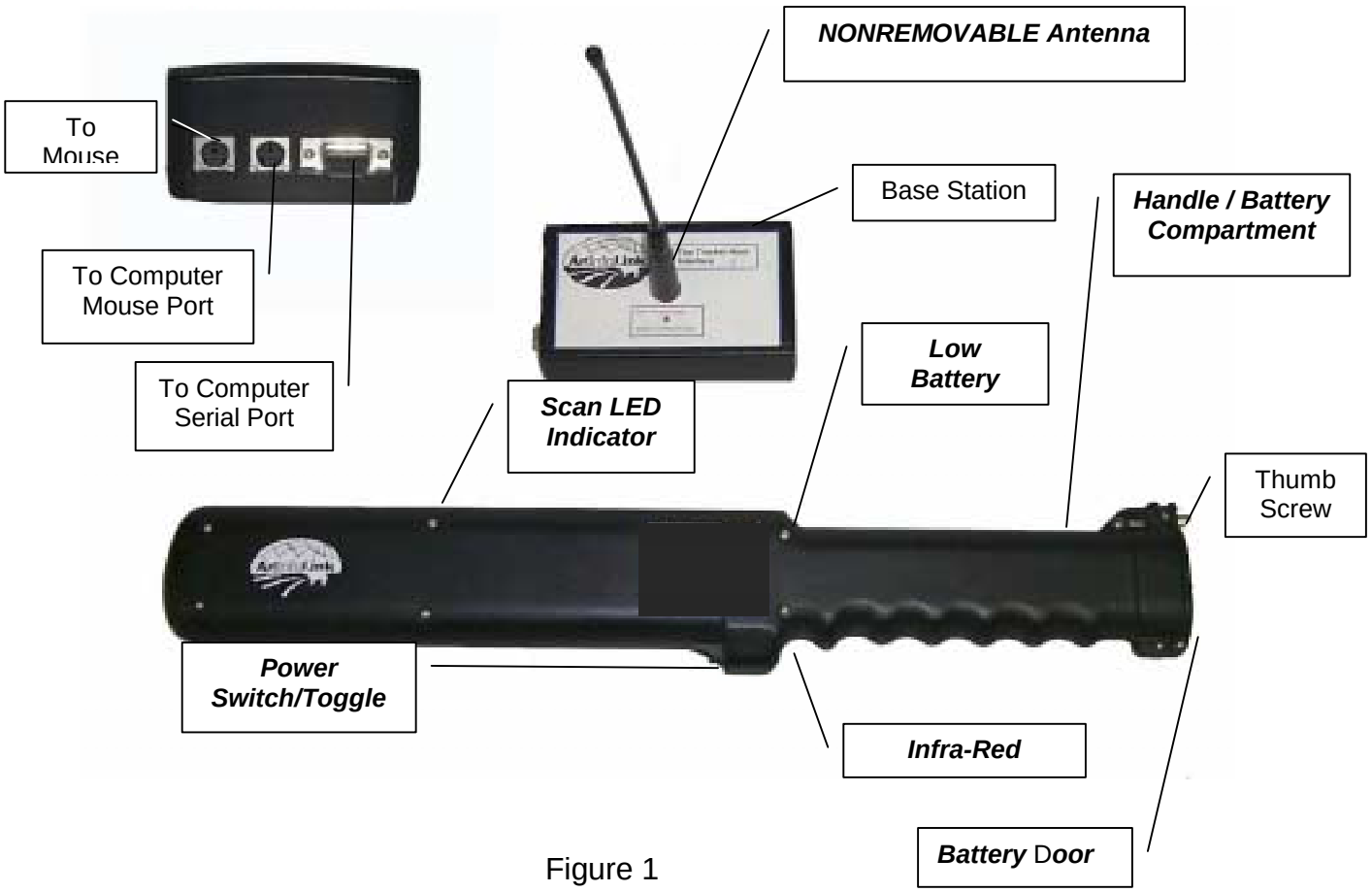


Figure 1

Table 2 – Features and Description of Use

Feature / Item	Description of Use
Base station	**Wireless receiver from reader. Provides data to PC via serial cable.**
I/R Trigger	**Activates transponder reading from ON state.**
Scan LED Indicator	**LED is Red when searching for a responder. Flashes Yellow if a responder is read.**
Dual Scan Face	**Tag can be read with either side of reader.**
Handle	**Ambidextrous gripping surface.**
End Cap	**Battery Hatch for accessing battery compartment.**
End Cap Screw	**Retains End-cap in place.**
Data Cable	**Connects Base Station to PC.**
PS-2 Cable	**Provides power to Base Station from PC. Plugs into mouse port on PC.**

Table 2 – Features and Description of Use (Continued)

Feature / Item	Description of Use
Enclosure	**Rugged, shock and splash resistant enclosure.**
Low Battery Indicator	**Provides low-battery warning.**
Power Switch/Toggle	**Provides main power to the reader. When switched toward the screw heads, the main power is on.**
Non-Removable Antenna	**Receives data from Reader into Host Interface.**

Setup

In order to prepare the Reader for use, the rechargeable Ni-Cad battery must be installed. Since the Ni-Cad battery is shipped in a discharged state, it must be fully charged (Approximately 1 hour using the included charger) prior to Reader use. To minimize battery charge memory, do not recharge the battery until the low battery LED becomes active.

Battery Installation Instructions

- Unscrew the Battery hatch fastener by turning it counter-clockwise approximately 5 complete turns. The fastener will accept a coin as a screwdriver if needed.

- Open hatch by swinging it down away from the Readers handle (See figure 2).

Figure 2

- NOTE- Tag Tracker ships with the battery already installed. Battery can only be removed or inserted in one way due to a molded guide-slot.

- Powered by 9.6 volt Makita Ni-Cad battery. Battery accessed with a thumb screw hatch. Charged with standard Makita charger.

- To insert the charged battery, line up raised rib on the battery with the molded slot in the battery compartment. (See figure 3.)

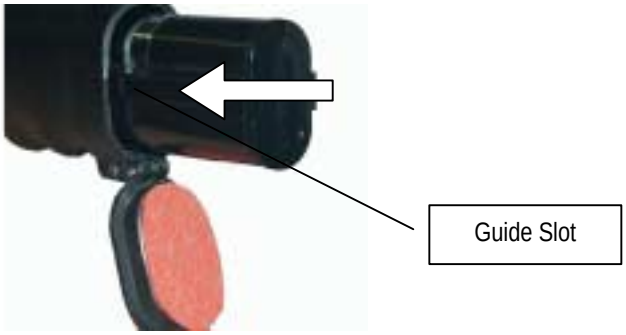


Figure 3

- To secure battery and battery compartment, screw end-cap fastener clock-wise approximately 5 turns until seated.

Base Station Setup

AgInfoLink's Tag Tracker is powered through the host computer's mouse port. No battery is required. A second mouse connection is provided on the Base Station to allow continued use of an external mouse. Either of the small circular connectors on the base station can be used for the power or external mouse (interchangeable).
The Base Station is cabled to an available port on the host computer, using a straight serial cable (DB9F to DB9M). The baud rate is 1200,with parity, data, and stop bits of N,8,1.

- Thread the provided antenna top into the antenna tower on the Host Interface.

- Using the provided Serial cable, plug the appropriate end into the 9-pin port (DB9-F) on the Tag Tracker Base Station. (See Figure 4)

- The Serial cable will only connect in one way to eliminate confusion. The other end will connect to the serial port (DB9-M) on your PC.

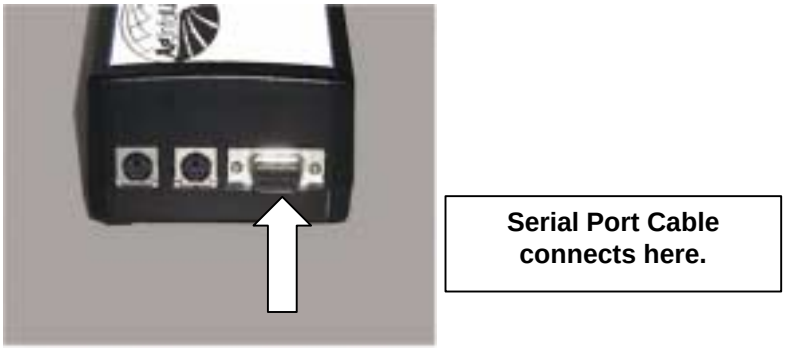


Figure 4

- The included PS-2 extension cable provides power to the Host Interface. If you are using a desktop PC, unplug your mouse, and connect the PS-2 cable from the Base Station into your mouse port. You can connect your mouse to the mouse port on the Base Station. (See figure 5)

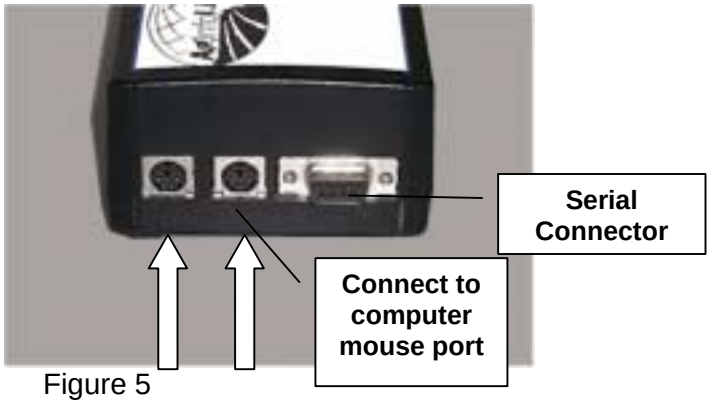


Figure 5

- When the Base Station is connected properly, the awaiting data LED will be lit bright red only when AGINFOLINK'S software is running. (see figure 6)

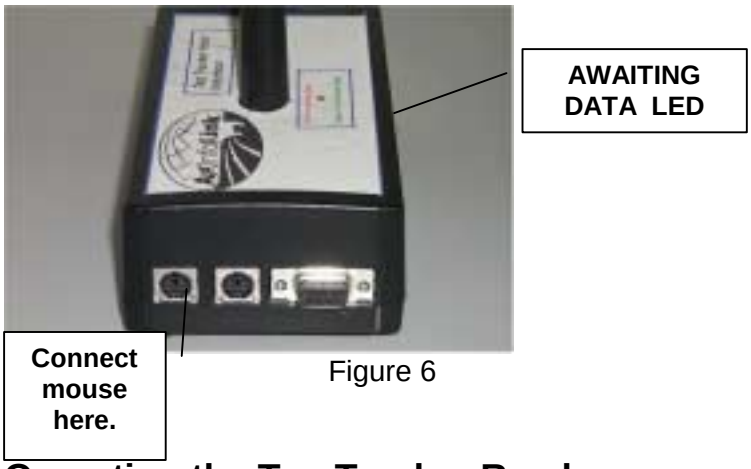


Figure 6

Operating the Tag Tracker Reader

With the Tag Tracker fully powered and the Host Interface properly connected to your PC, the tag tracker is now ready to use.

- To apply main power to the reader, toggle the switch lever towards the screw head side of the devise. If the reader start searching for a tag (Scan LED not Red) then block the scan aperture on the I/R trigger. This will activate the read operation (see figures 7 – 8).

Figure 7

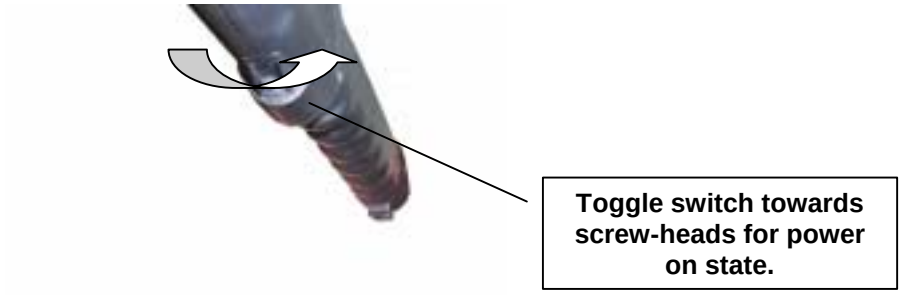


Figure 8

- With the Tag Tracker powered up, you can now scan tags. To verify that Tag Tracker is functioning correctly, there are two feature that will show this.
- First, there is the awaiting data LED on the Base Station. When operating correctly, the light will flicker green to inform you that the Tag Tracker has sent a proper signal. [See figure 9]

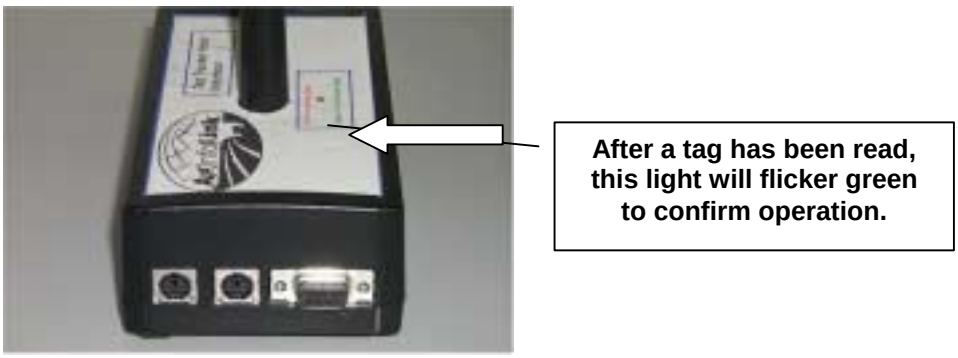
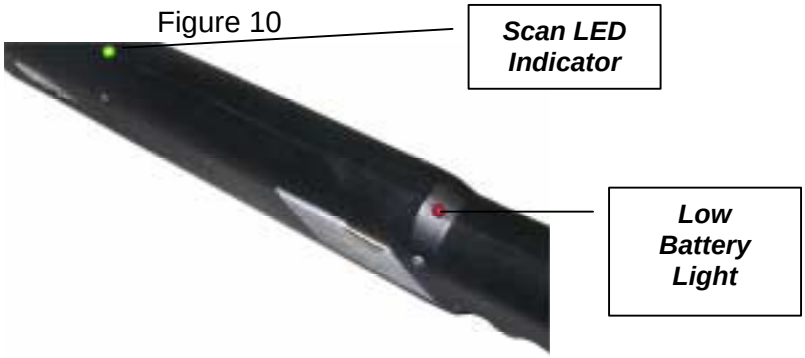


Figure 9

- A second way to confirm proper operation is the Scan LED Indicator located on the back of the Tag Tracker itself. This light will flicker yellow when the Tag Tracker has properly scanned. [See figure 10]

Figure 10



Infrared Trigger Operation

- If the I/R trigger is activated for a short time, then once the unit is searching for a responder, it will look for 10 to 15 seconds. If a tag is read within that time the unit will re-cycle and begin looking again. If no tag is read during the 10 to 15 second period, the unit will stop searching. If the I/R trigger is blocked continuosly, then the unit will look continue searching / reading regardless of the time out [See figure 11-12].

Figure 11

Figure 12

If a responder is read, the Tag Tracker will beep and the yellow “local read” LED will activate indicating that a transponder was read.

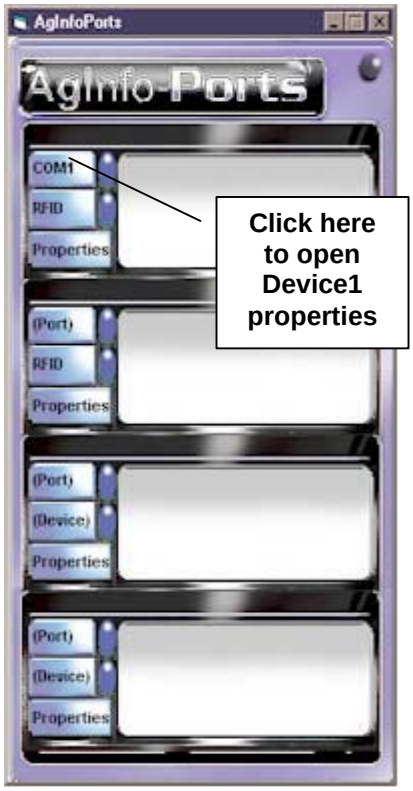
- The Tag Tracker is ergonomically designed, which will minimize fatigue when it is used for extended periods.

Using the Tag Tracker with AgInfoPorts

Figure 13

- To use Tag Tracker with AgInfoLink’s DevicePorts software [See figure 13], follow these steps. Make certain that the Tag Tracker is already properly connected to the PC.

- Open AgInfoPorts.
- Click on the “Port” button in the top display. [See figure 14]



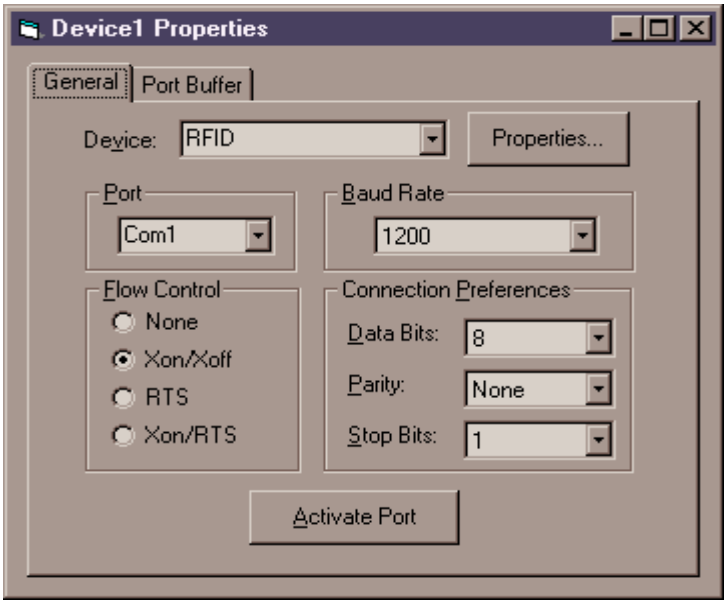


Figure 14

Figure 15

- Each device connected to the PC is assigned a window by AgInfoPorts. Hence, the top-most port is Device 1. The next port down is Device 2 and so on.
- Once you've clicked on the "port" button for device 1, the properties form will display [See figure 15]. From here you can configure AgInfoPorts to the device you choose. Plug the Tag Tracker Base-Station into your PC serial port, Windows95-98 usually assigns this as Comm1. So you would select "Com1" from the "Port" menu. [Figure 16].
- Verify that AgInfoPorts matches the Baud rate and Connection preferences from your device. You can do this in the Baud Rate and Connection Preferences menu [Figure 16].

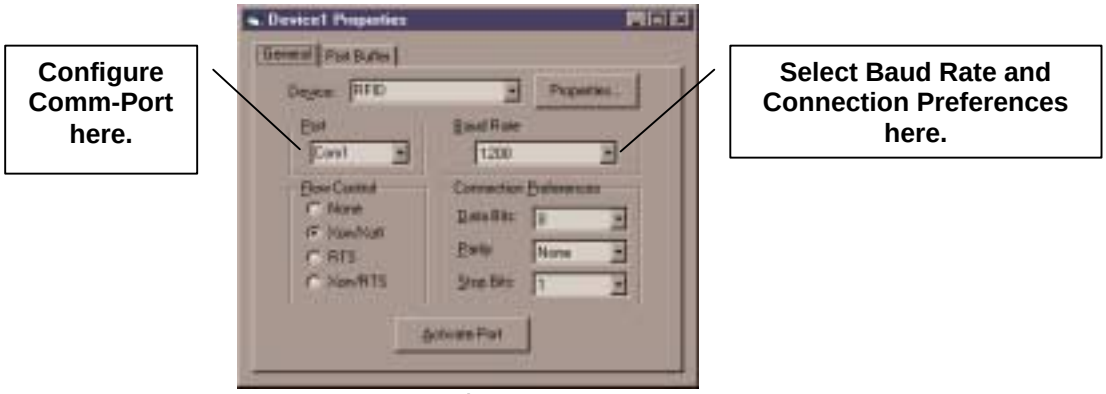


Figure 16

- Once you have all of the variables set for the RFID Reader, click on the “Activate Port” button. This will enable the port and allow you to see the tag number in the window of Com1 and how many times it has been scanned.

- By setting com1 as an RFID you can select defaults for which type of tags you will be working with; To do this, close Device1 Properties by clicking on the close button in the uppermost right corner of the form, and click on the “Properties” button in the window for com1[See figure 17].

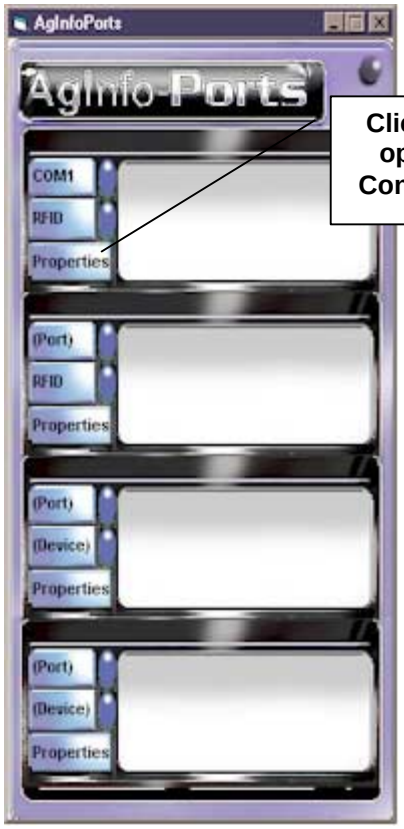


Figure 17

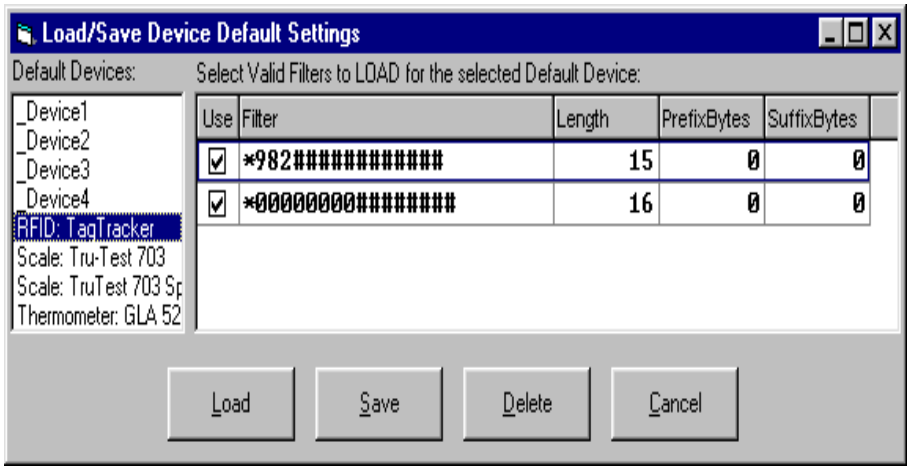


Figure 18

How to Load Pre-Configured Tag Tracker Settings

Load/Save Device Default Settings allows the user to load the acceptable input criteria to ensure only accurate data strings are accepted. For instance, when RFID: TagTracker is the selected Device, the Valid Filters will display to the right of the Default Device Box.

To Load a Device for a CommPort, click on the selected Device, the RFID: Tag Tracker in the example, and click the “Load” button. The device will now be listed for the CommPort.

- In addition to the default selections, users can select and add any validation that they desire. So in the future, when new tag protocols are released, our users can change validation on the fly to match the new tags.

- Now you are ready to scan with the Tag Tracker.

- If your Tag Tracker and Base station are connected and configured correctly, when you open up AgInfoPorts your first port window should look like the above picture [figure 17].

- To verify that you are receiving data, from the AgInfoPorts Interface, click on COM1, and when the Device1 properties dialogue box opens, click the “port buffer” tab. [See figure 19]

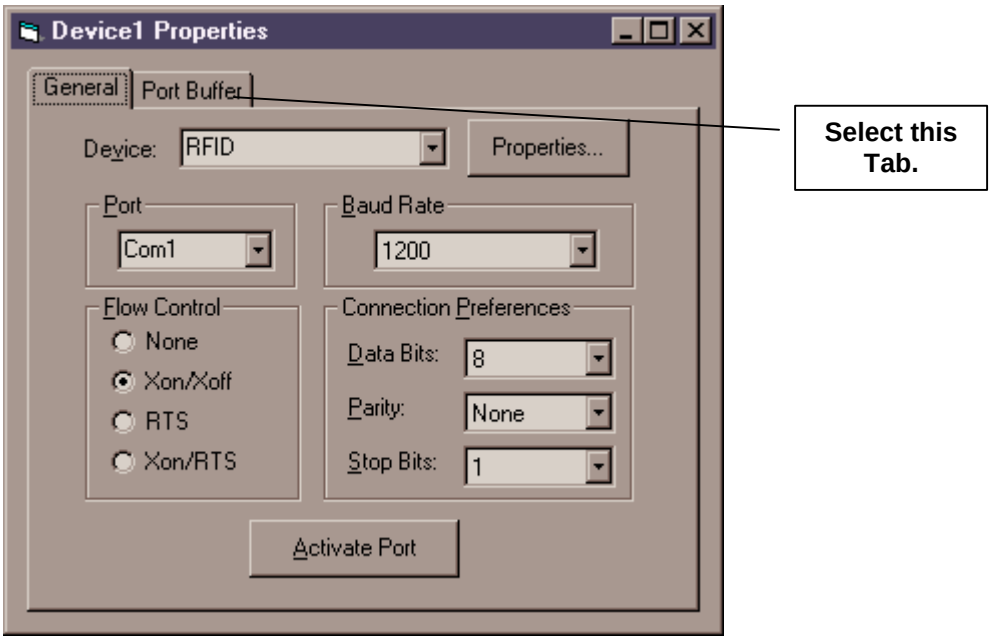


Figure 19

- Once you’ve selected the “port buffer” tab you will see this screen.[fig.20]

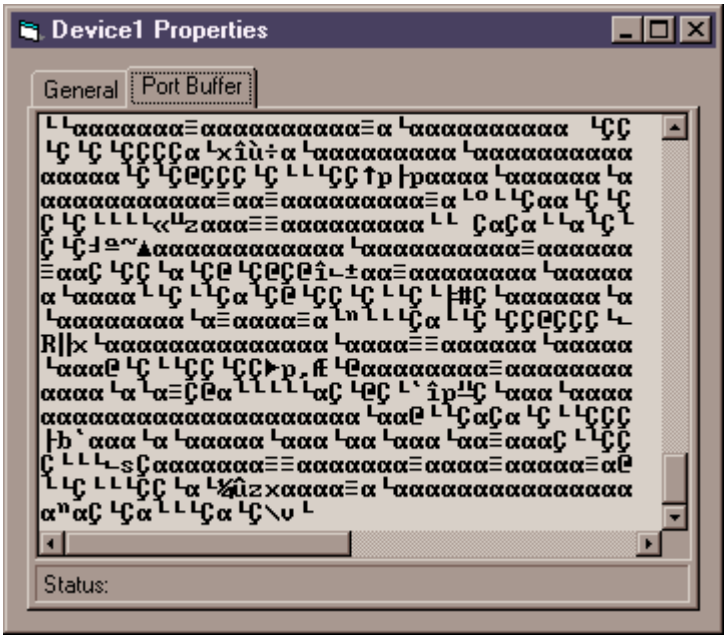


Figure 20

- The characters streaming across the screen are noise that the Tag Tracker picks up. This is normal. When you scan in an animal tag, you will also see the number appear in this window. Depending on the noise conditions, there can be many characters or just a few or none displayed.
- You can verify that the Tag Tracker is functioning correctly by exiting the 'port buffer' window and returning to main screen. Here you will see the green light on COM1 flickering and number in the port window followed by a number in parentheses. [see figure 21]

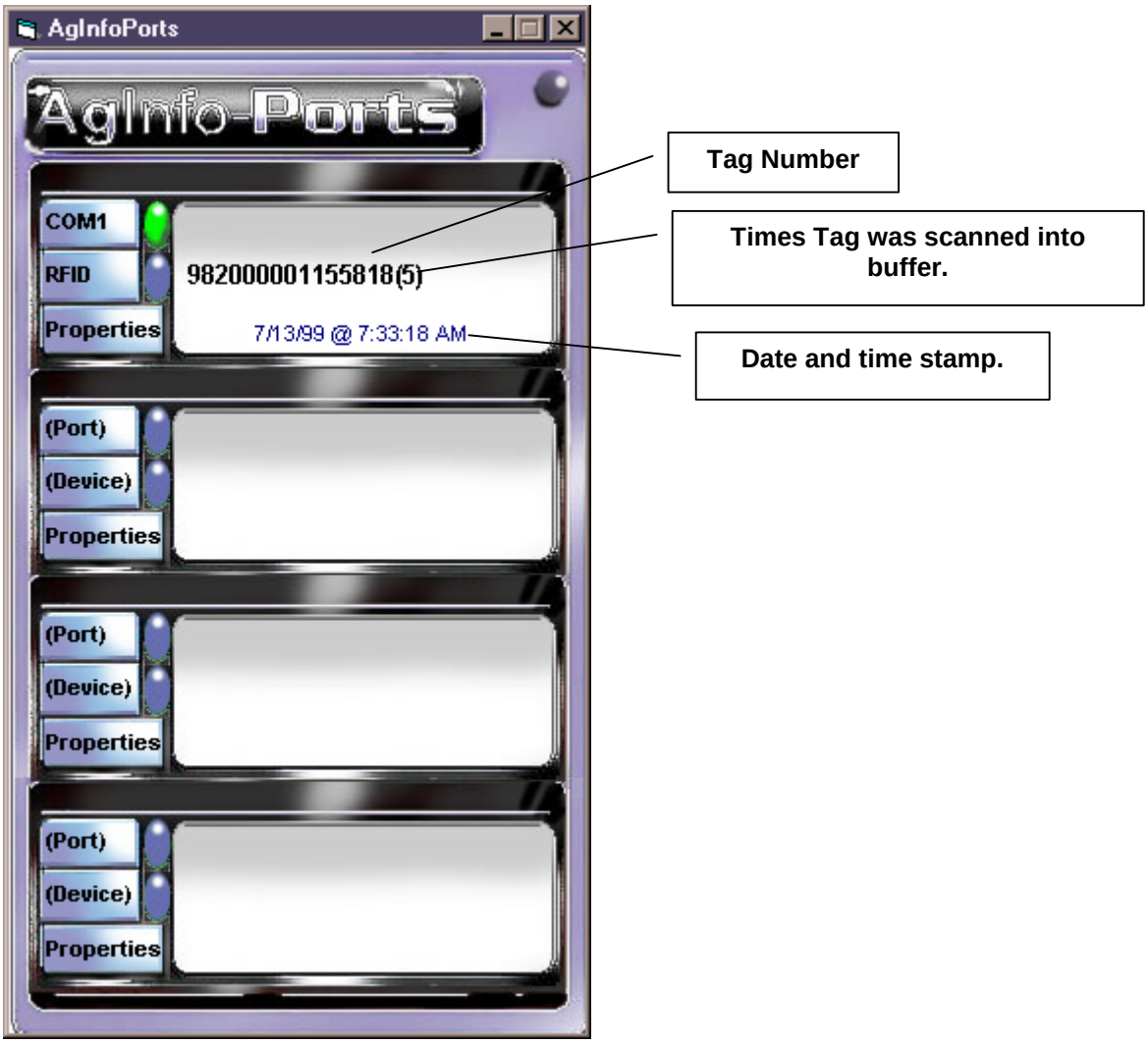


Figure 21

- Congratulations, you are now ready to read RFID tags with the Tag Tracker.
- You can also configure multiple devices following the same steps.
- NOTE: If you experience any difficulty while installing Tag tracker or with any other AgInfoLink Inc. product, call 1 800-287-8787 for technical support.

Tag Tracker Specs:

Features of AgInfoLink's ***TagTracker***

- Combination RFID and wireless communications link in one unit
- RFID reads two ISO protocols: FDXB and HDX (AllFlex and TI currently make an HDX, Destron currently makes an FDXB product -- there may be other manufacturers as well)
- The Communication link transmits and receives at 418 MHz using an internal non-removable antenna and exhibits an operational range of up to 500 feet, depending on conditions.
- Powered by 9.6 volt Makita Ni-Cd battery. Battery accessed with thumbscrew hatch. Charged with standard Makita charger.
- Built-in loop on end of reader for lanyard or cable.
- Weight: Approximately 2 lbs., including battery.
- Construction: Rugged glass-filled polyurethane. Splash resistant clamshell enclosure.
- Dimensions: Approximately 20"X2.75"X1.25"
- Turn reader on by flipping the toggle toward the screw heads in the enclosure.
- Infrared trigger activates reader when blocked (usually by your finger) and will continue reading for 10 to 15 seconds. If another tag (or the same tag) is still in proximity before the 13 seconds is up, it will continue reading.
- LED indicator (near far end of reader) turns red when reader is actively looking for a tag.
- LED indicator flashes yellow when a tag is read locally. Audible beep can also be heard when tag is read locally.
- The AgInfoLink System relies on audio feedback from BeefLink to verify that the correct information was received by the host computer.
- LED (near thumb) turns red to indicate low battery power. Charge or change the battery immediately when the low battery indicator comes on to avoid damage to the battery.
- Base Station is cabled to an available port on the host computer, using a straight serial cable (DB9F to DB9M).The baud rate is 1200,with parity, data, and stop bits of N,8,1.

The base station is powered through the host computer's mouse port. A second mouse connection is provided on the base station to allow continued use of an external mouse. Either female port on the transceiver can be used for the power or external mouse (interchangeable).

Warranty Information

"The Tag Tracker reading system comes with a 90 day unconditional warranty with the exception of intentional destruction. The warranty is void if either unit is opened. There are no user serviceable parts inside. Please refer servicing to AgInfoLink's technical support".