Introduction

The WT 2200 is a wearable data entry system consisting of a laser bar code scanner, usually worn on the operator's fingers or back of hand, and a wrist computer worn on the operator's forearm.

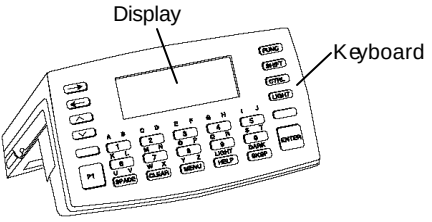
The detachable components work equally well for right- and left-handed individuals. Detachable personal mounts allow multiple operators to share both scanner and wrist computer without having to use the same mount.

About This Guide

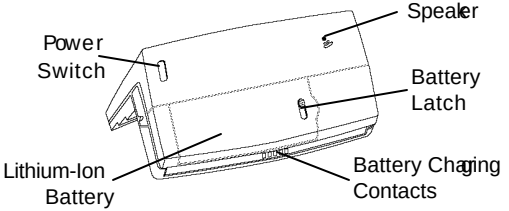
This guide presents information on system components, assembling the WT 2200, battery installation and charging, attaching the system, using the keyboard, and disassembly for use by others. For wearable scanner information, refer to the *WT 2200 Product Reference Guide* provided with your scanner.

Parts of the WT 2200 System

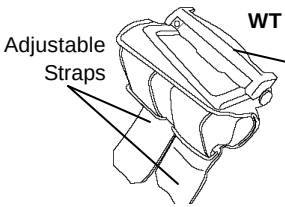
WT 2200 (Wrist Computer) Front



WT 2200 Top



WT 2200 Wrist Mount



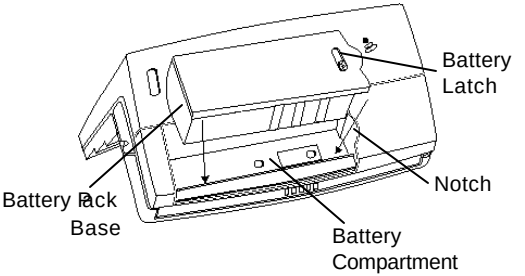
Installing and Charging the Battery

The wrist computer and scanner are powered by a Lithium- Ion battery pack. The pack provides power for a typical 8- hour shift.

Note: Before using the wrist computer, install and fully charge the Lithium-Ion battery pack.

To install the battery pack in the WT 2200:

1. Insert the battery pack, base first, in the battery compartment.

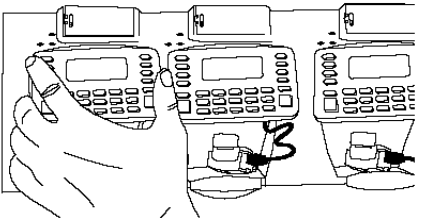


2. Line up the pack's locking mechanism with the notch in the battery compartment wall by sliding the battery latch, and press the pack into place.
3. Release the battery latch to lock in place.

Charging the Battery in WT 2200

To charge the Lithium-Ion battery in the WT 2200:

1. Place the WT 2200 in the cradle as shown below:



2. The cradle's CHARGING light illuminates (RED) if the WT 2200 is properly seated and the battery is charging.
3. The battery requires approximately 2 hours to charge fully. The CHARGING light changes to GREEN when the battery is fully charged.

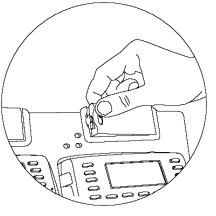
4. To remove the WT 2200 from the cradle, tilt the WT 2200 upward and pull out.

   For more information on the CS 1000 Cradle, refer to the *CS 1000 Single-Slot Cradle QRG*, p/n 70-16237- xx, or the *CS 1000 4-Slot Cradle QRG*, p/n 70-17661- xx.

Charging the Spare Battery

Spare battery packs can be charged separate from the WT 2200. To charge a spare battery pack in the cradle:

1. Insert the pack in the cradle's spare charging slot.



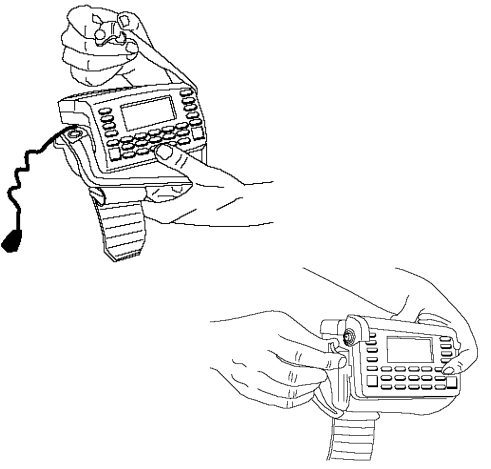
2. The CHARGING light illuminates red.

3. The spare pack is charged in approximately two hours, even if the WT 2200 is charging at the same time. The CHARGING light changes to green when the battery is fully charged.

Assembling the WT 2200 System

To assemble the WT 2200 (wrist computer):

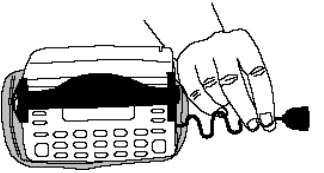
1. Place the WT 2200 wrist computer onto the wrist mount, facing you. Be sure the mount is oriented so that the longer strap will be further up the forearm.
2. Snap the bar over the WT 2200 using the snaps on either side of the mount. The straight part of the bar should lay across the front of the WT 2200; the curved part in back.



Note: The snaps on the wrist mount act as a tear-away

device allowing the wrist computer to detach from the mount if it catches on an object.

2. Plug the cable connector from the WT 2200 in the interface port on the back of the scanner.



2. Place the WT 2200 on your arm:
   a. Slide the wrist mount on your arm, so that the WT 2200 wrist computer faces you.

Pull the straps through the buckles so the wrist mount is secure but not tight.

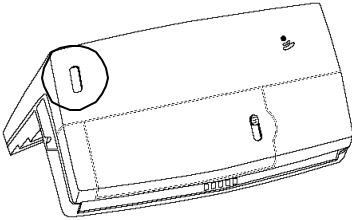
a. Use the Velcro to secure the straps.

2. Assemble and mount your scanner.

Power

Once the battery pack is fully charged, you are ready to use the wrist computer.

To power the wrist computer on, press the power switch on top of the WT 2200.



Display Light and Contrast

To turn the display light and keypad backlight on, press **LAMP** (**Left Alpha** and **Help**). To adjust the contrast:

- press **FUNC** and **SPACE** to darken the contrast,
- press **FUNC** and **BKSP** to lighten the contrast.

Communicating with the Host

Using the Cradle

The CS 1000 cradle is used to perform communications with a host PC. To set up the cradle for operation:

1. Plug one end of a null modem cable (p/n 59846-03-00) into the communications port located on the left end of the cradle.
2. Connect the other end of the cable to the host computer's serial (COMM) port.
3. Provide power to the cradle by plugging the power supply's round connector into the power port on the cradle and the other end of the power cable in an electrical outlet.
4. Insert the WT 2200 in the cradle (the ring scanner can be attached).
5. Start the communications program as detailed in the *WT 2200 Product Reference Guide*.

Radio Communications

Wireless communication with the host is available

through the ChameleonRF– IEEE 802.11b radio network. For information on performing radio communications, refer to the *WT 2200 Product Reference Guide*.

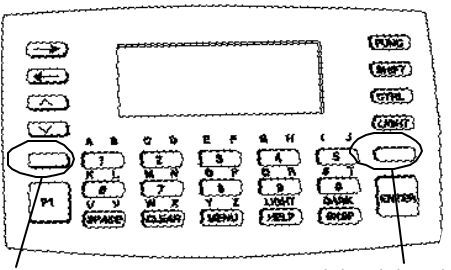
Data Entry

Using the Keyboard

The keyboard consists of two types of keys: alphanumeric character keys and modifier keys. Most keys are self- explanatory. Some guidelines for using the keyboard include:

- Press keys one at a time. Pressing two keys simultaneously produces an error.
- The default keyboard produces numbers; to produce letters, press the left Alpha Shift and the appropriate key to produce the letters in purple, and the right Alpha Shift to produce the letters in green, as shown below.

ft



- Use the modifier keys, **FUNC**, **SHIFT**, and **CTRL**, in combination with the character keys to produce other characters or to issue commands. Refer to documentation for your application for more information.

Cursor position is controlled by the **Up Arrow**, **Down Arrow**, **Left Arrow**, and **Right Arrow** keys.

Removing the WT 2200 from the

Mount

The WT 2200 can be removed from the wrist mount for use by other operators.

To remove the WT 2200:

1. Detach the cable connection to the scanner.
2. Unsnap the bar securing the wrist computer.
3. Lift the WT 2200 out of the mount.

Cleaning

Wrist Computer

To clean the wrist computer, use a clean, soft cloth dampened with a mild cleaner such as soap and water. Do not use abrasive paper, cloth, or abrasive/corrosive cleaners. Clean the keypad and scanner triggers, and wipe the display window with lens tissue.

Wrist Mount

Remove the bar from the wrist mount. Hand wash the fabric mount with warm water using a mild detergent and air dry (see tag on mount for washing instructions).

Service Information

Before you use the unit, it must be configured to operate in your facility's network and run your applications.

If you have a problem running your unit or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the ChameleonRF Support Center:

United States 1-866-CHAMRF2

Warranty

ChameleonRF Inc.. ("ChameleonRF") manufactures its hardware products in accordance with industry-standard practices. ChameleonRF warrants that for a period of twelve (12) months from date of shipment, products will be free from defects in materials and workmanship.

This warranty is provided to the original owner only and is not transferable to any third party. It shall not apply to any product (i) which has been repaired or altered unless done or approved by ChameleonRF, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by ChameleonRF, (iii) which has been subjected to unusual physical or electrical stress, misuse, abuse, power shortage, negligence or accident or

(iv) which has been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of customer and is not covered under this warranty.

Wear items and accessories having a ChameleonRF serial number, will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

Warranty Coverage and Procedure

During the warranty period, ChameleonRF will repair or replace defective products returned to ChameleonRF's manufacturing plant in the US. For warranty service in North America, call the ChameleonRF Support Center at 1-866-CHAMRF20. International customers should contact the local ChameleonRF office or support center. If warranty service is required, ChameleonRF will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, shipping and insurance charges prepaid. ChameleonRF will ship the repaired or replacement product freight and insurance prepaid in North America. Shipments from the US or other locations will be made F.O.B. ChameleonRF's manufacturing plant.

ChameleonRF will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for the replacement product in case it does not return the replaced product to ChameleonRF within 3 days of receipt of the replacement product. The process for return and customer's charges will be in accordance with ChameleonRF's Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof.

Repair or replacement of a product during warranty will not extend the original warranty term.

ChameleonRF's Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer's special operational requirements and are available at a

substantial discount during warranty period.

General

Except for the warranties stated above, ChameleonRF disclaims all warranties, express or implied, on products furnished hereunder, including without limitation implied warranties of merchantability and fitness for a particular purpose. The stated express warranties are in lieu of all obligations or liabilities on part of ChameleonRF for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product.

Seller's liability for damages to buyer or others resulting from the use of any product, shall in no way exceed the purchase price of said product, except in instances of injury to persons or property.

Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the proceeding exclusion or limitation may not apply to you.

Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are meeting with your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

Regulatory Information

Radio Frequency Interference Requirements

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the Federal Communications Commissions Rules and Regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

However, there is no guarantee that interference will not occur in a particular installation. If the 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:

- Re-orient 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 which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with FCC Part 15. 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.

RF Safety Statement

For body worn operation, this equipment has been tested and meets FCC RF exposure guidelines when used WAV accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC exposure guidelines.

This equipment is designed to be worn on the operator's wrist. Modification of the wrist mount for use on any other part of the body may violate FCC Exposure Guidelies. See "Assembling The WT2200 System" for the proper procedure.

If not wearing the device on the wrist as prescribed above please always maintain a separation distance of at least 1 cm from your body to the antenna which is located in the area just above the beeper opening and next to the battery lock

WAV Inc. is not responsible for any radio or television interference caused by unauthorized modification of the devices included with the WT2270 terminal or the substitution or attachment of connecting cable and equipment other than specified by WAV Inc. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Applicable Standards

- EN 55 022 - Limits and Methods of Measurement of Radio Interference Characteristics of Information technology Equipment
- EN 50 082-1:1997 - Electromagnetic Compatibility - Generic Immunity Standard, Part 1: Residential, commercial, Light Industry
- IEC 1000-4-2(1995-01) - Electromagnetic compatibility (EMC) - Part 4:Testing and measurement techniques - Section 2: Electrostatic discharge immunity test.
- IEC 1000-4-3(1995-03) - Electromagnetic compatibility (EMC) - Part 4:Testing and measurement techniques - Section 3: Radiated, radio-frequency, electromagnetic field immunity test.
- IEC 1000-4-4(1995-01) - Electromagnetic compatibility (EMC) - Part 4:Testing and measurement techniques - Section 4: Electrical Fast transient/burst immunity test.
- EN 60 950 + Amd 1 + Amd 2 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60 825-1 (EN 60 825) - Safety of Devices Containing Lasers

Caution: Use of controls or adjustments or performance

of procedures other than those specified herein may result in hazardous laser light exposure.

In accordance with Clause 5, IEC 0825 and EN60825, the following information is provided to the user:

ENGLISH

CLASS 1 CLASS 1 LASER PRODUCT

CLASS 2 LASER LIGHT

DO NOT STARE INTO BEAM

CLASS 2 LASER PRODUCT

DANISH

KLASSE 1 KLASSE 1 LASERPRODUKT

KLASSE 2 LASERLYF

SE IKKE IND I STRÅLEN

KLASSE 2 LASERPRODUKT

DUTCH

KLASSE 1 KLASSE-1 LASERPRODUKT

KLASSE 2 LASERLICHT

NIET IN STRAAL STAREN

KLASSE-2 LASERPRODUKT

FINNISH

LUOKKA 1 LUOKKA 1 LASERTUOTE

LUOKKA 2 LASERVALO

ÄLÄ TUIJOTA SÄDETTÄ

LUOKKA 2 LASERTUOTE

FRENCH

CLASSE 1 PRODUIT LASER DE CLASSE 1

CLASSE 2 LUMIERE LASER

NE PAS REGARDER LE RAYON FIXEMENT

PRODUIT LASER DE CLASSE 2

GERMAN

KLASSE 1 LASERPRODUKT DER KLASSE 1

KLASSE 2 LASERSTRAHLEN

NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN

LASERPRODUKT DER KLASSE 2

Patent Information

Patents

This product is covered by one or more of the following U.S. and foreign Patents:

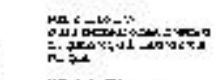
U.S. Patent No.4,360,798; 4,369,361; 4,387,297; 4,460,120; 4,496,831; 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095; 4,758,717; 4,816,660; 4,845,350; 4,896,026; 4,897,532; 4,923,281; 4,933,538; 4,992,717; 5,015,833; 5,017,765; 5,021,641; 5,029,183; 5,047,617; 5,103,461; 5,113,445; 5,130,520; 5,140,144; 5,142,550; 5,149,950; 5,157,687; 5,168,148; 5,168,149; 5,180,904; 5,229,591; 5,230,088; 5,235,167; 5,243,655; 5,247,162; 5,250,791; 5,250,792; 5,262,627; 5,262,628; 5,266,787; 5,278,398; 5,280,162; 5,280,163; 5,280,164; 5,280,498; 5,304,786; 5,304,788; 5,306,900; 5,321,246; 5,324,924; 5,337,361; 5,367,151; 5,373,148; 5,378,882; 5,396,053; 5,396,055; 5,399,846; 5,408,081; 5,410,139; 5,410,140; 5,412,198; 5,418,812; 5,420,411; 5,436,440; 5,444,231; 5,449,891; 5,449,893; 5,468,949; 5,471,042; 5,478,998; 5,479,000; 5,479,002; 5,479,441; 5,504,322; 5,519,577; 5,528,621; 5,532,469; 5,543,610; 5,545,889; 5,552,592; 5,578,810; 5,581,070; 5,589,679; 5,589,680; 5,608,202; 5,612,531; 5,619,028; 5,664,229; 5,668,803; 5,675,139; 5,693,929; 5,698,835; 5,705,800; 5,714,746; 5,723,851; 5,734,152; 5,734,153; 5,745,794; 5,754,587; 5,762,516; 5,763,863; 5,767,500; 5,789,728; 5,808,287; 5,811,785; 5,811,787; 5,815,811; 5,821,519; 5,821,520; 5,823,812; 5,828,050; 5,850,078; 5,861,615; 5,874,720; 5,875,415; 5,900,617; 5,902,989; 5,907,146; 5,912,450; 5,914,478; 5,917,173; 5,920,059; 5,923,025;D305,885; D341,584; D344,501; D359,483; D362,453; D363,700; D363,918; D370,478; D383,124; D391,250; D405,077; D406,581.

Invention No. 55,358; 62,539; 69,060; 69,187 (Taiwan); No. 1,601,796; 1,907,875; 1,955,269 (Japan).

European Patent 367,299; 414,281; 367,300; 367,298; UK 2,072,832; France 81/ 03938; Italy 1,138,713.

rev. 7/99

HEBREW



ITALIAN

CLASSE 1	PRODOTTO AL LASER DI CLASSE 1
CLASSE 2	LUCE LASER

NON FISSARE IL RAGGIO

PRODOTTO AL LASER DI CLASSE 2

NORWEGIAN

KLASSE 1	LASERPRODUKT, KLASSE 1
KLASSE 2	LASERLYS

IKKE STIRR INN I LYSSTRÅLEN

LASERPRODUKT, KLASSE 2

PORTUGUESE

CLASSE 1	PRODUTO LASER DA CLASSE 1
CLASSE 2	LUZ DE LASER

NÃO FIXAR O RAIO LUMINOSO

PRODUTO LASER DA

CLASSE 2

SPANISH

CLASE 1	PRODUCTO LASER DE LA CLASE 1
CLASE 2	LUZ LASER

NO MIRE FIJAMENTE EL HAZ

PRODUCTO LASER DE LA CLASE 2

SWEDISH

KLASS 1	LASERPRODUKT KLASS 1
KLASS 2	LASERLJUS

STIRRA INTE MOT STRÅLEN

LASERPRODUKT KLASS 2