



TEST INSTRUMENTS™

HUB8 HUB6 HUB4

Wireless Refrigerant Probes

INSTRUCTION MANUAL

ENGLISH



Download and install the **UEi HUB** App
Available on Google Play and The App Store

HUB8 Includes

- 2 Wireless Hygrometer Probe
- 2 Wireless Pressure Probe
- 2 Wireless Pipe Clamp
- 1 Wireless Outside Temperature Probe
- 1 Wireless Vacuum Gauge
- 14 Batteries (10 AA, 4 AAA)
- 1 45° Coupler
- 1 Carrying Case

HUB6 Includes

- 2 Wireless Hygrometer Probe
- 2 Wireless Pressure Probe
- 2 Wireless Pipe Clamp
- 10 Batteries (6 AA, 4 AAA)
- 1 Carrying Case

HUB4 Includes

- 2 Wireless Pressure Probe
- 2 Wireless Pipe Clamp
- 6 Batteries (AA)
- 1 Carrying Case



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KEEPING HOMES & WORKPLACES SAFE & COMFORTABLE

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IMPORTANT SAFETY WARNINGS & PRECAUTIONS

HUB probes are designed for Indoor and Outdoor use.

WARNING

Read entire Safety Notes section regarding potential hazard and proper instructions before using these probes. In this manual the word **“WARNING”** is used to indicate conditions or actions that may pose physical hazards to the user. The word **“CAUTION”** is used to indicate conditions or actions that may damage the instruments.

WARNING

To ensure safe operation and service of these probes, follow these instructions.

Failure to observe these warnings can result in severe injury or death. These probes are designed for trade professionals who are familiar with the hazards of their trade.

- Always adhere to national and local safety codes. Use proper personal protective equipment (PPE)
- Observe all recommended safety procedures that include proper lockout utilization and use of personal protective equipment that includes safety glasses, gloves and flame resistant clothing.

WARNING

Do Not exceed the following maximum pressure limits.

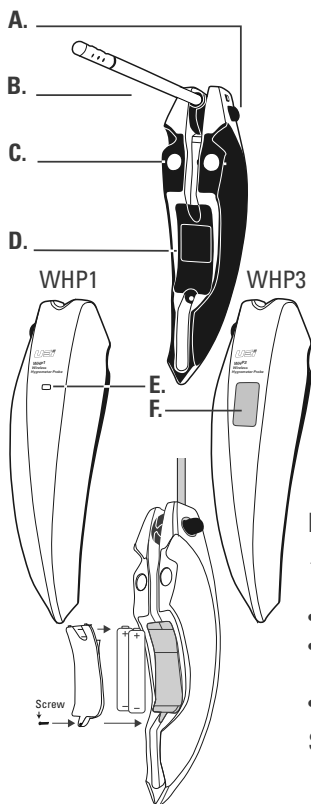
WVG2 Vacuum Gauge maximum over pressure 700 psi.

WPP2 and WPP3 Pressure Gauge maximum over pressure 725 psi.

CAUTION

- Do not open WPP3 or WPP2 probes to replace batteries while the probes are connected.
- To avoid false readings, replace batteries if a low battery indicator appears.
- Use batteries that meet the specified requirements.
- If there is any leakage or abnormality with the battery, handle it immediately and clean the instrument.
- Do not expose probes to extreme high or low temperatures, humidity, or corrosive environments.
- Avoid placing the probes in direct sunlight or high-vibration environments.
- Do not use these probes if they appear damaged. In case of malfunction or damage, stop using probes immediately and contact technical support.

Hygrometer Overview (WHP3, WHP1)



- A. Lock Button: Press to unlock and open probe. Move to 90° or 180° until it locks in place. Press button again to unlock and rotate back to closed position.
- B. 1/4" diameter probe
- C. Magnetic Mount
- D. Battery Cover
- E. Status Light (**WHP1 only**)
Blinks **GREEN** when probe is powered on.
Blinks **RED** when battery is low (Low battery indication is also visible in app Toolbox screen).
- F. LCD Display (**WHP3 only**)
Display (rotates through measurements...)

⚠ CAUTION: Press down Lock Button to release probe. Failure to do so may break probe and is not covered under warranty.

Battery Replacement

⚠ CAUTION: Take care not to lose screws when opening battery compartments

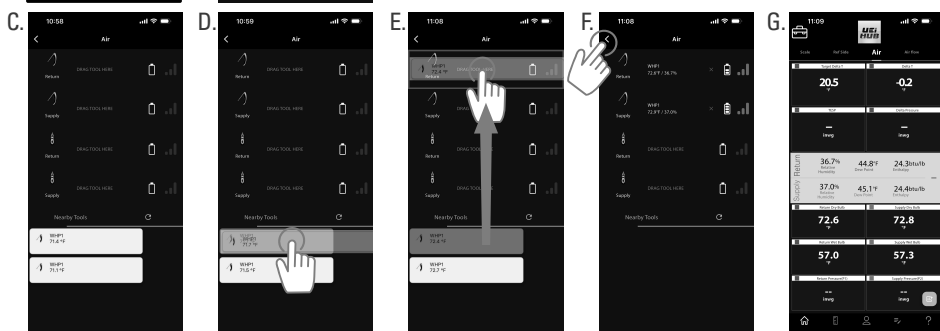
- Remove battery cover.
- Replace the old batteries with 2 new (AAA) batteries.
- Replace the battery cover.

See probe specifications on page 7

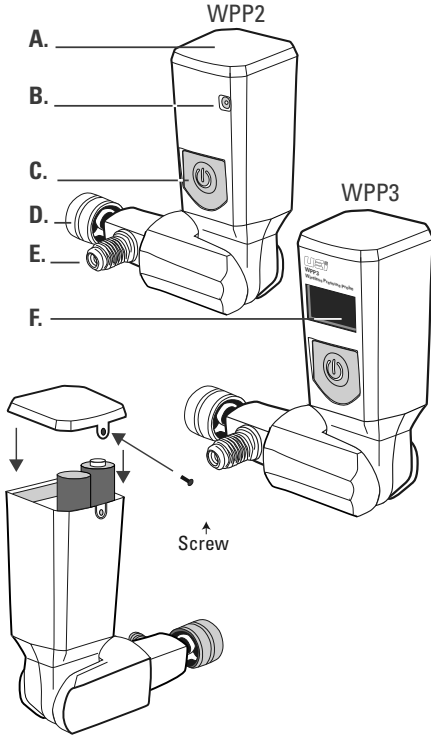
Connecting Probes

WHP3/WHP1 work in the **AIR** screen.

- A. Select "Toolbox" icon in upper left corner.
- B. In Toolbox screen, probes appear in the "Nearby Tools" list.
Tap "Refresh" icon if powered on probes don't appear.
- C. Available probes appear in list.
- D. Touch and Hold a probe to select for connection.
- E. Drag the probe to the matching probe icon for either "Return" or "Supply" slot assignment and release. Repeat with other probe.
- F. The UEi HUB will remember the assignment and automatically connect in future.
- G. Once connected, Tap the "back arrow" to return Home to view measurements



Pressure Probe Overview (WPP3, WPP2)



- A. Battery cover
- B. Status Light (**WPP2 only**)
Blinks **GREEN** when probe is powered on.
Blinks **RED** when battery is low (Low battery indication is also visible in app Toolbox screen).
- C. Power Button: Press to Power On
Press & Hold for 1 second and release to Power Off (**WPP3 only**)
Press & Hold for 5 seconds, UNIT appears
Press & Hold for 2 seconds to switch UNITS
Press & Hold for 5 seconds, to exit UNIT
- D. 1/4" pressure connector
- E. 1/4" pass-through connector
- F. LCD Display (**WPP3 only**)
Display rotates through measurements

⚠ **CAUTION:** Max over pressure is 725 PSI

Battery Replacement

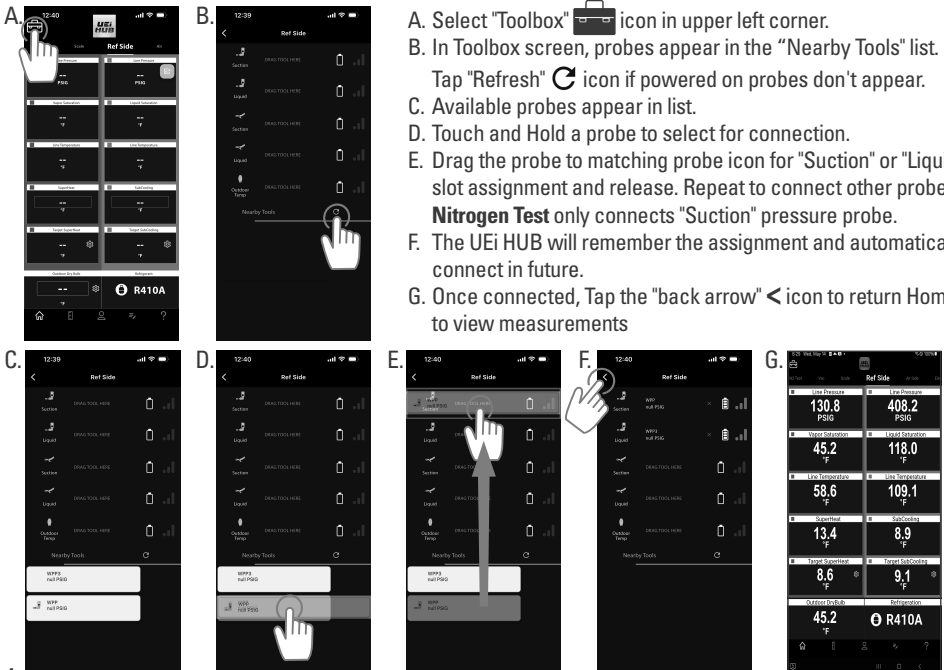
- ⚠ **CAUTION:** Take care not to lose the screws when opening battery compartments
- Remove battery cover.
- Replace old batteries with 2 new AA batteries.
- Replace the battery cover.

See probe specifications on page 8

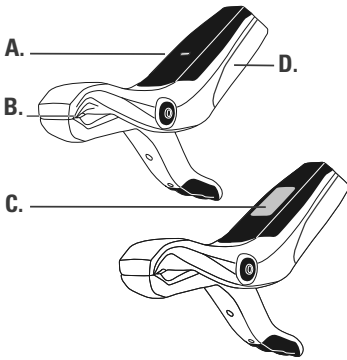
Connecting Probes

WPP3/WPP1 work in **REF SIDE** and **Nitrogen Test** Screens.

- A. Select "Toolbox" icon in upper left corner.
- B. In Toolbox screen, probes appear in the "Nearby Tools" list.
Tap "Refresh" if powered on probes don't appear.
- C. Available probes appear in list.
- D. Touch and Hold a probe to select for connection.
- E. Drag the probe to matching probe icon for "Suction" or "Liquid" slot assignment and release. Repeat to connect other probe.
- Nitrogen Test** only connects "Suction" pressure probe.
- F. The UEi HUB will remember the assignment and automatically connect in future.
- G. Once connected, Tap the "back arrow" to return Home to view measurements



Pipe Clamp Overview (WPC3, WPC2)



Opening jaw powers on pipe clamp

A. Status Light (**WPC2 only**)

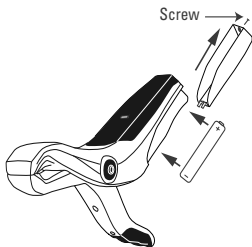
Blinks **GREEN** when probe is powered on.

Blinks **RED** when battery is low (Low battery indication is also visible in app Toolbox screen).

B. Thermally insulated temperature thermistor

C. LCD Display (**WPC3 only**)

D. Battery cover



Battery Replacement

⚠ CAUTION: Take care not to lose the screws when opening battery compartments

- Remove battery cover.
- Replace the old batteries with 1 new (AA) battery.
- Replace the battery cover.

See probe specifications on page 8

Connecting Probes

WPC3/WPC2 work in the **REF SIDE** Screen.

A. Select "Toolbox"  icon in upper left corner.

B. In Toolbox screen, probes appear in the "Nearby Tools" list.

Tap "Refresh"  icon if powered on probes don't appear.

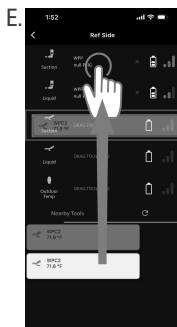
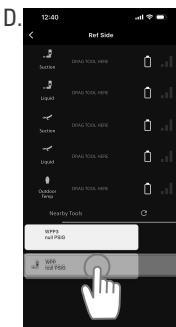
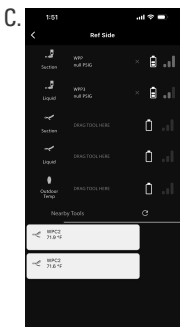
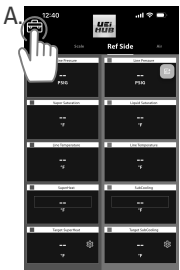
C. Available probes appear in list.

D. Touch and Hold a probe to select for connection.

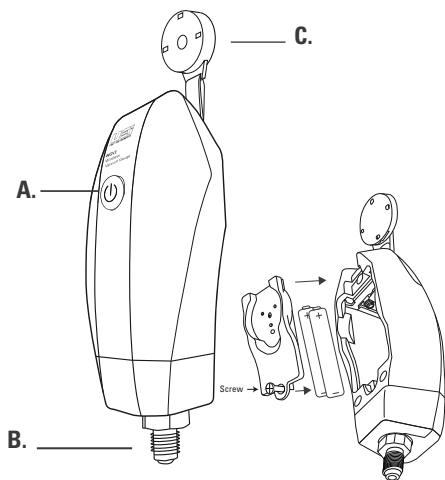
E. Drag the probe to matching probe icon for "Suction" or "Liquid" slot assignment and release. Repeat to connect other probe.

F. The UEi HUB will remember the assignment and automatically connect in future.

G. Once connected, Tap the "back arrow"  to return Home to view measurements



Vacuum Gauge Overview (WVG2)



- A.** Power button/Status Light
Press & Hold for 1 second to Power On
Blinks **GREEN** when probe is powered on.
Blinks **RED** when battery is low (Low battery indication is also visible in app Toolbox screen).
- B.** 1/4" Vacuum Gauge Sensor
- C.** Magnetic Hanger Strap
- ⚠ Maximum over pressure is **700 PSI**

Battery Replacement

- ⚠ **CAUTION:** Take care not to lose the screws when opening battery compartments
- Remove battery cover.
- Replace the old batteries with 2 new (AA) batteries.
- Replace the battery cover.

Cleaning the WVG2 Vacuum Sensor

If the vacuum sensor becomes contaminated with oil, follow this procedure:

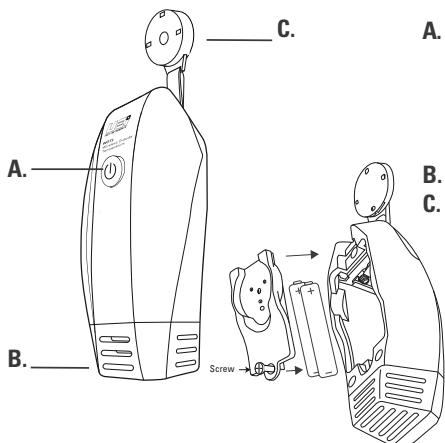
1. Power off the WVG2, carefully shake the gauge to remove any large quantities of oil from the sensor
2. Apply a few drops of rubbing alcohol inside the vacuum port

⚠ **CAUTION: DO NOT INSERT ANY OBJECT INTO PORT, AS THIS WILL PERMANENTLY DAMAGE THE SENSOR)**

3. Place your finger over the port and shake for 30 seconds
4. Remove your finger and allow alcohol to flow out the sensor part
5. Repeat steps 3 to 5 at least three times
6. Allow the sensor to air dry at least an hour

NOTE: It is important to remove all the vapors from the sensor, either through air-drying or via vacuum. Any remaining vapors will cause an incorrect reading.

Outside Temperature Overview (WOT2)



- A.** Power button/Status Light
Press & Hold for 1 second to Power On
Blinks **GREEN** when probe is powered on.
Blinks **RED** when battery is low (Low battery indication is also visible in app Toolbox screen).
- B.** Temperature Sensor
- C.** Magnetic Hanger Strap

Battery Replacement

- ⚠ **CAUTION:** Take care not to lose the screws when opening battery compartments
- Remove battery cover.
- Replace the old batteries with 2 new (AA) batteries.
- Replace the battery cover.

Connecting WVG2 & WOT2

Connecting Probes

WVG2 works in the **VACUUM** Screen.

WOT2 works in the **REF SIDE** Screen.

- Select "Toolbox"  icon in upper left corner.
- In Toolbox screen, probes appear in the "Nearby Tools" list.
Tap "Refresh"  icon if powered on probes don't appear.
- Available probes appear in list.
- Touch and Hold the probe to select for connection.
- Drag the probe to matching probe icon slot and release.
- The UEi HUB will remember the assignment and automatically connect in future.
- Once connected, Tap the "back arrow"  icon to return Home to view measurements

HUB Probes Specifications

	WHP1	WHP3	WOT2	WVG2
	Hygrometer		Outside Temp Probe	Vacuum Gauge
Range	-4° to 257°F (-20° to 125°C)	-4° to 257°F (-20° to 125°C)	-22° to 257°F (30° to 125°C)	0 - 20,000 Microns
Resolution	0.1°F (0.1°C)	0.1°F (0.1°C)	0.1°F (0.1°C)	1 micron
Accuracy	±0.6°F (32°F to 140°F) ±0.3°C (0°C to 60°C) otherwise ±1°F (±1°C)	±0.6°F (32°F to 140°F) ±0.3°C (0°C to 60°C) otherwise ±1°F (±1°C)	± 0.6°F 14°F to 176°F (±0.3°C -10°C to 80°C) otherwise ±1.0°F (±0.5°C)	±5% rdg ±5 microns
RH% Range	0% to 100% RH	0% to 100% RH	-	-
RH% Res	±3%RH (20-80%RH @ 77°F) ±5% RH otherwise @ 77°F	±3%RH (20-80%RH @ 77°F) ±5% RH otherwise @ 77°F	-	-
RH% Accuracy	0.1%	0.1%	-	-
Operating Temperature:	-40°F to 167°F (-40° to 75°C)	14°F to 167°F (-10° to 75°C)	-40°F to 167°F (-40°C to 75°C)	14° to 158°F (-10° to 70°C)
Storage Temperature:	14° to 104°F (-10° to 40°C)	14° to 104°F (-10° to 40°C)	14° to 104°F (-10° to 40°C)	13° to 185°F (-25° to 85°C)
Operating Humidity:	20% to 80% RH	20% to 80% RH	20% to 80% RH	30% to 85% RH
Dimensions:	6.84x1.93x1.53in	6.84x1.93x1.53in	4.75 x 2.4 x 1.5in	5.6 x 2.4 x 1.5in
Item Weight:	4.4 oz	5 oz	5.4 oz	4.2 oz
Certification:	CE Conformity, FCC/IC	CE Conformity, FCC/IC	CE Conformity, FCC/IC	CE Conformity, FCC/IC
Battery Type:	AAA x2	AAA x2	AA x2	AA x2
Battery Life:	100+ hours	100+ hours	100+ hours	100+ hours
Pressure Over-range:	-	-	-	700 PSI
Jaw Opening:	-	-	-	-
Response Time:	<1 sec	<1 sec	<30 sec	-

HUB Probes Specifications (continued)

	WPP2	WPP3	WPC2	WPC3
	Pressure Probe		Temperature Pipe Clamp	
Range	0 to 725 PSI	3 to 725 PSI	22° to 257°F (-30° to 125°C)	22° to 257°F (-30° to 125°C)
Resolution	0.1 PSI	0.1 PSI	0.1°F (0.1°C)	0.1°F (0.1°C)
Accuracy	±1% F.S. 32° to 158°F (0° to 70°C)	±0.5% F.S. 77°F ±5.4°F (25°C ±3°C) ±1% F.S. 32° to 158°F (0° to 70°C)	± 0.6°F 14°F to 176°F (±0.3°C -10°C to 80°C) otherwise ±1.0°F (±0.5°C)	± 0.6°F 14°F to 176°F (±0.3°C -10°C to 80°C) otherwise ±1.0°F (±0.5°C)
Operating Temperature:	14° to 158°F (-10° to 70°C)	14 to 158°F (-10 to 70°C)	-40°F to 167°F (-40°C to 75°C)	14°F to 167°F (-10°C to 75°C)
Storage Temperature:	13° to 185°F (-25° to 85°C)	13 to 185°F (-25 to 85°C)	14° to 104°F (-10° to 40°C)	14° to 104°F (-10° to 40°C)
Operating Humidity:	30% to 85% RH	30 to 85%	20% to 80% RH	20% to 80% RH
Dimensions:	6.70x1.56x1.44in	6.70x1.56x1.44in	5.66x3.8x1.1 in	5.66x3.8x1.1 in
Item Weight:	7.4 oz	8 oz	2.1 oz	2.6 oz
Certification:	CE Conformity, FCC/IC	CE Conformity, FCC/IC	CE Conformity, FCC/IC	CE Conformity, FCC/IC
Battery Type:	AA x2	AA x2	AA 1	AA 1
Battery Life:	100+ hours	80+ hours	100+ hours	80+ hours
Pressure Over-range:	1000 PSI	1000 PSI	-	-
Jaw Opening:	-	-	1.5 in diameter	1.5 in diameter
Response Time:	-	-	<30 sec.	<30 sec.

- **Operating Altitude:** 6,562 ft (2000 meters) above sea level
- **Maximum Output Power:** 10.5dBm
- **Wireless Frequency Reception Range:** 169MHz to 2.4GHz
- **Wireless Frequency Transmission:** 2.4GHz
- **Pollution Degree:** 2

HUB Refrigerants List

R11	R403A	R419A	R448A
R113	R403B	R420A	R449A
R114	R404A	R421A	R450A
R115	R405A	R421B	R452A
R116	R406A	R422A	R452B
R12	R407A	R422B (NU22B)	R453A
R123	R407B	R422C (One shot)	R454A
R133ZD	R407C	R422D	R454B
R1234YF	R407D	R423A	R454C
R1324ZE	R407E	R424A	R455A
R124	R407F	R425A	R458A
R125	R407H	R426A	R500
R13	R408A	R427A	R501
R134A	R409A	R428A	R502
R142B	R409B	R429A	R503
R143A	R410A	R430A	R504
R152A	R410B	R431A	R507A
R22	R411A	R432A	R508A
R227EA	R411B	R433A	R508B (Suva95)
R23	R412A	R434A (RS-45)	R509A
R236FA	R413A	R435A	R510A
R245FA	R414A	R436A	R512A
R290	R414B (Hotshot)	R436B	R513A
R32	R415A	R438A (MU99)	R600 (Butane)
R401A	R415B	R441A	R600A (Isobutane)
R401B	R416A	R442A	R601 (Pentane)
R401C	R417A	R443A	R601A (Isobutane)
R402A	R417C (Hotshot 2)	R444A	
R402B	R418A	R444B	

Refrigerant list is current at time of publication. Refrigerants are updated via the app and may include additional gases. See UEi HUB app for complete list.

FCC AND IC STATEMENT

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 an experienced radio/TV technician for help.

This equipment complies with FCC/IC RSS102 radiation exposure limits set forth for an uncontrolled environment.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC AND IC NOTICE

This device complies with Part 15 of the FCC rules and Industry Canada license-exempt RSS 247. 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.

Cet appareil est conforme à la partie 15 des règles de la FCC, ainsi qu'à la norme RSS 247 exempte de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) Cet appareil ne doit pas provoquer d'interférences nuisibles; et (2) cet appareil doit accepter toutes les interférences reçues, y compris celles susceptibles d'entraîner un dysfonctionnement de l'appareil.

FCC/IC INFORMATION (continued)

FCC CAUTION

The device must not be co-located or operated in conjunction with any other antenna or transmitter. Caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

L'appareil ne doit pas être placé ou utilisé conjointement avec une autre antenne ou un autre émetteur. Attention à l'utilisateur que des changements ou des modifications non expressément approuvés par la partie responsable pour la conformité pourraient annuler l'autorité de l'utilisateur pour faire fonctionner l'équipement.

a. This device complies with RSS247 of Industry Canada. Cet appareil se conforme à RSS247 de Canada d'Industrie. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

a. Appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Exposure of humans to RF fields (RSS-102)

The computers employ low gain integral antennas that do not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site at <http://www.hc-sc.gc.ca/>

The radiated energy from the antennas connected to the wireless adapters conforms to the IC limit of the RF exposure requirement regarding IC RSS-102, Issue 5 clause 4.

Non-compliance with the above restrictions may result in violation of FCC RF exposure guidelines.

Conformité des appareils de radiocommunication aux limites d'exposition humaine aux radiofréquences (CNR-102) L'ordinateur utilise des antennes intégrales à faible gain qui n'émettent pas un champ électromagnétique supérieur aux normes imposées par Santé Canada pour la population. Consultez le Code de sécurité 6 sur le site Internet de Santé Canada à l'adresse suivante : <http://www.hc-sc.gc.ca/> L'énergie émise par les antennes reliées aux cartes sans fil respecte la limite d'exposition aux radiofréquences telle que définie par Industrie Canada dans la clause 4.1 du document CNR-102, version

5. Tests DAS sont effectués en utilisant les positions recommandées par la FCC/CNR avec le téléphone émet à la puissance certifiée maximale dans toutes les bandes de fréquences testées sans distance attacher loin du corps. Non-respect des restrictions ci-dessus peut entraîner une violation des directives de la FCC/CNR.

STORAGE

Remove the batteries when instrument is not in use for a prolonged period of time. Do not expose to high temperatures or humidity. After a period of storage in extreme conditions exceeding the limits mentioned in the Specifications section, allow the instrument to return to normal operating conditions before using it.

DISPOSAL



CAUTION: This symbol indicates that equipment and its accessories shall be subject to separate collection and correct disposal.

CLEANING

Periodically clean your probes case using a damp cloth. **DO NOT** use abrasive, flammable liquids, cleaning solvents, or strong detergents as they may damage the finish, impair safety, or affect the reliability of the structural components.

WARRANTY

The HUB probes (WPP2, WPP3, WPC2, WPC3, WHP1, WHP3, WOT2, and/or WVG2) are warranted to be free from defects in materials and workmanship for a period of 1 year from the date of purchase. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at UEi's option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance. Batteries and consequential damage resulting from failed batteries are not covered by warranty.

Any implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the express warranty. UEi shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss.

A purchase receipt or other proof of original purchase date will be required before warranty repairs will be rendered. Instruments out of warranty will be repaired (when repairable) for a service charge

Warranty and technical support provided by:

UEi Test Instruments, 7601 E 88th Place, Building 8, Indianapolis, IN 46256

www.ueitest.com • 1-800-547-5740 • info@ueitest.com

This warranty gives you specific legal rights. You may have additional rights, which vary from state to state.