

BlackBerry 7130e

Safety and Product Information

BlackBerry 7130e™: model number - RAV20CW

Last revised: 22 September 2005
Part number: MAT-10280-001 rev.002
Print specification: PRINTSPEC-002

©2005 Research In Motion Limited. All Rights Reserved. The BlackBerry and RIM families of related marks, images, and symbols are the exclusive properties of Research In Motion Limited. RIM, Research In Motion, "Always On, Always Connected", the "envelope in motion" symbol, and BlackBerry are registered with the U.S. Patent and Trademark Office and may be pending or registered in other countries.

CDMA2000 is a registered trademark of the Telecommunications Industry Association (TIA-USA). cdmaOne™ is a registered trademark of the CDMA Development Group. The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Research In Motion Limited is under license. All other brands, product names, company names, trademarks and service marks are the properties of their respective owners.

The BlackBerry device and/or associated software are protected by copyright, international treaties and various patents, including one or more of the following U.S. patents: 6,278,442; 6,271,605; 6,219,694; 6,075,470; 6,073,318; D445,428; D433,460; D416,256. Other patents are registered or pending in various countries around the world. Visit www.rim.com/patents.shtml for a current listing of applicable patents.

This document is provided "as is" and Research In Motion Limited and its affiliated companies ("RIM") assume no responsibility for any typographical, technical or other inaccuracies in this document. RIM reserves the right to periodically change information that is contained in this document; however, RIM makes no commitment to provide any such changes, updates, enhancements or other additions to this document to you in a timely manner or at all. RIM MAKES NO REPRESENTATIONS, WARRANTIES, CONDITIONS OR COVENANTS, EITHER EXPRESS OR IMPLIED (INCLUDING WITHOUT LIMITATION, ANY EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS OF FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, MERCHANTABILITY, DURABILITY, TITLE, OR RELATED TO THE PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE REFERENCED HEREIN OR PERFORMANCE OF ANY SERVICES REFERENCED HEREIN). IN CONNECTION WITH YOUR USE OF THIS DOCUMENTATION, NEITHER RIM NOR ITS RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES OR CONSULTANTS SHALL BE LIABLE TO YOU FOR ANY DAMAGES WHATSOEVER BE THEY DIRECT, ECONOMIC, COMMERCIAL, SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR INDIRECT DAMAGES, EVEN IF RIM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INCLUDING WITHOUT LIMITATION, LOSS OF BUSINESS REVENUE OR EARNINGS, LOST DATA, DAMAGES CAUSED BY DELAYS, LOST PROFITS, OR A FAILURE TO REALIZE EXPECTED SAVINGS.

This document might contain references to third party sources of information, hardware or software, products or services and/or third party web sites (collectively the "Third-Party Information"). RIM does not control, and is not responsible for, any Third-Party Information, including, without limitation the content, accuracy, copyright compliance, compatibility, performance, trustworthiness, legality, decency, links, or any other aspect of Third-Party Information. The inclusion of Third-Party Information in this document does not imply endorsement by RIM of the Third Party Information or the third party in any way. Installation and use of Third Party Information with RIM's products and services may require one or more patent, trademark or copyright licenses in order to avoid infringement of the intellectual property rights of others. Any dealings with Third Party Information, including, without limitation, compliance with applicable licenses and terms and conditions, are solely between you and the third party. You are solely responsible for determining whether such third party licenses are required and are responsible for acquiring any such licenses relating to Third Party Information. To the extent that such intellectual property licenses may be required, RIM expressly recommends that you do not install or use Third Party Information until all such applicable licenses have been acquired by you or on your behalf. Your use of Third Party Information shall be governed by and subject to you agreeing to the terms of the Third Party Information licenses. Any Third Party Information that is provided with RIM's products and services is provided "as is". RIM makes no representation, warranty or guarantee whatsoever in relation to the Third Party Information and RIM assumes no liability whatsoever in relation to the Third Party Information even if RIM has been advised of the possibility of such damages or can anticipate such damages.

Licensed by QUALCOMM Incorporated under one or more of the following United States Patents and/or their counterparts in other nations:

4,901,307	5,490,165	5,056,109	5,504,773	5,101,501
5,506,865	5,109,390	5,511,073	5,228,054	5,535,239
5,267,261	5,544,196	5,267,262	5,568,483	5,337,338
5,600,754	5,414,796	5,657,420	5,416,797	5,659,569
5,710,784	5,778,338			

Research In Motion Limited
295 Phillip Street
Waterloo, ON N2L 3W8
Canada

Published in XXXXXX

Safety information

Please read these safety and operation instructions before using the BlackBerry® device or any accessories provided with the device. Retain these instructions for future use.

In some countries there may be restrictions on using Bluetooth®-enabled and encrypted devices. Check with your local authorities.

Electrical safety

Charge the BlackBerry device using only the USB cable ASY-06610-001, Travel charger ASY-04078-001, ASY-07559-001, or ASY-07040-001, Automotive charger ASY-04195-00, or other charging accessory provided or specifically approved by Research In Motion Limited (RIM) for use with this device. Any approval from RIM under this document must be in writing and must be from a person authorized to provide such approval. Use of any other accessory might invalidate any warranty provided with the device and might be dangerous.

Use the charging accessories provided with the device or any other approved charging accessories only from the type of power source indicated on the marking label. Before using any power supply, verify that the mains voltage is in accordance with the voltage printed on the power supply.

Do not overload wall outlets, extension cords, or convenience receptacles as this might result in a risk of fire or electric shock. To reduce the risk of damage to the cord or the plug, pull the plug rather than the cord when you disconnect the charging accessory from the wall outlet or convenience receptacle.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where the power cord connects to the device. Unplug charging accessories during lightning storms or when unused for long periods of time.

Do not use charging accessories outside or in any area exposed to the elements.

Refer to the documentation that came with the device for more information on inserting the lithium-ion battery and connecting the power supply.

Battery safety and disposal

The BlackBerry device contains a removable lithium-ion battery. Do not dispose of either the device or the lithium-ion battery in a fire. Dispose of the lithium-ion battery in accordance with the laws and regulations in your area governing disposal of such cell types.

The lithium-ion battery might present a fire or chemical burn hazard if mistreated. Do not disassemble, crush, or puncture the lithium-ion battery. Do not heat the lithium-ion battery above 60°C (140°F). Do not allow metal objects to contact the battery terminals.

Use only the lithium-ion battery that RIM specifies for use with your particular device model. Using any other lithium-ion battery might invalidate any warranty provided with the device and might present a risk of fire or explosion.



When this icon appears on your BlackBerry device, the lithium-ion battery is not inserted or an invalid lithium-ion battery is inserted. If you have inserted an invalid lithium-ion battery, remove it immediately and insert the lithium-ion battery that RIM specifies for use with your particular device model. If you have inserted the lithium-ion battery that is specified for use with your particular device model, remove and reinsert the lithium-ion battery. Verify that the battery connectors align with the connectors on your device.

Device disposal



The BlackBerry device should not be placed in household waste bins. Please check local regulations for information on the disposal of electronic products in your area.

Driving safety

Check the laws and regulations regarding the use of wireless devices in the areas where you drive. Always obey them. Also, if using the BlackBerry device in your car, please use the following minimum guidelines:

- Give your full attention to driving; driving safely is your first responsibility.
- Use hands-free operation if it is available.
- Pull off the road and park before making or answering a phone call.

RIM recommends that you do not use the BlackBerry device while driving. Instead, consider having a passenger in the vehicle use the device for you, or find a safe location to stop your vehicle prior to using the device.

Store the device safely before driving your vehicle. Do not use any charging accessory as a means of storing the device while you are in a vehicle. If your vehicle is equipped with an air bag, do not place the device or other objects above the air bag, or in the air bag deployment area. If in-vehicle wireless equipment is improperly stored or installed, and the air bag inflates, serious injury could result.

Radio frequency (RF) signals might affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. If any equipment has been added to your vehicle, you should also consult the manufacturer of that equipment for information on RF signals.

Accessories

Use only those accessories approved by RIM. Using any accessories not approved by RIM for use with this particular BlackBerry device model might invalidate any approval or warranty applicable to the device, might result in the non-operation of the device, and might be dangerous.

Antenna care

Use only the supplied integral antenna. Unauthorized antenna modifications, or attachments could damage the BlackBerry device and might violate U.S. Federal Communications Commission (FCC) regulations.

Operating and storage temperatures

Situate the BlackBerry device or device accessories away from heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

If you are not going to use the device for more than two weeks, turn the device power off, remove the battery, and follow the operating and storage temperatures listed below:

Device operating	32 to 122°F (0 to 50°C)	Travel charger operating	32 to 113°F (0 to 45°C)
Device storage	50 to 86°F (10 to 30°C)	Travel charger storage	-22 to 167°F (-30 to 75°C)

Interference with electronic equipment

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment might not be shielded against the RF signals from the BlackBerry device.

Pacemakers: Consult a physician or the manufacturer of your pacemaker if you have any questions regarding the effect of RF signals on your pacemaker. If you have a pacemaker, verify that you are using the device in accordance with the safety requirements associated with your particular pacemaker, which might include the following:

- Always keep the device more than 7 inches (20 cm) from the pacemaker when the device is turned on.
- Do not carry the device in your breast pocket.
- When using the phone on the device, use the ear opposite the pacemaker for making and receiving calls to minimize the potential interference.
- If you have any reason to suspect that interference is taking place, turn the BlackBerry device radio and the Bluetooth radio off immediately.

Hearing aids: Some digital wireless devices may interfere with some hearing aids. In the event of such interference, consult your service provider or contact the manufacturer of your hearing aid to discuss alternatives.

Other medical devices: If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Health care facilities: Turn the BlackBerry device radio and the Bluetooth radio off in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Aircraft: Federal Aviation Administration (FAA) and FCC regulations prohibit using the radio of wireless devices while in the air. Turn the BlackBerry device radio and the Bluetooth radio off before boarding an aircraft. The effect of using the BlackBerry device radio or the Bluetooth radio in an aircraft is unknown. Such use might affect aircraft instrumentation, communication and performance, might disrupt the network, might otherwise be dangerous to the operation of the aircraft, and might be illegal. With the BlackBerry device radio and Bluetooth radio off, only use non-radio based device applications in accordance with airline regulations for electronic devices.

Dangerous areas

Potentially explosive atmospheres: Turn the BlackBerry device radio and the Bluetooth radio off when in any area with a potentially explosive atmosphere, and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked. They include fueling areas such as gasoline or petrol stations; below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

If available, do not use the phone on the device to report a gas leak in the vicinity of the leak. Leave the area and, if the phone is available and active on the device, make the call from a safe location.

Blasting areas: To avoid interfering with blasting operations, turn the BlackBerry device radio and the Bluetooth radio off when in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Service

Only qualified service personnel should perform repairs to the BlackBerry device. Disconnect the power supply cables from the computer or electrical outlet and refer the device or charging accessory for service to qualified service personnel if any of the following situations occur:

- the power supply cord, plug, or connector is damaged
- liquid has been spilled or objects have fallen into the device or charging accessory
- the device or charging accessory has been exposed to rain or water
- the device or charging accessory becomes very hot to the touch
- the device or charging accessory has been dropped or damaged in any way
- the device or charging accessory does not operate normally by following the instructions in the user documentation
- the device or charging accessory exhibits a distinct change in performance

Do not attempt to disassemble the device or any charging accessory.

To reduce the risk of fire or electric shock, adjust only those controls that are covered in the user documentation for the device. An improper adjustment of other controls might cause damage and will often require extensive work by a qualified technician to restore the device, charging accessory, or any other accessory to normal operation.

Failure to observe all safety instructions contained in the user documentation for the device will void the Limited Warranty and might lead to suspension or denial of services to the offender, legal action, or both.

Additional safety guidelines

Speakerphone: The BlackBerry device is equipped with a speakerphone that can generate audio levels loud enough for phone call operation while holding the device at an arm's length from your head. When using your device speakerphone, never hold the device to your ear. Serious and permanent hearing damage could occur.

Liquids and foreign objects: Never push objects of any kind into the BlackBerry device or device accessories through openings as this action might short circuit parts and cause a fire or electric shock. Do not use the device or device accessories near water (for example, near a bathtub or a sink, in a wet basement, or near a swimming pool). Never spill liquid of any kind on the device or device accessories.

Stability: Do not place the device or device accessory on any unstable surface. It could fall, thereby potentially causing serious injury to a person and serious damage to the device or device accessory. Take care when using the device with any charging accessories to route the power cord in a way that reduces the risk of injury to others, such as by tripping or choking.

Cleaning: Do not use liquid, aerosol cleaners, or solvents on or near the device or device accessory. Clean only with a soft dry cloth. Disconnect any cables from the computer and unplug any charging accessories from the electrical outlet before cleaning either the device or the charging accessory.

Compliance information

Exposure to radio frequency signals

The BlackBerry device radio is a low power radio transmitter and receiver. When the device radio is on, it receives and also sends out RF signals. The device complies with FCC and Industry Canada (IC) guidelines respecting safety levels of RF exposure for wireless devices, which in turn are consistent with the following safety standards previously set by Canadian, U.S., and international standards bodies:

- ANSI/IEEE C95.1, 1999, IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
- National Council on Radiation Protection and Measurements (NCRP) Report 86, 1986, Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields
- Health Canada, Safety Code 6, 1999, Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
- International Commission on Non-Ionizing Radiation Protection (ICNIRP), 1998, Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz)

To maintain compliance with FCC and IC RF exposure guidelines when carrying the device on your body, use only RIM-supplied or approved accessories, or accessories that contain no metallic components and provide a separation distance from the body of at least 15 mm (0.60 inches). Use of accessories that are not expressly approved by RIM might violate FCC and IC RF exposure guidelines and might void any warranty applicable to the device. When carrying the device while the device radio is on, use the specific RIM-approved holster that has been tested for compliance. For data operation (when you do not use a RIM-approved, body-worn accessory and are not holding the device at the ear), position the device at least 15 mm (0.60 inches) from the body.

Specific absorption rate data

THIS WIRELESS DEVICE MODEL MEETS GOVERNMENT REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

The BlackBerry device is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government and Industry Canada of the Canadian Government (IC). These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC/IC is 1.6W/kg*. Tests for SAR are conducted using standard operating positions specified by the FCC/IC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a wireless device model is available for sale to the public, it must be tested and certified to the FCC and IC that it does not exceed the limit established by the government-adopted requirement for safe exposure under the recommendations of the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The tests are performed in positions and locations (for example, at the ear and worn on the body) as required by the FCC, IC and for each model.

The highest SAR values for each device model when tested for use at the ear is outlined below:

Device	1 g SAR (W/kg)
BlackBerry 7130e™	1.23

The highest SAR values for each device model when worn on the body, in an approved holster or carrying case, is outlined below:

Device	1 g SAR (W/kg)
BlackBerry 7130e™	1.36

Body-worn measurements differ among wireless device and phone models, depending upon available accessories and FCC and IC requirements. While there may be differences between the SAR levels of various wireless devices and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this wireless device model with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this wireless device model is on file with the FCC and can be found under the Display Grant section of [http:// www.fcc.gov/oet/fccid](http://www.fcc.gov/oet/fccid) after searching on FCC ID L6RAV20CW. Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) web-site at <http://www.wow-com.com>.

* In the United States and Canada, the SAR limit for mobile devices used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue for the body or head (4.0 W/kg averaged over 10 grams of tissue for the extremities - hands, wrists, ankles and feet). The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

The long-term characteristics or the possible physiological effects of Radio Frequency Electromagnetic fields have not been evaluated by Underwriters Laboratories Inc. (UL).

FCC compliance statement (USA)

FCC Class B Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.



Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Safety and Product Information Booklet

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 manufacturer's instructions, may cause interference harmful to radio communications.

There is no guarantee, however, 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.

US Information Concerning the Federal Communications Commission ("FCC") Requirements for Hearing Aid Compatibility with Wireless Devices

Background Information

When wireless devices are used near hearing devices (such as hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference, and wireless devices also vary in the amount of interference they generate.

The wireless telephone industry has developed ratings to assist hearing device users in finding wireless devices that may be compatible with their hearing devices. Not all wireless devices have been rated. Wireless devices that are rated will have the rating displayed on their box together with other relevant approval markings.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device is vulnerable to interference you may not be able to use a rated wireless device successfully.

Consulting with your hearing health professional and testing the wireless device with your hearing device is the best way to evaluate it for your personal needs.

How the Ratings Work

M-Ratings: Wireless devices rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than wireless devices that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Wireless devices rated T3 or T4 meet FCC requirements and are likely to be more usable with a hearing device's telecoil ("T Switch" or "Telephone Switch") than unrated wireless devices. T4 is the better/higher of the two ratings. (Note that not all hearing devices have telecoils in them).

Hearing devices may also be measured for immunity to this type of interference. Your hearing device manufacturer or hearing health professional may help you find results for your hearing device. The more immune your hearing aid is, the less likely you are to experience interference noise from wireless devices.

For additional information about the FCC's actions with regard to hearing aid compatible wireless devices and other steps the FCC has taken to ensure that individuals with disabilities have access to telecommunications services, please go to: www.fcc.gov/cgb/dro.

Industry Canada certification

This device complies with Industry Canada RSS 129, RSS 133 and RSS 210 under certification number 2503A-RAV20CW.

Class B compliance

This device complies with the Class B limits for radio noise emissions as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Additional regulatory conformance

Specific details about compliance to the following standard and regulatory body may be obtained from Research In Motion:

- Underwriters Laboratories UL60950 requirements for Canada and the United States

Product information

Mechanical properties	
Weight	Approximately 133g (4.7 oz) including battery
Size (L x W x H)	117.4 x 56.3 x 22.6 mm (4.6 x 2.2 x 0.9 in)
Memory	64 MB flash memory, 16 MB SRAM

Power	
Battery	Removable, rechargeable lithium-ion cell
Port	USB compatible port for data synchronization and charging

Radio specifications	
BlackBerry 7130e™	
Dual-band support	800/1900 MHz CDMA
Networks	CDMA2000® 1X/cdmaOne™, EVDO
Power class	Class 3 (Cell band), Class 2 (PCS band)
Transmitting frequency	Cell 824.70 to 848.31 MHz, PCS 1851.25 to 1908.75 MHz
Receiving frequency	Cell 869.70 to 893.31 MHz, PCS 1931.25 to 1988.75 MHz, A-GPS E911: 1575 MHz
Bluetooth Radio	
Single-band support	ISM 2.4 GHz
Power class	Bluetooth class 2 (2.5 mW)
Transmitting and receiving frequency	2402 to 2480 MHz