VII. Declaration of Conformity

This product has been manufactured in accordance with the harmonized European standards, following the provisions of the below stated directives:

CE 2460	93/42/EEC as amended by 2007/47/EC Medical Device Directive
CE M year	2014/31/EU Non-automatic Weighing Instruments Directive

Please see separate document showing on sticker of device for above CE marking.

Authorized EU Representative:

EC REP

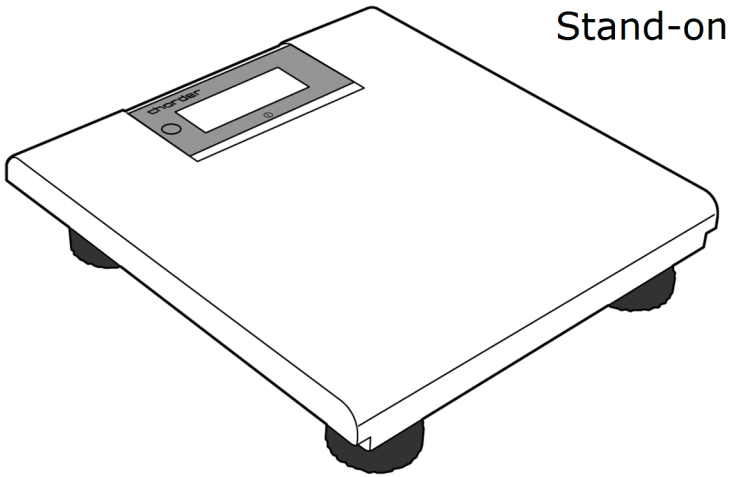
Obelis s.a.
Bd Général Wahis, 53
B-1030 Brussels
Belgium

Manufactured by:
Charder Electronic Co., Ltd.
No.103, Guozhong Rd., Dali Dist.,
Taichung City, 41262 Taiwan (R.O.C.)

CD-IN-00503 REV001 05/2022

charder®

USER MANUAL
MS4203
Stand-on Floor Scale



Please keep the instruction manual at hand all the time for future reference.

Explanation of Graphic Symbols on Label/Packaging

	Caution, consult accompanying documents before use		Separate collection for waste of electrical and electronic equipment, in accordance with Directive 2002/96/EC
	Manufacturer of medical device		Manufacturing year of medical device
	Carefully read user manual before installation and usage, and follow instructions for use.		Medical electrical equipment with Type B applied part
	Device catalogue number		Authorized representative in the European Community
	Manufacturer's batch or lot number		Device is a medical device
	Serial number		Unique Device Identifier
		Device conforms to 93/42/EEC as amended by 2007/47/EC Medical Device Directive. Four digit number refers to Notified Body.	
		Device complies with International Organization of Legal Metrology (Class III) requirements (verified models only)	
		Device complies with EC directives (verified models only) **M**: Conformity label in compliance with Directive 2014/31/EU for non-automatic weighing instruments **18**: Year in which conformity verification was performed and the CE label was applied. (ex: 18=2018) **0122**: Refers to Notified Body for metrology	

VI. Product Specifications

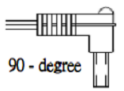
A. Device Information

Model		MS4203
Weight Measurement	Capacity	0-150 kg x 50g 150-220 kg x 100g
	Accuracy	±1.5
	LCD Screen	1.0-inch LCD screen (5 digits)
	OIML	Class III
Device Dimension		325(W) x 310(D) x 65(H) mm
Device Weight		3.3 kg (Without Battery)
Key Functions		On/Zero/Off
Power Supply		6 AA batteries / Power adapter
Operation Temperature & Humidity		5℃~35℃ 15% / 85% RH
Standard Accessories		User manual, Power adapter
Optional Accessories		Carrying bag

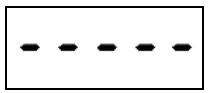
B. Power Adapter Standards

Warning

The device is only compatible with the power adapters specified in the dashed block below.

AMP VOLTAGE	DRAWING NO.:	CE APPROVED TYPE NO. / MODEL NO.:	TYPE	Adapter plug
12V 1A	AD-8095	UE24WCP1-120200SPA	US	
12V 1A	AD-8095	UE24WCP1-120200SPA	EU	
12V 1A	AD-8095	UE24WCP1-120200SPA	UK	
12V 1A	AD-8095	UE24WCP1-120200SPA	AU	

Error Messages

Error Message	Reason	Action
	**Low battery warning** Voltage of battery is too low to operate device	Replace batteries, or plug in adapter
	**Overload** Total load exceeds device's maximum capacity	Reduce weight on measurement platform and try again
	**Counting Error** Abnormal signal from loadcells	Error normally caused by faulty loadcell or wiring. Please contact distributor.
	Weight on measurement platform when device is turned on	Remove all objects and restart the scale

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Taichung City, 41262 Taiwan

CONTENTS

- If the steps above cannot resolve the problem, re-calibration may be required to correct weighing accuracy

Distributor support required
If the following errors occur, we recommend contacting your local Charder distributor for repair or replacement services:

1. Device will not power on
- Faulty on/off key
- Broken or damaged wires causing short circuit or faulty connection
- Safety fuse burnout
- Faulty adapter

2. Indicator damage
- Possible hardware defects include: faded LCD screen, blurred text, smeared rainbow screen, incorrect decimal display
- Unable to read data
- Indicator shows "Err.E" after device is switched on
- Keys not responding
- Buzzer malfunction

V. Troubleshooting

Product Defects

Charder's warranty is effective for the original purchaser of this device, subject to the terms and conditions listed in the Warranty Program & Return Policy.

1. If Charder is responsible for a fault or defect present upon receipt of the unit, Charder shall either repair the fault, or supply a replacement unit. Should the repairs or replacement delivery fail, statutory provisions shall be valid. The period of warranty shall be two years, beginning on the date of purchase. Please retain your receipt as proof of purchase.

2. No responsibility shall be accepted for damage caused through any of the following reasons: unsuitable or improper storage or use, incorrect installation or commissioning by the owner or third parties, natural wear and tear, changes or modifications, incorrect or negligent handling, chemical, electrochemical, or electrical interference, unless damage is attributable to negligence on the part of Charder.

If device is not covered under warranty, a service maintenance charge will apply, plus cost of replacement parts.

Before contacting your local Charder distributor for repair service, we recommend considering the following troubleshooting procedures:

Self-inspection

1. Device will not power on

- If battery power is depleted, replace with new batteries
- If batteries are not used, check if the power adapter is plugged into the device properly. Check if power adapter is plugged into mains properly

2. Indicator showing "0000" ZERO SPAN out of range

- Interference due to factors such as RF disturbance or ground vibration. Relocate device to location without interference and try again
- Unstable platform. Relocate device to stable location and try again
- External objects interfering with measurement platform. Clear platform of objects and try again
- Device may not function properly on soft surfaces such as carpets or lawns. Relocate device to location with solid, stable floor

⚠ I. Safety Notes

A. General Information

Thank you for choosing this Charder Medical device. It is designed to be easy and straightforward to operate, but if you encounter any problems not addressed in this manual, please contact your local Charder service partner.

Before beginning operation of the device, please read this user manual carefully, and keep it in a safe place for reference. It contains important instructions regarding installation, proper usage, and maintenance.

Intended Use

This device is intended to measure the weight of subjects who can stand unassisted, for diagnosis of weight-related issues by professionals.

General Handling

- Device should be placed on stable, flat, solid, non-slippery surface.
- Usage on soft surfaces (ex: carpet) may result in inaccurate results.
- Ensure all parts are properly locked and tightened before operating the device.
- Device is intended to measure one subject at a time.

Safety Instructions

Before putting device into use, please read this user manual carefully. It contains important instructions for installation, usage, and maintenance of device.

The manufacturer shall not be liable for damages caused by failure to heed the following instructions:

- Batteries should be kept away from children. If swallowed, promptly seek medical assistance.
- The device has an expected service life of 5 years when correctly handled, serviced, and periodically inspected in accordance with manufacturer's instructions.
- Always comply with appropriate regulations when using electrical components under increased safety requirements.
- Improper installation will render the warranty null and void.
- Ensure voltage marked on power supply matches mains power supply.
- The device is intended for indoor use only.
- Observe permissible ambient temperatures for use
- Device meets requirements for electromagnetic compatibility. Do not

exceed the maximum values specified in the applicable standards.

Environmental

- All batteries contain toxic compounds; batteries should be disposed of via designated competent organizations. Batteries should not be incinerated.

Cleaning

- Device surface should be cleaned using alcohol-based wipes. Corrosive cleansing liquids should not be used. Pressure-washers should not be used.
- Do not use large amounts of water when cleaning the device, as it may cause damage to the internal electronics.
- Always disconnect device from mains power before cleaning.

Maintenance

- Please contact your local Charder distributor for regular maintenance and calibration.
- Device does not require routine user maintenance. However, regular checking of accuracy is recommended; frequency to be determined by level of use and state of device, or local metrology/measuring instrument regulations if applicable. If results are inaccurate, please contact local distributor.

Warranty/Liability

- The period of warranty shall be eighteen (18) months, beginning on the date of purchase. Please retain your receipt as proof of purchase.
- No responsibility shall be accepted for damage caused through any of the following reasons: unsuitable or improper storage or use, incorrect installation or commissioning by the owner or third parties, natural wear and tear, changes or modifications, incorrect or negligent handling, chemical, electrochemical, or electrical interference.
- All maintenance, technical inspections, and repairs should be conducted by an authorized Charder service partner, using original Charder accessories and spare parts. Charder is not liable for any damages arising from improper maintenance or usage.

Disposal

- This product is not to be treated as regular household waste, but should be taken to a designated collection points for electronics. Further information should be provided by local waste disposal authorities.

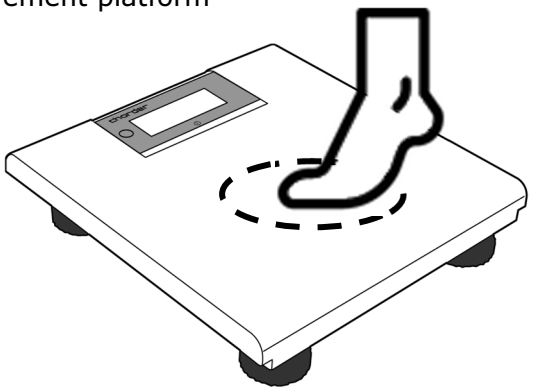
IV. Using Device

A. Basic Operation

There are 2 methods to switch on the device:

Auto-on

1. Step onto the device for 2 seconds to turn on device
2. Leave measurement platform



3. The device will automatically perform self-calibration.

Manual switch-on

1. Press **[On/Zero/Off]** key to turn the device on.
2. The device will automatically perform self-calibration.

Note: Do not stand on the scale while the scale is performing self-calibration.

Once "0.00 kg" appears on indicator, device is ready for measurement.

Note: If "0.00 kg" does not display on indicator, press **[On/Zero/Off]** key to zero the device. This function can be used for weight within ±2% of full capacity.

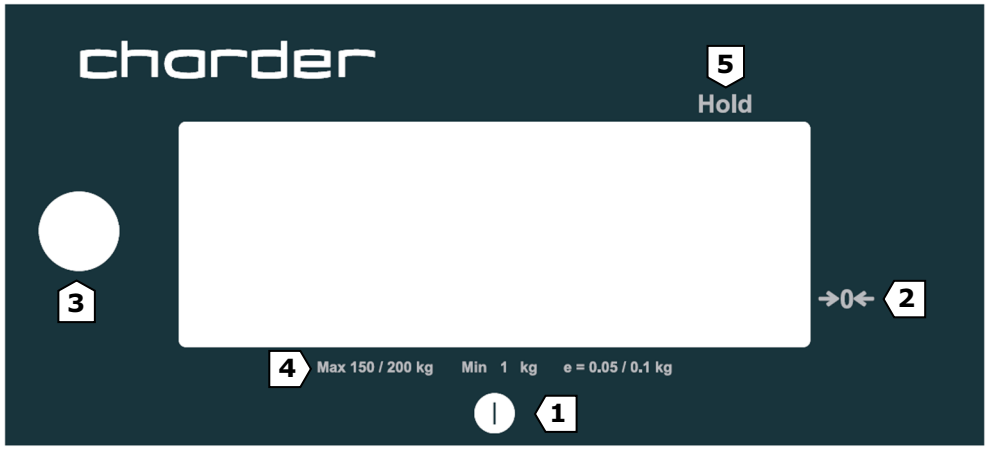
Note: If subject's weight exceeds scale capacity, indicator will display "Err" prompt due to overload.

B. Zero

The zero function allows the user to clear the residual value of objects from the device's measurement result. Zero can be used when weight of object is ≦at/below 2% of full capacity.

III. Indicator

Indicator and Key Functions



Key Functions

1. On/Zero/Off: Turn device on and off. Zero scale (±2% of full capacity). Press and hold to turn off.

Indicator Symbols

2. Zero Indicator: Device is at zero
3. Level Indicator: Determine if device is level
4. Scale Specification: Capacity and graduation of device
5. Hold(optional): Determine if weight lock mode (hold) is active

Warning

- Only the original adapter should be used with the device. Using an adapter other than the one provided by Charder may cause malfunction.
- Do not touch the power supply with wet hands.
- Do not crimp the power cable, and avoid sharp edges.
- Do not overload extension cables connected to the device.
- Route cables carefully, to avoid tripping.
- Keep device away from liquids.
- Do not remove the plug by yanking on the cable.
- Use only a correctly wired (100-240VAC) outlet, and do not use a multiple outlet extension cable.
- Do not under any circumstances dismantle or alter the device, as this could result in electric shock or injury as well as adversely affect the precision of measurements.
- Do not place the device in direct sunlight, or in close proximity to an intense heat source. Excessively high temperatures may damage the internal electronics.

Incident Reporting

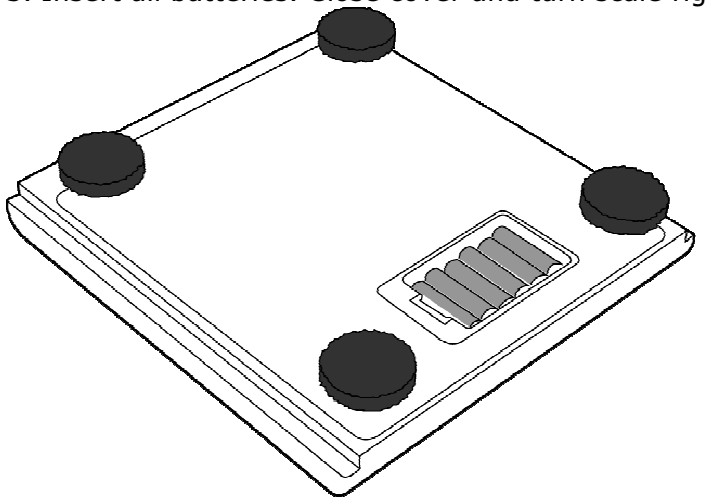
- Any serious incident that has occurred in relation to the device should be reported to the manufacturer, EU representative (if device is used in EU member state), and competent authority of user/subject's member state.

B. EMC Guidance and Manufacturer's Declaration

Guidance and manufacturer's declaration-electromagnetic emissions		
The MS4202L Stand-on Floor Scale is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.		
Emission test	**Compliance**	**Electromagnetic environment-guidance**
RF emissions CISPR 11	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations /flicker emissions IEC 61000-3-3	Compliance	

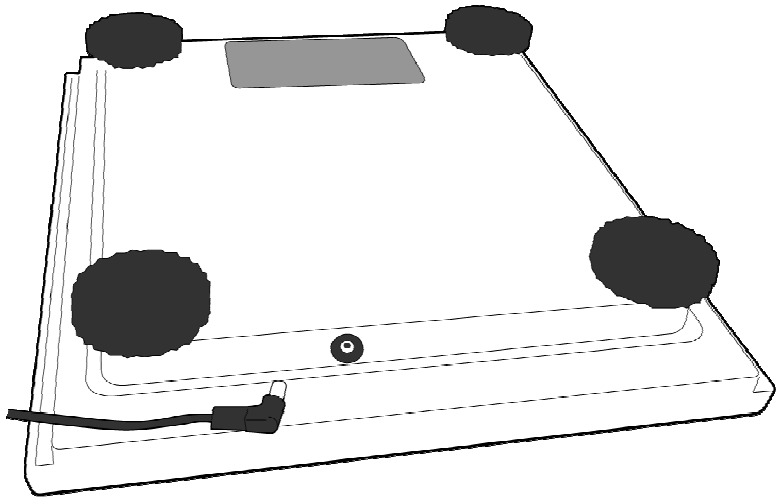
Guidance and manufacturer's declaration-electromagnetic immunity			
The MS4202L Stand-on Floor Scale is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment-guidance**
Electrostatic discharge(ESD) IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%

3. Insert all batteries. Close cover and turn scale right-side up.



B. Using Adapter

Device can be powered via adapter using port located at rear of device. Plug adapter into device before plugging into mains.

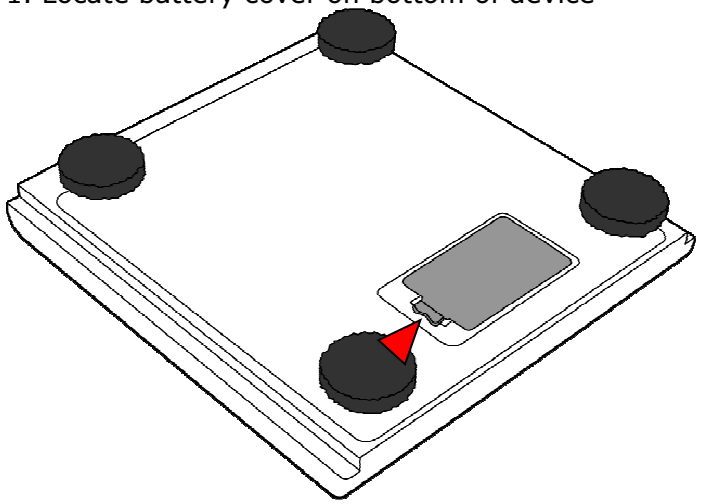


II. Installation

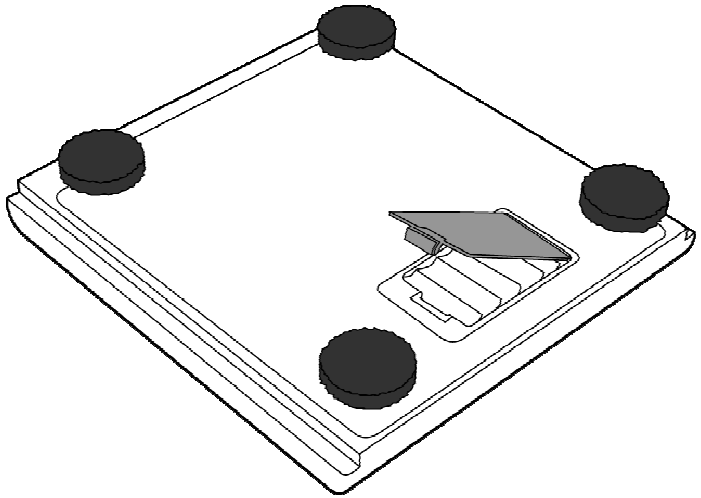
Device can be used once batteries are installed (or adapter is plugged in).

A. Inserting Batteries

1. Locate battery cover on bottom of device



2. Remove battery cover. Insert batteries. Ensure polarity is correct.



Electrical fast transient/burst IEC 61000-4-4	± 2kV for power supply lines + 1kV for input/output lines	+ 2kV for power supply lines + 1kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1kV line(s) to line(s) ± 2kV line(s) to earth	+ 1kV line(s) to line(s) + 2kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT for 0,5 cycle 0% UT for 1 cycle 70% UT(30% dip in UT) for 25 cycles 0% UT for 5 s	0% UT for 0,5 cycle 0% UT for 1 cycle 70% UT(30% dip in UT) for 25 cycles 0% UT for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency(50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	The device power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE UT is the a.c. mains voltage prior to application of the test level.			

Guidance and manufacturer's declaration-electromagnetic immunity			
The MS4202L Stand-on Floor Scale is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment-guidance**
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 KHz to 80 MHz 6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz 3 V/m	3 Vrms 150 KHz to 80 MHz 6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1	Portable and mobile RF communications equipment should be used no closer to any part of the device including cables, than the recommended separation distance calculated from the equation applicable to

	80MHz to 2,7 GHz	kHz 3 V/m 80MHz to 2,7 GHz	the frequency of the transmitter. **Recommended separation distance:** d = 1,2 √*P* d = 1,2 √*P* 80MHz to 800 MHz d = 2,3 √*P* 800MHz to 2,5 GHz Where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey[a], should be less than the compliance level in each frequency range[b]. Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the device.

b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distance between portable and mobile RF communications equipment and the MS4202L Stand-on Floor Scale

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	**Separation distance according to frequency of transmitter m**		
	150 kHz to 80 MHz d =1,2√*P*	**80 MHz to 800 MHz** d =1,2√*P*	**800 MHz to 2,5 GHz** d =2,3√*P*
0,01	0,12	0,12	0,23
0,1	0,38	0,38	0,73
1	1,2	1,2	2,3
10	3,8	3,8	7,3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.