

Owner's Manual

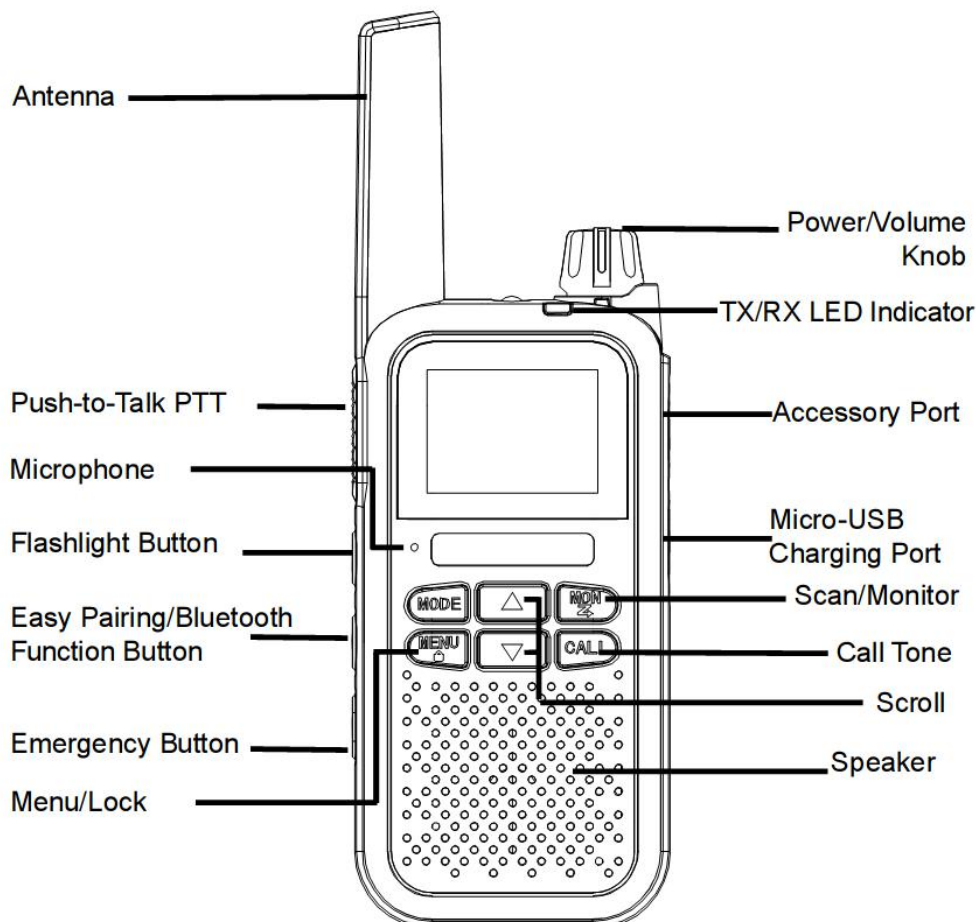
(Version 2021-02)

ATTENTION!

Observe the following precautions to prevent fire, personal injury, and radio damage.

- Do not modify or attempt to adjust this radio for any reason.
- Do not expose the radio to long periods of direct sunlight, nor place it close to heating appliances.
- Do not place the radio in excessively dusty, humid, and /or wet areas, nor on unstable surfaces.
- If an abnormal odor or smoke is detected coming from the radio, switch OFF the power immediately and remove the optional battery pack from the radio, then contact the dealer.

CONTROL BUTTONS



PREPARING YOUR RADIO

Battery Meter and Low Battery Alert



Indicates that the battery is fully charged.



Blinks when battery is low; charge the radio or replace batteries immediately.

Installing the Batteries

Each radio can use either 1 Li-ion/NiMH rechargeable battery pack or 3 AA alkaline batteries and beeps when the batteries are low.

Installing the Li-ion/NiMH Rechargeable Battery Pack

1. Take the belt clip off.
2. With the back of the radio facing you, lift the battery cover latch up and remove the cover.
3. Insert the Li-ion or NiMH battery pack by following the instruction on the battery pack.
4. Close the battery cover firmly.

Using the Micro-USB Charger

1. Make sure your radio is OFF.
2. Plug the USB charge cable into the radio charging port on side of the radio.
3. Plug the AC adapter into an AC outlet.
4. LED indicator lights Orange: Charging; Orange LED indicator lights off: Full Charged.

Attaching and Removing the Belt Clip

1. Attach the belt clip to the back of the radio until the clip clicks in place.
2. Attach the belt clip to pocket or belt strap until the clip clicks in place.

To Remove

1. Push the release tab on top of the belt clip to release the latch.
2. Pull the belt clip away from the back of the radio

BASIC OPERATIONS

Turning your Radio On and Off

1. To turn your radio ON, turn the rotary knob clockwise.
2. In the ON position, the radio chirps and briefly shows all feature icons available on the radio.
3. The display screen then shows the current channel, code and all features that are enabled. The radio is now in Two-Way Radio mode.
4. To turn your radio OFF, turn the rotary knob counterclockwise.

Setting the Volume

From any mode, to increase volume is by turning the rotary knob clockwise. To decrease volume, turn the rotary knob counterclockwise.

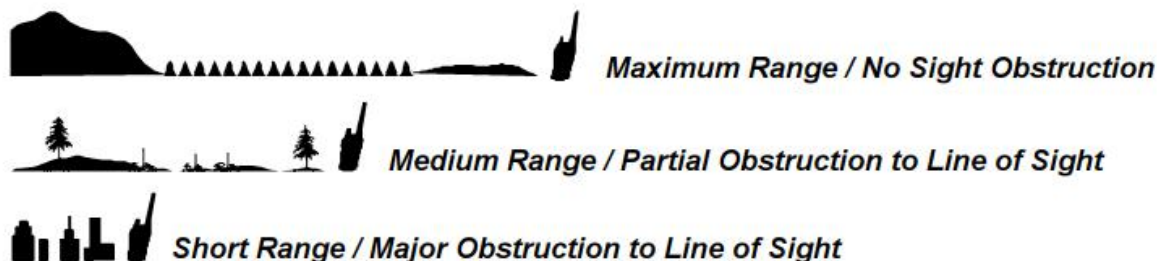
Note: DO NOT hold the radio close to your ear. If the volume is set to an uncomfortable level, it could hurt your ear.

Transmit and Receive

- (1) To make a call, press and hold the  button, then speak into the microphone using normal speaking voice. Hold the microphone approximately 1.5 inches (3 to 4 cm) from your lips.
- (2) Release the PTT button to receive.
- (3) If you set a CTCSS/DCS Code in the radio, you can receive ONLY when the CTCSS/DCS Code is SAME for the radios.

ABOUT RANGE

Your radios are designed to give you maximum range under optimum conditions.



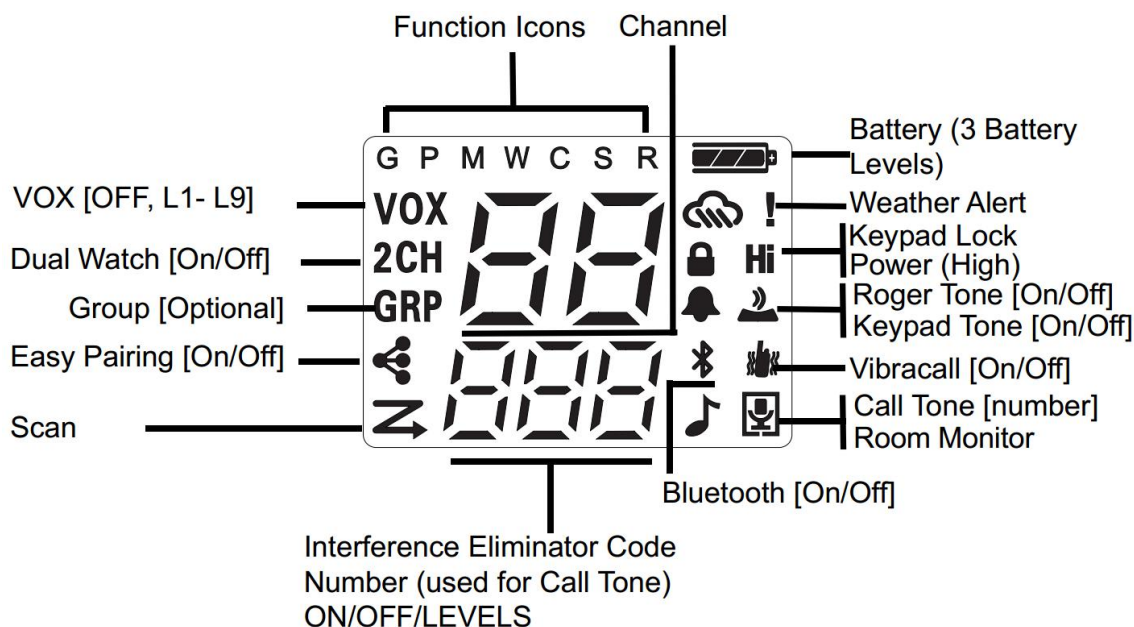
Optimum Conditions are:

- Over water
- Open rural areas without obstructions
- Flat areas where you can see the other person

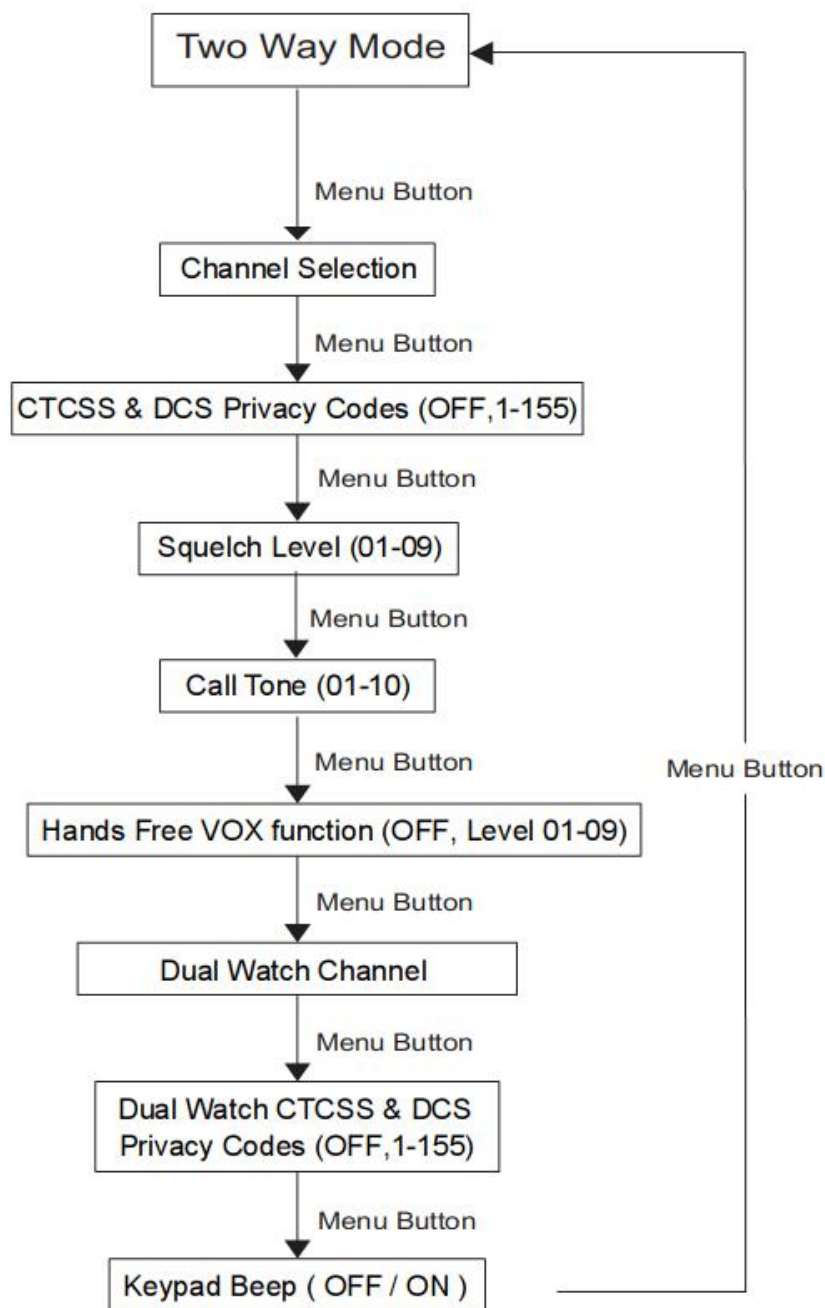
To ensure you get maximum range:

- Be sure to use fresh or fully charged batteries - low batteries will cause low power conditions.
- Be sure to set your radio to use High power (**Screen display : HI**). - **For USA/Canada Version only**

DISPLAY SCREEN GUIDE



MENU OPTIONS



SPECIAL FUNCTIONS SHORTCUT OPERATION

LED Flashlight Function

Press  button to turn on or turn off the LED Flashlight.

Vibration Alert Function

Vibration alert function can notify you that your radio is receiving a message.

This is useful in noisy environments. The Vibrate Alert will be triggered when you received a call.

Press and hold  Button until  displays to turn on the vibration alert function.

The Vibrate Alert will be triggered when you received a call for 3 seconds.

It will then only be triggered again if there is no activity within 30 seconds after the previous call.

To turn off the vibration alert function, press and hold  until  is no longer displayed.

Emergency Alert Mode

Press  Button to sound and transmit the SOS Siren to other radios.

Press **PTT** button to Turn Off the SOS Siren.

WARNING: The SOS Siren is to be used only in the event of an emergency. We are not responsible if there is no response to the SOS Siren.

Roger Beep

You can set your radio to transmit a unique tone when you finish transmitting.

It is like saying "Roger" or "Over" to let others know you are finished talking.

Press and hold  Button until  displays to turn on the Roger Beep function.

To turn off the Roger Beep function, press and hold  Button until  is no longer displayed.

Push-to-Talk Time-out Timer

To prevent accidental transmissions and save battery life, the radio emits a continuous warning tone and stops transmitting if you press the PTT button for 60 seconds continuously.

Automatic Power Save

For better battery life, your radio is designed to switch to Power Save mode when there has been no transmissions after 3 seconds. The radio can receive transmissions in this mode.

Keypad Lock Function

To avoid accidentally changing your radio settings, you can lock the keypad of your radio:

Press and hold  Button until  displays.

To unlock the radio, press and hold  until is  no longer displayed

Monitor Function

You can use the Monitor function to listen to weak signals that you cannot hear during normal operation.

Pressing and holding  button for 3 seconds to enter Monitor mode and listen for weak signals on the current channel. You can also listen to the volume level of the radio when you are not receiving. This allows you to adjust the volume, if necessary.

Scan Function

Channel Scan Mode Enables your radio to scan for active channels.



Press  button to turn on the Channel Scan Function.
When activity channel is detected, your radio lands (stays) on that channel (for 2 seconds).

To transmit on that channel, press the **PTT** button.

When activity on the landed channel ends, your radio continues scanning other channels.



To stop scanning, Press  Button to exit Scan.

Transmitting Call Tones

To transmit your call tone to other radios, please set radios to the same

channel and same CTCSS/DCS Code and then Press  Button.

Press and hold  Button can switch to Setting Call Tones menu.

MODE button functions:

(1) Room Monitor function

Room Monitor enables your radio to detect voice/noises and transmit back to the listening radio without pushing the PTT button.
The monitoring radio is not able to receive any transmissions in this mode.

Press  button to turn on or turn off the Room Monitor function.



 will display in screen when your turn on Room monitor function.

(2) NOAA Weather Receiver Function **(For USA/Canada Version only)**

Your radio can tune in to broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) Weather Radio and Environment and Climate Change Canada (ECCC) Weather Radio. You can listen to a weather channel (see "Weather Channels and Frequencies" table for details) or set your radio to alert you to emergency weather broadcasts that interrupt routine broadcasts. When you listen to a weather channel, you cannot use your radio in scan mode or for two-way communications.

Both NOAA and ECCC have transmitters located throughout the United States and Canada, respectively. These transmitters broadcast watches, forecasts, and other information 24 hours a day.

Note: NOAA weather radio stations are assigned to cover specific areas and service may be limited. Please check with your local weather office for frequency and details or visit www.weather.gov/nwr in the US to view the appropriate transmitter for your area. The use of the NOAA logo does not provide an endorsement or implied endorsement by the National Weather Service of NOAA, nor does the use of the Weather Radio logo provide an endorsement or implied endorsement by Environment and Climate Change Canada (ECCC).

Entering Weather Mode

1. From two-way mode, press and hold  button for 3 seconds to enter weather mode .

2. Screen display .

Setting the Weather Channel

Your radio receives weather frequencies:

1. In weather mode, press **MENU** button until weather channel number flashes.
2. Press  to select the appropriate channel with good reception in your area.
3. Press the **PTT** button to set and exit Menu or **MENU** button to continue set up weather alert.

Setting the Weather Alert

Your radio can be set to respond to NOAA Weather Radio emergency messages. A special alarm tone sounds an alert and turns on the weather receiver to give you immediate weather and emergency information.

1. In weather mode press **MENU** button twice until  displays.
2. Press  to select On/Off.
3. Press the **PTT** button or **MENU** button to exit the weather menu set up.
4. Press **MODE** button to return to two-way mode.

If you activate Weather Alert and return to two-way mode  will display.

Note: When the weather channel is activated, either manually or after receiving an alert, and no buttons are pressed for 5 minutes, the weather mode will automatically revert back to two-way mode.

As with two-way radio reception, weather channel reception depends on how close you are to a transmitter and whether you are indoors or outdoors. Because weather channels are transmitted without codes, they may contain static or noise. Weather Alert will not function while actively transmitting or receiving in two-way mode.

Weather Channels and Frequencies

Weather Channel	Frequency	Weather Channel	Frequency
WX1	162.550 MHz	WX7	162.525 MHz
WX2	162.400 MHz	WX8	161.650 MHz
WX3	162.475 MHz	WX9	161.775 MHz
WX4	162.425 MHz	WX10	161.750 MHz
WX5	162.450 MHz	WX11	162.000 MHz
WX6	162.500 MHz		

TROUBLE SHOOTING

Troubles	Solution
No Power Supply The working time shorten, even the battery is fully charged.	1. The battery has been exhausted. Replace or recharge the battery 2. The battery is installed incorrectly. Remove the battery. Replace the battery
Not able to communicate with the radios of the same group.	1. Confirm if the CTCSS/DCS in the same frequency 2. Distance is out of the talk range
The voice of another group can be heard	Change all CTCSS/DCS of the group
Other radios can not receive the TX signals or receive signals in a volume.	1. Switch the volume knob to the highest level 2. The microphone may be damaged, send it to local dealer for check.
Noise is always heard	The distance is out of the range. Turn on the radio in nearer range and try again

LIST OF CTCSS/DCS CODES

50 Groups CTCSS CODE (Hz)

NO.	CODE	NO.	CODE	NO.	CODE	NO.	CODE
1	67.0	14	107.2	27	167.9	144	69.3
2	71.9	15	110.9	28	173.8	145	159.8
3	74.4	16	114.8	29	179.9	146	165.5
4	77.0	17	118.8	30	186.2	147	171.3
5	79.7	18	123.0	31	192.8	148	177.3
6	82.5	19	127.3	32	203.5	149	183.5
7	85.4	20	131.8	33	210.7	150	189.9
8	88.5	21	136.5	34	218.1	151	196.6
9	91.5	22	141.3	35	225.7	152	199.5
10	94.8	23	146.2	36	233.6	153	206.5
11	97.4	24	151.4	37	241.8	154	229.1
12	100.0	25	156.7	38	250.3	155	254.1
13	103.5	26	162.2				

105 Groups DCS CODE

NO.	CODE	NO.	CODE	NO.	CODE	NO.	CODE	NO.	CODE
39	023	60	143	81	315	102	532	123	053
40	025	61	152	82	331	103	546	124	122
41	026	62	155	83	343	104	565	125	145
42	031	63	156	84	346	105	606	126	212
43	032	64	162	85	351	106	612	127	225
44	043	65	165	86	364	107	624	128	246
45	047	66	172	87	365	108	627	129	252
46	051	67	174	88	371	109	631	130	255
47	054	68	205	89	411	110	632	131	266
48	065	69	223	90	412	111	654	132	274
49	071	70	226	91	413	112	662	133	325
50	072	71	243	92	423	113	664	134	332
51	073	72	244	93	431	114	703	135	356
52	074	73	245	94	432	115	712	136	446
53	114	74	251	95	445	116	723	137	452
54	115	75	261	96	464	117	731	138	454
55	116	76	263	97	465	118	732	139	455
56	125	77	265	98	466	119	734	140	462
57	131	78	271	99	503	120	743	141	523
58	132	79	306	100	506	121	754	142	526
59	134	80	311	101	516	122	036	143	645

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. To comply with the corresponding requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services.

Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the local government radio management departments equipment authorization for this radio could violate the rules.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Information

- DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio, and the antenna gain shall not exceed the specified gain by the manufacturer declared.

- DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.

- During transmissions, your radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so.

- DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

- Portable Device, this transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between user and the device or its antenna shall be at least 2.5 cm. Highest Reported SAR 0.304W/Kg for Front of face, Highest Reported SAR 0.344W/Kg for Body worn.

- General population/uncontrolled Radio, this radio is designed for and classified as “General population/un-controlled Use” .

ISED Statement

- English: 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. The digital apparatus complies with Canadian CAN ICES - 3 (B)/NMB - 3(B).

- French: 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.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

IC SAR Warning:

- English: The device has been tested and compliance with SAR limits, users can obtain Canadian information on RF exposure and compliance.

- French: L'appareil a été testé et respecte les limites du SAR. L'UESR a accès à l'information canadienne sur l'exposition aux RF et la conformité.