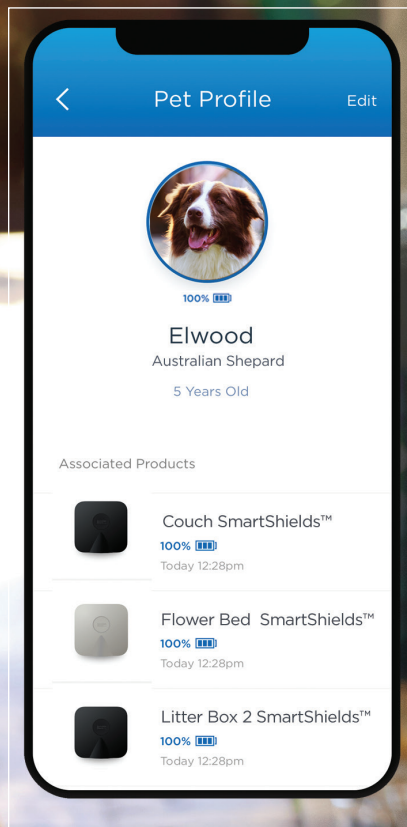




Boundary Plus Smart™ System



boundary  **plus** 

Owner's Manual and Operating Guide

Important Precautions

- Invisible Fence® Brand pet containment systems have contained over three million pets. However, there are some precautions you should take.
- Read and retain manuals: Read the entire Owner's Manual before using your new Invisible Fence Brand pet containment system.
- Adhere to all warnings and cautions contained in any Invisible Fence Brand manual.

⚠ WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION used without the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in harm to your pet.

NOTICE is used to address safe use practices not related to personal injury.

⚠ WARNING

- Replacing the battery backup with a battery not specifically approved by Invisible Fence® Brand may cause fire or explosion. Refer all service to your Invisible Fence Brand Dealer only.
- There is a risk of explosion if a battery is replaced by an incorrect type. Do not short circuit, mix old and new batteries, dispose of in fire or expose to water. When batteries are stored or disposed, they must be protected from shorting. Dispose of used batteries properly.
- Not every pet can be trained to avoid the established boundary. Sometimes even a properly trained pet may cross the boundary. Therefore, Invisible Fence, Inc., as well as Invisible Fence Distributors and Dealers, cannot guarantee the system will, in all cases, keep a customer's pet within the established boundary. Accordingly, if a customer has reason to believe that their pet may pose a danger to others, or harm itself, the customer should not rely solely upon the Invisible Fence Brand pet containment system to keep the pet from crossing the boundary.
- Do not install, connect, or remove your system during a lightning storm. If the storm is close enough for you to hear thunder, it is close enough to create hazardous surges.

CAUTION

Read and follow the important instructions on how to avoid pressure necrosis in your Invisible Fence® Brand Computer Collar® Unit manual. Proper fit of the Computer Collar Unit is important. A Computer Collar Unit worn for too long or made too tight on the pet's neck may cause skin damage. Ranging from redness to pressure ulcers; this condition is commonly known as bedsores.

The following tips will help keep your pet safe and comfortable.

- Avoid leaving the Computer Collar Unit on the pet for more than 12 hours per day.
- When possible, reposition the Computer Collar Unit on the pet's neck every 1 to 2 hours.
- Check the fit to prevent excessive pressure; follow the instructions in this manual.
- Never connect a leash to the Computer Collar Unit; it will cause excessive pressure on the contacts.
- When using a separate collar for a leash, don't put pressure on the Computer Collar Unit.
- Wash the pet's neck area and the contacts of the Computer Collar Unit weekly with a damp cloth.
- Examine the contact area daily for signs of a rash or a sore.
- If a rash or sore is found, discontinue use of the Computer Collar Unit until the skin is healed.
- If the condition persists beyond 48 hours, see your veterinarian.

To prevent an unintended correction:

- The Computer Collar Unit should not be on your pet when the system is tested.
- Remove the Computer Collar Unit before making any changes to your system.
- Before placing the Computer Collar Unit on your pet, test the Boundary Area and Width after any change.
- The use of any power source other than a Power Cap® Battery may cause a Computer Collar Unit to operate erratically or fail. The use of unnecessary force may damage the case and render the Power Cap Battery inoperable.
- Train your pet according to the instructions in the Invisible Fence Brand training manuals. Complete all steps before allowing your pet to run free. Do not become overly confident if your pet has become conditioned to the Invisible Fence Brand pet containment system sooner than expected.

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- Your Invisible Fence® Brand Dealer has professionally installed your pet containment system and ensured it is working properly. You will want to perform periodic maintenance checks to make sure the system is properly functioning for your pet's safe containment.
 - Check the Invisible Fence Brand transmitter periodically to make sure it is operating properly. To do this, simply bring the Computer Collar® Unit to the edge of the containment field to verify function
 - The transmitter has visual and audible signals to warn of a system malfunction. The transmitter should be installed where such signals may be easily seen and heard. If the transmitter is installed by the customer in an enclosed box, or in a place not readily accessible to the customer, the customer will not benefit from the system's warning functions, for which Invisible Fence, Inc., as well as Invisible Fence Distributors and Dealers, assume no responsibility.
 - All Invisible Fence® Brand pet containment systems are designed for domesticated animal use only. Never attempt to use this product for any purpose not specifically described in this manual.

NOTICE

- Do not attempt to service any Invisible Fence Brand equipment. Refer all service to your authorized Invisible Fence Brand Dealer. Only your authorized Invisible Fence Brand Dealer should make adjustments to your pet containment system.
- Use care when mowing, aerating, or trimming your lawn so as not to cut the loop wire.
- If you have any questions about any aspect of your Invisible Fence Brand pet containment system, call your Invisible Fence Brand Dealer immediately.

Congratulations on your purchase of the world’s premier pet containment solution, the Invisible Fence® Brand. When professionally installed, the Invisible Fence Brand pet containment system is backed with a one-year, money-back performance guarantee. The support of your Invisible Fence Brand Dealer gives you peace of mind that your pet remains safe at home. Refer to the back of your sales contract for complete details.

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How the System Works

The Boundary Plus Smart™ System is designed to contain your pet within areas you choose, or teach your pet to avoid specific areas inside or outside such as flower beds, pools or litter boxes. The transmitter produces a signal either wirelessly or by traveling along a signal field wire and back to the transmitter to produce an Invisible Boundary® barrier.

When your pet approaches the established boundary, the Computer Collar® Unit generates a tone and correction to remind your pet of the boundary. With training and praise, your pet will quickly learn to stay within or avoid the established boundary.



Boundary Plus Smart™ Components

1. Computer Collar® Unit
2. SmartShields™ Unit
3. Control Panel
4. Control Panel WiFi antenna

DEFINITION: A correction is a training term used to describe an action taken to discourage unwanted pet behavior. The Computer Collar Unit applies a correction when your pet crosses the boundary of an Invisible Fence® Brand electronic pet containment system. Corrections are used in combination with rewards to alter unwanted pet behavior.

Your Invisible Fence® Brand pet containment system will only work when:

- The adapter is connected to the transmitter and to a functional standard electric outlet, via an approved Lightning Protection Device. All Invisible Fence Brand pet containment systems must be grounded per the National Electric Code to be protected against lightning (for North American customers only).
- The transmitter is on, connected to the signal field wire, and producing a signal along the entire length of the wire.
- The signal field wire is intact, continuous, and the transmitter's Status Indicator Lights are indicating all is well.
- The Computer Collar Unit is correctly fitted and worn by your pet. The Computer Collar Unit must be adjusted so that both of the correction posts touch your pet's skin.
- The Power Cap® Battery in the Computer Collar Unit is charged and correctly installed.

About Thunder and Electrical Storms: Even though your Invisible Fence Brand pet containment system is equipped with a Lightning Protection Device (for North American customers only), it is still possible that it may be damaged during a thunderstorm, or when an electrical storm is in the area. After a storm has ended, check the signal field width.

Control Panel Overview



- 1 Invisible Fence® Brand Logo
- 2 Wire (Loop) Status Indicator
- 3 Wifi Status Indicator
- 4 Pet Out of Boundary Indicator
- 5 TX Multi-Purpose Physical Button

Audible Alarm: Audible Alarm: There is an audible alarm for certain alert conditions (see chart below). Pressing the TX Multi-Purpose button will silence the alarm.

Transmitter Status Indicators

Control Panel Logo Light Indicator			
Color	Pattern	Message	Action Needed
White	Solid	Transmitter is connected to AC Power	None
White	Blinking	Transmitter is Running on Battery Back-Up	Check power connection for AC power
None	None	Transmitter Does Not Have Power	<ul style="list-style-type: none">• Ensure pet(s) are inside• Check power connection• If power connection is good, Call Invisible Fence Brand Dealer

Control Panel Wire Loop Light Indicator			
Color	Pattern	Message	Action Needed
None	None	Fence is functioning normally	None
Red	Solid	Wire Break Detected Alarm will also sound	<ul style="list-style-type: none">• Ensure pet(s) are inside• Mute Alarm by pressing button• Call Invisible Fence Brand Dealer

Control Panel Overview

Control Panel WiFi Light Indicator



Color	Pattern	Message	Action Needed
Blue	Solid	WiFi is connected	None
Red	Solid	WiFi is not connected Fence is not operating	Check troubleshooting for how to reset Wi-Fi If trouble shooting does not work, call IFB Dealer

Control Panel Dog Light Indicator



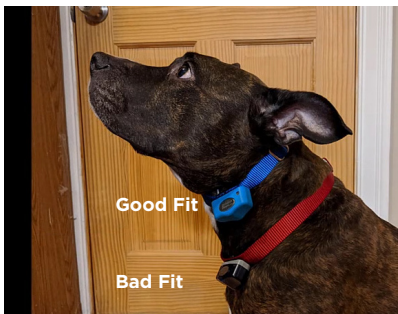
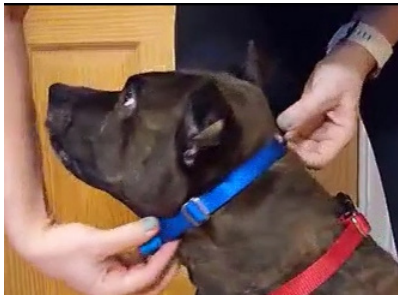
Color	Pattern	Message	Action Needed
None	None	Pet is in boundary	None
Red	Solid	Pet is Outside of Boundary Alarm will also sound	Mute Alarm by pressing button Ensure pet is safe If it happens multiple times, contact Invisible Fence® Brand dealer



Computer Collar® Units



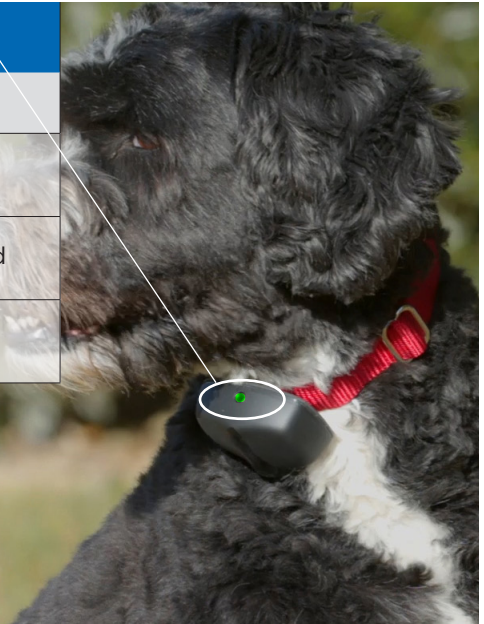
Collar Fit



To work properly, the correction posts on the Computer Collar Unit must touch your pet's skin.

1. Position the collar strap high on your pet's neck with the Computer Collar Unit under your pet's jaw.
2. To avoid having a collar that is too tight on a thick-haired pet, thin some hair away in order to allow the correction posts to make contact with the skin. Do not shave the pet's neck.
3. Tighten the collar strap of the Computer Collar Unit appropriately. Adjust the collar strap so it is snug enough to slide only one finger between a correction post and your pet's skin.
4. Adjust the fit of the Computer Collar Unit as necessary as your pet's coat, weight, and age change. Your pet's coat may change from season to season.
5. Allow your pet to become accustomed to its new Computer Collar Unit. The collar must be removed each night during the first month of training. This ensures proper fit and avoids the possibility of skin irritation.
6. After training is complete, remove your pet's Computer Collar Unit each night if possible. This will help prevent irritation. However, if this is not possible, please check the tightness of the collar each time you feed your pet by removing the collar and then replacing it back on your pet.
7. The Computer Collar Unit is waterproof. If the nylon collar strap becomes wet, it is recommended that it be removed from your pet and be allowed to air dry before replacing the collar on your pet's neck.

Transmitter Status Indicators

Computer Collar Unit Status Light Indicator			
Color	Action	Meaning	
Green	Blinking 2x Every 30 Seconds	Battery is full charged	
Yellow	Blinking 2x Every 30 Seconds	Battery sufficiently charged	
Red	Blinking 2x Every 30 Seconds	Battery is running low	

Computer Collar® Unit Battery Charging

Changing Your Computer Collar Unit Battery

1. Use a coin to rotate rechargeable battery from locked to unlocked
2. Remove battery and place in battery charger for charging
3. Insert charged battery into battery cavity in unlocked position
4. Use coin to rotate battery into locked position
5. Once battery is inserted properly, collar will
 - a. Vibrate
 - b. Show Solid Amber Light
 - c. Blink Color 5 Times



How do they work?

The Boundary Plus Smart™ Computer Collar® Unit is designed for battery “Hot Swapping” to eliminate any downtime due to charging. One battery module will be powering the Computer Collar Unit while a second module can be charging. You will be provided with one battery charger per two Computer Collar Units and two battery modules per collar unit. Battery life will vary depending on the activity of your pet. The battery modules, when used as a pair, will provide approximately five years of service before replacement is required. Overall time between charge and battery lifetime is dependent on operation environment. Contact your local Invisible Fence® Brand dealership for replacement battery modules.

DO NOT replace or modify the cell or safety circuits in this module. The use of any unauthorized power sources or modified Battery Modules may damage the Collar Unit beyond repair. The Battery Charger is a 2-slot wall charger that is specifically designed for charging the Battery Module. One charger is required for every two pets.

Charging the Battery Module

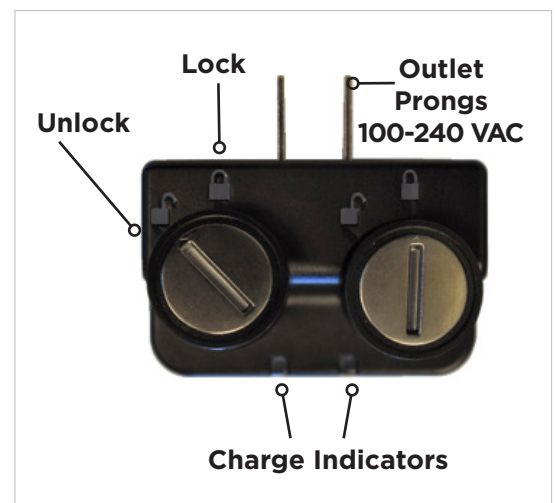
It is important to charge the Battery Modules fully before first use.

1. Insert the Battery Charger into a standard 120-volt outlet.
2. Place battery module into the charger with the slot pointing to the unlock position as shown below.
3. Press down and rotate to the locked position. The charge indicator for that slot will light.

Light indicators

The Charge Indicators will display the charge status when a battery module is in the charger and the charger is plugged into a working outlet.

Indicator	Status
Red	Charge in Progress
Green	Charging Complete



SmartShields™ Plus Units

Caution: To ensure your pet does not receive an unintended correction, make sure your pet is not wearing the Computer Collar® Unit when turning ON or adjusting the SmartShields™ Plus transmitter.

Charge the SmartShields™ Plus Transmitter

1. Connect the charger connector to the charging jack with the keyed side facing down
2. Plug the AC adaptor into a standard 120 volt wall outlet
3. Allow the unit to charge a full 4 hours before initial use and after prolonged storage. A charge time of 2 hours is required after the initial charge for normal charging. Charge indicator light will be yellow while charging
4. Charge indicator light will turn off once charge is complete
5. When charging is complete remove the charger connector
6. If storing unit, remove rechargeable battery prior to storage

Turning On and Off

1. Turn on by pressing and holding **RANGE UP (+)** button
2. Turn off by pressing and holding **RANGE DOWN (-)** button until signal field range displays 0.0

Adjust Signal Field Range

1. Determine the desired location and the signal field range required
Wireless: 1.5 ft. minimum radius up to 4.5 ft. maximum radius
2. With the unit **ON**, press and hold the **RANGE UP (+)** or the **RANGE DOWN (-)** buttons to increase or decrease the signal field range. The first indicator equals 1.5 ft. radius of signal field. Each additional segment represents approximately 6 inches radius of range

Verify Signal Field Range

1. Turn the SmartShields™ Plus transmitter **ON**
2. Holding the Computer Collar unit at the height of your pet's neck, start outside the range and move slowly towards the SmartShields Plus transmitter. Do not touch the correction posts at this time
3. The Computer Collar unit will beep as it approaches the outer range of the signal field width set in Step 2
4. The beeping will be accompanied by a correction



Periodic Maintenance Checks

System Device	How often	What to look for
Computer Collar® Unit	Daily	Check mobile app for battery status or Check Battery Status light on top of unit
Signal Field	Monthly and after a thunderstorm	Check mobile app for weak wire Verify signal field wire is active for whole property

Monthly Signal Field Test

You should always be aware of your system's signal field. Check the signal field from only one place on the signal field loop wire. Always check the signal field from the same place. Take the Computer Collar Unit off your pet to measure the signal field.

1. Hold the Boundary Plus Smart™ Computer Collar® Unit so it is parallel to the signal field wire.
2. Hold the collar so it is about the same height and at the same angle as it will be when the pet is wearing it.
3. Walk slowly toward the signal field wire. The Computer Collar Unit will activate when you reach the buried signal field wire. Do NOT touch the correction posts at this time!
4. Move back into the safe area, raise the Computer Collar Unit to twice the height of your pet and repeat Step 3. The Computer Collar Unit will activate when you reach the buried signal field wire.

If the Computer Collar Unit does not sound a warning tone where the signal is supposed to be, immediately call your Invisible Fence® Brand Dealer for service. Use a leash (lead) or other means to contain your pet until all necessary service has been completed.



Troubleshooting - System Issues

Symptom	Possible Cause	Action
Pet is getting out.	<ul style="list-style-type: none"> Battery needs to be charged Computer Collar® Unit is not fit properly Wire break Control panel does not have power Pet needs additional training 	<ul style="list-style-type: none"> Replace with fully charged battery Properly fit collar Check mobile app or control panel for wire break indicator Check power on control panel Contact local Invisible Fence® Dealer for additional pet training
Pet will not enter the yard.	<ul style="list-style-type: none"> Pet needs additional training 	<ul style="list-style-type: none"> Contact your Invisible Fence Brand Dealer for additional pet training.
Weak Wire Notification	<ul style="list-style-type: none"> Signal wire has partial break Wire break has been fixed within 6 hours 	<ul style="list-style-type: none"> Contact local Invisible Fence Dealer for system check
Wire Break Notification (Mobile App or Control Panel)	<ul style="list-style-type: none"> Wire break 	<ul style="list-style-type: none"> Ensure pet is inside Mute alarm Contact local Invisible Fence Dealer for service
Control Panel is Running on Battery Back-Up	<ul style="list-style-type: none"> Control Panel is unplugged Power to outlet is not working Adapter is faulty 	<ul style="list-style-type: none"> Ensure unit is plugged in Ensure GFCI is not tripped Contact local Invisible Fence Dealer for service
No Wi-Fi Connection	<ul style="list-style-type: none"> New router or new router password Loss of internet in home Router is too far from Control Panel Wi-Fi Module in Control Panel is damaged 	<ul style="list-style-type: none"> Confirm home internet is working Follow process for resetting Wi-Fi module Contact local Invisible Fence® Dealer for service
Not Receiving Notifications	<ul style="list-style-type: none"> Wi-Fi is not working (see above) Notifications are disabled Computer Collar® Unit or other Devices are out of RF range from Control Panel 	<ul style="list-style-type: none"> Follow actions above Check notification section and confirm notifications are enabled Contact local Invisible Fence® Dealer for system check

Troubleshooting - Resetting WiFi

1. Go to Control Panel with Mobile App Open on Phone
2. Confirm Wi-Fi light on Control Panel is Solid Red
3. Start with Wi-Fi Soft Reset
 - a. Press and hold middle button for 5 seconds
 - b. Wi-Fi LED should change to Blinking Purple
 - c. Once button is released Wi-Fi LED will change to Blinking Blue while attempting to connect to network
 - d. Wi-Fi LED will change to Solid Blue once connected
 - e. If Wi-Fi LED change to solid red
4. Move to Wi-Fi Hard Reset
 - a. Press and hold middle button for 15 seconds
 - b. Wi-Fi LED should change to Blinking Purple and then Fast Blinking Purple to indicate it is now in Provisioning Mode.
 - c. Once button is released Wi-Fi LED will change to Alternating Red and Blue. Control Panel is now in Provisioning Mode.
 - d. Follow instructions within Mobile App to reset Wi-Fi
 - e. Wi-Fi LED will change to Solid Blue once connected
 - f. If Wi-Fi LED change to solid red
5. If Wi-Fi is still not connected, contact local Invisible Fence® Brand dealer for service





Battery Disposal

Separate collection of spent batteries is required in many regions; check the regulations in your area before discarding spent batteries. The Computer Collar® Unit operates on one (1) Lithium (Li-Ion Alium) battery with a 3 Volt, 150 mAh capacity. Replace only with equivalent Power Cap® Battery that can be obtained from your Invisible Fence® Brand Dealer. The Transmitter operates on one (1) Li-Ion Panasonic NCR18500A battery.

Computer Collar® Unit: Please see your manual for instructions on how to remove the Power Cap® Battery for separate disposal.

Transmitter: At the end of product life of the Transmitter, please contact your Invisible Fence® Brand Dealer to receive instructions on proper disposal of the backup battery (if installed). Please do not dispose of the backup battery in household or municipal waste receptacle.

⚠ WARNING Replacing the battery backup with a battery not specifically approved by Invisible Fence® Brand, may cause fire or explosion. Refer all service to your Invisible Fence® Brand Dealer only.



Important Recycling Advice

Please respect the Waste Electrical and Electronic Equipment regulations in your country. This equipment must be recycled. If you no longer require this equipment, do not place it in the normal municipal waste system. Please return it to where it was purchased so it can be placed in our recycling system. If this is not possible, please contact your Invisible Fence® Brand Dealer.

Compliance

US and Canada

This device complies with Industry Canada license exempt RSS standard(s). This device complies with Part 15 of the FCC Rules. 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Cet appareil est conforme à la partie 15 des règles FCC. 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.

CAUTION: Modification or changes to this equipment not expressly approved by Radio Systems Corporation® may void the user's authority to operate the equipment.

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 specific installation. If interference does occur 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

If interference does occur 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 the Computer Collar® Unit.
- Connect the equipment to an outlet on a circuit different from that to which the Computer Collar® Unit is connected.
- Consult the dealer, or an experienced radio/TV technician for help.

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.

Australia

This device complies with the applicable EMC requirements specified by the ACMA (Australian Communications and Media Authority).

CE European Union

Radio Systems Corporation declares under its own responsibility, that the following product(s) is (are) in compliance with the essential requirements under article 3 of the RED (2014/53/EU) and the RoHS 2 Directive (EU) 2015/863. Unauthorised changes or modifications to the equipment that are not approved by Radio Systems Corporation may violate EU RED regulations, could void the user's authority to operate the equipment, and will void the warranty. Hereby, Radio Systems Corporation, declares that this part is in compliance with the essential requirements and other relevant provisions.



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For a list of patents protecting this product,
please visit: www.radiosystemscorporation.com/patents