RE4 Repeater

NextCentury Connect™ Wireless Repeater

Operation and Installation Guide



1| Product Overview

The NextCentury RE4 Repeater is a powerful wireless device that extends and amplifies network coverage.

Dual antennas and smart frequency hopping help mitigate interference in even the most challenging environments.

With the longest range in its class and simple plug-n-play setup, the RE4 makes property installation quick and easy.

NextCentury Connect™ Wireless

Utilizing NextCentury Wireless Connect™ technology, RE4 Repeaters create a multi-hop network supporting properties with hundreds or even thousands of meters.

The NextCentury Connect™ technology includes a multi-stage encryption engine for security and data privacy.

Intelligent network balancing allows for reliable communication and a high resolution of meter usage data.

2| Technical Specifications

2.1 – Certifications

- **FCC:** 2AB8I-RE4 **IC:** 20949-RE4

2.2 – Wireless

- Two-way NextCentury RF Connect™ (902-928 MHz Unlicensed Band)
- BLE – Direct Connect using your iOS or Android mobile device

2.5 – Power Requirements

- 120/240 VAC outlet required
- 15 VDC 1A power supply (included)

2.6 – Dimensions:

- 4.7" x 3.1" x 1.1" | 120mm x 80mm x 28mm

2.7 – Operation Environment:

- -4°F to 140°F | -20°C to 60°C)
- Indoor (or NEMA rated enclosure required)

3| Device Compatibility

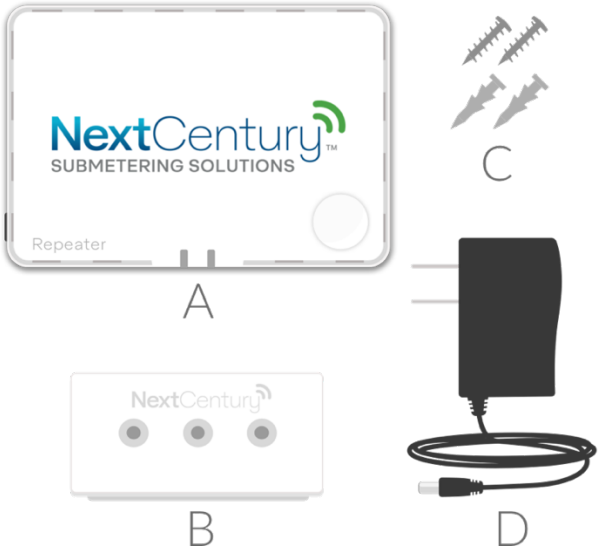
3.1 – Transceiver Compatibility

- TR4 Transceiver
- TR4-X Outdoor Transceiver
- TR201 Transceiver
- RR4-TR Remote Reader
- RR301-TR Remote Reader

3.2 – Network Device Compatibility

- GW4 Gateway (5G/LTE)
- GW301 Gateway
- GW201 Gateway (LCD)
- GW4-Lite Gateway
- GW301-Lite Gateway
- RE201 Repeater

4| Package Contents



A – RE4 Repeater

B - Mounting Plate

C – Mounting Hardware

D – Power Supply

sales@nextcenturymeters.com
www.nextcenturymeters.com

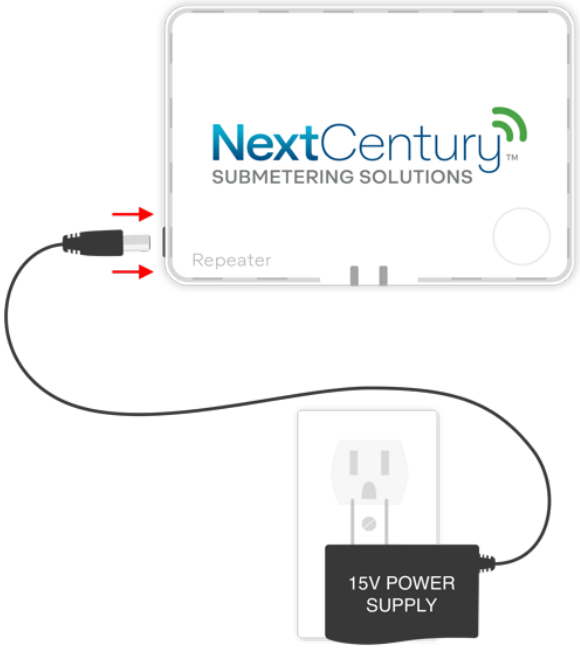
5| In-Field Installation

5.1 –Mounting Plate

- Peel off the adhesive backing and attach the mounting plate to the wall surface
- Secure using the included screws

5.2 – Power Supply

- Plug in the included 15v power supply to the Repeater and a standard 120v receptacle



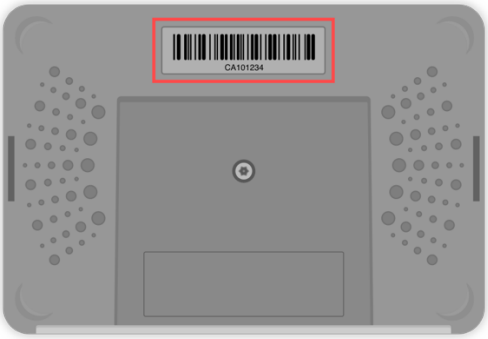
5.3 – Power Requirements

- Use of intermittent power sources such as timed lighting circuits is not recommended.
- GFCI outlets can trip when near radio devices—install the RE4 at least 3' from GFCI outlets.

6| Programming & Verification

6.1 – Serial Number

Scan the barcode using the NCSS Mobile App or using a barcode scanner with the NextCentury website.



The barcode, located on the back of the Repeater.

6.2 – Verify Communication

- The Test Connect button can be pressed to verify communication with the Gateway.
- Two green blinks indicate that the Repeater has established two-way communication.



The Test Connect button and RF indicator LED.

7| Repeater Network Layout

7.1 – Radio Range

The maximum distance between NextCentury wireless devices will vary depending on the building material, grade, and other obstructions present on the property.

At least one Repeater for every 70 units is recommended (typical apartment building construction).

7.2 – Property Network Coverage

All NextCentury wireless devices provide immediately feedback of connectivity with the Test Connect feature. Extending outward from the Gateway, Repeaters can be added and verified.

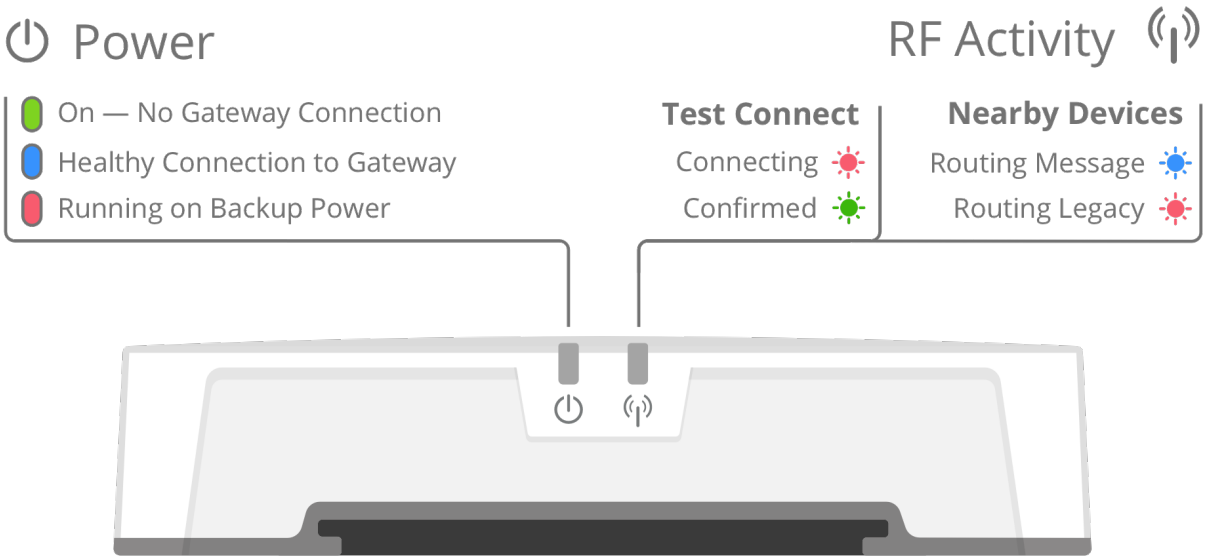
- Press the Test Connect button of the device while in the location where the Repeater will be installed
- Two green blinks of the RF LED indicate it is within range
- In areas of the property where this communication confirmation is not seen, Repeaters should be added or moved.

7.3 – Selecting Locations

Where possible, select installation locations:

- Away from immediate obstructions such as appliances, metal doors, and other electronic equipment
- Not directly mounted on metal supports, beams, or decking
- Mounted as high as possible within the location

8| LED Indicators



9| Television and Radio Interference

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.

10| FCC Part 15 & Industry Canada Compliance

This device complies with part 15 of the FCC Rules and 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.

This portable equipment with its antenna complies with FCC's and IC's RF radiation exposure limits set forth for an uncontrolled environment. Users are advised to maintain a separation distance of 20cm to comply with FCC and IC RF exposure limits.

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.

10| Warranty

10.1 – Scope of Warranty

NextCentury warrants that all communication equipment manufactured by NextCentury will be free from defects in materials and workmanship under normal use and in accordance with NextCentury's documented installation and operating procedures for a period of three (3) years from the date of manufacture.

Products not manufactured by NextCentury, including without limitation, accessories, attachments, or batteries used in conjunction with NextCentury equipment are only warranted, if at all, by the original manufacturer. NextCentury's warranties do not include replacement of batteries used to power NextCentury products.

10.2 – Limits of Liability

This warranty only applies to Read Management System components produced by NextCentury and does not cover any products which have been damaged by abuse, negligence, vandalism, acts of God, excessive operating conditions, normal wear and tear, unauthorized attachments or modifications, or other actions or events beyond NextCentury's reasonable control. This warranty will be nullified and voided if products are placed in non-recommended installation application/fashion, or are converted, altered, or treated by other than NextCentury recommended procedures and instructions, or are read by equipment not approved by NextCentury.

NextCentury's sole liability and customer's exclusive remedy under this warranty are expressly limited to repair or replacement of the product at NextCentury's option, and is conditioned upon the customer returning the product(s) to the location designated by NextCentury within the warranty periods or limits stated herein, and pre-paying the freight costs both to and from specified location. In no event shall NextCentury be liable for costs or expenses associated with the removal or installation of products under this warranty.

NEXTCENTURY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE, OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES OF ANY KIND, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY, BREACH OF WARRANTIES, OR OTHERWISE, AND EVEN IF ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES. INCIDENTAL AND CONSEQUENTIAL

DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOST REVENUE, LOSS OF PROFITS, DATA, BUSINESS, OR GOODWILL. NEXTCENTURY'S LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY THE PURCHASER FOR THE DEFECTIVE PRODUCT. IN ADDITION, DAMAGES RESULTING FROM NEGLIGENCE ON THE PART OF THE PURCHASER OR OTHER THIRD PARTY, INCLUDING, BUT NOT LIMITED TO, THE CARE AND MAINTENANCE OF NEXTCENTURY PRODUCTS, OR DAMAGES RESULTING FROM NEGLIGENCE REGARDING PERIODIC TESTING OF THE PRODUCT'S PERFORMANCE, ARE NOT COVERED UNDER THIS GUARANTEE.

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY NEXTCENTURY MAY VOID THIS WARRANTY AND THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THE FOREGOING WARRANTY IS THE SOLE AND EXCLUSIVE REMEDY AVAILABLE TO THE PURCHASER AND IS IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, OR REMEDIES, WHETHER WRITTEN OR ORAL, EXPRESSED, OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, ALL OF WHICH NEXTCENTURY HEREBY EXPRESSLY DISCLAIMS.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Due to updated regulations and product improvements, NextCentury Submetering Systems, LLC reserves the right to change the product specifications without notice.

11| Additional Resources

For additional resources, please visit:

products.nextcenturymeters.com/re4

Product Support:

Phone: (844) 538.8203

Email: support@nextcenturymeters.com