

# RE4 Repeater

NextCentury Connect<sup>TM</sup> Wireless Network Repeater

## Operation and Installation Guide



### 1| Product Overview

The NextCentury RE4 Repeater is an easy to use, full featured device that receives signals from Transceivers and routes the data to the Gateway.

The Repeater increases coverage by amplifying and repeating signals in the network. The RE4 Repeater has the longest range in its class with LED light indicators allowing for immediate verification of signal delivery during setup and maintenance.

The RE4 is a drop-in replacement for the previous RE201 Repeater model and is compatible with all NextCentury radio devices.

### 2| Technical Specifications

#### 2.1 – Certifications

FCC: 2AB8I-RE4      IC: 20949-RE4

#### 2.2 – Wireless

- Two-way NextCentury RF Connect<sup>TM</sup>
- 902-928 MHz Unlicensed Band

#### 2.5 – Power Requirements

- 120/240 VAC power supply (included)

#### 2.6 – Dimensions:

- 5.7" x 4.6" x 1.7" (145mm x 117mm x 44mm)

#### 2.7 – Operation Environment:

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

### 3| Device Compatibility

The RE4 Repeater is compatible with all NextCentury end devices and Gateways. It is a drop-in replacement for the previous RE201 Repeater model.

#### 3.1 – Transceiver Compatibility

- TR201 Transceiver
- TR4 Transceiver
- RR301-TR Remote Reader (with Radio)
- RR4 Remote Reader

#### 3.2 – Gateway Compatibility

- GW201 LCD Gateway (Legacy)
- GW301 Cellular Gateway
- GW4 Cellular Gateway

### 4| Network Layout

The Repeater can be installed in any location within RF range and will automatically be integrated into the wireless network by the Gateway and other nearby Repeaters.

Where possible, select locations:

- Away from immediate obstructions
- Not directly mounted on metal beams or floor decking
- Mounted as high as possible

### 5| In-Field Installation

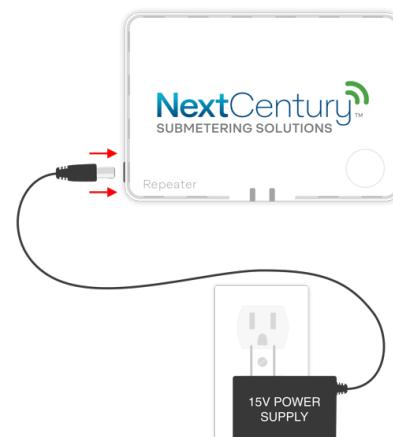
#### 5.1 –Mounting Plate

- Adhesive backing provided to aid in installation, use of screws recommended
- Attach the mounting plate to the wall surface using the included sheetrock anchors and screws

#### 5.2 – Power Supply

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

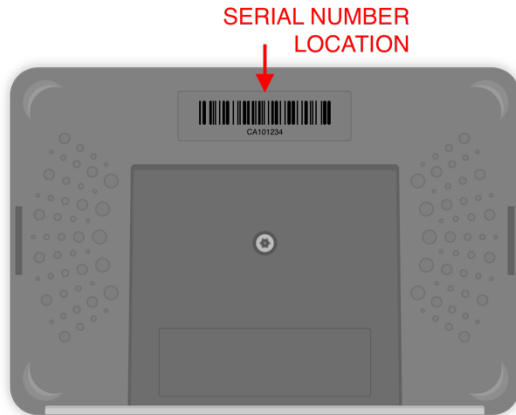
*Note: GFCI receptacles can nuisance trip when in close proximity to any RF transmitting device – use the full length of the power supply cord and install the RE4 at least 3' from a GFCI receptacle.*



## 6| Programming & Verification

### 6.1 – Serial Number

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



### 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.



## 10| 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.

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Company Name may void the user's authority to operate the equipment.

#### Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### As per 47 CFR §15.19

(All other devices shall bear the following statement in a conspicuous location on the device:

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.

#### As per 47 CFR §15.21

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

#### ISED Statement

*This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below 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.*

Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi).

#### 8.4 User Manual Notice for Licence-Exempt Radio Apparatus

User manuals for license-exempt radio apparatus shall contain the following text, or an equivalent notice that shall be displayed in a conspicuous location, either in the user manual or on the device, or both:

*This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSSs. 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.*

Cet appareil est conforme aux flux RSS exemptés de licence d'Innovation, Science et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:

- (1) Cet appareil ne doit pas provoquer d'interférence; et
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

#### ISED Radiation Exposure Statement

[English] Radiation Exposure Statement: This equipment complies with the IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

[French] Énoncé d'exposition aux rayonnements: Cet équipement est conforme aux limites d'exposition aux rayonnements ioniques RSS-102 Pour un environnement incontrôlé. Cet équipement doit être installé et

utilisé avec un Distance minimale de 20 cm entre le radiateur et votre corps.

## 10| Warranty/Disclaimer 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, meters, or batteries used in conjunction with NextCentury equipment are warranted, if at all, only by the original manufacturer. NextCentury's warranties do not include replacement of batteries used to power NextCentury products.

### 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 misconduct, negligence, vandalism, acts of God, excessive operating conditions, or unauthorized attachments or modifications. This warranty will be null and void 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 liability and customer's exclusive remedy under this warranty is 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. In addition, damages resulting from negligence on the part of the customer, 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, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH NEXTCENTURY HEREBY EXPRESSLY DISCLAIMS.

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](https://products.nextcenturymeters.com/re4)

**Product Support:**

Phone: (844) 538.8203

Email: [support@nextcenturymeters.com](mailto:support@nextcenturymeters.com)