

RE201 REPEATER

Operation and Installation Guide

1| Product Review

The NextCentury RE-201 (Repeater) is an easy to use, full-feature device that receives signals from the TR-201 Transceivers and routes the data to the GW-301 Gateway. The Repeater increases coverage by amplifying and repeating signals in the network. The RE-201 Repeater has the longest range in its class with easy to understand LED light indicators. Indicators allow for immediate verification of signal delivery during setup/maintenance.

1.1 - RE-201 Hardware



Figure 1 RE-201 Hardware

A Power Indicator B RF Signal Indicator C Test Button
D Mounting Plate E 12 Volt Power

1.2 - Packaging Contents

- 1x NextCentury RE-201 Repeater
- 1x NextCentury 12V 1A power supply
- 1x NextCentury mounting plate with 3M tape
- 1x Package of fasteners

2| Specifications

2.1 - Dimensions

- 102.7mm x 65.75mm x 22.7mm
- 4in x 2.6in x .9in

2.2 - Operating Environment

- -28C - 60C.
- -20F - 140F
- Up to 90% relative humidity (non-condensing)

2.3 - Certifications

- FCC: 2A B81-RE-40-214
- IC: 20949-RE40214

2.4 - Power Requirements

- 120/240 VAC wall transformer (included)

Note: If the Repeater is installed outside where it is directly exposed to the elements, the recommendation is to house it in an appropriate NEMA class plastic enclosure. (See [NextCentury NEMA Enclosures](#) document.)

3| Installation and Setup

In order to get the greatest RF coverage, it is highly recommended that the RE-201 Repeater be placed as high up on a property as possible.

1. Choose the location where the Repeater will be installed:
 - a. Ensure the power supply will reach an appropriate outlet.
 - b. Ensure the included fasteners will be sufficient for the area.
 - c. Ensure a GFCI outlet is at least 3 feet away.
2. Remove the Repeater and power supply from packaging.
3. Slide the mounting plate (Figure 1-D) off the back of the Repeater.
4. Secure the mounting plate to the wall. Two options are available:
 - a. Use the supplied screws and drywall anchors (Figure 2).
 - b. Peel off the backing of the 3M tape attached to the mounting plate and attach plate on a clean wall (Figure 2).
5. Slide the Repeater onto the mounting plate.
6. Plug the power supply into the Repeater.

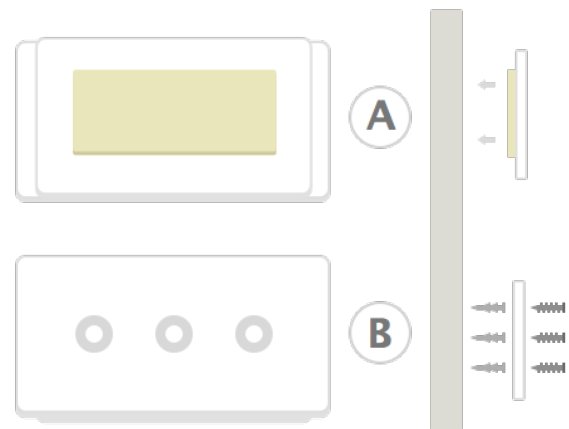


Figure 2 Mounting the Repeater

A Double-Sided 3M Tape B Mounting Screws and Anchors

4| Repeater LED Operation/Test Button

The RE-201 Repeater comes equipped with two LED lights and one test button on the front panel. The following tables (Figures 3 and 4) show what the different LED patterns indicate.

Power Indicator

LED Pattern	Description
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Solid Red	Loss of Power.
Solid Green	Power is supplied/Not Synced.
Solid Blue	Power is supplied/Synced with its GW-301 Gateway.

Figure 3 Power Status LED Table

RF Indicator

LED Pattern	Description
8x Fast Red Blinks	Sending a message searching for the GW-301 Gateway it should Sync with.
8x Fast Blue Blinks	Sending a message to the GW-301 Gateway that the device is Synced with.
2x Green Blinks	Message has been received successfully by its assigned GW-301 Gateway.
1x Fast Green Blink	Routing a message.

Figure 4 RF Indicator LED Table

4.1 - Power Indicator

- When the Repeater is plugged in, the Power Indicator (Figure 1-A) will be solid green indicating the device is powered on but not Synced with a GW-301 Gateway. A solid blue Power Indicator (Figure 1-A) signifies the device is powered on and has Synced with its GW-301 Gateway. The Power Indicator will turn Red if a loss of power occurs.

4.2 - RF Signal Indicator

- When the Repeater is powered on it will automatically send a message to the GW-301 Gateway. If the Repeater has not yet Synced with a GW-301 Gateway, the RF Signal Indicator (Figure 1-B) will blink red when sending messages. When the Repeater has successfully Synced with its GW-301 Gateway, the indicator light will blink blue when sending messages. If this does not happen automatically, press the Test button (Figure 1-C). This will manually send out a Sync broadcast.

4.3 - Test Button

- The Test button (Figure 1-C) is pressed to see if the Repeater transmission is being received by the Gateway. If the signal is being received, the RF Signal indicator (Figure 1-B) will blink green twice.

Note: When the RE-201 Repeater loses power, the Power Indicator light will turn red. The Repeater will automatically switch to power back-up. Power backup lasts long enough for the Repeater to initiate a message to its GW-301 Gateway stating a power loss.

5 | Television and Radio Interference

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.

6 | FCC Part 15 and 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 (this will be generated from our MPE report) 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.

Cet équipement portable avec son antenne se conforme aux limites d'exposition aux radiations RF du FCC et du IC, énoncées pour un environnement non contrôlé. Les utilisateurs sont conseillé de maintenir une distance de séparation de 20 cm (ceci sera généré depuis notre rapport de MPE) pour se conformer aux limites d'exposition RF du FCC et du IC.

7 | 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 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 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 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. If the RE-201 Repeater's outer casing is opened for any reason, the warranty is voided.

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 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.

8 | NextCentury Submetering System Contact Information

If there are any questions or concerns related to these guidelines, please contact NextCentury Submetering Systems Product Support:

- Phone: (844) 538.8203 opt. 2
- Email: support@nextcenturymeters.com