

User Manual MRC 3040



1. General Description

MRC 3040 is a wireless gateway that receives and transmits events. It operates within ISM band . It is intended for use as high-performance for robust frequency agile, half-duplex bi-directional RF links, and where stable and constant RF performance is required over the full operating range of the device.

The Gateway has three main modes of operation. It can function as:

- Terminal unit: the unit will receive the events and is normally connected to the computer/server that is used for processing the events.
- Receive/Transmit unit : the unit will receive the events from end user devices such as bracelet or pendant. It will communicate this event wirelessly to the the terminal unit or to an intermediate repeater unit.
- Repeater unit: It functions as the unit above but it will receive its event from another MRC 3040 gateway instead of end user devices.

2. Package Contents:

The package contains the following elements:

- Gateway MRC 3040
- Antenna
- 5V DC power supply
- RS232 cable

In addition to the above, a factory supplied programmer , Picket 3, and computer/laptop is provided separately on loan or purchase arrangement.

3. Assembly Instructions

- Connect the antenna
- Connect the power supply
- Connect the programmer to the unit
- Select the mode of operation i.e. how the unit will function i.e. Terminal, Receive/Transmit or Repeater
- Perform programming instructions as shown in section 4.

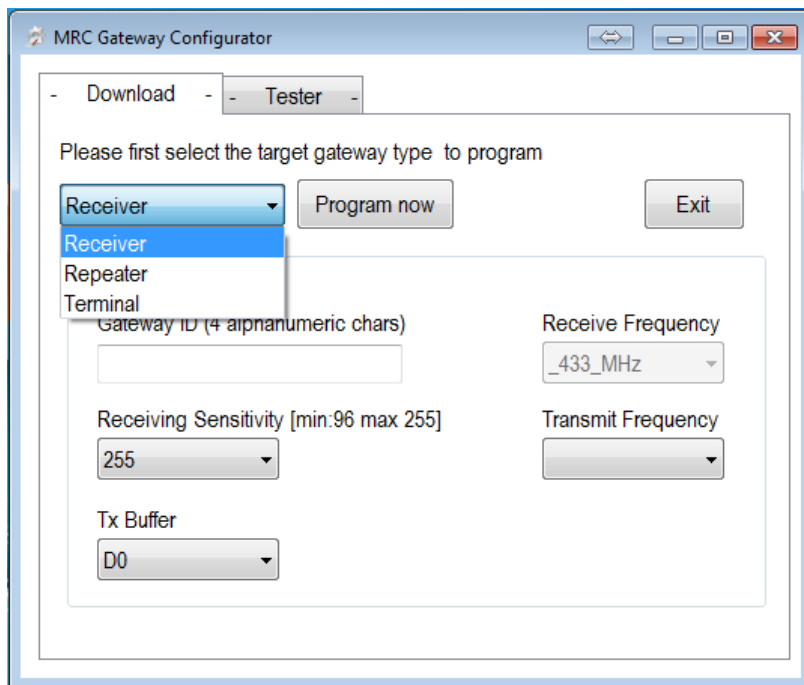
The unit should be ready for use after the above steps.

Installation of this product should only be done by professional installer trained by MRC Networks.

4. Programming and Setup Instructions

Run the installed software by double clicking on the icon “mrc 3040 gateway setup”

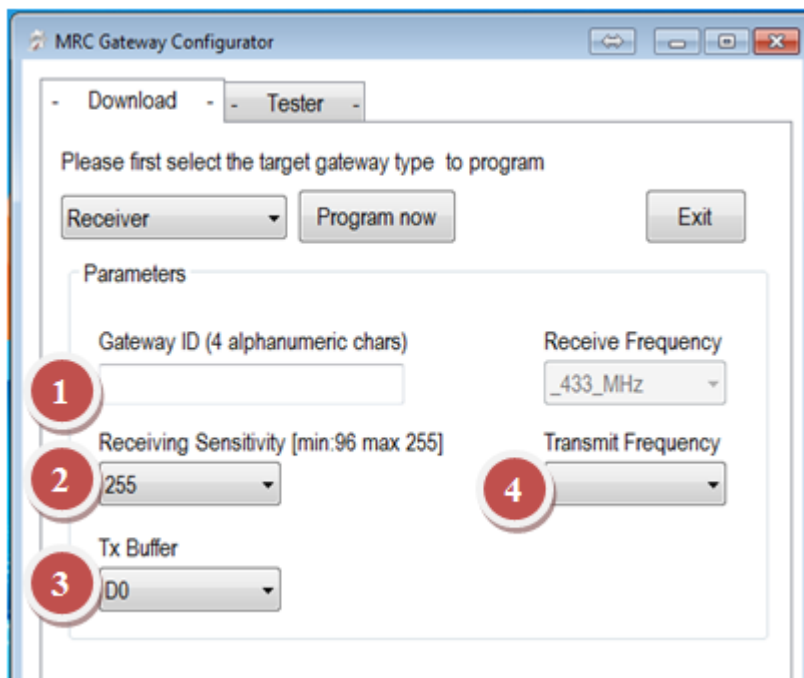
Select the mode of operation



Three modes of operation

- 1) Receiver/Transmitter
- 2) Repeater
- 3) Terminal

Receiver/Transmitter Setup:



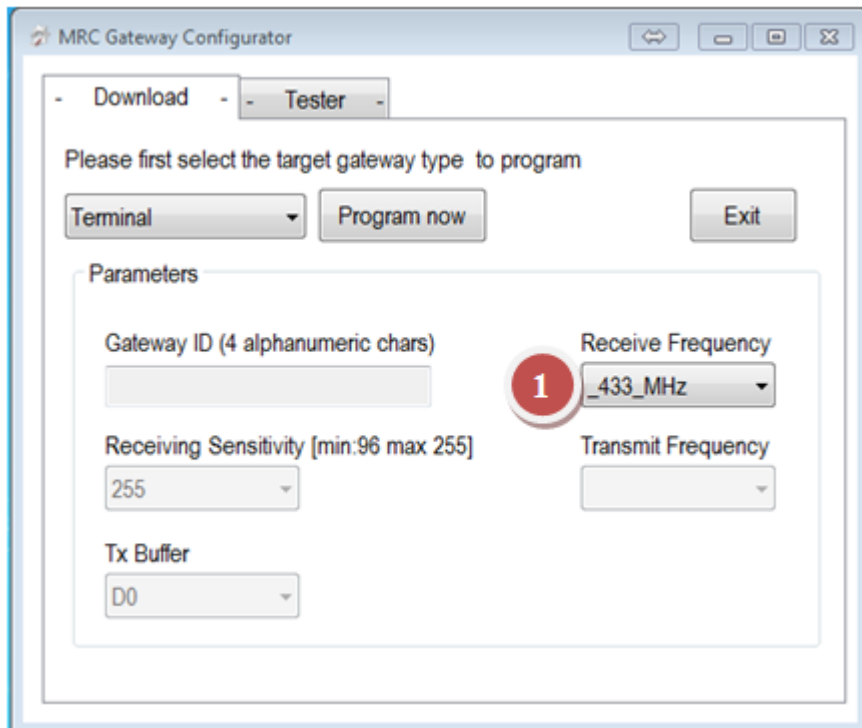
Receiver/Transmitter Setting

- 1) Insert unit identification : Each unit must have a unique 4 bytes alphanumeric identification
- 2) Set up the required receiver gain to control the coverage area of the gateway: value 96 minimum and value 255 maximum
- 3) set up buffering delay (if required): this will hold the data for x seconds. The value could be set to x=0 to 6. The default setup is 0.
- 4) Transmit frequency: set to 450 MHz.

Repeater setup :

Setup in the same way Receiver/Transmitter unit above.

Terminal setup:



Terminal's Setting

1) setup the receive frequency. The selected frequency must match the value selected from the "transmit frequency" of either Receiver/Transmitter unit or Repeater unit.

5. Regulatory Information:

FCC ID: 2AHE6-MRC3040

IC: 20485-MRC3040

Warning (FCC Part 15.21): Any changes or modifications of this product, not approved by manufacturer MRC Networks Inc will void the user's authority to operate the equipment.

(FCC Part 15.19) This device complies with Part 15 of the FCC Rules and ISSED Canada licence-exempt RSS standard(s), 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.

Cet appareil est conforme à la partie 15 des règlements de la FCC et du ISSED Canada licence-exempt RSS standard(s), l'opération est soumise aux deux conditions suivantes: (1) ce dispositif ne peut pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences qui peuvent causer un mauvais fonctionnement

(FCC part 15.105) 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 MRC Networks for help.