

WR900 repeater User Manual

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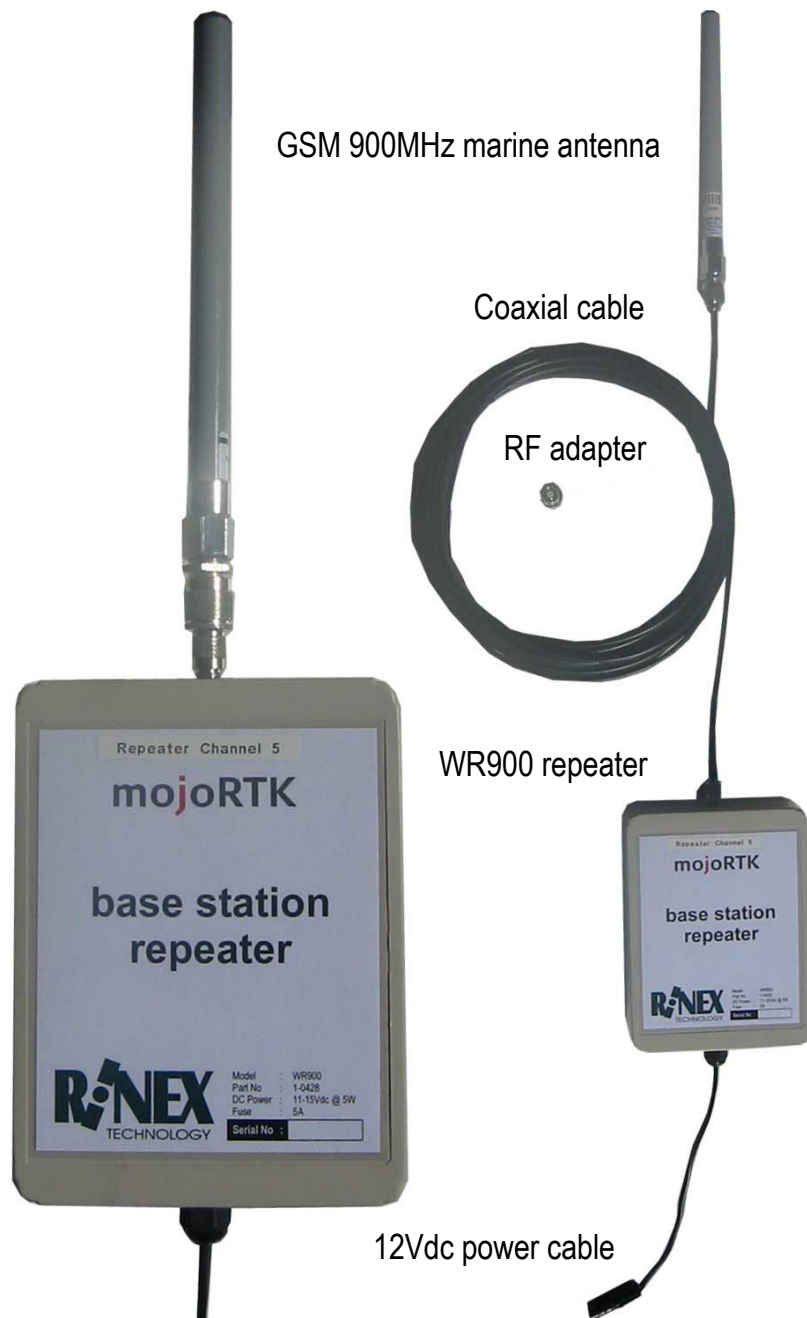


Figure 1. WR900 repeater components

1. INTRODUCTION

The WR900 repeater is designed for use with the mojoRTK system to extend the range of the console (tractor) from the base station. The mojoRTK and WR900 modems incorporate intelligent message addressing so that the console may receive messages from either the base station and/or repeater directly without conflict. This further enhances the flexibility of the mojoRTK with minimal user input.

2. INSTALLATION

The installation and use of the WR900 system is simple and straightforward. Furthermore the WR900 may be used with or without the coaxial extension cable. The first procedure is for setting the WR900 without the coaxial extension cable.

1. Screw the RF adapter to the GSM antenna and secure finger tight.
2. Screw the RF adapter to the WR900 and secure finger tight.
3. Mount the WR900 as required with the antenna mounted vertically at the top of the WR900. Bare in mind that the WR900 must be “in line of sight” with the mojoRTK base station and vehicle. Hence the WR900 should be mounted as high as practical to optimise reception from the base and the area that it will rebroadcast to the tractor.
4. Connect the 12Vdc power cable to a suitable 12V source. This may be a standard 12V vehicle battery or 12Vdc power supply. Check that the Red power led is activated.
5. The WR900 repeater is pre-programmed to Channel 5. It will be necessary to select channel 5 on both the mojoRTK base station and console.
6. The system is now operational.

These next procedures are when using the extension coaxial cable supplied with the WR900 kit.

1. Carefully uncoil the coaxial cable ensuring that kinks or knots are left in the cable.
2. Screw the N connector to the GSM antenna and secure finger tight.
3. Locate the antenna, mount vertically, to a suitable location as high as practical with the extension cable determining the overall height. Bare in mind that the antenna must be “in line of sight” with the mojoRTK base station and vehicle. Secure the antenna and cable as required.
4. Connect the 12Vdc power cable to a suitable 12V source. This may be a standard 12V vehicle battery or 12Vdc power supply. Check that the Red power led is activated.

5. The WR900 repeater is pre-programmed to Channel 5. It will be necessary to select channel 5 on both the mojoRTK base station and console.
6. The system is now operational.



It is recommended that all electrical wiring should be installed by a qualified auto-electrician. Incorrect wiring may damage the system and/ or vehicle if not installed correctly.

3. OPERATION

If the WR900 has been installed in accordance with the steps above the system is operational. Note, the user must confirm that the Red power LED is operational. The mojoRTK base station and MojoRTK console must be set to Channel 5.

The system is now operational and ready for use.