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Certification Exhibit

FCC ID: P2SMRXV3
IC: 4171B-MRXV3

FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-247

ACS Project Number: 16-0202

Manufacturer: Neptune Technology Group Inc.
Model: MRX920v3

Manual

5015 B.U. Bowman Drive Buford, GA 30518 USA Voice: 770-831-8048 Fax: 770-831-8598

NEPTUNE
TECHNOLOGY GROUP

MRX920™ User's Manual

NEPTUNE TECHNOLOGY GROUP

ARB® UTILITY MANAGEMENT SYSTEMS™

MRX920™ User's Manual

Propriety Rights Notice

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Other brands or product names are the trademarks or registered trademarks of their respective holders.

Regulatory Compliance

Federal Communication Commission (FCC) Statement:

FCC ID: P2SMRXV3

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. (US 47 CFR §15.19)

	Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. (US 47 CFR §15.21)

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 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.

RF Exposure

To comply with FCC/IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed on non-permanent objects and structures to provide a separation distance of at least 20 cm from all persons (US 47 CFR §2.1091), and must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada (IC) Notice:

IC: 4171B-MRXV3

This radio transmitter (4171B-MRXV3) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type 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.

Le présent émetteur radio (4171B-MRXV3) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Approved Antenna List

Type: Omni-Directional

Gain: 5dBi

Impedance: 50 ohms

Freq: 896-970 MHz

This device complies with Industry Canada licence-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

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.

RF Exposure

Cet équipement est conforme aux limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20 cm entre le radiateur et votre corps. Cet émetteur ne doit pas être co-localisées ou opérant en conjonction avec tout autre antenne ou transmetteur.

MRX920™ User's Manual
Literature No. UM MRX920 05.16
Part No. 12508-002

Neptune Technology Group Inc.
1600 Alabama Highway 229
Tallassee, AL 36078
Tel: (334) 283-6555
Fax: (334) 283-7293

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Chapter 1 Introduction

The MRX920™ is a compact, portable, mobile data collection device used for meter reading of Neptune radio frequency equipped water meters. It is used in conjunction with the MX900 software to conduct automatic meter reading. The data collected is then communicated to the utility's billing system.

Figure 1.1 MRX920 Receiver

The MRX920 provides the meter reading industry with many advantages over current meter reading methods:

- Suitable for any size utility
- Portable and easy to set up
- Significantly reduced man-hours needed to collect readings
- Maximized meter reading success rates
- Improved meter reading accuracy
- Access for meters that are "hard-to-read" or "dangerous-to-read"

- Increased safety and minimized liability exposure

The MRX920 is only to be used for in-vehicle purposes.

System Operations

Operators use the N_SIGHT™ host software to make route assignments for meter readers. The routes to be read are obtained from the utility billing system and placed on a USB flash drive or accessed by use of a Bluetooth connection for the meter readers. Routes are loaded into the MX900 host software. Each meter reader drives through the assigned routes to collect data broadcast by R900® meter interface units (MIUs). When complete, the meter readings can be uploaded to the N_SIGHT host software. The host software transfers the customer information to the billing computer to generate customer bills. See Figure 1.2.

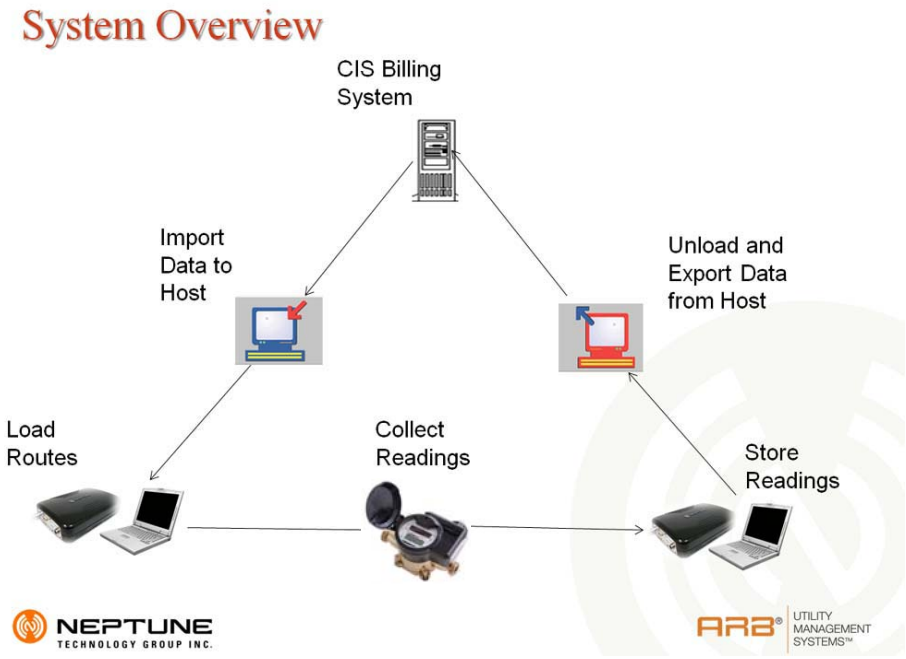

Figure 1.2 MRX920 Meter Reading Operations

About This Manual

The *MRX920™ User's Manual* describes the system and its features. This manual also provides procedures on how to set up the MRX920, use its MX900 software, exit, and close the unit. This manual contains the following chapters:

Chapter	Title	Description
2	Specifications	Provides a section that includes all product specifications, including dimensions, weight, and environmental conditions.
3	Getting Started with the MRX920	Describes hardware setup instructions, power and antenna connection, and instructions on how to turn on the laptop computer. The chapter also includes information on how to adjust system settings including keyboard backlighting, display intensity, and the beeper settings. It also provides steps for installing and updating the software.
4	Using the MRX920	Explains how the product works, procedures for reading meters, reviewing account information, reading missed meters, using the data logger, using the mapping feature, and exiting the software.
5	Troubleshooting	Provides diagnostics procedures for troubleshooting MRX920 problems.

Conventions Used in this Manual

This manual uses the following icons and typographical conventions to identify special information.

The Warning icon identifies actions that can cause injury to the user or permanently damage the product.

The Caution icon identifies important information that is critical to ensuring that data stored with the MRX920 is not lost.

The Note icon identifies information that clarifies a point within the text.

All small caps	Refers to keys. Examples: ENTER, ALT, TAB
All bold initial caps	Refers to field names, menus, buttons, and menu options. Example: **Device** field or **File** menu.
+ between keys	Refers to pressing the keys at the same time. Example: ALT+B

Product Support within North America

Neptune offers various methods to receive high-quality, responsive Customer Support. However, before contacting Neptune, it is important that you know the version number of the host software that your MRX920 uses. This information is useful to the Customer Support Specialist who addresses the call.

The version number of MX900 software is located on the title bar at the top of your window.

Contacting Customer Support

Within North America, Neptune Customer Support is available Monday through Friday, 7:00 AM to 5:00 PM Central Standard Time by telephone, email, or fax.

Phone

To contact Neptune Customer Support by phone, complete the following steps.

1 Call **(800) 647-4832**.

2 Select one of the following options.

- Press **1** if you have a Technical Support Personal Identification Number (PIN).
- Press **2** if you do not have a Technical Support PIN number.

3 Enter the six digit **PIN** number and press **#**.

4 Select one of the following options.

- Press **2** for Technical Support.
- Press **3** for maintenance contracts or renewals.
- Press **4** for Return Material Authorization (RMA) for Canadian Accounts.

You are directed to the appropriate team of Customer Support Specialists. The specialists are dedicated to you until the issue is resolved to your satisfaction. When you call, be prepared to give the following information.

- Your name and utility or company name.
- A description of what occurred and what you were doing at the time.
- A description of any actions taken to correct the issue.

Fax

To contact Neptune Customer Support by fax, send a description of your problem to (334) 283-7497. Please include on the fax cover sheet the best time of day for a Customer Support Specialist to contact you.

Email

To contact Customer Support by email, send your message with a description of the problem to hhsupp@neptunetg.com.

Notes:

Chapter 2 Specifications

This chapter provides product specifications, including dimensions, weight, and environmental conditions for the MRX920.

Physical Conditions

The following table lists the specifications and weight for the MX920 data collection device.

Table 2.1 Physical Specifications

Operating Temperature	-4F to +122F (-20C to +50C)
Storage Temperature	-40F to +185F (-40C to +85C)
Operating Humidity	5% to 95% non-condensing relative humidity
Weight	5 lbs

Dimensions and Weight of the MRX920

The MRX920 is light in weight and compact in size. Refer to Table 2.2 and Figure 2.1 for the dimensions and weight of this unit.

Table 2.2 Dimensions and Weight of the MRX920

Dimensions	Refer to Figure 2.1, measurement in inches.
Weight	Approximately 5.0 pounds (2.27 kg.)

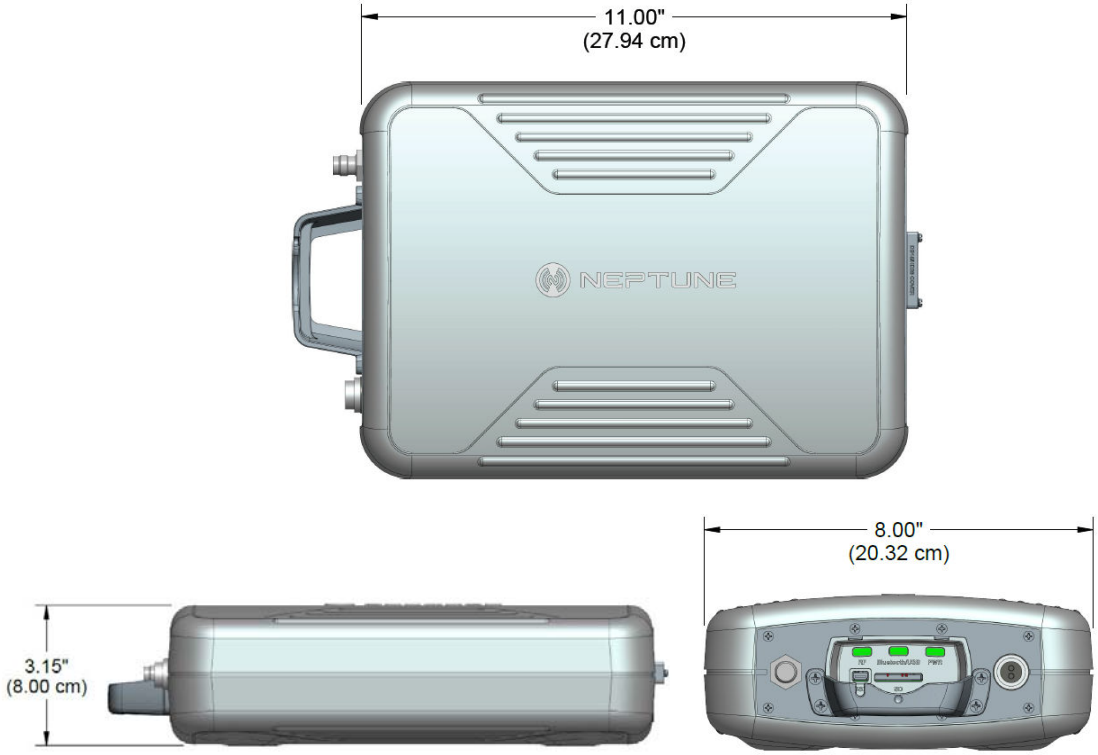

Figure 2.1 MRX920 Dimensions

Hardware Requirements

In order to adequately run the MX900 software, the laptop you use must meet the following minimum specifications:

Table 2.3 Hardware Requirements

	The MRX920 is a mobile data collector designed to be used in a vehicle designated for meter reading. It has been constructed to be used occasionally on a bumpy terrain found in rural meter reading routes. This needs to be considered when choosing a laptop to use with the MRX920. Should your utility operate the MRX920 in bumpy conditions or should you require a display rated for outdoor visibility, Neptune recommends considering a ruggedized laptop such as a Panasonic Toughbook® or equivalent. Neptune recommends one of the following: • Cigarette lighter adapter, required for laptop • Extended life battery
Processor	Intel Pentium Processor 1.7 GHz
Electrical Specification	The following to be considered: • Power consumption: < 1A • Power supply: 12V DC via vehicle power source adapter
Operating System	One of the following operating systems is required: • Windows 7 Professional (32 and 64 bit) • Windows 8 Professional (32 and 64 bit) • Windows 8.1 Professional (64 bit) • Windows 10 Professional (64 bit)
Processor	Intel Pentium processor 1.7 GHz
Memory	1 GB
Communication	The following to be considered: • Internal 802.11 b/g wireless LAN • Windows Wireless Connection Manager (if Bluetooth connection to the receiver is desired)
Display	12.1" XGA (800 x 600)
Keyboard	89-key
USB	USB 2.0

GPS	GPS receiver (mapping package is optional)
Physical Specification	Weight: 5 lbs

Chapter 3 Getting Started

This chapter provides an overview of the MRX920 along with software installation and hardware setup instructions including power and antenna connection. This chapter also includes information on how to adjust system settings including keyboard backlighting, display intensity, and the beeper settings.

MRX920/MX900 Overview

The MRX920 is a portable, mobile data collection device. It is used in conjunction with internal software, a laptop computer, and the MX900 software to conduct automatic meter reading. The data collected is then communicated to the utility's billing system.

The MRX920 features the following:

- Durable construction in a compact design for everyday use in any vehicle
- Optional map view with GPS capability
- Available Bluetooth connection to laptops
- Audible tone sounds to indicate successful readings
- Wireless loading and unloading
- Ability to read R900 radio transmitters
- Captured reads stored to the hard drive of the laptop

MRX920 Features

The MRX920 consists of a data collection receiver/processing unit and the user's laptop computer for use in meter reading. See Figure 3.1. The unit features meter reading software designed for simplified route collection.

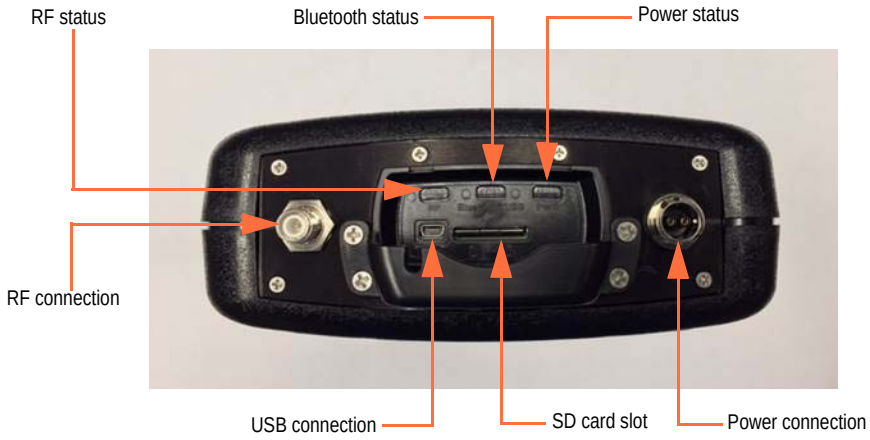

Figure 3.1 MRX920 Receiving/Processing Unit

Attempting to repair or modify the unit on your own can result in personal injury or damage to the unit and will void the warranty.

Bluetooth/USB Support

The MX900 software supports Bluetooth and USB connection to the current receiver as well as a serial port connection for the legacy model receiver.

Bluetooth Support

The latest generation MRX920 supports Bluetooth connectivity from the MRX920 unit to the laptop. Only one MRX920 at a time can be bonded to the MX900 host software/PC.

USB Connection

The MX900 software supports a virtual serial port over USB. Neptune's driver maps the USB device on the MRX920 to a virtual communications port. The MRX920 must be plugged into PC via USB cord in order to install USB driver.

During the installation, prompts provide a warning indicating that the driver is not Windows certified.

The Laptop

One of the available options when purchasing the MRX920 is to purchase the receiver by itself. This allows you to utilize an existing laptop hardware already installed in the utility vehicle. This section guides you through setting up the MRX920 with a third-party laptop. The laptop needs a car charger or power inverter in order to be charged in the vehicle while reading.

Neptune is not responsible for issues with any laptops not provided by Neptune and does not warranty, support, or repair laptops not provided by Neptune.

Software Installation

Installing MRX900

After accepting the License Agreement, the following window appears.

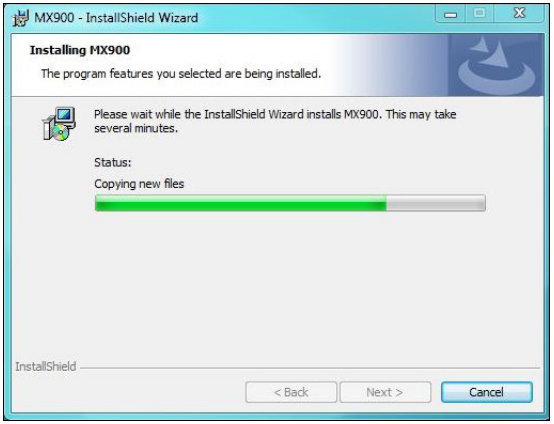

Figure 3.2 Installing MRX900 Window

Please wait to continue.

The installation can take a few minutes. The green progress bar indicates how much time the installation is taking.

Completing the Installation

When the installation is complete, the following window appears.

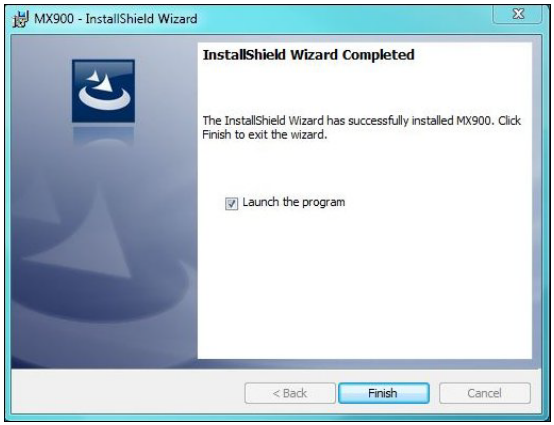

Figure 3.3 InstallShield Wizard Completed Window

Click **Finish** to close the InstallShield Wizard.

Initializing the Database

After installing MX900, when you start MX900, the following window appears.

Figure 3.4 Initializing the Database message

Installing the USB Driver

The following steps are for Windows 7 users only.

To install the USB drive, complete the following steps.

1 Be sure your MRX920 is powered from your automobile's cigarette lighter plug.

2 Connect the MRX920 to your laptop using an USB cable.

If Windows 7 Does Not Recognize Driver

If Windows 7 does not automatically prompt you for the device driver, complete the following steps.

1 Select **Start**.

2 Select **Control Panel**.

3 Select **View devices and printers**.

4 Scroll down to select **Neptune MRX920**.

The following dialog appears.

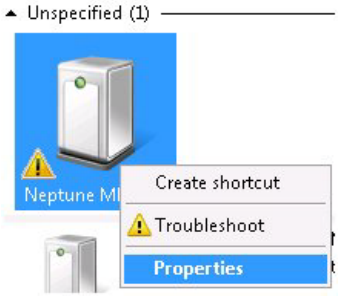

Figure 3.5 Selecting Neptune MRX920 Properties

5 Right-click and select **Properties**.

The following dialog appears.

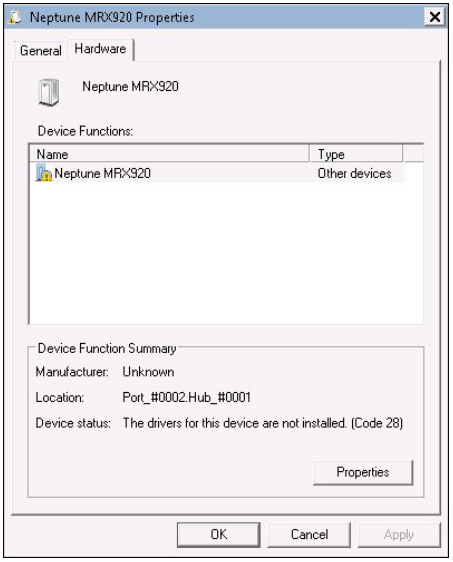

Figure 3.6 Neptune MRX920 Properties

6 Select the **Hardware** tab.

The following dialog appears.

Figure 3.7 Neptune MRX920 Properties General Tab

7 Click Change settings.

The following dialog appears.

Updating the Driver

Complete the following steps.

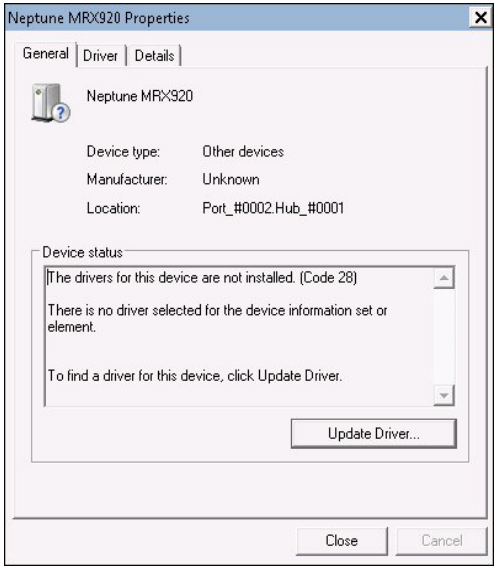

Figure 3.8 Update Driver Dialog

1 Click Update Driver...

The following dialog appears.

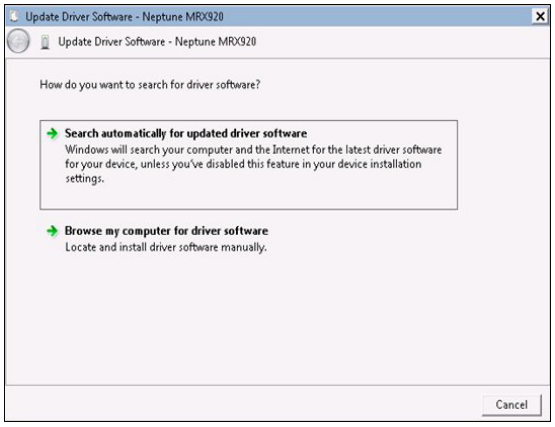

Figure 3.9 Update Driver Software

2 Select **Browse my computer for driver software**.

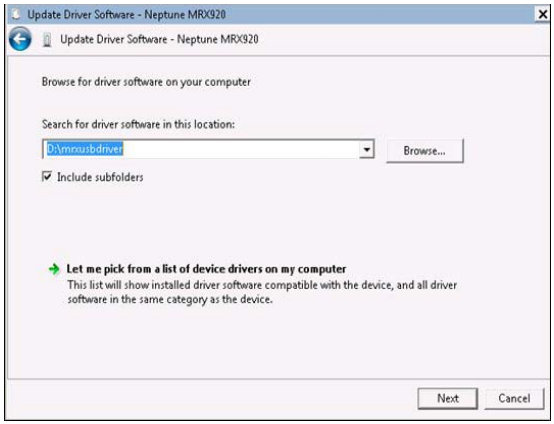

Figure 3.10 Browse for Driver

3 Click **Browse** to locate the **mrxusbdriver** folder on the installation media.

The following dialog appears.

Figure 3.11 Windows Security Dialog

4 Select **Install this driver software anyway**.

The following dialog appears.

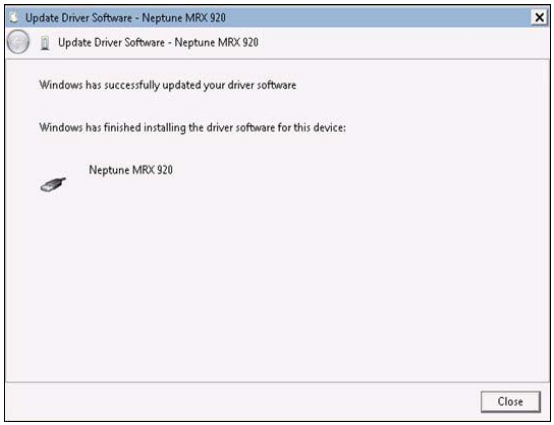

Figure 3.12 Update Driver Software Successful

5 Click **Close**.

6 Close all dialogs and go back to **Devices and Printers**.

The driver installation is complete.

Setting Up the MRX920

To set up the MRX920, please refer to Chapter 3 of this manual for the following instructions.

- “Plugging in the Power Cable,” on page 3-14.
- “Installing the Antenna,” on page 3-15
- “Inserting the USB Flash Drive,” on page 3-17
- “Starting the Software,” on page 3-18 (Software must first be installed.)

Installing the MRX920 in the Vehicle

With the MRX920, you have flexibility as to where to place the unit, for example, under the seat, in the back seat, and so forth. The most optimum way of using the unit is to place the unit in the passenger seat and fasten the seat belt through the straps on the carrying case, Part No. 13125-001. See Figure 3.13.

Figure 3.13 MRX920 Placed in Vehicle

Neptune offers an optional mobile office unit, Part No. 1310A-001, that can help you organize your equipment with a compartment for the MRX920 and a way to secure your laptop. See Figure 3.14 and Figure 3.15 on page 3-13 for how you can use this unit.

The laptop must be installed securely in a vehicle mount. This protects the driver and equipment should the vehicle be required to come to an immediate stop.

Figure 3.14 Optional Mobile Office

The mobile office unit can keep your laptop and MRX920 secure while driving.

Figure 3.15 Mobile Office in Use

Plugging in the Power Cable

Complete the following steps to connect the vehicle power supply power cable to the MRX920, and plug it into the vehicle power supply receptacle.

1 Start the vehicle.

It is very important to first start the vehicle before connecting the cable.

2 Grip the vehicle power supply cable by the black sleeve, not the metal casing.

3 Line up the red arrows and insert the power connector until the metal locking mechanism twists and locks into place.

You might need to wiggle the power supply cable a little to get the connector to click.

4 After the power supply cable is connected, the red dot and red arrow should align, ensuring you that the cable is connected.

5 Insert the appropriate end of the vehicle power supply power cable into the connector on the MRX920, as illustrated in Figure 3.16.

Figure 3.16 Vehicle Power Supply Power Cable

6 Plug the other end of the power cable into the vehicle power supply receptacle as illustrated in Figure 3.17.

Figure 3.17 Vehicle Power Supply Cable Inserted In Car

Installing the Antenna

The proper installation of the antenna cable is critical for the optimal performance of the MRX920. If the cable is crimped, the performance of the unit degrades significantly.

There are several options for running the cable. Whichever method works best for you depends on the type of vehicle being used. The most important consideration when installing the antenna is for the cable to remain undamaged.

To ensure proper installation of the antenna, complete the following steps.

1 Referring to Figure 3.1 on page 3-2, connect the RF antenna to the MRX920 and hand-tighten the connector by turning it clockwise until it is secured.

2 Place the magnetic base of the antenna in the center of the roof approximately one foot (30 cm) behind the leading edge of the roof.

Figure 3.18 Antenna Installation

3 Route the antenna wire through the passenger window or through the door. See Figure 3.19. To prevent the cable from crimping, protect the cable as illustrated in the following figure.

Figure 3.19 Antenna Cable Through Window

4 Use one of the cable protectors (Part No. 12729-001) that are included with the MRX920.

Caution is necessary to ensure there is sufficient room for the cable and that it does not get crimped.

In some vehicles, there is enough room to run the cable through the doorframe of the vehicle without crimping the cable. Other vehicles do not always have enough clearance (especially vehicles with rain gutters). Running the cable through a rear door can be an option. You can also run the cable through a window.

5 Gently close the window, positioning the antenna cable so there is no pressure on it.

Pressure on the antenna cable can cause damage.

Inserting the USB Flash Drive

Neptune recommends that you insert the USB flash drive into the laptop after you place the laptop in the vehicle.

Complete the following steps to insert the USB flash drive containing the routes you plan to read.

1 If there is a cover over the USB flash drive, remove the cover.

2 Remove the dust cover from the USB port.

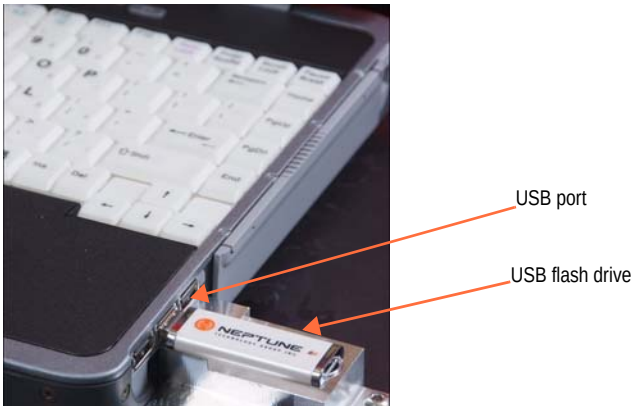

Figure 3.20 USB Port and Drive

3 Insert the USB flash drive into the port on the laptop.

Be careful not to force the USB flash drive into the slot. Forcing can cause damage to the drive or to the data contained on the drive. If the drive does not insert easily, rotate it 180°, and try to insert it again.

Starting the Software

Complete the following steps to start the software on your laptop.

1 Double-click on the icon on your Windows desktop.

The software automatically attempts to import a route file. When the import process is complete, the Routes window appears.

2 Within the software, click ? in the toolbar at the top right of the window, get information and instructions on how to use the software.

Becoming Familiar with the MRX920

When the installation is complete, you are ready to begin using the MRX920 for meter reading. Please refer to chapter 4 for instructions on operating the MRX920.

When turned on, the unit only beeps when receiving an MIU signal in the selected route. Other readings are silently inserted into other routes.

To protect the driver's safety, use the beeper function on the MRX920 to monitor meter reading.

The laptop computer retrieves meter readings from the receiver in realtime and stores them in nonvolatile memory. It checks meter reading completeness against route files that are downloaded from the MX900 software. About one second after a reading is received, the message area and progress bar update the reading status of the route.

Navigation

All MX900 functions are performed by using the tabs at the top of the MX900 window. You click the appropriate tab to perform the tasks.

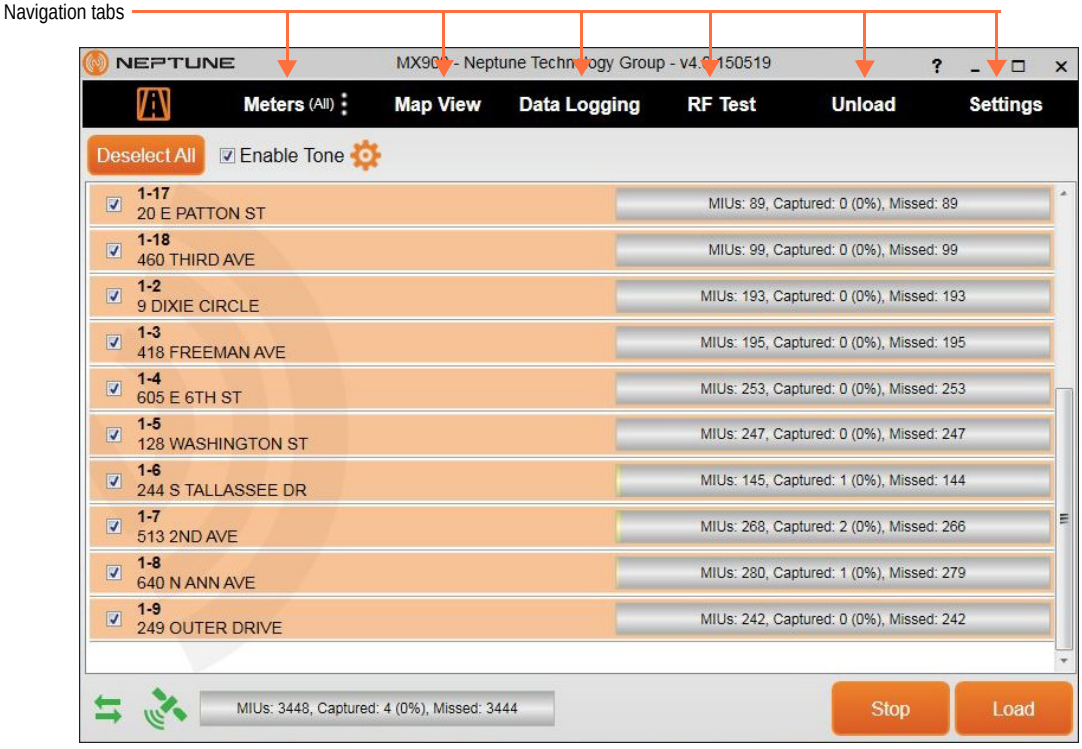

Figure 3.21 Navigating Within the Software

For example, Figure 3.21 shows the Routes window with the route icon highlighted.

Software

The MX900 software application runs on the laptop computer that works in conjunction with the MRX920. The purpose of the software is to log meter readings from routes where R900s are installed. Messages from MIUs outside of the route are identified as such and are discarded. The MX900 software also provides a visual interface for the operator to monitor route progress.

Although the MX900 software can start and stop the reading of message data, it does not control the receive frequency or the decoding of message data. Instead, the MRX920 contains a receiving and processing unit that collects data only from R900s.

The file transfer between the software and the utility company billing system is in a file format specific to Neptune's software application.

Within the software, click ? in the toolbar at the top right of the window, get information and instructions on how to use the software.

Chapter 4 Troubleshooting

Troubleshooting the MRX920

The troubleshooting section of this guide provides diagnostics procedures for troubleshooting MRX920 problems. It includes both a hardware section and a software section. It also includes recommendations on how to verify that the MRX920 is performing up to specification. Included are tables of possible symptoms, areas of focus, and actions that can be taken to try to resolve problems that can arise with either your MRX920 or MX900 software.

Troubleshooting Hardware Issues

Use the following table to help identify possible solutions for hardware problems that can occur with the MRX920.

Table 4.1 Hardware Troubleshooting Table

Problem	Probable Cause	Things to Check
No power to the unit.	Loose connection at the vehicle plug. Loose connection at the MRX920.	Look for the LED on the power cable. Look for the LED on power cable, but not on the MRX920. Be sure the red arrow on the cable matches the red dot on the MRX920.
	Internal fuse blown on the power cable.	Look for the LED on the power cable.
	Dead battery or fuse in the utility vehicle.	Check the electrical status of the utility vehicle.

Table 4.1 Hardware Troubleshooting Table

Problem	Probable Cause	Things to Check
My USB connection isn't working.	Cable is unplugged.	Be sure the USB cable is secure on both the laptop end and the MRX920 end.
	Cable is damaged.	Try any other USB cable.
	Connected through other method.	Check Receiver Settings to ensure that you are connecting as you intended (Bluetooth vs. USB). Look at front of the MRX920. The LEDs labeled Bluetooth and USB flashes slowly when not connected, and flashes quickly on the chosen connection method (Bluetooth or USB) within the first few seconds of being connected. Flash continues extremely fast.
Not getting readings.	Unit is not connected correctly.	As long as the Rx LED is changing from on to off, your MRX920 is receiving readings.
	RF antenna is damaged.	Check the antenna for any crimps or damage.
Power is applied, the MX900 host software executes, but no route data is available.	USB flash drive not inserted.	Make sure the USB flash drive is properly inserted into an available USB port on your laptop, or route files did not properly download from the network.
	Incompatible data on USB flash drive.	Select the Self-Diagnostics tab to verify that the data on the USB flash drive is compatible.

Troubleshooting Host Software Issues

Use the following table to help identify possible solutions for host software problems that can occur with the MX900 software.

Table 4.2 Host Software Troubleshooting Table

Problem	Probable Cause	Things to Check
Cannot import route file.	Incorrect file type.	Make sure the file you are importing is an .imp file.
	Corrupt file.	Recreate the file in N_SIGHT.
Cannot hear audible tone while meter reading.	Audible tone checkbox is not selected.	Verify that there is a check mark next to the Enable Tone option in the upper left corner of the Routes window.
	Volume is not turned up on the laptop.	Verify that the volume on the laptop is turned up and is not on mute.
Unable to view all accounts in Missed and Captured Reads windows.	Filter is turned on.	Verify that the filter in the bottom right corner of the Missed and Captured Reads window has been removed.
Unable to export all routes.	Unload checkbox is not selected.	In the Unload window be sure to select all the routes to unload.
Unable to locate route file.	Route file has been saved to an unknown location, or cannot be located on network.	In the Routes window click Load in the bottom right corner. Browse to the proper location where the route file has been saved and select it.
Cannot install the software.		Refer to “Software Installation” on Page 3-4 in this user's manual

Table 4.2 Host Software Troubleshooting Table

Problem	Probable Cause	Things to Check
My Bluetooth connection isn't working.	My MX900/RF Test software is connected to the wrong MRX920	Check the MAC address (available under Connection Settings) and compare it to the MAC address on the MRX920's label.
	Connected through the other method Check Receiver Settings to ensure you are connecting as you intended (Bluetooth vs. USB)	Look at front of MRX920. LEDs labeled Bluetooth and USB flashes slowly when not connected, and flashes quickly on the chosen connection method (Bluetooth or USB) within the first few seconds of being connected. Flash continues extremely fast.
Cannot press the ✕ in the top right corner	Must be in the Stop mode to be able to press the ✕.	Verify that the software is in the Stop mode.

Glossary

central processing unit	Often abbreviated as CPU, it is the brain of the computer. Sometimes referred to as the processor or central processor, the CPU is where most calculations take place. In terms of computing power, the CPU is the most important element of a computer system.
default setting	A computer term that is similar in meaning to factory setting. The default setting is one that the MX900 software automatically applies to an item. For example, the default setting for Enable Tone On/Off mode is Enable Tone Off. The Enable Tone is always off unless the meter reader changes the Enable Tone setting.
direction keys	Special keys on the laptop keyboard that allow you to move up or down a list of items. The direction keys, the Up (F5) and Down (F4) keys are indicated by arrow key icons on the laptop display.
display	The top part of the laptop computer where selections and information about routes and accounts are shown.
download	The process of sending readings and route information from the Host Computer to the USB flash drive used for readings.
function key	Special key on the laptop keyboard that allows you to perform tasks quickly. The function keys used by the software are on the top row of the laptop computer (PF1 - PF7) and in the two rows of F keys (F1 - F17). PF keys and F keys have an equivalent function in the MX900 host software.

highlighted	Describes an item that is selected. When you select an item using the direction keys, the software lets you know that it has been selected by accenting the item in negative image.
host computer	A computer that is accessed by a user working on another PC or workstation; for example, the host computer contains all the Mobile, RouteMAPS, or EZRouteMAPS data to which the billing computer and other PC operators can connect.
message area	A portion of a window that displays a message.
meter number	The number by which a utility identifies a meter.
MHz	Abbreviation for megahertz. One MHz represents one million cycles per second.
microprocessor	A chip that contains a central processing unit. At the heart of all personal computers and most workstations is a microprocessor. Microprocessors also control the logic of almost all digital devices.
MIU ID	An abbreviation for *M*eter *I*nterface *U*nit Identifier, which is a discrete number used to identify a specific meter interface unit.
operating system	A critical program that runs on a computer that is used to run other programs. Operating systems perform basic tasks, such as, recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories, and controlling any peripheral devices such as disk drives, ports, and printers.
PC	An abbreviation for personal computer, in the case of MRX920, this refers to the laptop.
personal computer	A general-purpose, single-user microcomputer designed to be operated by one person at a time. All are based on the microprocessor technology that enables manufacturers to put an entire central processing unit on one chip.

screen	The graphic portion of a display. The MX900 software windows show information in three different areas to present the information shown on the display: - A meter reading and loading indicator area with a graphic progress bar and pulsing reading indicator - A message and information display area - An active function key display bar
select	To choose a route or address by positioning a highlighted area using function keys. The highlighted item is selected.
upload	The process of sending readings and route data from the MRX920 to the host computer via Bluetooth/USB/serial port connection.
USB flash drive	A small, device that allows you to add memory, mass storage, and other capabilities to portable computers. USB flash drives are sometimes called thumb drives.
Windows	The operating required for MX900: - Windows 7 Professional (32 and 64 bit) - Windows 8 Professional (32 and 64 bit) - Windows 8.1 Professional (64 bit) - Windows 10 Professional (64 bit)

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Neptune Technology Group Inc.
1600 Alabama Highway 229
Tallassee, AL 36078
USA
Tel: (800) 633-8754
Fax: (334) 283-7293

Neptune Technology Group (Canada) Ltd.
7275 West Credit Avenue
Mississauga, Ontario
L5N 5M9
Canada
Tel: (905) 858-4211
Fax: (905) 858-0428

Neptune Technology Group Inc.
Avenida Ejército Nacional No 418,
Piso 12, Desp. 1201-1202,
Col. Chapultepec Morales
Delegación, Miguel Hidalgo
11560 México D.istrito Federal
Tel: (525) 55203 5294 / (525) 55203 5708

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