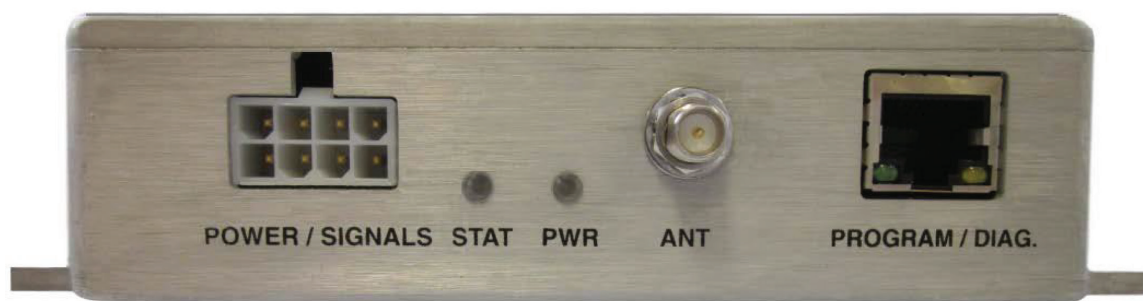


TB-100 Bluetooth Transmitter



Installation and Configuration Guide

SF Mobile-Vision Inc.



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Introduction

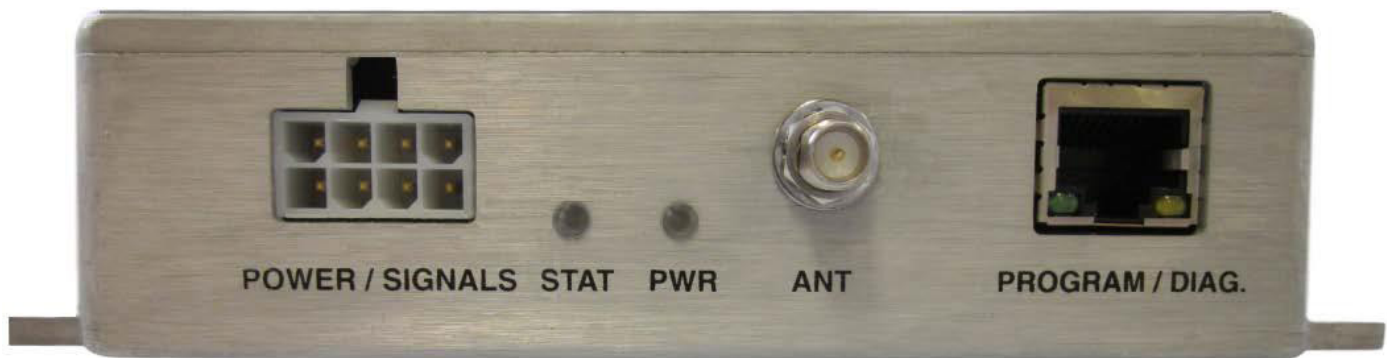
The TB-100 Bluetooth Transmitter is a device that can be added to new and existing Flashback systems (including Flashback2s, Flashback3s, and FlashbackHDs) to enable bi-directional Bluetooth transmission between Flashback system(s) and BWX-100 body worn camera(s) (BWCs). This enables your recording devices to remotely initiate recordings on other devices that are within transmission range. It also enables other recording devices to remotely initiate recordings on your devices*.

Installing a TB-100

TB-100 Kit

The TB-100 Kit includes the following parts:

Item #	Description	Item #	Description
1	Transmitter module model TB-100—Qty: 1	6	Screw, #6 x 1/2 lg, pan head, sheet metal, steel—Qty: 2
2	Antenna—Qty: 1	7	Cable assembly, signal and power—Qty: 1
3	ZCable, antenna—Qty: 1	8	Cable assembly, Flashback pigtail—Qty: 1 (Flashback version only)
4	Bracket, antenna mounting—Qty: 1	9	Cable assembly, Fuse Holder, 2A—Qty: 1
5	Screw, #8 x 1/2 lg, hex head, sheet metal, drill point, steel—Qty: 4	10	Butt Splice, 22-16 AWg—Qty: 1



If you are using this TB-100 with a Flashback in-car video system, see ["Installing a TB-100 in a Vehicle with a Flashback Recorder" on page 4.](#)

If you are using this TB-100 with BWX-100s only, see ["Installing a TB-100 in a Vehicle without a Flashback Recorder" on page 6.](#)

*Assuming that the **Ignore TB-100 Transmission** field is set to **No**.

Installing a TB-100 in a Vehicle with a Flashback Recorder

1. **Check your Flashback wiring harness for the gray Aux 2 wire.** If your wiring harness includes the gray Aux 2 wire, then proceed to the next step. If your wiring harness does not include the gray Aux 2 wire and your Aux 1 wire is already connected to another device, then you'll need to order an FB3/FBHD Wiring Harness (W-FB-IO-C Axx), which includes the Aux 2 wire. For assistance, contact SF Mobile-Vision Inc. Sales at 1-800-336-8475.
2. **Disconnect the vehicle battery's negative lead.**
3. **Mount the transmitter box.**
 - a. Select a location that is:
 - On a flat surface in the trunk or cabin.
 - Within 4 feet of the proposed antenna location and within 10 feet of the Flashback DVR
 - Away from possible spills.
 - b. Mount the transmitter box (Item #1 on [page 3](#)) to the surface using the self-tapping screws provided.
4. **Mount the antenna.**

i NOTE: Antenna Mounting Location

Because the TB-100 utilizes a "line of sight" signal, it's important to mount the antenna as high as you can so the signal can easily pass through the vehicle's glass.

- a. Select a location that is within 4 feet of the TB-100:
 - If TB-100 is mounted in the trunk, then mount the antenna on the rear deck or C pillar.
 - If TB-100 is mounted in the center console, then mount the antenna on the cage or A pillar.
 - If TB-100 is mounted in the rear of an SUV, then mount the antenna on the cage or C pillar.
 - b. Mount the antenna (item #2 on [page 3](#)) using the provided bracket hardware (item #4 [page 3](#)).
5. **Connect the antenna cable (item # 3 on [page 3](#)) to the antenna (item #2).**
6. **Connect the other end of the antenna cable (item # 3) to the TB-100.**
7. **Plug the Signal & Power cable (item #7 on [page 3](#)) into the POWER/SIGNAL port on the back of the TB-100.**
8. **Connect the wires, as shown in the following diagram.** For a list of connections, see "[Connections for Installing a TB-100 in a Vehicle with a Flashback Recorder](#)" on [page 6](#).

DVR

power
lights
ground
siren
brakes
door

ignition
aux 1
Aux 2

To flashback monitor

Item #2 Antenna

Antenna

Item #3 Antenna cable

Item #4 Antenna mounting bracket

Item #8 FB pigtail cable

FB REC LED

To grill light if used

To same ground location as Flashback.

GROUND

To battery positive

2-amp fuse (white label)

IGNITION

SIREN IN

LIGHTS IN

Not used; cap off

TO DVR AUX 2

12V BATTERY

2-amp fuse (yellow label)

STAT: Status LED:

- Solid Green: System is fully initialized; ready to receive input commands.
- Solid Red: Transmission output is activated due to any of the Flashback inputs.
- Blinking Red: Transmission output is activated due to an external transmission from a BWX-100 or another TB-100.

Item #1 TB-100 Bluetooth Transmitter

PWR: Power LED. Turns solid green when unit has power and vehicle ignition is on.

Item #7 Signal and Power cable

Connections for Installing a TB-100 in a Vehicle with a Flashback Recorder

Wire	Color	Connect to...
FB REC LED	Orange	Orange wire on Flashback Pigtail cable
GROUND	Black	Same ground location as Flashback
12 V BATTERY	Red	2-amp fuse, then to battery positive
IGNITION	White	2-amp fuse, then to white wire on Flashback Pigtail cable
TO DVR AUX 1 or AUX 2	Gray	The brown Aux 1 wire or gray Aux 2 wire

9. **Connect the Flashback Pigtail cable (item #8 on [page 3](#)) to the white lead on the back of the Flashback monitor cable.**
10. **Reconnect negative lead of vehicle battery.**

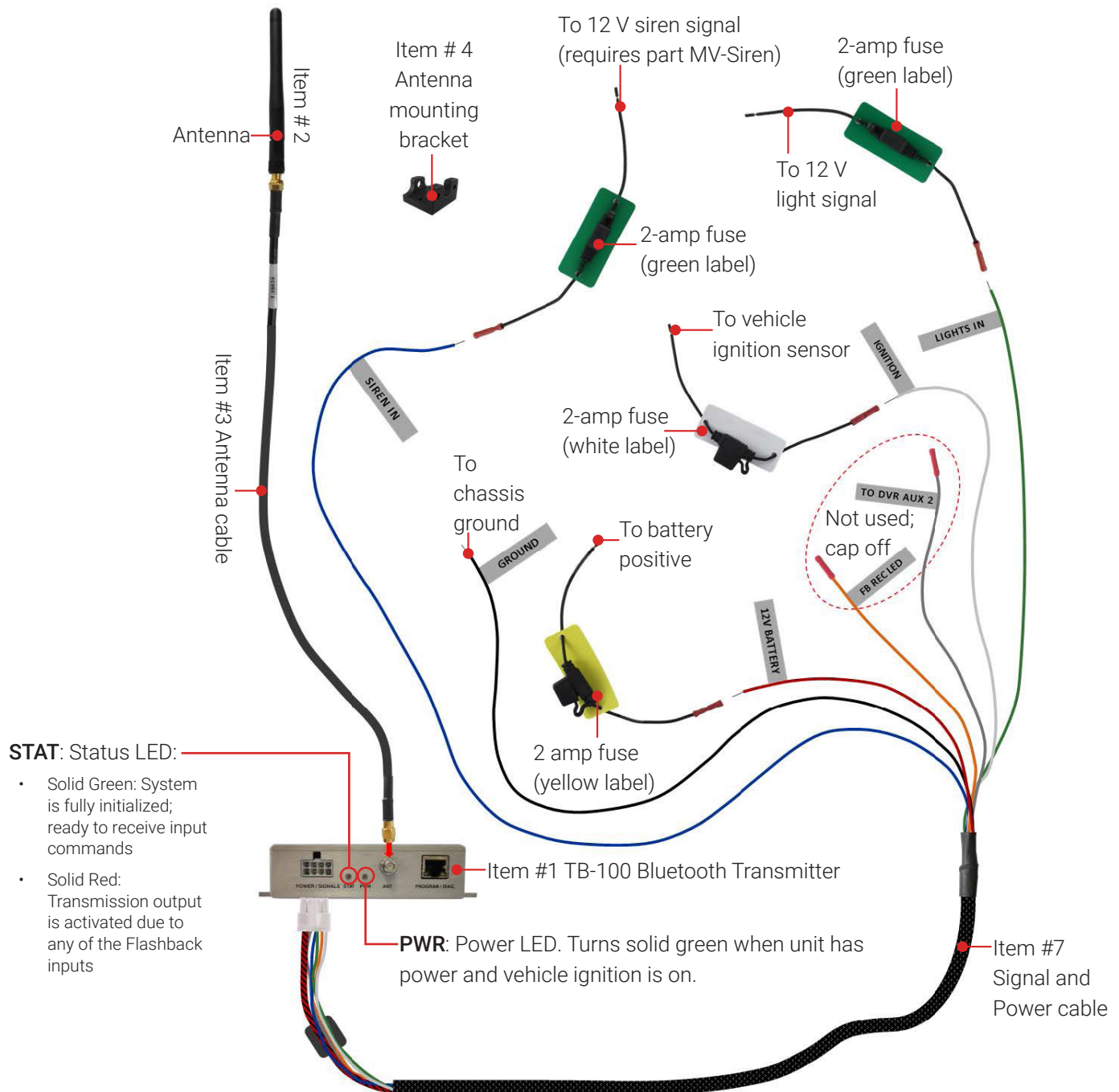
Installing a TB-100 in a Vehicle without a Flashback Recorder

In this application, the TB-100 is used for sending a signal from the vehicle's lights or siren that can be received by other Bluetooth-Transmitter-enabled Flashback systems or transmission-enabled BWX-100s.

1. **Disconnect the vehicle battery's negative lead.**
2. **Mount the TB-100:**
 - a. Begin by selecting a location that is:
 - On a flat surface in the trunk or cabin.
 - Within 4 feet of the proposed antenna location.
 - Away from possible spills.
 - b. Mount the TB-100 (item #1 on [page 3](#)) to the surface using the provided self-tapping screws.
3. **Mount the antenna.**

Begin by selecting a location that is within 4 feet of the TB-100, such as on the vehicle's back deck, cage wall, or A-pillar. Next, mount the antenna (item #2 [page 3](#)) using the provided bracket hardware (item #4 on [page 3](#)).
4. **Connect the antenna cable (item #3 [page 3](#)) to the antenna (item #2).**
5. **Connect the other end of the antenna cable (item #3) to the TB-100.**
6. **Plug the Signal & Power cable (item # 7 on [page 3](#)) into the POWER/SIGNAL port on the back of the TB-100.**
7. **Make the wiring connections:**

Wiring Diagram for Installing a TB-100 in a Vehicle without a Flashback Recorder



NOTE: Compliance Information

See ["Appendix C: FCC Compliance" on page 35](#) for compliance information.

Connections for Installing a TB-100 in a Vehicle without a Flashback Recorder

Wire	Color	Connect to...
SIREN IN	Blue	Emergency lights or siren
GROUND	Black	Chassis ground
12 V BATTERY	Red	2-amp fuse, then to battery positive
IGNITION	White	2-amp fuse, then to vehicle ignition sense
LIGHTS IN	Green	Emergency lights or siren

Configuring Devices For Bluetooth Transmission

Your TB-100 includes a software utility called the MVI Bluetooth Transmitter Config Tool (or “Config Tool” for short). This tool is used to update the TB-100 firmware, select device settings, and enable/disable various device functions.

If your agency has purchased more than one TB-100, we recommend that you install the Config Tool on a laptop so that you can carry your laptop with the Config tool from vehicle to vehicle.

Downloading, Installing, and Launching the Config Tool

This section describes how to install the Config Tool on a laptop PC.

1. If your laptop has a CD/DVD drive, insert the **TB-100 Config Tool CD** in the PC’s CD/DVD drive. Skip to step 4.

– OR –

If your laptop does not have a CD/DVD drive, use another PC to copy the **mvi-BluetoothTransmitter_[version number].zip** file from the CD to a USB drive.

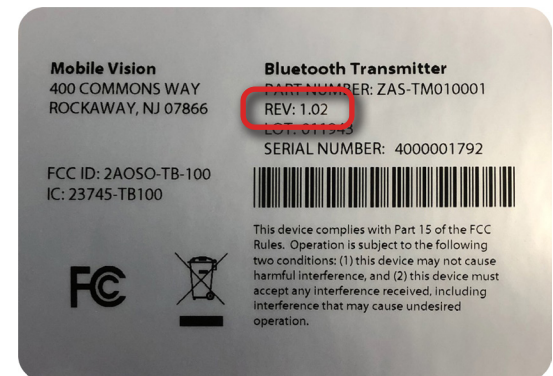
2. Insert the USB drive in a USB port on the laptop.
3. Navigate to the USB or CD/DVD drive.
4. Copy the **mvi-BluetoothTransmitter_[version number].zip** file to a directory on the laptop.
5. Right-click on the **mvi-BluetoothTransmitter_[version number].zip** file and select **Extract Here** from the drop-down list.
6. Click **Extract** in response to the popup message.
7. Double-click on the **mvi-BluetoothTransmitter [version number]** folder to open it.
8. Right-click on the **mvi-bluetoothtransmitter.exe** file and select **Run as administrator** from the drop-down list. If any security popups display, click **Yes** or **Allow Access** in response to them.

The **Devices** screen displays.

Connecting to a TB-100 Bluetooth Transmitter

This section describes how to establish a connection between the machine which contains the config tool (laptop) and the TB-100. There are three ways to connect your TB-100 to the laptop. The method you use is determined by the hardware version of your TB-100 and if you want to directly connect your TB-100 to the laptop or connect via the Ethernet.

1. Determine the hardware revision of your TB-100 by looking at the label on its top panel.



2. Using an Ethernet cable, connect the TB-100 to your laptop, either directly or through the Ethernet.

TB-100 hardware Rev 1.01 or 1.02:

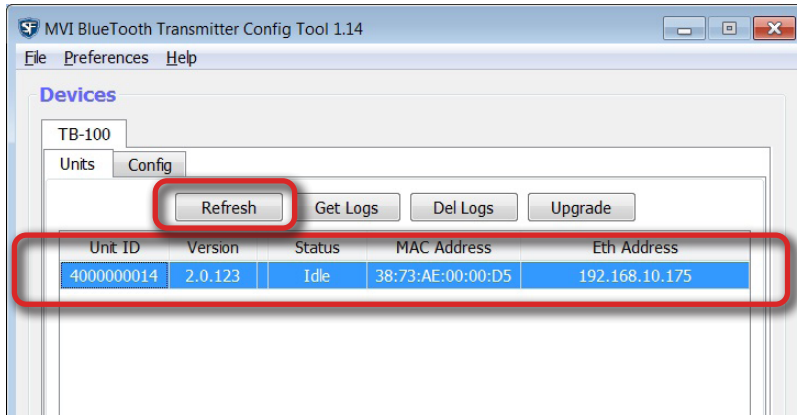
- Directly connect the TB-100 to the laptop. Because Rev 1.01 and 1.02 TB-100s are configured with DHCP as the default connection method, you will have to install a DHCP server on the laptop. See ["Installing and Configuring a DHCP Server on Your Laptop" on page 27.](#)
- Connect the TB-100 to the laptop via the network if the network already has a DHCP server running.

TB-100 hardware Rev 1.03:

- Directly connect it to the laptop by using a static IP. Hardware Rev 1.03 TB-100s are configured with a static IP as the default connection method. You might have to configure your laptop to have a static IP. For more about configuring your laptop to have a static IP address, see ["Configuring Your Laptop to Have a Static IP Address" on page 32.](#)

3. Log into the laptop.
4. Navigate to the disk drive location where the **mvi-bluetoothtransmitter.exe** file is located.
5. Double-click on the **mvi-bluetoothtransmitter.exe** file. (If any security popups appear, click **Yes** or **Allow Access** in response to them.) The **Devices** window appears.

6. Click **Refresh**. The TB-100 will then appear in the list.
7. Click on the device record to select it.



TB-100 Factory Default Settings

The following table describes the factory defaults for your TB-100.

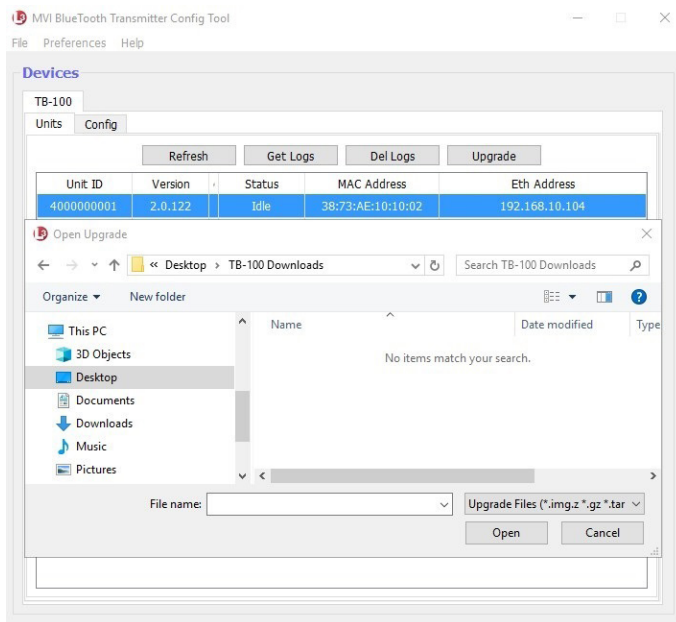
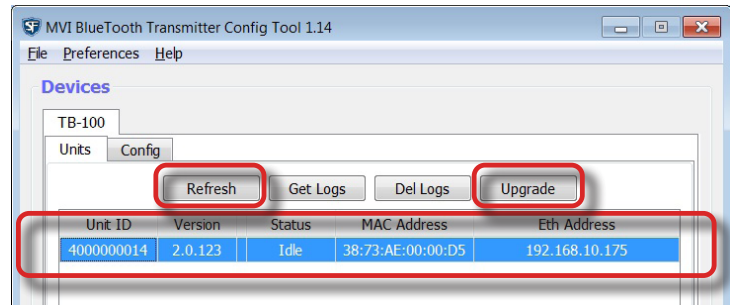
Setting	Default	Why Change?	How to change...
Bluetooth	Enabled	If you are not ready for your TB-100 to begin sending and receiving messages yet, temporarily change this field to Disabled.	See "Configuring TB-100 Settings" on page 12
Bluetooth ID	1	If you want your TB-100 to communicate only with devices that share the same Bluetooth ID, then enter that ID in this field.	See "Configuring the Bluetooth ID on the TB-100" on page 15
Ignore Bluetooth ID Transmissions	Yes	If you want your TB-100 to respond to transmissions from other TB-100s, then change this field value to No.	See "Disabling the 'Ignore TB-100 Transmissions' Option" on page 16.
TB-100s Ethernet IPs	HW Rev 1.02: Default IP address that appears on the Ethernet tab of the Config Tool. HW Rev 1.03: The static IP address is 10.0.0.2.	If you want to have uniformity throughout your devices, pick either DHCP or Static IP for the Ethernet IP settings.	See "Viewing the Ethernet Address on Your TB-100" on page 13 and "Viewing the Ethernet Address on Your TB-100" on page 13.

Perform other procedures in this guide on an "as needed" basis, or as directed by your SF Mobile-Vision Inc. Support representative.

Upgrading TB-100 Firmware

This section describes how to upgrade the TB-100 firmware. Perform this task when SF Mobile-Vision Inc. provides you with a new firmware file.

1. Copy the firmware file to a directory on the laptop you use to connect to the TB-100.
2. If you have not done so already, connect the TB-100 to your laptop via an Ethernet cable. Next, open the Config Tool. (If necessary, review ["Downloading, Installing, and Launching the Config Tool" on page 8.](#)) The **Devices** screen displays.
3. Click **Refresh**. The TB-100 will then appear in the list.
4. Click on the device record to select it.
5. Click the **Upgrade** button. Windows Explorer displays.



NOTE: Automatic power cycle

After the firmware is upgraded, the TB-100 will automatically restart to finalize the upgrade process.

6. Navigate to the disk drive location where you placed the firmware file.
7. Double-click on the firmware file. If any security popups display, click **Yes** or **Allow Access** in response to them.
8. Follow the system prompts to install the firmware.

Configuring TB-100 Settings

Use the TB-100 Config Tool provided by SF Mobile-Vision Inc. to configure the new TB-100. This involves installing the TB-100 Config Tool on a laptop (see ["Downloading, Installing, and Launching the Config Tool" on page 8](#)), connecting that laptop to the TB-100 via an Ethernet cable (see ["Connecting to a TB-100 Bluetooth Transmitter" on page 9](#)), and then selecting your TB-100 settings.

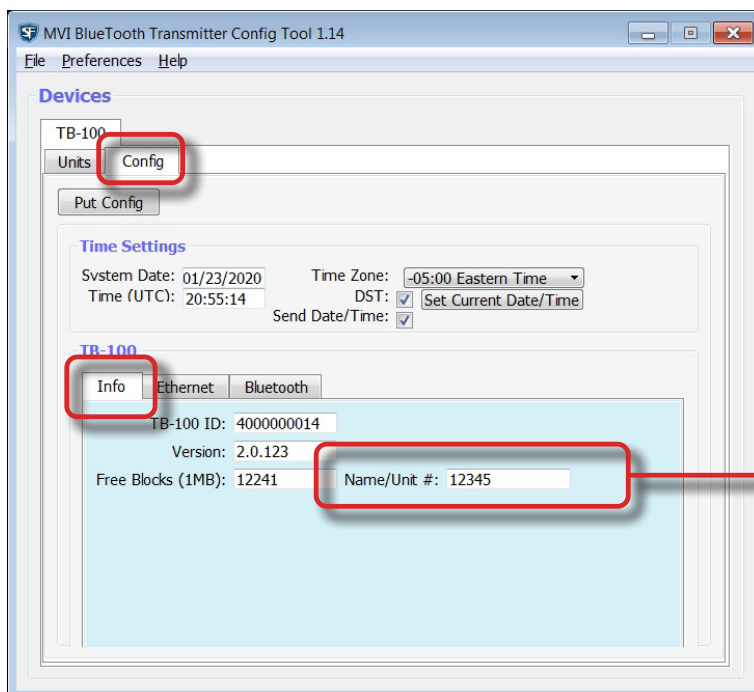
The following sections describe how to:

- Assign a unit name/number (for easy identification of the TB-100 unit in the BWX-100 GUI when manually pairing).
- View the Ethernet address for the TB-100.
- Disable/enable DHCP.
- Assign a Bluetooth ID to your TB-100 to communicate with other devices.
- Enable/disable Bluetooth transmissions.
- Configure your TB-100 to ignore or accept recording transmissions from other TB-100s.

Entering a Unit Name/Number

This section describes how to name the TB-100. This name/number can then be used instead of the serial number when manually pairing a TB-100 with a BWX-100. For example, instead of remembering and finding a long serial number when scrolling through the list of available devices, you can instead search for "Patrol Car 3".

1. Click to select the **Info** tab if it is not already selected.



Name/Unit# is the only configurable field in the Info tab.

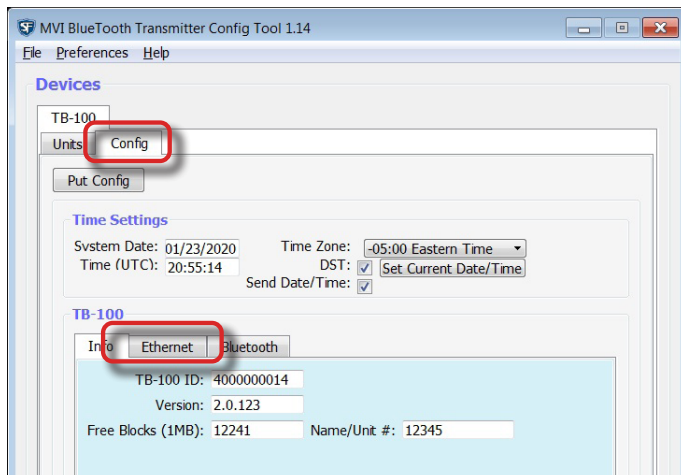
2. On the **Info** tab, enter the **Name/Unit #** of the TB-100 device when you run Blue-Sync. This unit name is the name that will appear in the list of found devices in the LCD window of the BWX-100, which you will use to manually pair the BWX-100 and TB-100 units. See ["Manually Syncing \(using Blue Sync\) the BWX-100 with a TB-100" on page 25](#).

Info Tab Options

Field	Description
TB-100 ID	The serial number for this TB-100.
Version	The firmware version that is currently assigned to this TB-100.
Free Blocks (1MB)	The amount of space, in megabytes, that remains on this TB-100's internal SD card.
Name/Unit #	The unit name or number in which this TB-100 is installed (i.e., Unit 16). This name will appear on the BWX-100's LCD menu whenever you sync a BWX-100 with your TB-100. Entering a descriptive name here will make it easier for you to identify your TB-100 on the BWX-100's list of in-range devices. If you leave this field blank, the TB-100's serial number will display on that list instead.

Viewing the Ethernet Address on Your TB-100

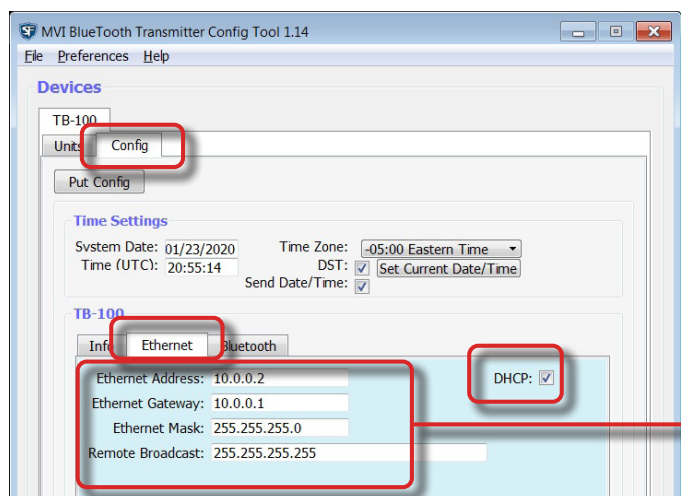
1. Click the **Ethernet** tab in the TB-100 section.



NOTE: Static IP and DHCP Interaction

If you have enabled DHCP and also entered a static IP, DHCP will overwrite the static IP.

2. Deselect the **DHCP** checkbox.

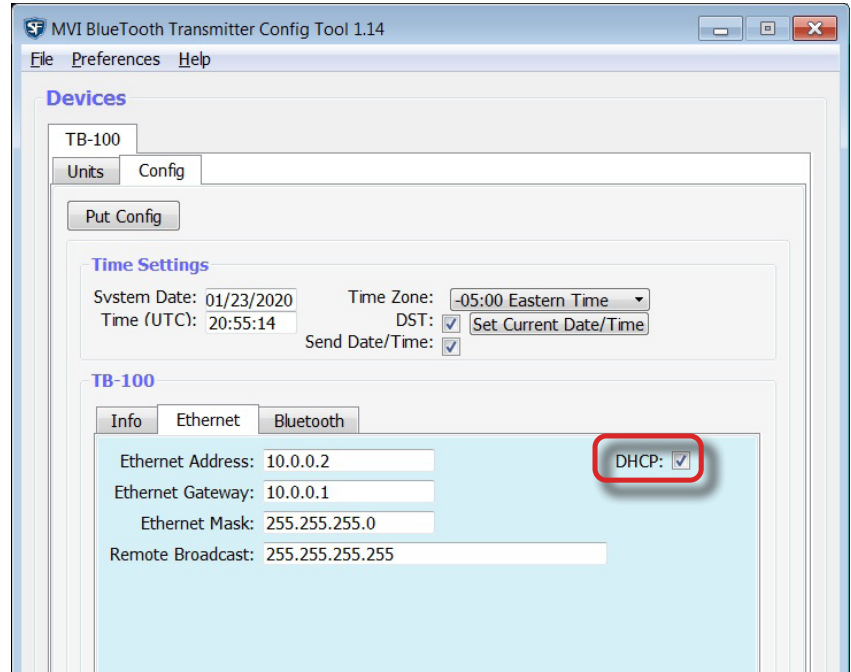


Defaults for the Ethernet Address, Ethernet Gateway, Ethernet Mask, and Remote Broadcast fields.

Configuring DHCP on Your TB-100

You have the option to use DHCP on your TB-100 instead of a static IP address if your agency network already has a DHCP server up and running, then you can simply plug your TB-100 into your network or if your laptop already has a DHCP server running on it, then just connect the Ethernet cable to your laptop. The Config Tool will automatically find your device.

1. On the **Config** tab, click to select the **Ethernet** tab in the TB-100 section.
2. Click to select **DHCP**.



NOTE: Static IP and DHCP Interaction

If you have enabled DHCP and also entered a static IP, DHCP will overwrite the static IP.

NOTE: Connecting to TB-100 Rev 1.02

If you have Rev 1.02 TB-100s, then they are configured to have DHCP connectivity settings. There are three ways to use DHCP to connect to your TB-100 Rev 1.02:

- If your agency network already has a DHCP server up and running, then you can simply plug your TB-100 into your network.
- If your laptop already has a DHCP server running on it, then just connect the Ethernet cable to your laptop. The Config Tool will automatically find your device.
- If your laptop does not have DHCP server running on it, then you will need to install and configure a DHCP server on your laptop. See ["Appendix A" on page 27, Installing and Configuring a DHCP Server on your Laptop.](#)

NOTE: Identifying a TB-100 That Has Hardware Revision 1.02

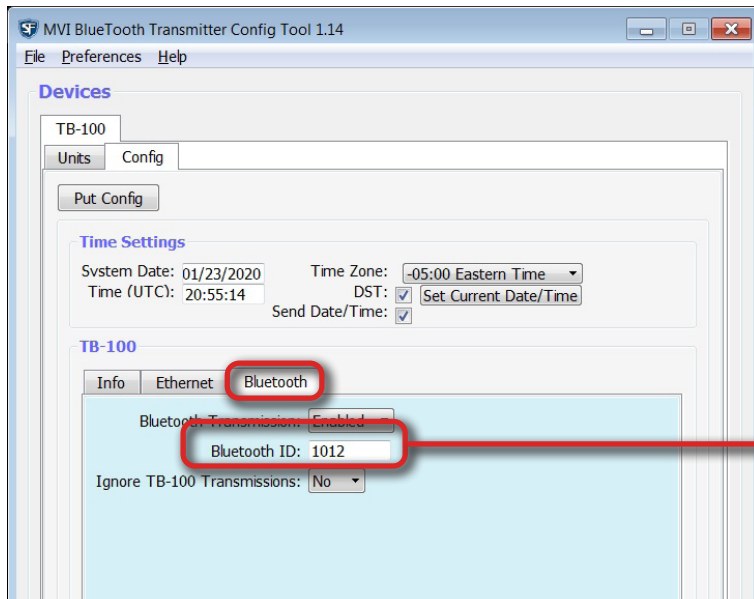
TB-100s with serial numbers that are in the range of 4000001100 to 4000001592 are shipped with Hardware Revision 1.02.

Configuring the Bluetooth ID on the TB-100

This section describes how to assign a unique Bluetooth ID to the TB-100. When you do so, your TB-100 will only respond to signals from devices that share the same Bluetooth ID. This can include BWX-100s and/or TB-100s.

By default, your TB-100 will accept transmissions from all in-range devices, even those outside your agency.

1. Click the **Bluetooth** tab in the TB-100 section on the **Config** tab.



NOTE: Default Bluetooth ID

The default value for the Bluetooth ID is 0. We strongly suggest that you configure a unique ID number for each device. If you leave all devices to have a Bluetooth ID of 0, then one device can initiate all with the same ID number to record.

2. Enter a unique code in the **Bluetooth ID** field (must be 1 - 8 characters long and consist of a combination of numbers from 0 - 9 and/or letters from a - f). This will ensure that your TB-100 only communicates with devices* that share the same Bluetooth ID.

TIPS: Three Scenarios for Configuring Bluetooth IDs: Unique, Squadron, and Precinct

The Bluetooth ID is the value used to sync TB-100s with BWX-100s or other TB-100s. It is therefore essential that you carefully consider what you enter into this field. If all TB-100s/BWX-100s/Flashbacks are configured with the same Bluetooth ID, then any single device could initiate all to record.

Consider the following configuration scenarios:

- **Car***: Configure the TB-100 in the vehicle to have the same Bluetooth ID as the officer's BWX-100 to allow the officer's BWX-100 to initiate recording. This can also be applied to a second or third officer so that any of the three officers can initiate recording.
- **Group***: Configure all the TB-100s and BWX-100s within the same group to have the same Bluetooth ID. In this scenario, any officer within that group can use their BWX-100 or TB-100 to initiate recording on all devices in that group.
- **Precinct**: Configure all TB-100s and BWX-100s in the precinct to have the same Bluetooth ID, so that any BWX-100 can initiate recording for all devices. For BWX-100s, this can be done by an administrator via fleet management. Each TB-100 and BWX-100 will have to be configured by an administrator to have the same Bluetooth ID.

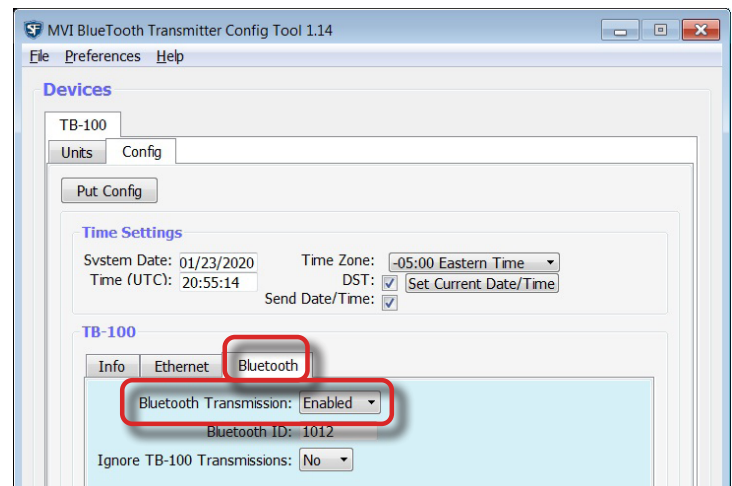
NOTE: When to Use Blue-Sync

*If you are considering the Unique or Squadron scenario, you might use Blue-Sync to manually pair BWX-100s and TB-100s to temporarily configure each unit's Bluetooth ID to be the same as the others. This might occur if an officer is using a different vehicle than usual, or if officers are temporarily reassigned to a different vehicle or squadron. See ["Blue-Sync" on page 24.](#)

Enabling/Disabling Bluetooth Transmissions

This section describes how to turn the Bluetooth transmission feature On or Off. By default, Bluetooth transmission is On. This will enable your TB-100 to send record transmissions to BWX-100s and receive record transmissions from other BWX-100s.

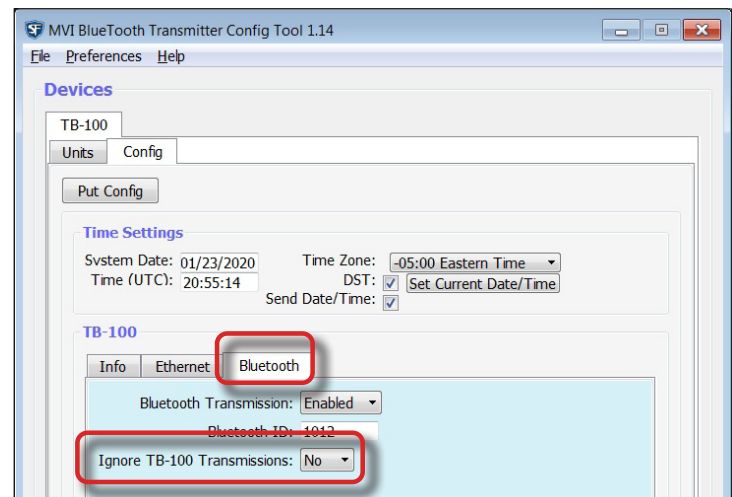
1. Click the **Bluetooth** tab in the TB-100 section on the **Config** tab.
2. Select a value from the **Bluetooth Transmission** drop-down list for communication with BWX-100s: **Enabled** (activate Bluetooth transmission) or **Disabled** (deactivate Bluetooth transmission).



Disabling the 'Ignore TB-100 Transmissions' Option

This section describes how to disable the Ignore TB-100 Transmissions option. When this option is set to **No** (default), your TB-100 will respond to record transmissions from other TB-100s. When this option is set to **Yes**, your TB-100 will ignore the recording transmissions from other TB-100s.

1. Click the **Bluetooth** tab in the TB-100 section on the **Config** tab.
2. Proceed to the **Ignore TB-100 Transmissions** field, and select **No** from the drop-down list.



Configuring Your BWX-100 device(s) in DES to Support Bluetooth Transmission

Enabling Bluetooth Transmission and Setting the Bluetooth ID

1. Log into your DES video management software as an Admin user.
2. Display the BWX-100's DVR record.
3. If there are tabs at the top of the record, click **Video**. Otherwise proceed to the next step.
4. Set the **Bluetooth Transmission** field to **Enabled**.
5. Enter a unique code in the **Bluetooth ID** field (must be 1 - 8 characters long and consist of a combination of numbers from 0 - 9 and/or letters from a - f). This will ensure that your TB-100 only communicates with devices* that share the same Bluetooth ID.

The screenshot shows the 'Edit DVR (BWX-309)' window with the 'Video' tab selected. Under 'Video Properties', 'Pre-Event Recording' is set to 0 and 'Resolution' is 1080p. Under 'Recording Properties', 'GPS Run Time' is 0, 'GPS Tracking' is checked, 'Audio/Video Mode' is 0, and 'Recording Alert Time (minutes)' is 0. The 'Bluetooth Transmission' dropdown is set to 'Enabled' and the 'Bluetooth ID' text field contains '00000002'. Both the dropdown and the text field are circled in red. 'Record LED' is unchecked. 'Save' and 'Cancel' buttons are at the bottom.

Sample DVR configuration with Fleet Management **ON**.

Sample DVR configuration with Fleet Management **OFF**.

The screenshot shows the 'Edit Device (BWX-309)' window. Fields include: 'DVR Name' (BWX-309), 'Serial #' (3000000309), 'Daylight Savings Time' (checked), 'Time Zone' (-05:00 Eastern Time), 'Allow Officer Assignment' (checked), 'DVR Officer Name' (Andy), 'GPS Tracking' (checked), 'GPS Run Time' (0), 'Snapshot/Tracepoint' (Both), 'Audio/Video Mode' (0), 'Bluetooth Transmission' (Enabled), 'Bluetooth ID' (80000002), 'Ethernet DHCP' (unchecked), 'Resolution' (1080P), 'Ethernet IP' (166.20.101.176), 'Recording Alert Time (minutes)' (0), 'Ethernet Mask' (255.255.255.0), 'Mute Enabled' (unchecked), 'Ethernet Gateway IP' (166.20.101.1), 'Pre-Event Recording' (0), 'Remote Broadcast IP(s)' (166.20.101.70 166.20.101.69 192.168.), and 'Record LED' (checked). The 'Bluetooth Transmission' dropdown and 'Bluetooth ID' text field are circled in red. 'Save' and 'Cancel' buttons are at the bottom.

6. Click **Save**.

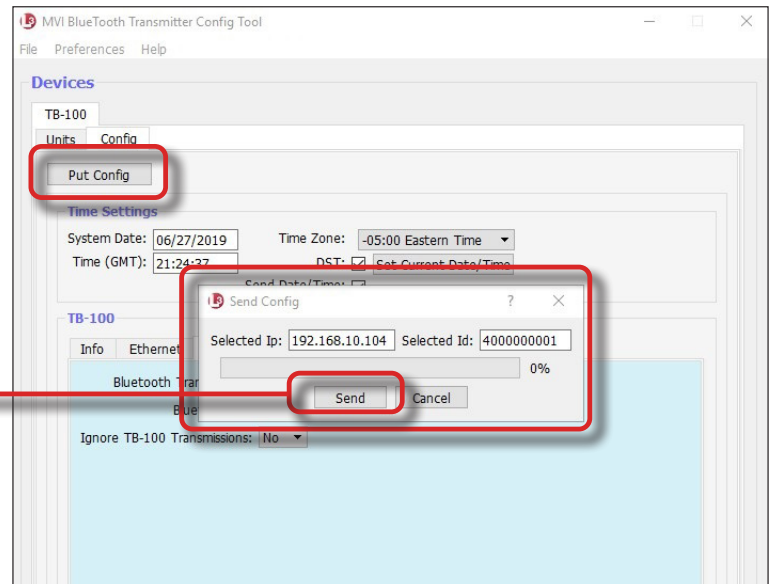
* Can include BWX-100s or TB-100s. Just remember to assign the same Bluetooth ID to all devices in the same group.

Applying Configuration Settings

After changing configuration settings, you need to send those settings to the affected TB-100. Click the **Put Config** button to send the settings to the affected TB-100s.

1. On the **Config** tab, click the **Put Config** button.
A **Send Config** popup displays.

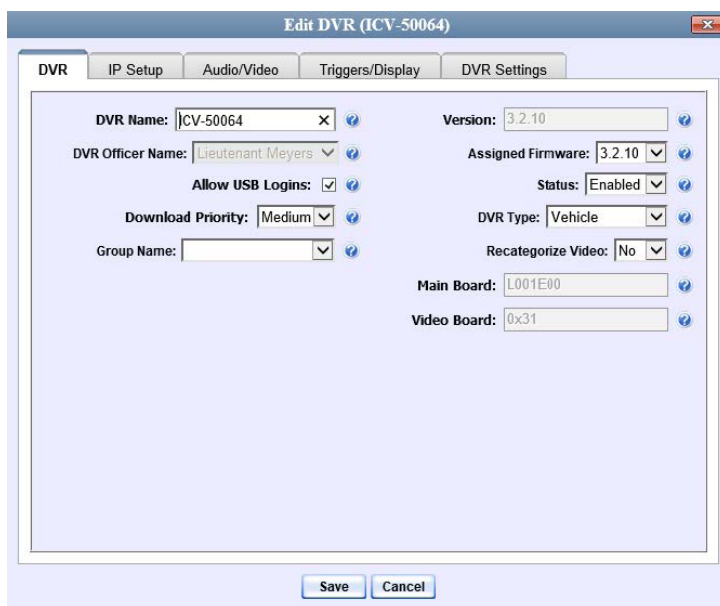
2. Click **Send**.
After the update-in-progress indicator reaches 100%, the popup closes.



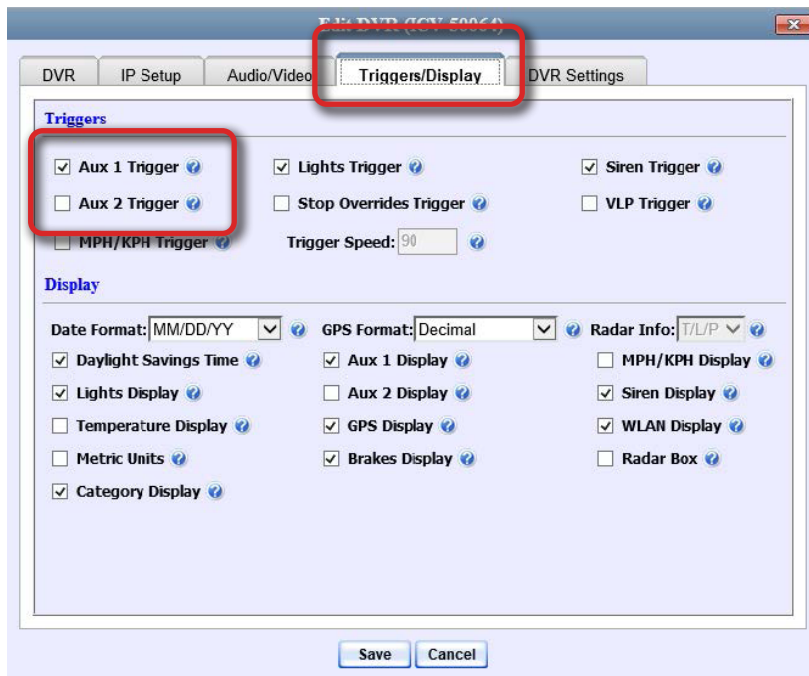
Configuring the Flashback DVR in DES to Interact with TB-100

From DES

1. Login to your DES video management software as an Admin user.
2. In the list of available DVRs, select and open the Flashback DVR that will be connected to this TB-100.



3. Click the **Triggers/Display** tab.





4. Select the **Aux 1 Trigger** or **Aux 2 Trigger** checkbox to indicate which Flashback connection you used for the **TO DVR AUX 2** connection (See ["Wiring Diagram for Installing a TB-100 in a Vehicle without a Flashback Recorder" on page 7](#)).
5. Click **Save**.












From Flashback3 or FlashbackHD



1. Turn the vehicle ignition On. Once the Flashback has finished booting, proceed to step b. **AUTO**
2. Make sure the door to your DVR is open and Auto mode is Off. (If necessary, press the button until the **AUTO** light turns off.)
3. Press **M**. The **Flashback Main Menu** displays.
4. Press the **□** or **▶▶** button until **Recording** is highlighted.
5. Press **R** to select the **Recording** option. The **Recording** menu displays.
6. Press **▶▶** twice to advance to the **Input** option.
7. Press **R** to select the **Input** option. The **Input** screen displays.
8. Highlight the **Flashback** connection you used for the **TO DVR AUX 2** connection:
 - For **Aux 1**, press **▶▶** two times to advance to the **AUX1 Trigger** field.
 - OR—
 - For **Aux 2**, press **▶▶** three times to advance to the **AUX2 Trigger** field.

Main Menu > Recording > Input	
Light Trigger	ON
Siren Trigger	OFF
AUX1 Trigger	ON
AUX2 Trigger	ON <input type="checkbox"/>
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

9. Press  to toggle the field value from **OFF** to **ON**.
10. Press  twice to save your changes and exit this option.

From Flashback 2

1. Turn the vehicle ignition On. Once the Flashback has finished booting, proceed to step b.
2. Make sure the door to your DVR is open and **Auto** mode is Off. (If necessary, press the  button until the  light turns off.)
3. Press . The **Flashback2 Main Menu** displays.
4. Press the  or  button until **Input Setup** is highlighted.
5. Press . The **Input Setup** screen displays.
6. Highlight the **Flashback** connection you used for the **TO DVR AUX 2** connection:
For **Aux 1**, press  six times to advance to the **AUX1 Dsp/Trg** field.
—OR—
For **Aux 2**, press  eight times to advance to the **AUX2 Dsp/Trg** field.
7. Press . A blue dot displays to the left of the **AUX1 Dsp/Trg** or **AUX2 Dsp/Trg** field.
8. Press  to toggle the field value from **OFF** to **ON**.
9. Press  three times to save your changes and exit this option.

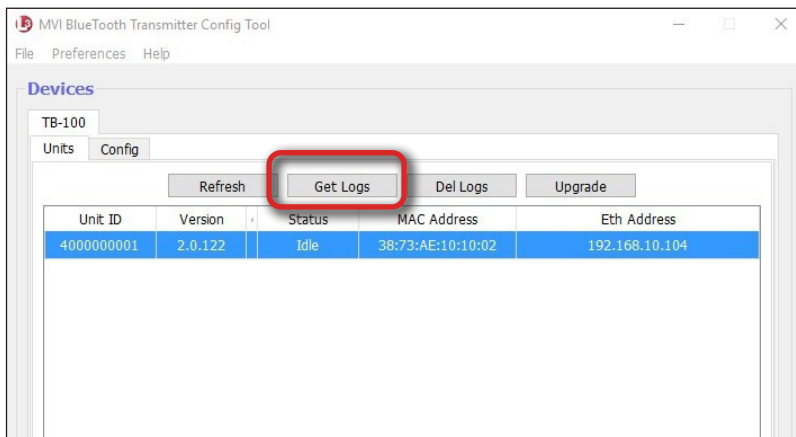
	AUX1 Dsp/Trg	On / 
	AUX2 Dsp/Trg	Off / Off
	Stop/Delay	On / 5
	MPH Dsp/Trg	Off / Off
	MPH Trg Speed	90
	Stop Override	Off
	Metric Units	Off
	VLP Trg	On

Device Logs

Downloading Device Logs

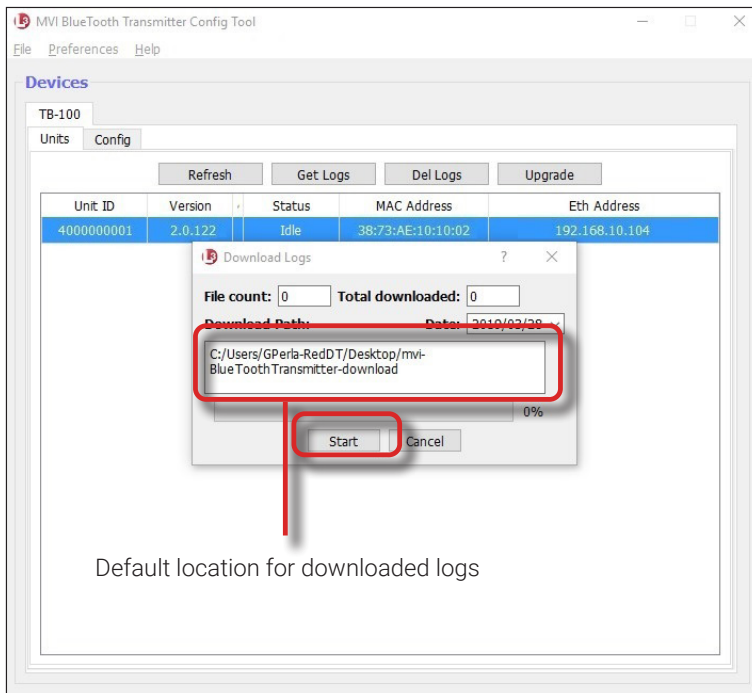
This section describes how to download the device logs for your TB-100. Perform this task when instructed to do so by your SF Mobile-Vision Inc. support representative.

1. On the **Devices** page, click the **Get Logs** button.



The **Download Logs** popup displays.

2. Click **Start**. The system copies the log files to the location listed in the **Download Path** box.

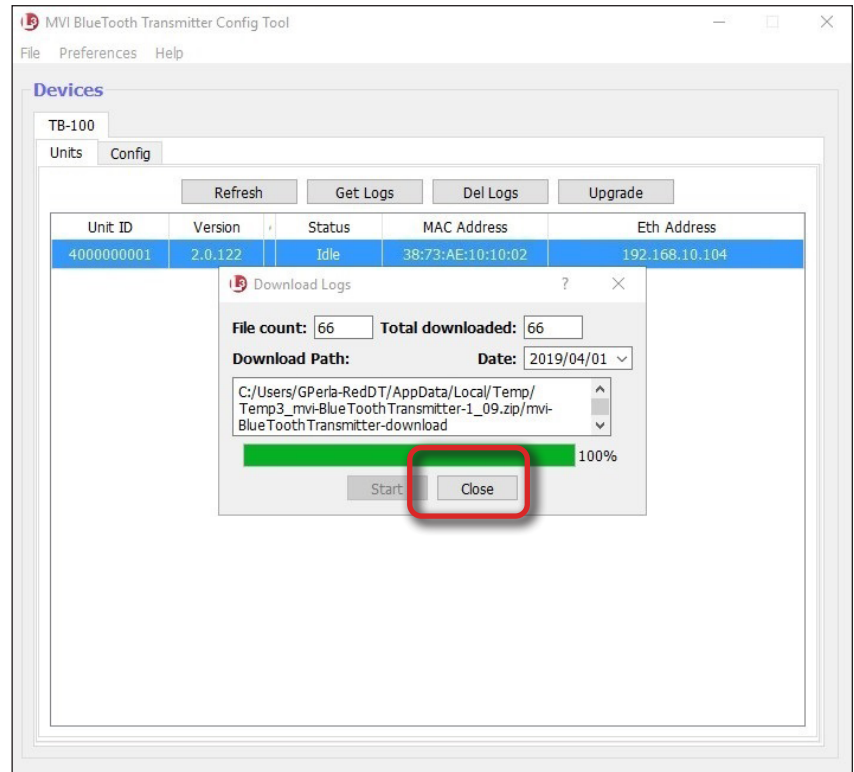


TIP!

To remember where the log files are stored, you might want to write down this directory path or take a screen capture of the popup. Alternately, you can change the directory location to your desktop. (See **Preferences** menu at top of page.)

3. After the download-in-progress indicator reaches 100%, click **Close**.
4. Navigate to the disc drive location where the log files were copied.

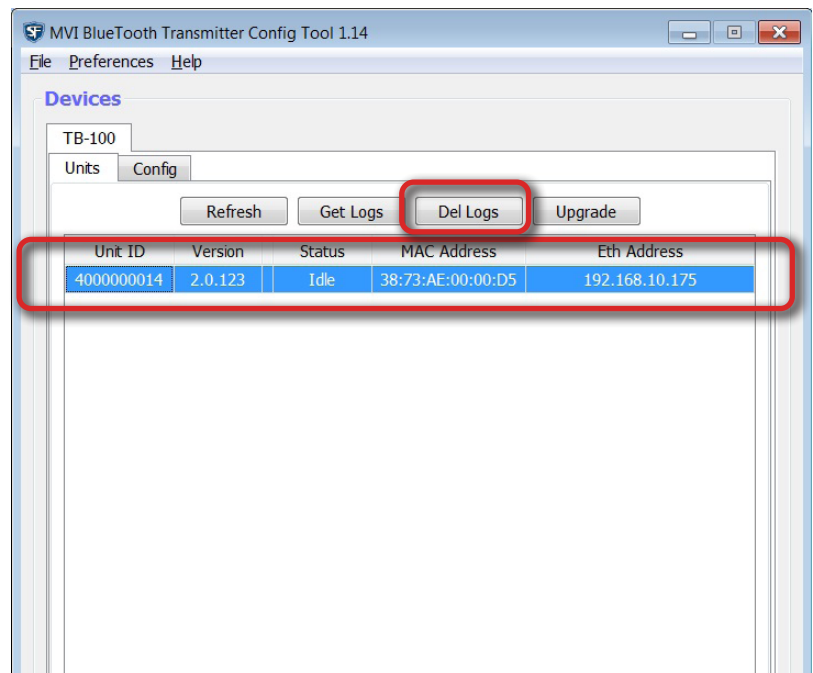
- Forward the Device Log files to your SF Mobile-Vision Inc. support representative, as per their instructions.



Deleting Device Logs

This section describes how to delete all device logs prior to a selected date.

- Click on the device record in the **Units** tab to select it.
- Click **Del Logs** button. A confirmation message displays.

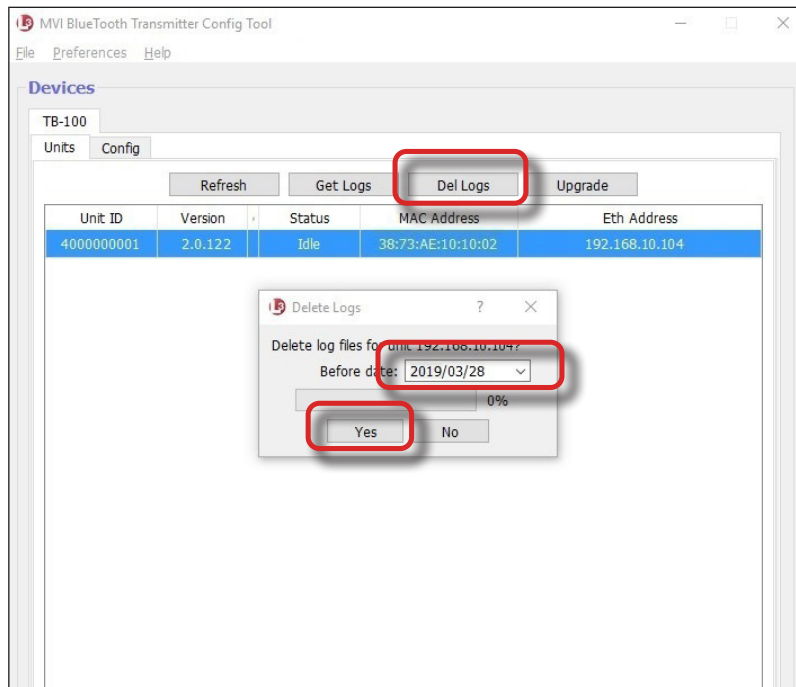


3. If you wish to delete all log files generated prior to today's date (default), then proceed to the next step.

– OR –

If you want to delete all log files generated prior to a different date, then select that date from the **Before date** drop-down list.

4. Click **Yes**.



Blue-Sync

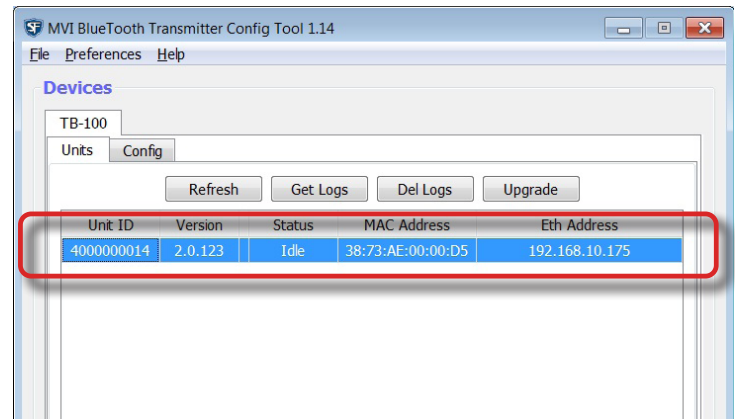
The Blue-Sync feature allows for easy manual pairing of BWX-100s with your TB-100 when the Bluetooth IDs of the BWX-100 and TB-100 do not match.

NOTE: Availability of Blue-Sync on Older Hardware Versions

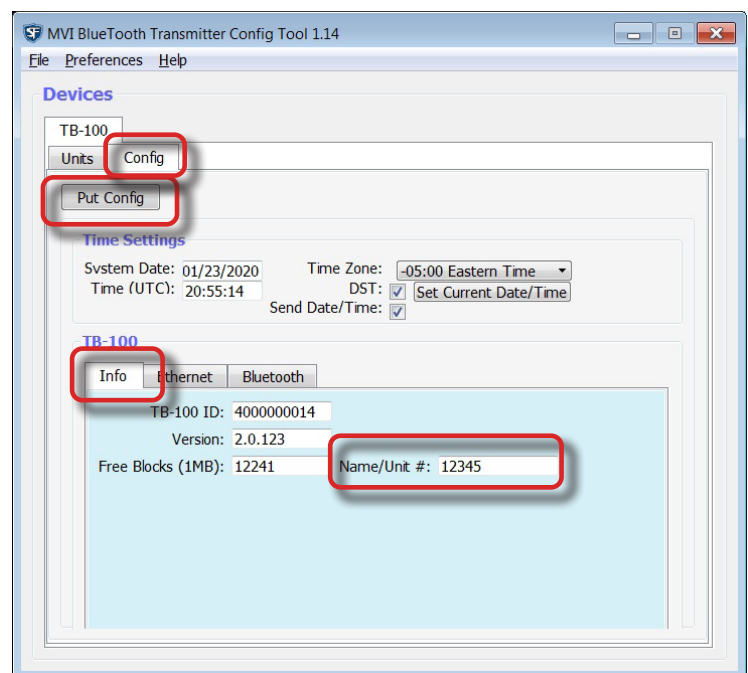
TB-100s that are hardware revision 1.01 require a firmware upgrade to access Blue-Sync. See ["Upgrading TB-100 Firmware" on page 11](#) for more. These TB-100s are also configured to have DHCP as the default connection method. To connect to them, you must either use a network with a DHCP server or configure the machine with the Config Tool to have a DHCP server. See ["Installing and Configuring a DHCP Server on Your Laptop" on page 27](#).

Configuring for the Blue-Sync Feature

1. Click on the device record to select it.



2. On the **Info** tab, enter the **Name/Unit #** of the TB-100 device when you run Blue-Sync. This unit name is the name that will appear in the list of found devices in the LCD window of the BWX-100, which you will use to manually pair the BWX-100 and TB-100 units. See ["Manually Syncing \(using Blue Sync\) the BWX-100 with a TB-100" on page 25](#).



TIP! Naming Units

When naming a unit, use something that is meaningful and memorable. We recommend using the patrol car number (which is indicated on the cruiser) as a unit name.

Manually Syncing (using Blue Sync) the BWX-100 with a TB-100

If you use different vehicles and/or different BWX-100s daily, you will need to manually sync your BWX-100 with the TB-100 at the beginning of each recording session.

TIP! Manually Syncing at the Beginning of each Recording Session

If you always use the same vehicle and the same BWX-100, you do not have to manually re-sync the BWX-100 and your TB-100. However, if you use a different vehicle and/or different BWX-100 every day, then you will need to perform the manual sync procedure at the beginning of each recording session.

Manually sync the BWX-100 with the TB-100.

1. If you have not done so already, turn the vehicle's ignition On. Doing so will power on the Flashback and the TB-100. To ensure that the TB-100 is ready to send and receive signals, check the **STAT** and **PWR** lights on the back of the unit. Both lights should be solid green.
2. Press and hold the BWX-100's **Select** button until the LCD screen reads "BLUE SYNC ON", then release the button. Wait approximately 10 seconds. Once the screen reads "SELECT DEVICE", proceed to step c.
3. Press the **Select** button again. A device name* or serial number will display.



4. If the displayed device name or serial number matches the TB-100, press the **Select** button.

– OR –

If the displayed device name or serial number does not match the TB-100, use the arrow buttons on your BWX-100 to display the correct record, then press **Select**.

A confirmation message displays after the BWX-100 has successfully synced with the TB-100.



5. Repeat steps a – d for all BWX-100s you wish to sync with your TB-100.

*If you entered a value in the Config Tool's Name/Unit# field, then the devices name displays. If not, then the serial number displays.

Testing the Transmission Functions

Testing a Flashback Setup

- Turn on lights and/or siren. Verify that the Flashback recorder in the vehicle and the paired BWX-100 camera started recording.
- Test Flashback-to-BWX Transmission: Manually start a Flashback recording. Verify that all paired BWX-100 cameras in the range also started recording. Then manually stop recording.
- Test BWX-to-Flashback Transmission: Manually start a BWX-100 camera recording. Verify that the Flashback recorder in the vehicle and all paired BWX-100 cameras in the range also started recording. Then manually stop recording.

Testing a Non-Flashback Setup

- Turn on lights and/or siren. Verify that all paired BWX-100 cameras in the range started recording.

Appendix A

Installing and Configuring a DHCP Server on Your Laptop

Rev 1.02 TB-100s are factory pre-set to have a DHCP connectivity setting, and therefore your laptop will need to use a DHCP server to connect to your TB-100 Rev 1.02. If your network does not already have a DHCP server installed, you will have to install and configure a DHCP server on the laptop that will be used for upgrading the TB-100 firmware.

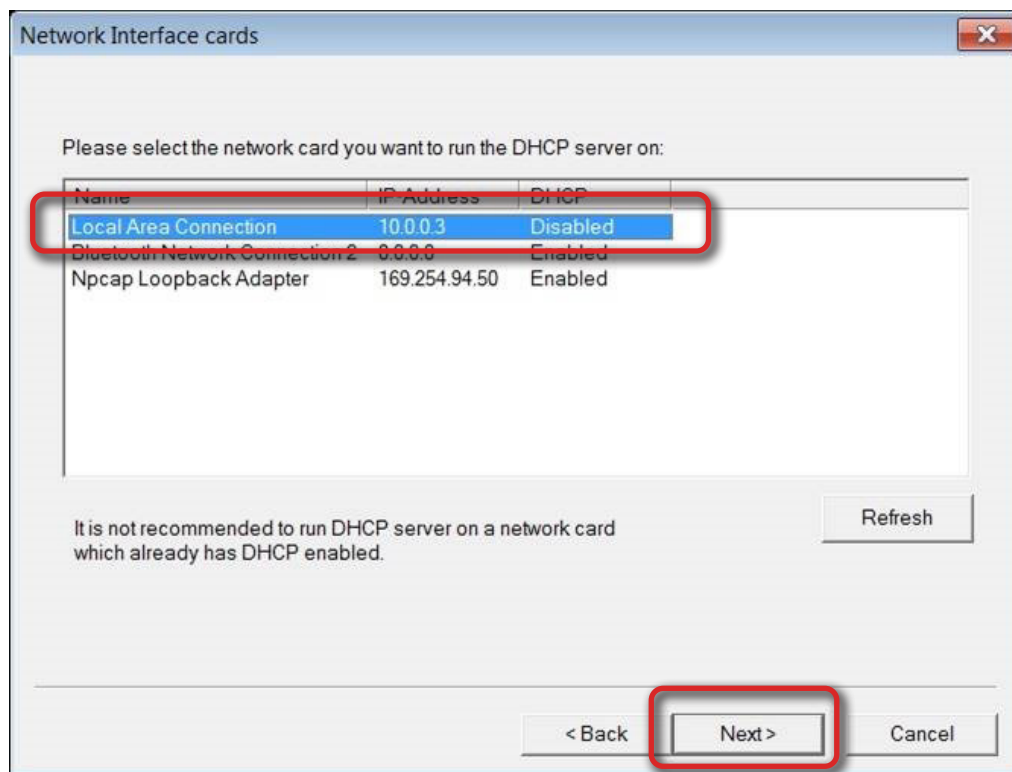
1. Download the DHCP installation zip file for DHCP server v2.5.2 from (<http://www.dhcpserver.de/cms/>), then extract it to a temporary folder on the laptop.
2. Run the **dhcpwiz.exe** to configure the DHCP server.

The **Welcome** window appears.

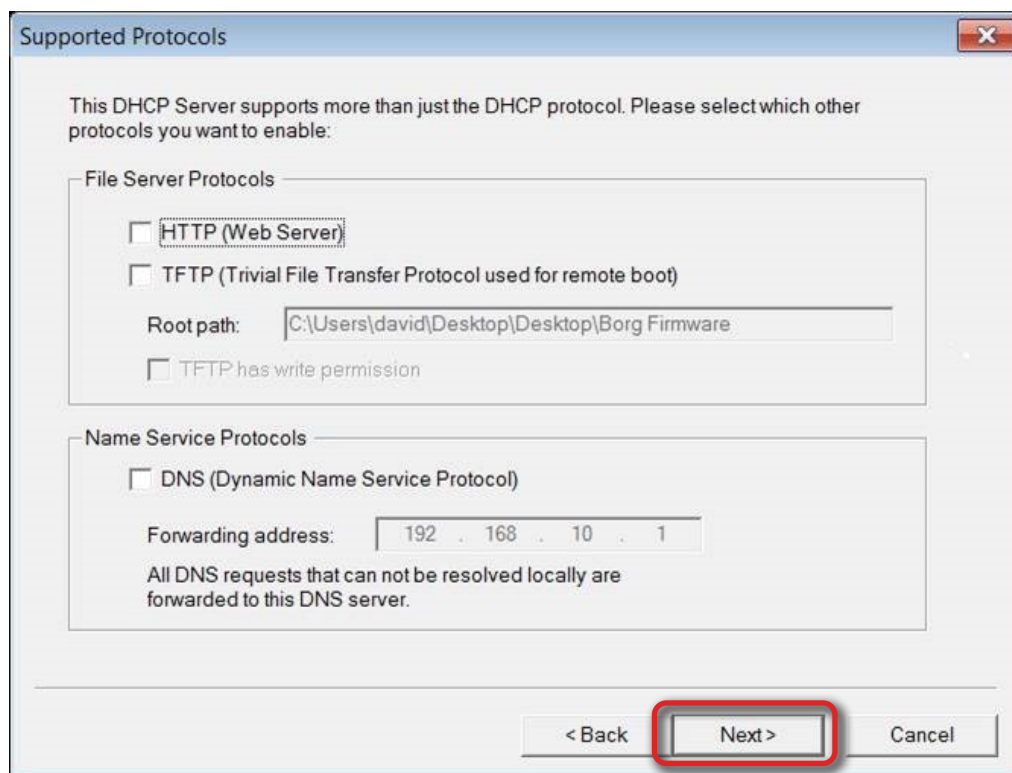


3. Click **Next**.

The **Network Interface cards** window opens.

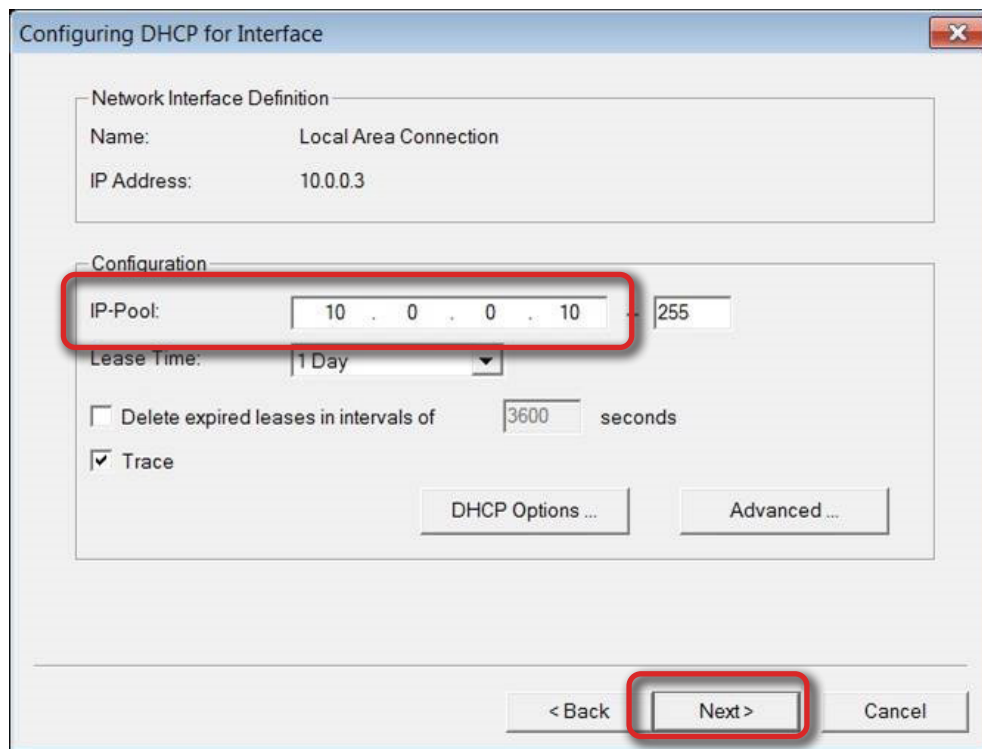


4. Verify that your Ethernet adapter or local area connection is present. Select the correct network, then click **Next**. The **Supported Protocols** window opens.



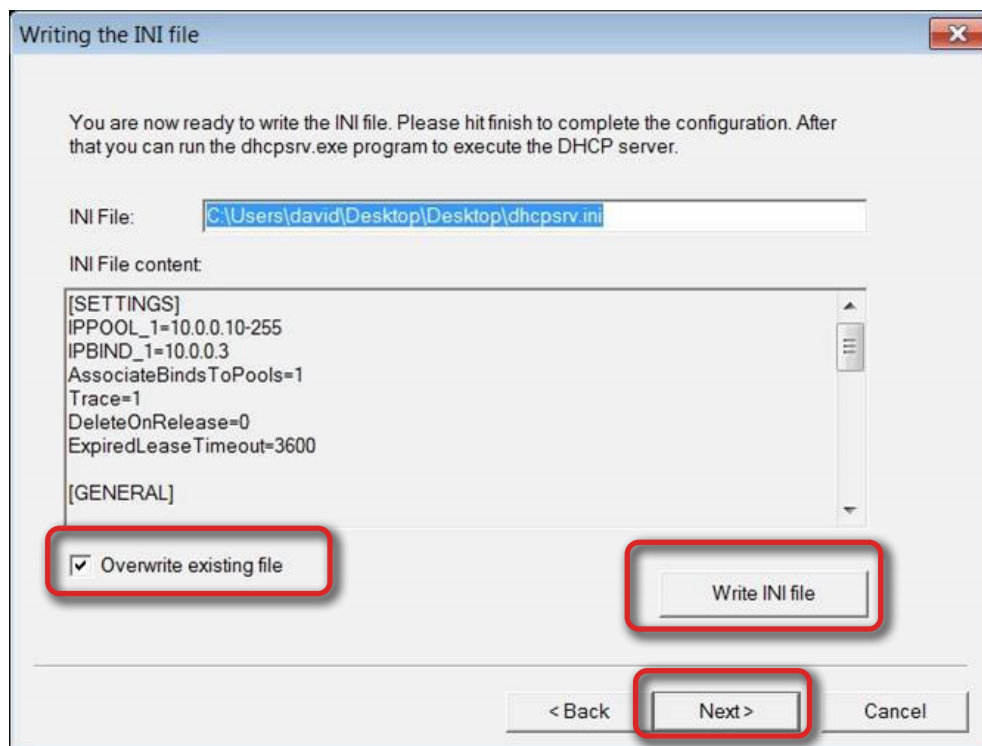
5. Click **Next**. You do not need to select/configure any of these options.

The **Configuring DHCP for Interface** window opens.



6. Ensure that the **IP-Pool** field starts at **10.0.0.10**, and then click **Next**.

The **Writing the INI file** window opens.

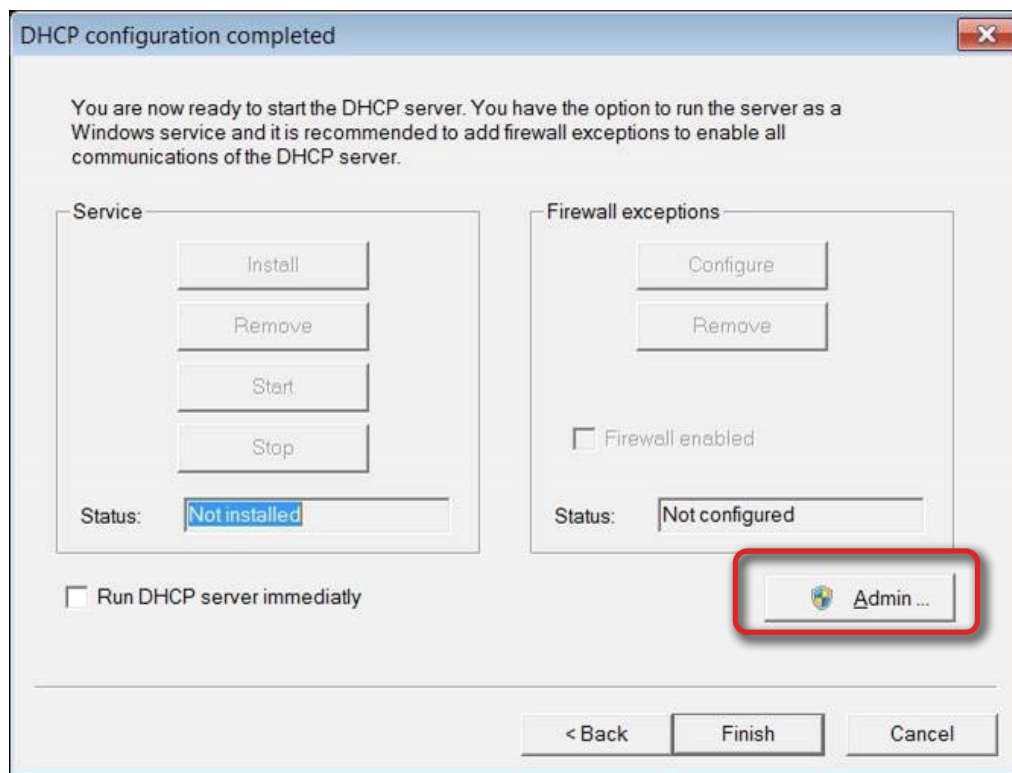


7. Select **Overwrite existing file**, then click on **Write INI file**, then click **Next**.

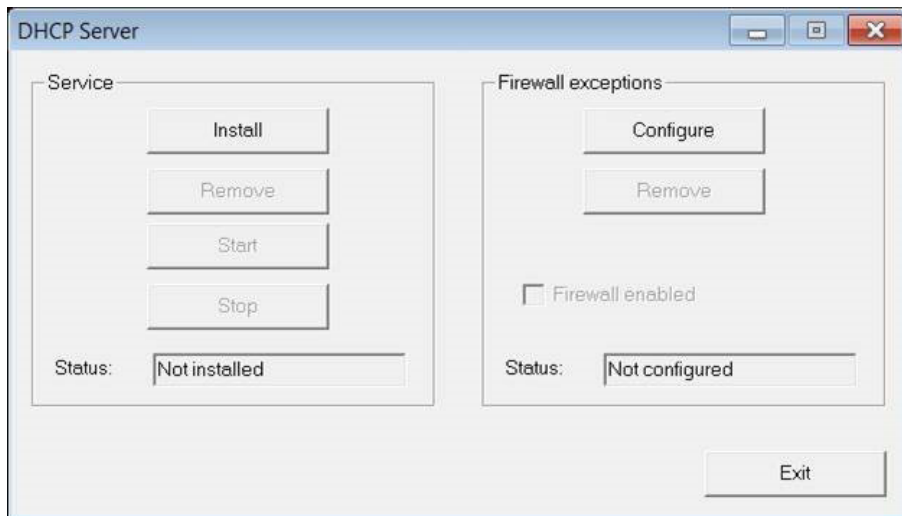
NOTE: Old vs. new INI files

Selecting **Overwrite existing file** ensures that this new INI file overwrites any previously installed INI file.

The **DHCP configuration completed** window opens.



8. Click **Admin** to enable the **Administration** features. The **DHCP Server** window opens.
9. Click **Configure Firewall Exceptions**, and then click **Install** under **Service**.



The service is installed.

10. Click **Start under Service** after the installation is complete.



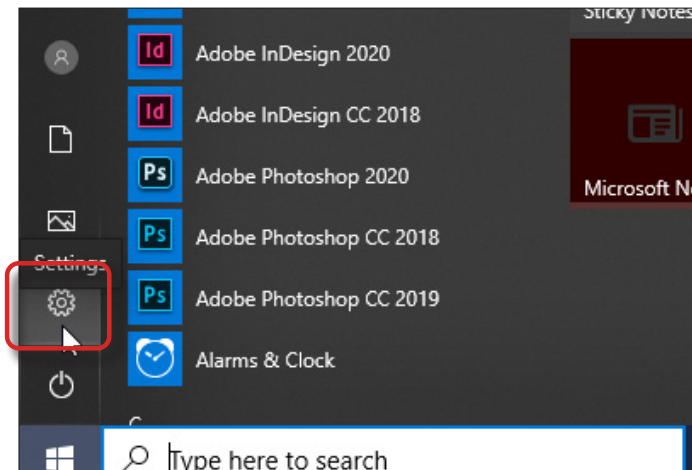
Your computer should now be handing out DHCP addresses. Click **Exit**.

Appendix B

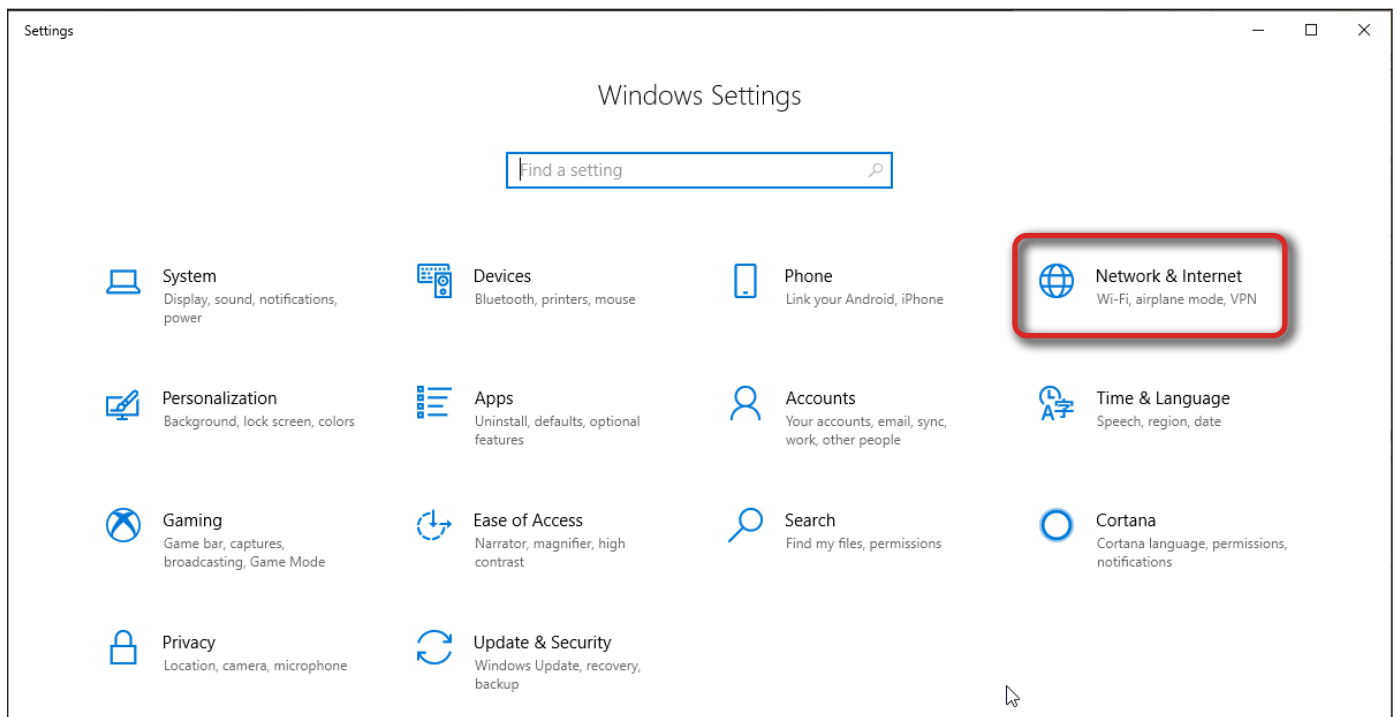
Configuring Your Laptop to Have a Static IP Address

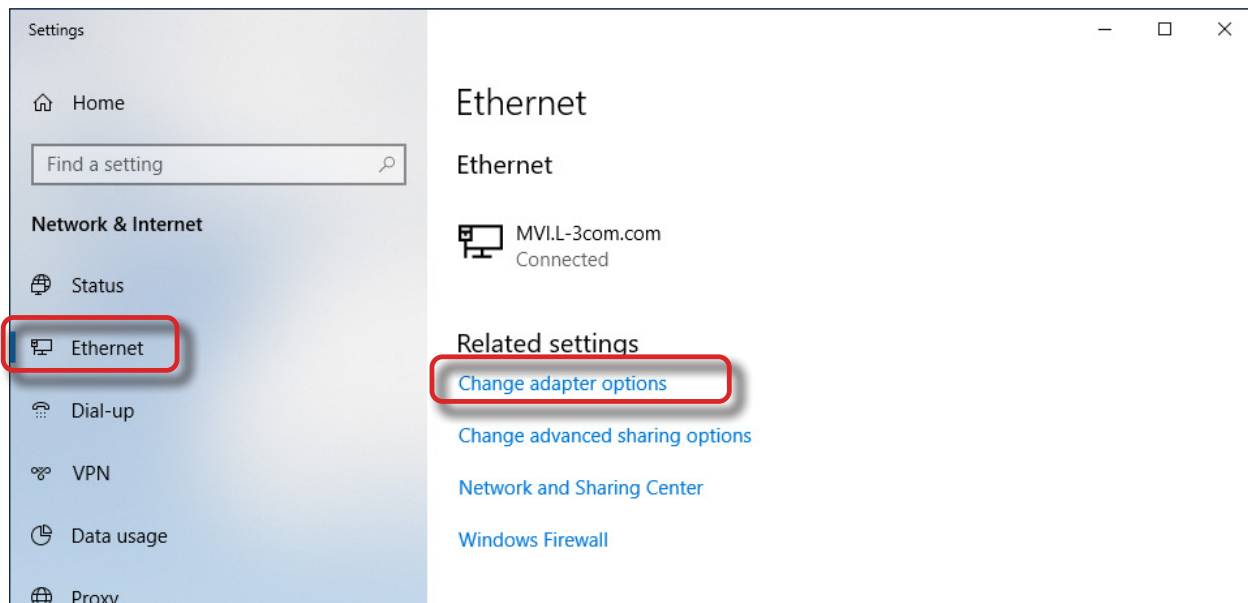
You will need to configure your laptop to have a static IP address so that it can connect to TB-100 devices with static IPs.

1. Open **Windows** settings.



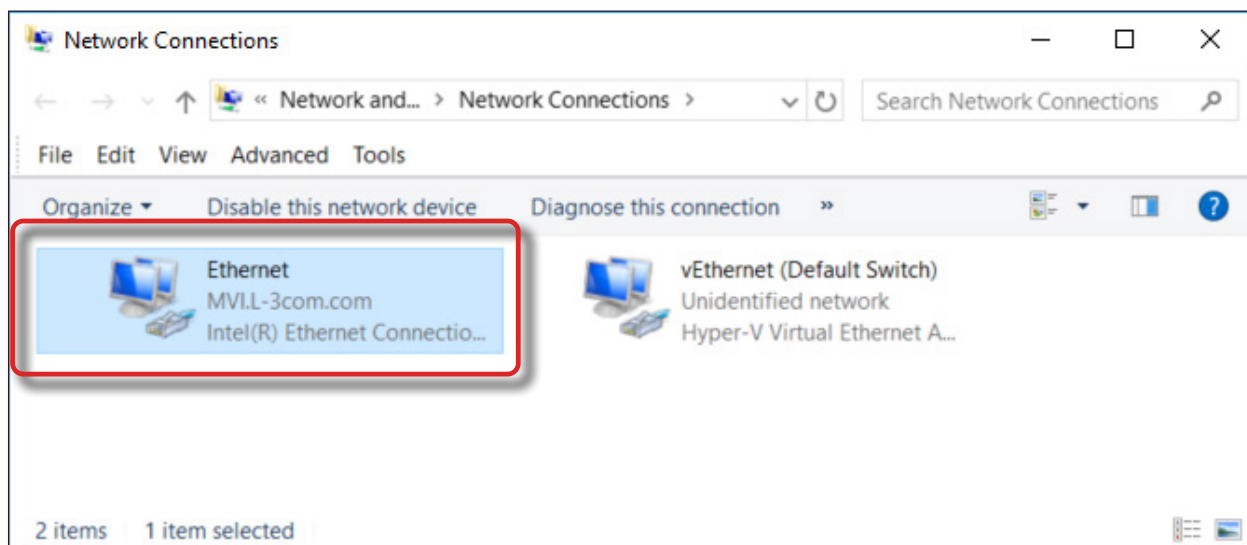
2. Select **Network & Internet**, and then select the **Ethernet** tab.





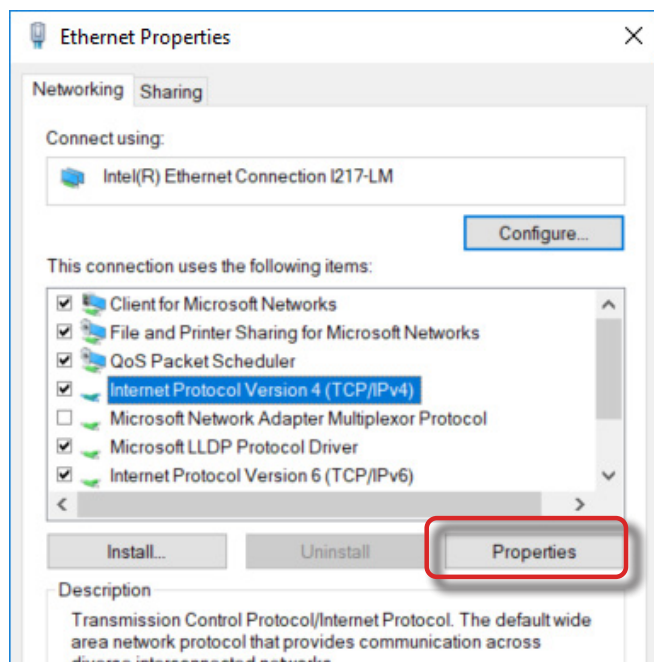
3. Click **Change adapter options**.

The **Network Connections** window opens.

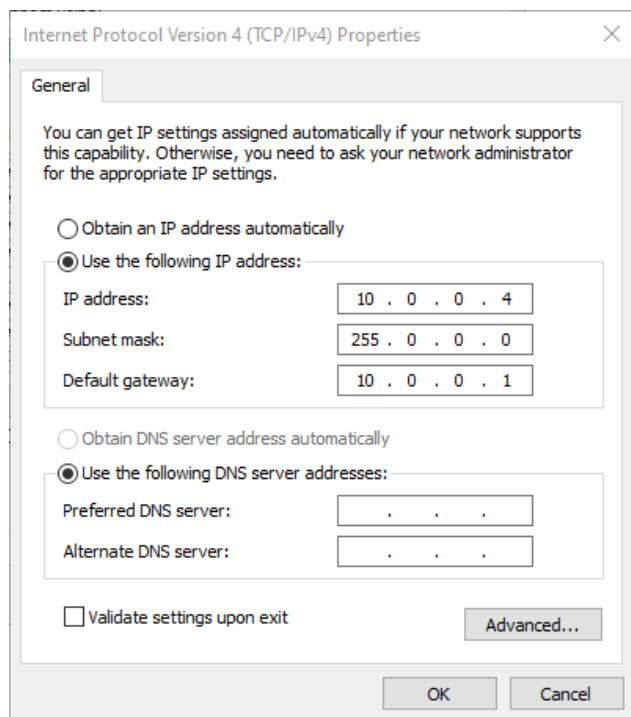


4. Right-click on your **Ethernet** device, and then select **Properties**.

The **Ethernet Properties** window opens.



5. Double-click **Internet Protocol Version 4** or select **Internet Protocol Version 4** then click **Properties**.
The **Internet Protocol Version 4 (TCP/IPv4) Properties** window opens.



6. Enter the values as shown in the above image.

Appendix C: FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

WARNING!

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

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

Canadian Users

This device complies with 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.

Under Industry Canada regulations, this radio transmitter may only operate using a dipole antenna and a maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device has been designed to operate with dipole antenna(s), and having a maximum gain of 9 dBi. Dipole antennas having a gain greater than 9 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

This device is granted for use in Mobile only configurations in which the antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all person and not be co-located with any other transmitters except in accordance with FCC and Industry Canada multi-transmitter product procedures.

Utilisateurs Canadiens

Cet appareil est conforme aux normes d'Industrie Canada en ce qui concerne les appareils de type CNR exempts de licence. Son utilisation doit répondre aux deux conditions suivantes: 1) cet appareil ne peut produire d'interférence, et 2) cet appareil doit accepter toute interférence, incluant celle capable de causer son fonctionnement indésiré.

En vertu du règlement d'Industrie Canada, cet émetteur radio ne peut fonctionner que si on utilise une antenne dipôle et un gain maximal (ou moindre) approuvés par Industrie Canada en fonction de l'émetteur. Pour réduire le risque d'interférence radio chez les autres utilisateurs, on recommande de choisir le type d'antenne et son gain de manière à ce que la puissance isotrope rayonnée équivalente (p.i.r.e.) suffise tout juste à assurer une communication efficace.

Cet appareil a été conçu pour être muni d'une antenne dipôle ou plus avec un gain maximal de 9 dBi. Il est strictement interdit d'utiliser des antennes dipôles présentant un gain supérieur à 9 dBi avec cet appareil. L'antenne doit présenter une impédance de 50 ohms.

Cet appareil doit être utilisé uniquement dans les configurations mobiles, alors que les antennes employées avec cet émetteur doivent être installées de manière à présenter une distance de séparation d'au moins 20 cm de tout individu. De plus, elles ne doivent pas se trouver au même endroit que d'autres émetteurs, sauf si on respecte la procédure de la FCC et d'Industrie Canada en ce qui concerne les produits dotés de plusieurs émetteurs.