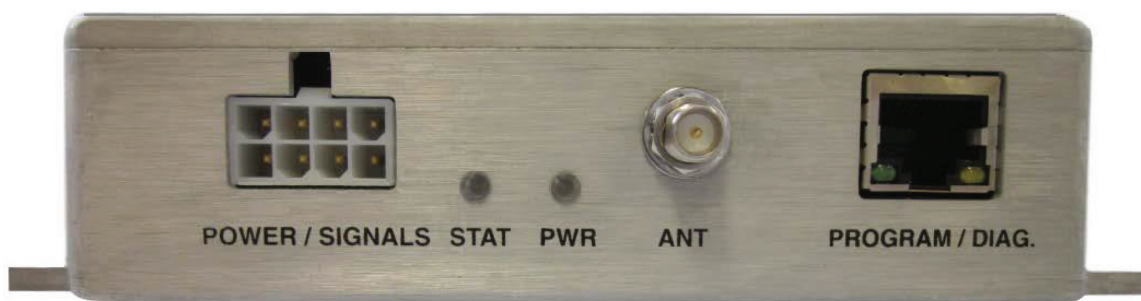


TB-100 Bluetooth Transmitter



Installation and Configuration Guide



Contents

- Introduction.3**
- Installing a TB-100.. . . .3**
 - TB-100 Kit.. . . . 3
 - Installing a TB-100 in a Vehicle with a Flashback Recorder. 4
 - Wiring Diagram for Installing a TB-100 in a Vehicle with a Flashback Recorder. 5
 - Connections for Installing a TB-100 in a Vehicle with a Flashback Recorder 6
 - Installing a TB-100 in a Vehicle without a Flashback Recorder. 6
 - Wiring Diagram for Installing a TB-100 in a Vehicle without a Flashback Recorder. 7
 - Connections for Installing a TB-100 in a Vehicle without a Flashback Recorder 8
 - Configuring Flashback DVRs to Interact with TB-100s. 8
 - From DES 8
 - From Flashback3 or FlashbackHD: 9
 - From Flashback 2: 9
- Configuring Devices For Bluetooth Transmission.. . . .10**
 - Downloading, Installing, and Launching the Config Tool.. . . . 10
 - Connecting to a TB-100 Bluetooth Transmitter.. . . . 10
 - TB-100 Factory Default Settings 12
 - Applying Configuration Settings. 12
 - Configuring DHCP on Your TB-100. 13
 - Pairing via Bluetooth IDs. 14
 - Configuring BWX-100 DVRs to Support Bluetooth Transmission 15
 - Manually Pairing. 15
 - Assigning a TB-100 Unit Name/Number for Manual Pairing 15
 - Manually Pairing a BWX-100 with a TB-100 16
- Testing the Transmission Functions.16**
 - Testing a Flashback Setup 16
 - Testing a Non-Flashback Setup 16

Appendix A.....17
 Installing and Configuring a DHCP Server on Your Laptop..... 17

Appendix B.....22
 Configuring Your Laptop to Have a Static IP Address 22

Appendix C.....25
 Viewing the Ethernet Address on Your TB-100..... 25

Appendix D.....26
 Configuring DHCP on Your TB-100..... 26

Appendix E.....27
 Upgrading TB-100 Firmware..... 27

Appendix F.....28
 Enabling/Disabling Bluetooth Transmissions 28
 Disabling the 'Ignore TB-100 Transmissions' Option 28

Appendix G.....29
 Device Logs..... 29
 Downloading Device Logs..... 29
 Deleting Device Logs 30

Appendix H: FCC Compliance.....32

Introduction

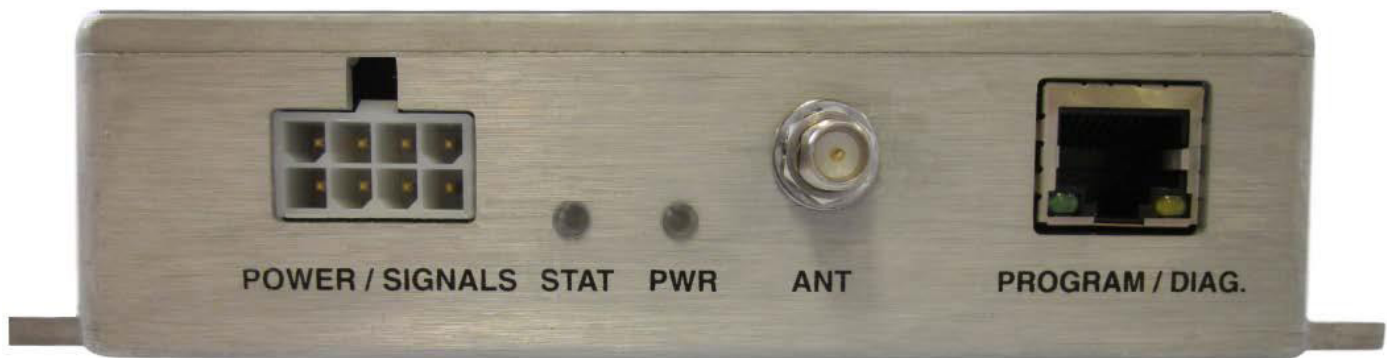
The TB-100 Bluetooth Transmitter is a device that can be added to new and existing Flashback systems (including Flashback2s, Flashback3s, and FlashbackHDs) to enable bi-directional Bluetooth transmission between Flashback system(s) and BWX-100 body worn camera(s) (BWCs). This enables your recording devices 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.](#)

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

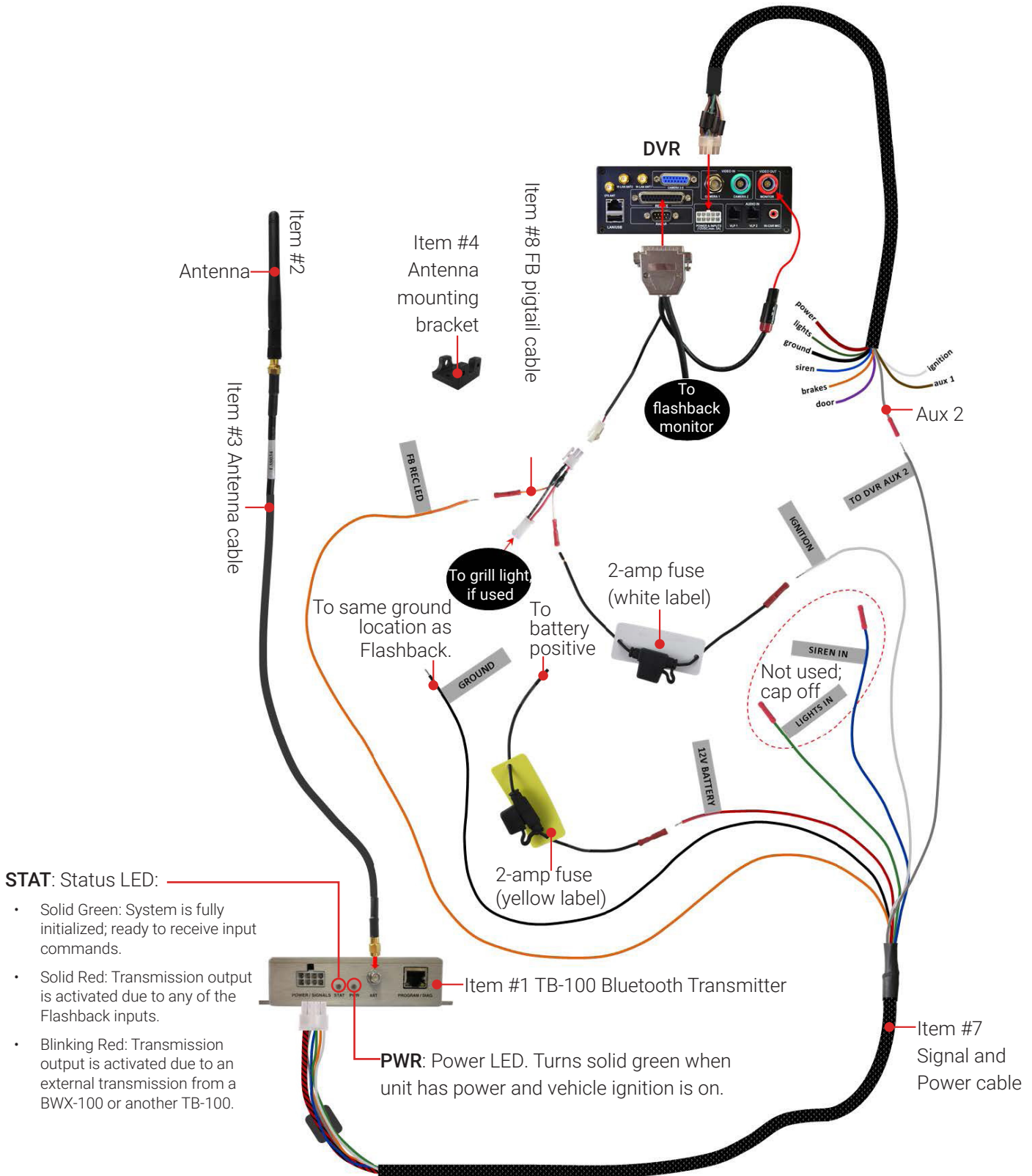
1. **Check your Flashback wiring harness for the gray Aux 2 wire.** If your wiring harness includes the gray Aux 2 wire, then proceed to the next step. If your wiring harness does not include the gray Aux 2 wire and your Aux 1 wire is already connected to another device, then you'll need to order an 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](#).

Wiring Diagram for Installing a TB-100 in a Vehicle with a Flashback Recorder



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.**

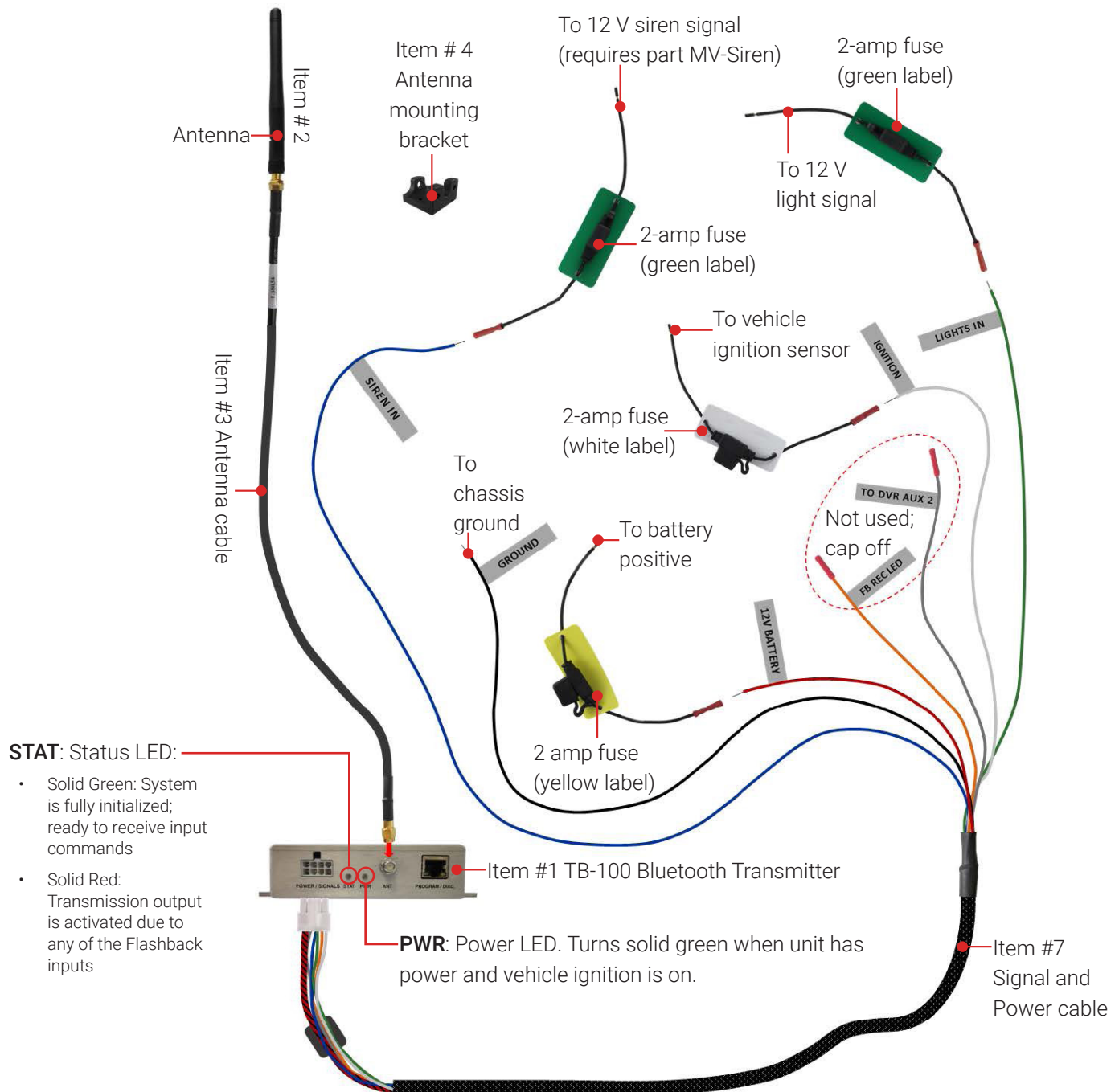
Installing a TB-100 in a Vehicle without a Flashback Recorder

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 H: FCC Compliance" on page 32](#) 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 Flashback DVRs to Interact with TB-100s

Depending on how you installed the TB-100 Bluetooth Transmitter, you will need to turn on either the Aux 1 or Aux 2 trigger in your Flashback DVR.

From DES

The way you configure your BWX-100 DVRs depends on whether your agency uses the Fleet Management feature.

To check if the feature is enabled (if applicable), refer to the **Enabling or Disabling Fleet Management** section in the **DES Administrator's Guide**, found on the [SafeFleet Community](#).

If Fleet Management is Disabled (or not applicable)

- Follow steps 1-10 in the **Turning the Aux1/2 Trigger On** subsection of the **Flashback 3/HD User Guide**.

OR

- Complete steps 1-7 and 17 in the **Turning the Aux 1/2 Trigger On/Off** subsection of the **Flashback2 User Guide**.

If Fleet Management is Enabled and Your DVR is Assigned to a DVR Group

- Complete steps 1-2 in the **Configuring DVR Groups** section of the **DES Administrator's Guide**.
- Review step 3 of the **Configuring Audio, Video, Trigger, and Display Settings** subsection of the **Configuring a Flashback DVR Group** section.
- Ensure that either **Aux 1 Trigger** or **Aux 2 Trigger** is selected.

If Fleet Management is Enabled and Your DVR is Not Assigned to a DVR Group

- Complete steps 1-3 in the **Configuring Flashback DVRs** section in the **DES Administrator's Guide**.
- Review the **Configuring Triggers Subsection** of the **Configuring a Flashback DVR Not Assigned to a DVR Group**.
- Ensure that either **Aux 1 Trigger** or **Aux 2 Trigger** is selected.

From Flashback3 or FlashbackHD:

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 **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.

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

Main Menu > Recording > Input L3	
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

From Flashback 2:

1. Turn the vehicle ignition On. Once the Flashback has finished booting, proceed to step 2.
2. Make sure the door to your DVR is open and **Auto** mode is Off. (If necessary, press the **AUTO** button until the **AUTO** light turns off.)
3. Press **M**. The **Flashback2 Main Menu** displays.
4. Press the **▶▶** or **◀◀** button until **Input Setup** is highlighted.
5. Press **R**. 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 **R**. 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 **M** three times to save your changes and exit this option.

Input Setup	
Light Dsp/Trg	On / On
Siren Dsp/Trg	On / On
Brakes Dsp	On
AUX1 Dsp/Trg	On / 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

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.

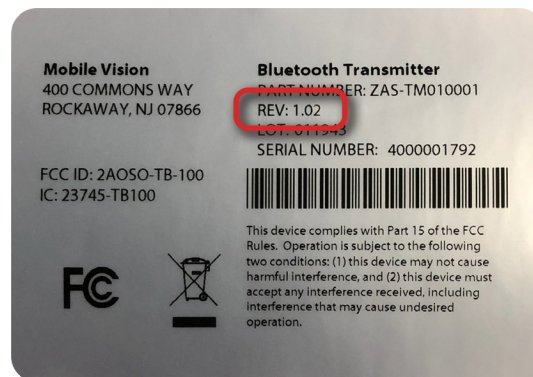
1. If your laptop has a CD/DVD drive, insert the **TB-100 Config Tool CD** in the PC’s CD/DVD drive. Skip to step 4.
– OR –
If your laptop does not have a CD/DVD drive, use another PC to copy the **mvi-BluetoothTransmitter_[version number].zip** file from the CD to a USB drive.
2. Insert the USB drive 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 17.](#)
- 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 at static IP as the default connection method.

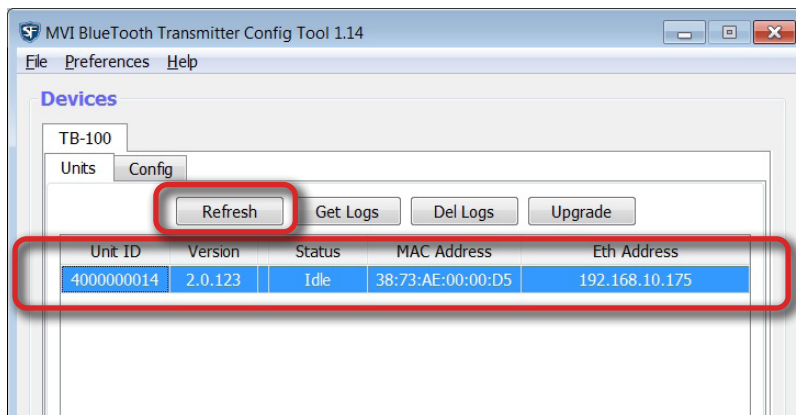
If you currently have a DHCP server on your laptop, then you can either:

- Configure DHCP on your TB-100, or
- Configure your laptop to have a static IP address.

For more about configuring DHCP on your TB-100, see ["Configuring DHCP on Your TB-100" on page 13.](#)

For more about configuring your laptop to have a static IP address, see ["Configuring Your Laptop to Have a Static IP Address" on page 22.](#)

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 "Appendix F" on page 28. Enabling/Disabling Bluetooth Transmissions.
Bluetooth ID	0	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 "Pairing via Bluetooth IDs" on page 14
Ignore Bluetooth ID Transmissions	No	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 28.
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 25.

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

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.

Applying Configuration Settings

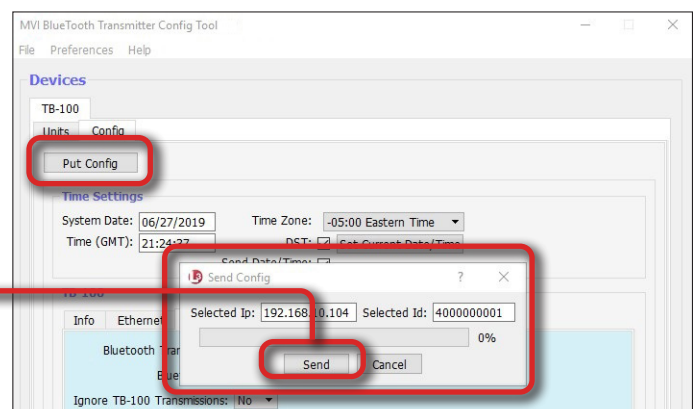
After changing configuration settings, you need to send those settings to the affected TB-100. Click the **Put Config** button to send the settings to the affected TB-100s.

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.



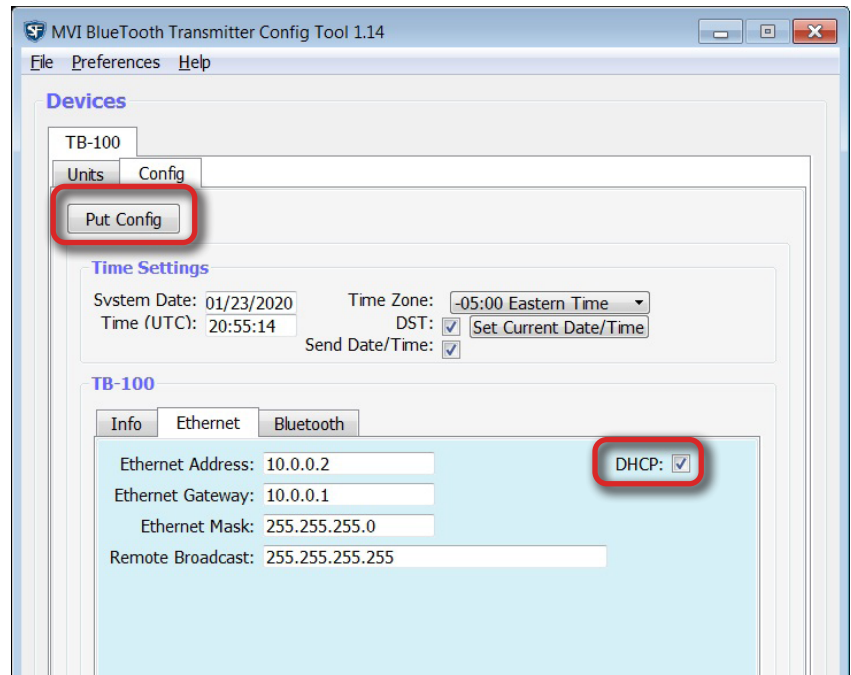
Configuring DHCP on Your TB-100

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. 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**.
3. Click **Put Config**. The **Send Config** popup displays.
4. Click **Send**. After the update-in-progress indicator reaches 100%, then the popup closes.

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 17](#), **Installing and Configuring a DHCP Server on your Laptop**.

Pairing via Bluetooth IDs

TB-100s only pair with TB-100s or BWX-100s that share the same Bluetooth ID. The factory-set ID for all TB-100s is 0. Therefore, by default, TB-100s will pair with all other TB-100s unless the Bluetooth ID is changed to another unique ID.

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

If you want your TB-100s to pair with only a specific group of devices, then you must change the group's Bluetooth IDs to a unique number.

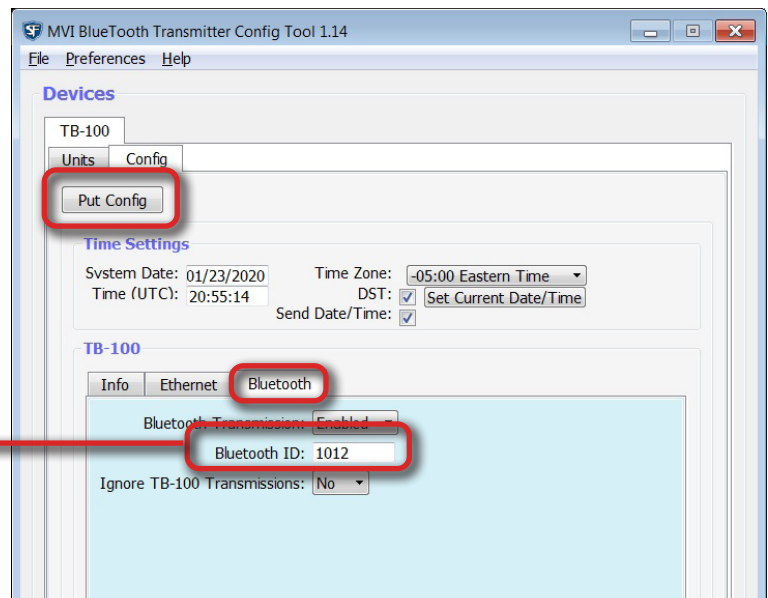
Consider the following configuration scenarios:

- **Patrol Car:** Assign a unique Bluetooth ID to each car's TB-100. This will prevent officers from triggering recordings in other patrol cars. If each officer has their own BWX-100 and always uses the same car, then you can assign the unique Bluetooth ID to each officer's BWX-100, as well. If officers share BWX-100s or cars, then the BWX-100s can still be manually paired with the car, as described in **"Manually Pairing a BWX-100 with a TB-100"** in the **BWX-100 Officer Guide**.
- **Station:** Assign all the TB-100s and BWX-100s from the same station to have the same Bluetooth ID. In this scenario, any officer from that station can use their BWX-100 or TB-100 to trigger recordings on all devices from that station.
- **Agency:** Assign all the TB-100s and BWX-100s in your agency to have the same Bluetooth ID, so that any device can trigger a recording on all devices. As TB-100s already have a default Bluetooth ID of '0', you can simply add this same ID to all BWX-100s in your agency, or assign a new ID to all your TB-100s and BWX-100s.

Assigning a Bluetooth ID to a TB-100

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

The Bluetooth ID is the alphanumeric value you use for communicating with BWX-100s or other TB-100s that have the same Bluetooth ID.



3. Click **Put Config**. The **Send Config** popup displays.
4. Click **Send**. After the update-in-progress indicator reaches 100%, then the popup closes.

Configuring BWX-100 DVRs to Support Bluetooth Transmission

The way you configure your BWX-100 DVRs depends on whether your agency uses the Fleet Management feature.

To check if the feature is enabled (if applicable), refer to the **Enabling or Disabling Fleet Management** section in the **DES Administrator's Guide**, found on the [SafeFleet Community](#).

If Fleet Management is Enabled

1. Follow steps 1-3 in the **Configuring a Body-Worn DVR when Fleet Management is Enabled** section of the **DES Administrator's Guide**.
2. Review steps 1 and 2v Steps in the corresponding **Configuring Video Settings** subsection.

If Fleet Management is Disabled (or not applicable)

1. Follow steps 1-3 in the **Configuring a Body-Worn DVR when Fleet Management is Disabled** section of the **DES Administrator's Guide**.
2. Review steps 1 and 2v Steps in the corresponding **Configuring Video Settings** subsection of the **Configuring a Body-Worn DVR when Fleet Management is Enabled** section.

Manually Pairing

Assigning a TB-100 Unit Name/Number for Manual Pairing

Assigning a unit name/number to TB-100s allows for the manual pairing of BWX-100s with your TB-100 when the Bluetooth IDs of the BWX-100 and TB-100 do not match. Manually pairing devices is also known as Blue Sync. If you plan to use this feature, please refer to the **Manually Pairing the BWX-100 with a TB-100** section of the **BWX-100 Officer's Guide**.

NOTE: Ability to Manually Pair Older Hardware Versions

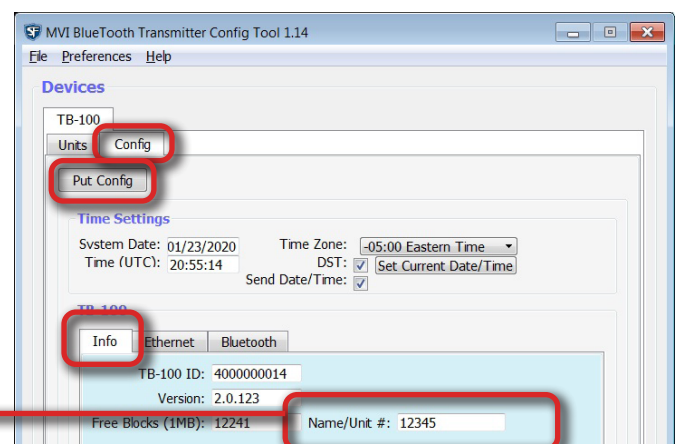
TB-100s that are hardware revision 1.01 require a firmware upgrade to gain the ability to manually pair. See ["Upgrading TB-100 Firmware" on page 27](#) for more. These TB-100s are also configured to have DHCP as the default connection method. To connect to them, you must either use a network with a 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 17](#).

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

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.

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



2. Enter the **Name/Unit #** for the TB-100 device. 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 Pairing a BWX-100 with a TB-100" on page 16.](#)

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.

3. Click **Put Config**. The **Send Config** popup displays.
4. Click **Send**. After the update-in-progress indicator reaches 100%, then the popup closes.

Manually Pairing a BWX-100 with a TB-100

If the Bluetooth ID of the BWX-100 and TB-100 does not match, you will need to manually pair your BWX-100 with the TB-100 at the beginning of each recording session.

If you plan to use this feature, please refer to the **Manually Pairing the BWX-100 with a TB-100** section of the **BWX-100 Officer's Guide**.

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.

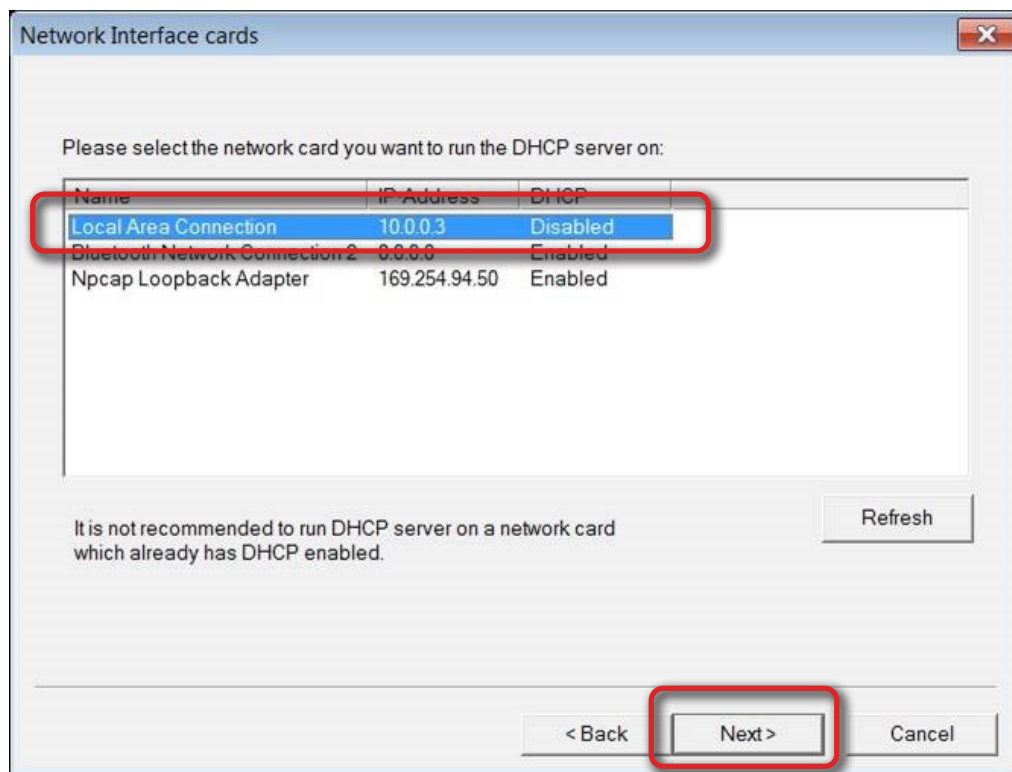
1. Download the DHCP installation zip file for DHCP server v2.5.2 from (<http://www.dhcpserver.de/cms/>), then extract it to a temporary folder on the laptop.
2. Run the **dhcpcwiz.exe** to configure the DHCP server.

The **Welcome** window appears.

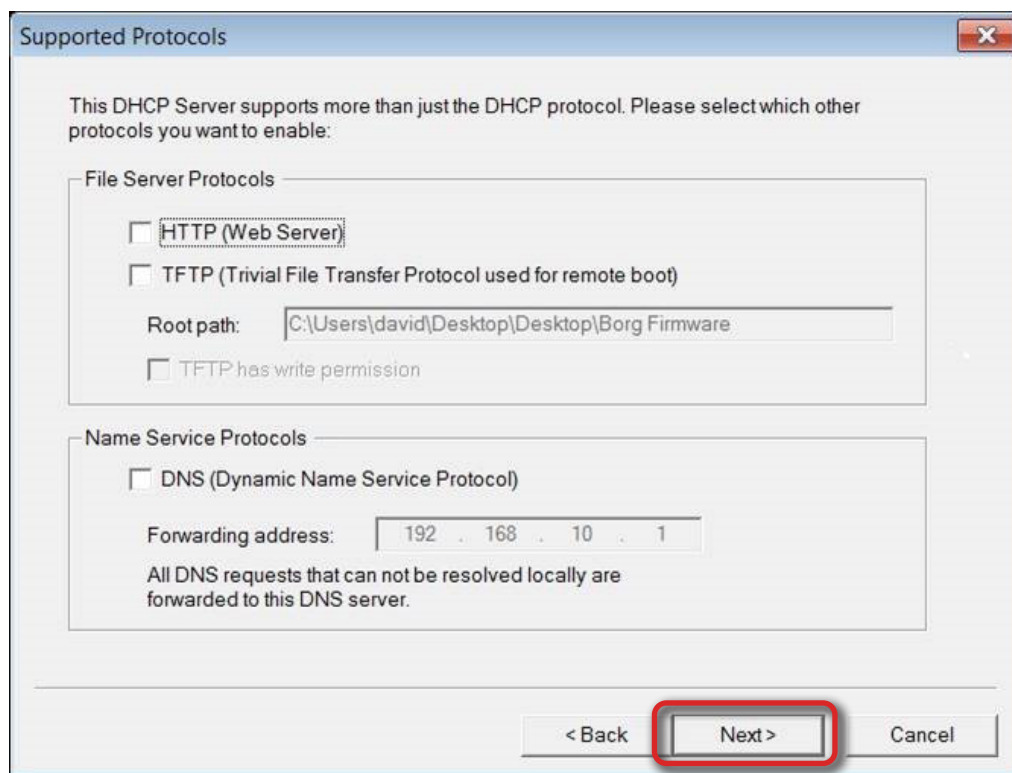


3. Click **Next**.

The **Network Interface cards** window opens.

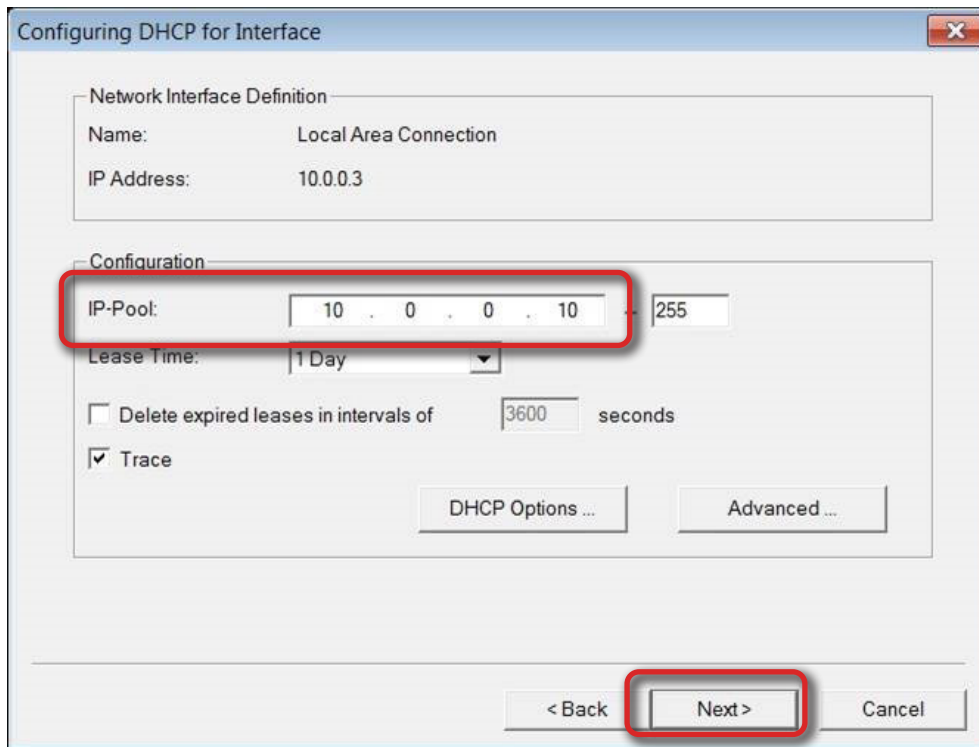


4. Verify that your Ethernet adapter or local area connection is present. Select the correct network, then click **Next**. The **Supported Protocols** window opens.



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

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



The "Configuring DHCP for Interface" window is shown. It has a title bar with a close button. The window is divided into two main sections: "Network Interface Definition" and "Configuration".

Network Interface Definition:

- Name: Local Area Connection
- IP Address: 10.0.0.3

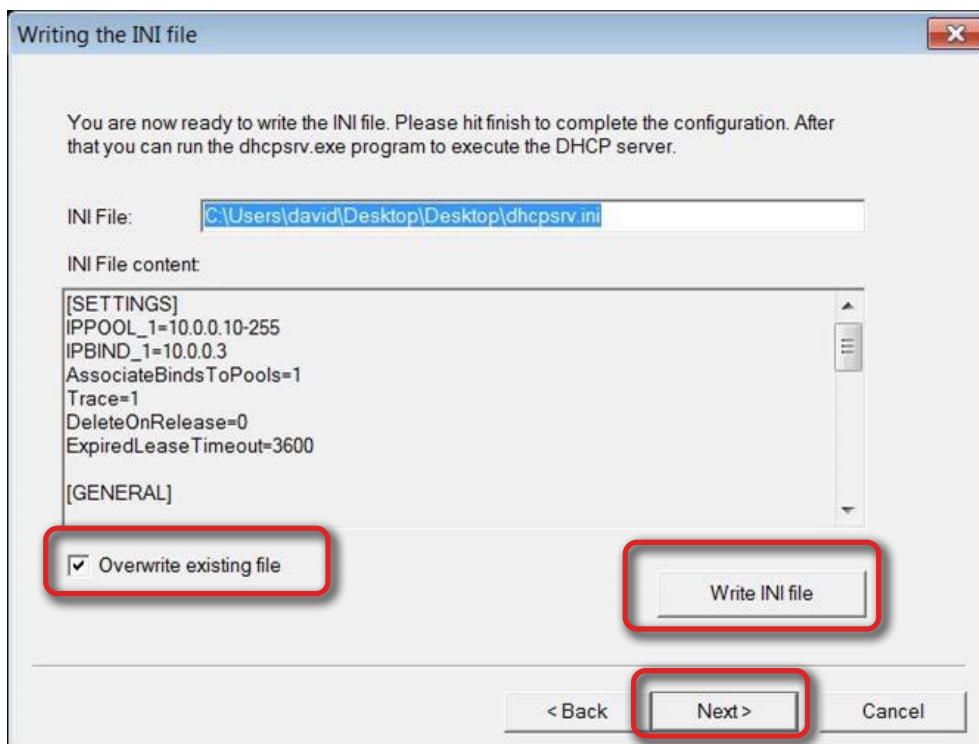
Configuration:

- IP-Pool: 10 . 0 . 0 . 10 (The entire IP-Pool field is highlighted with a red box).
- Lease Time: 1 Day
- ☐ Delete expired leases in intervals of 3600 seconds
- ☒ Trace
- Buttons: DHCP Options ... and Advanced ...

At the bottom, there are three buttons: "< Back", "Next >" (highlighted with a red box), and "Cancel".

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

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



The "Writing the INI file" window is shown. It has a title bar with a close button. The window contains the following information:

You are now ready to write the INI file. Please hit finish to complete the configuration. After that you can run the dhcpd.exe program to execute the DHCP server.

INI File: C:\Users\david\Desktop\Desktop\dhcpd.ini

INI File content:

```
[SETTINGS]
IPPOOL_1=10.0.0.10-255
IPBIND_1=10.0.0.3
AssociateBindsToPools=1
Trace=1
DeleteOnRelease=0
ExpiredLeaseTimeout=3600

[GENERAL]
```

At the bottom, there are three buttons: "< Back", "Next >" (highlighted with a red box), and "Cancel".

There are two red boxes highlighting specific elements:

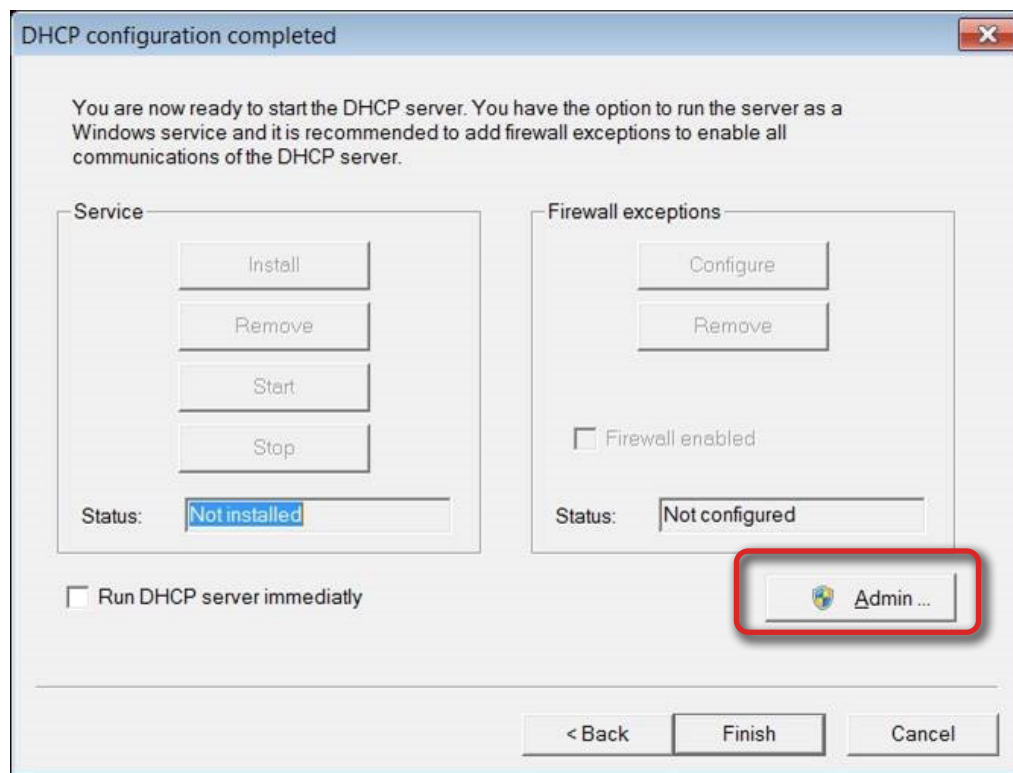
- A red box around the "Overwrite existing file" checkbox, which is checked.
- A red box around the "Write INI file" button.

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

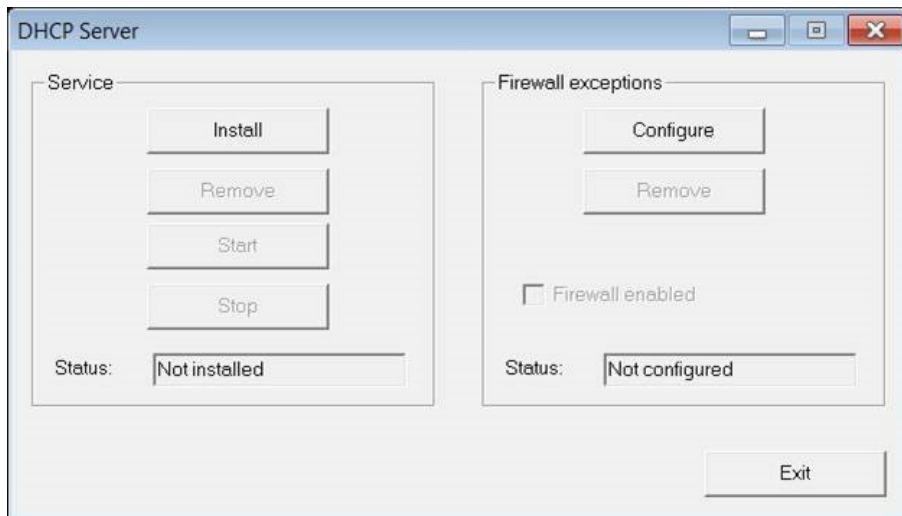
NOTE: Old vs. new INI files

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.



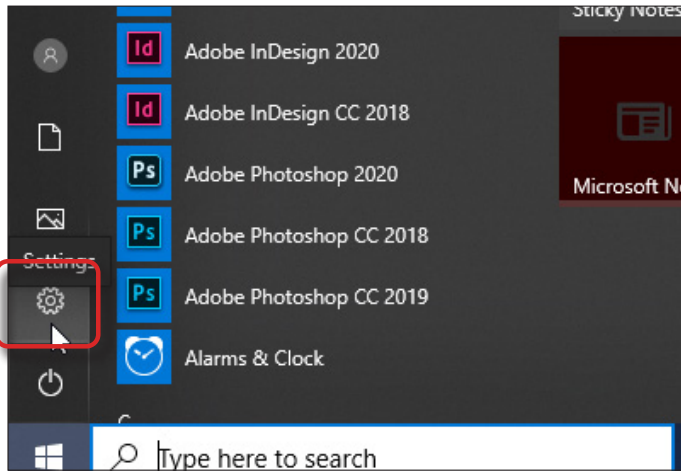
Your computer should now be handing out DHCP addresses. Click **Exit**.

Appendix B

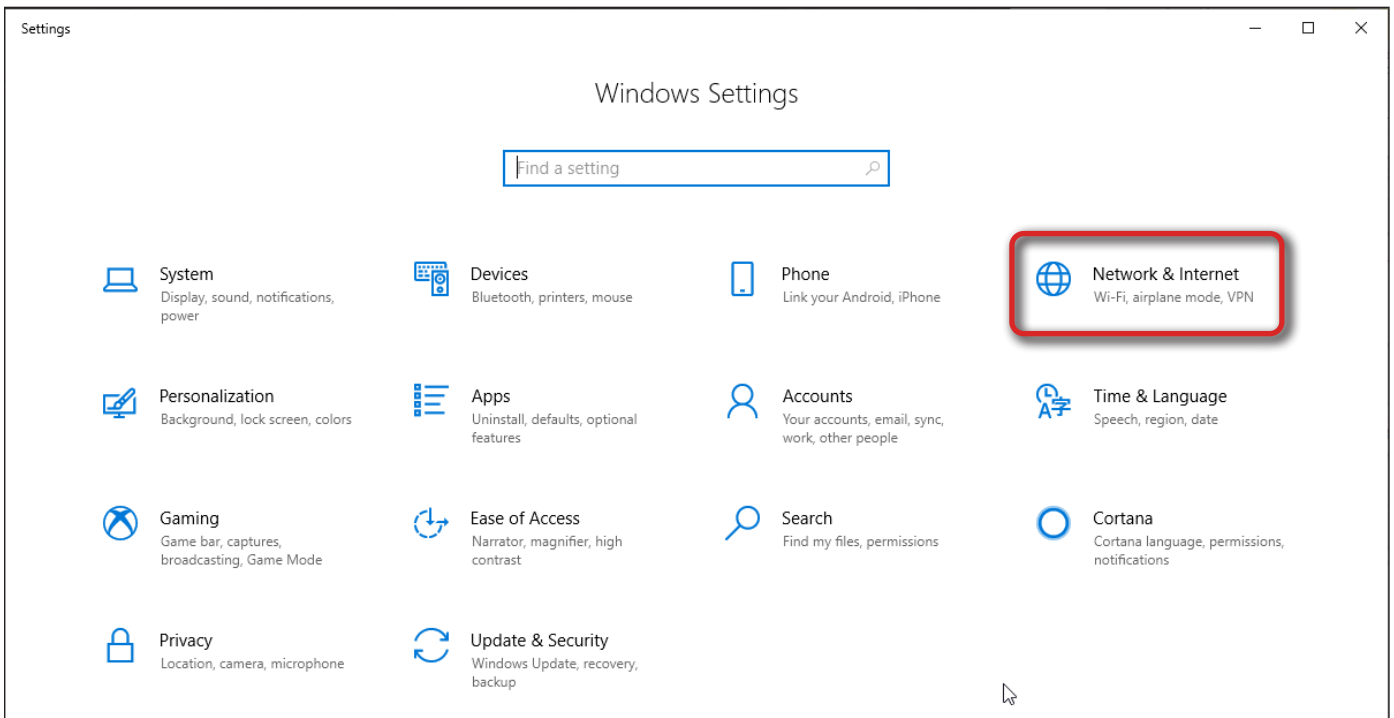
Configuring Your Laptop to Have a Static IP Address

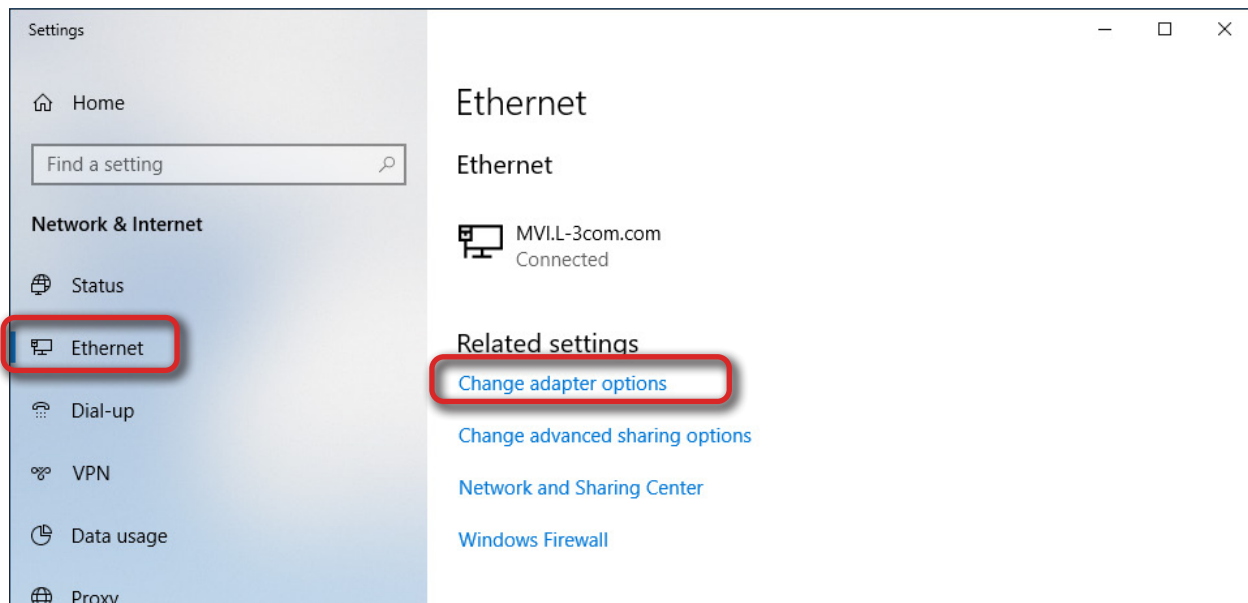
You will need to configure your laptop to have a static IP address so that it can connect to TB-100 devices with static IPs.

1. Open **Windows** settings.



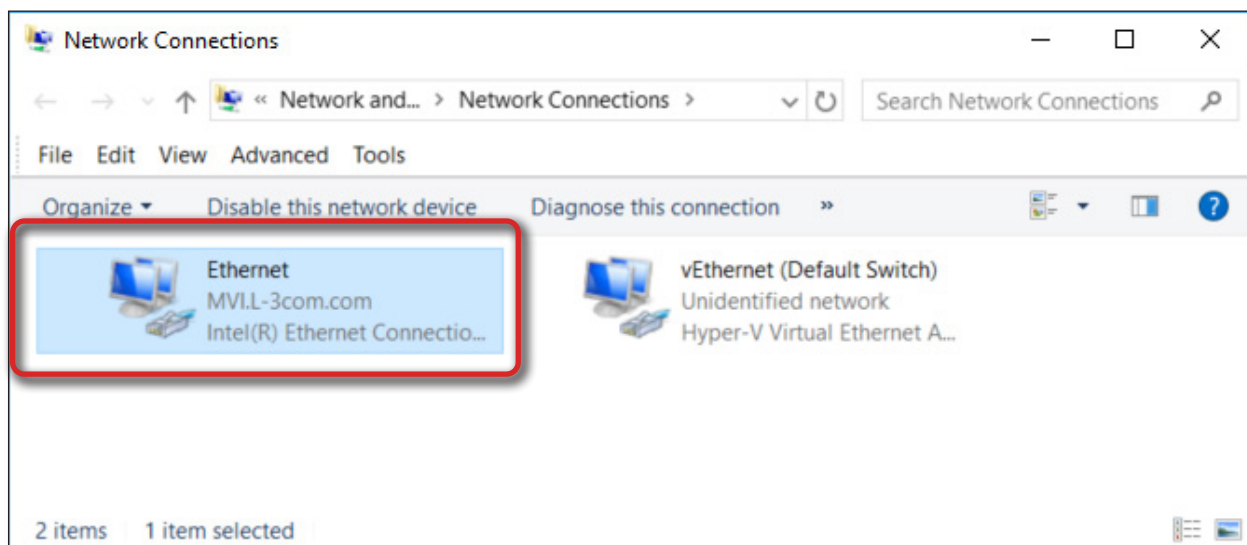
2. Select **Network & Internet**, and then select the **Ethernet** tab.





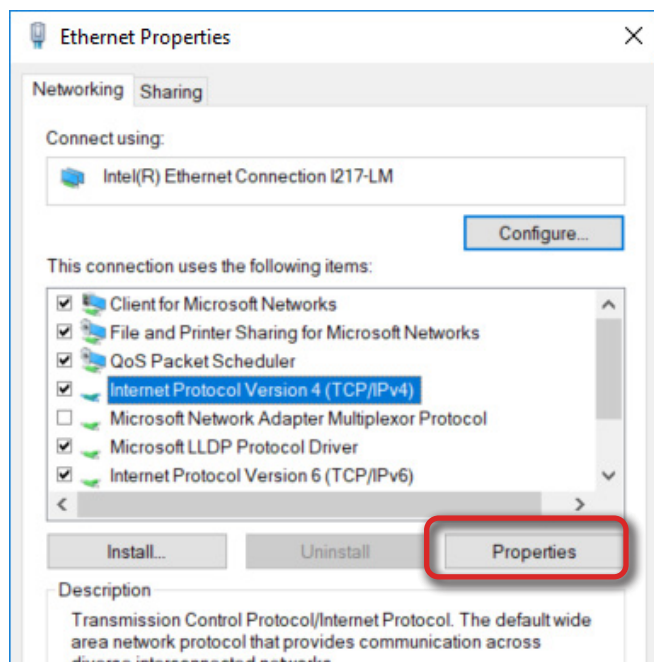
3. Click **Change adapter options**.

The **Network Connections** window opens.

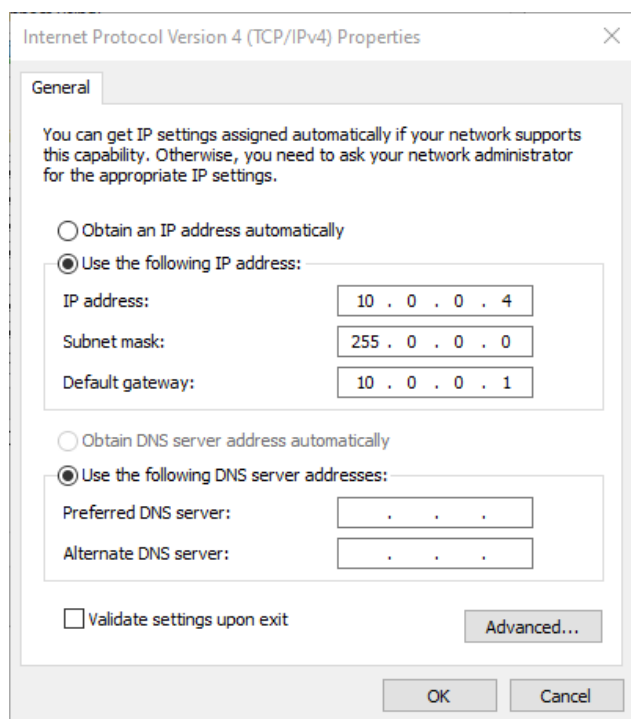


4. Right-click on your **Ethernet** device, and then select **Properties**.

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.

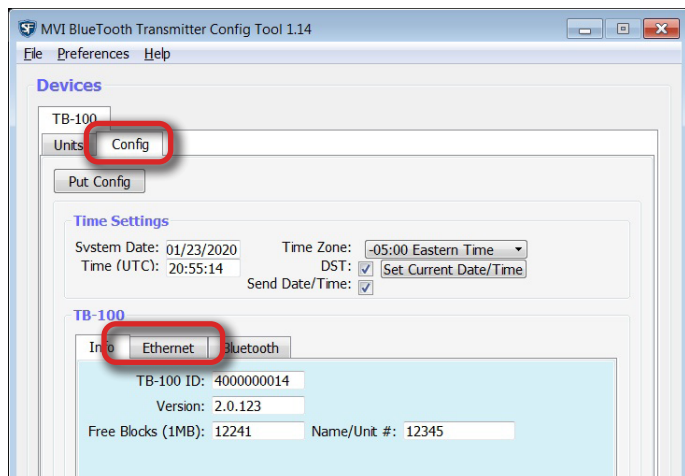


6. Enter the values as shown in the above image.

Appendix C

Viewing the Ethernet Address on Your TB-100

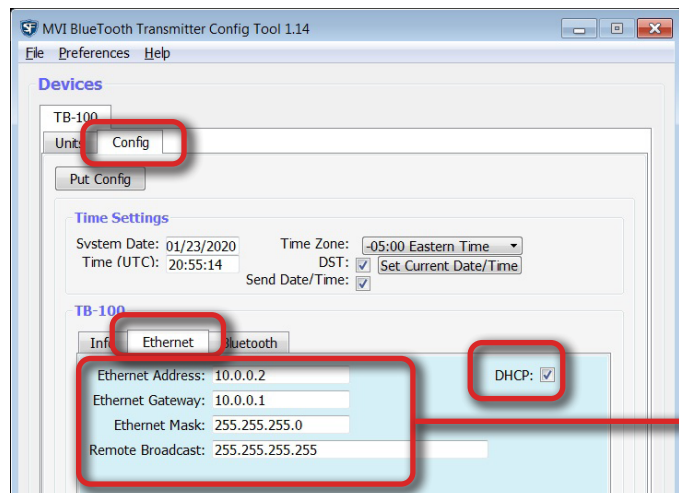
1. Click the **Ethernet** tab in the TB-100 section.



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.



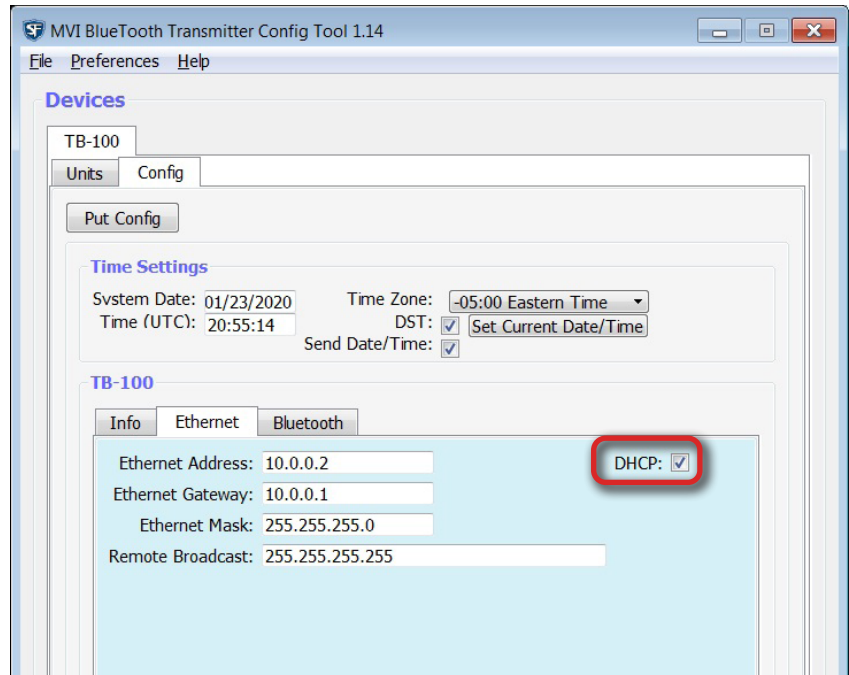
Defaults for the Ethernet Address, Ethernet Gateway, Ethernet Mask, and Remote Broadcast fields.

Appendix D

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. 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:

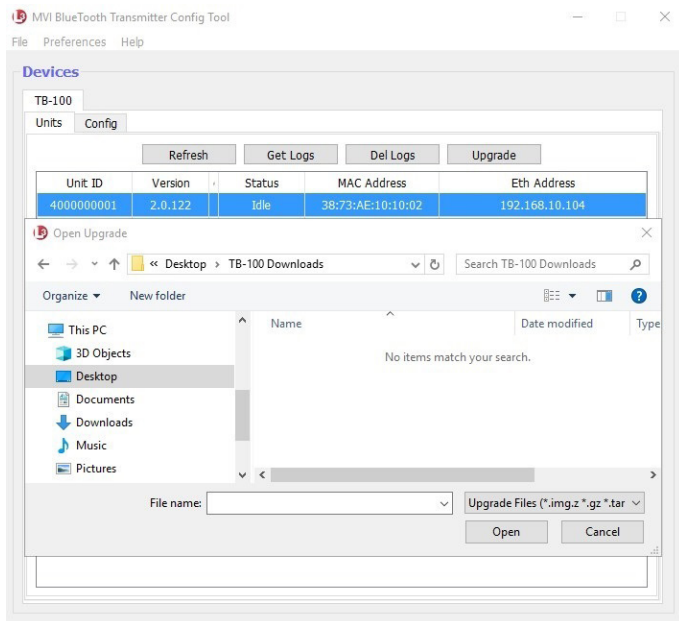
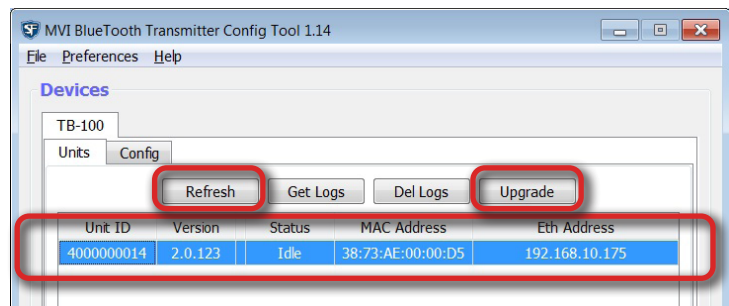
- If your agency network already has a DHCP server up and running, then you can simply plug your TB-100 into your network.
- If your laptop already has a DHCP server running on it, then just connect the Ethernet cable to your laptop. The Config Tool will automatically find your device.
- If your laptop 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 17](#), **Installing and Configuring a DHCP Server on your Laptop**.

Appendix E

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 10.](#)) 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.

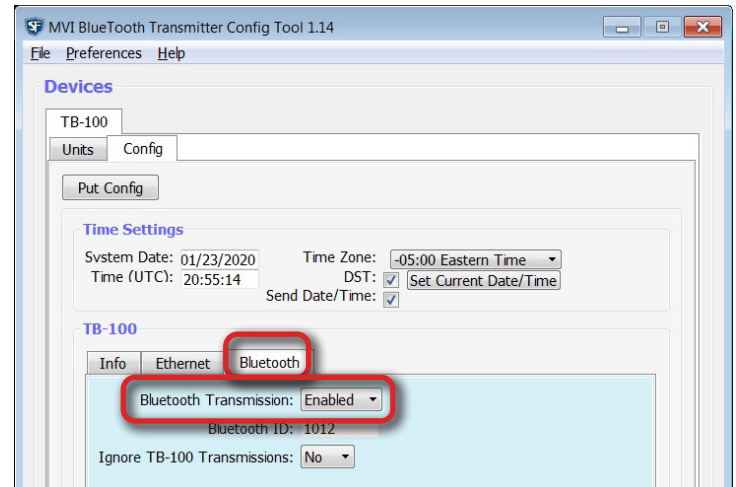
6. Navigate to the disk drive location where you placed the firmware file.
7. Double-click on the firmware file. If any security popups display, click **Yes** or **Allow Access** in response to them.
8. Follow the system prompts to install the firmware.

Appendix F

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.

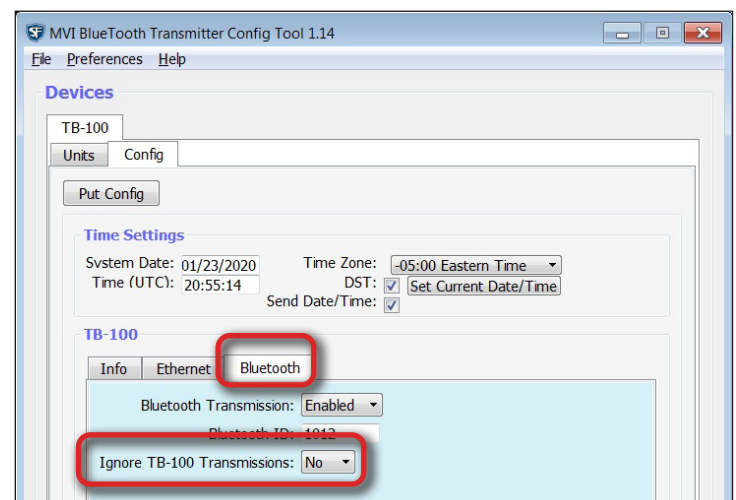
1. Click the **Bluetooth** tab in the TB-100 section on the **Config** tab.
2. Select a value from the **Bluetooth Transmission** drop-down list for communication with BWX-100s: **Enabled** (activate Bluetooth transmission) or **Disabled** (deactivate Bluetooth transmission).



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.



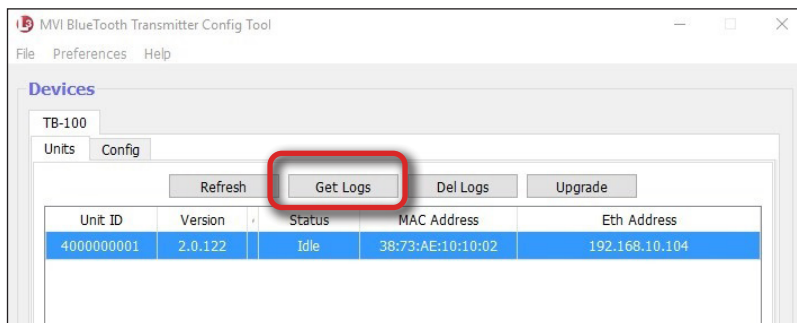
Appendix G

Device Logs

Downloading Device Logs

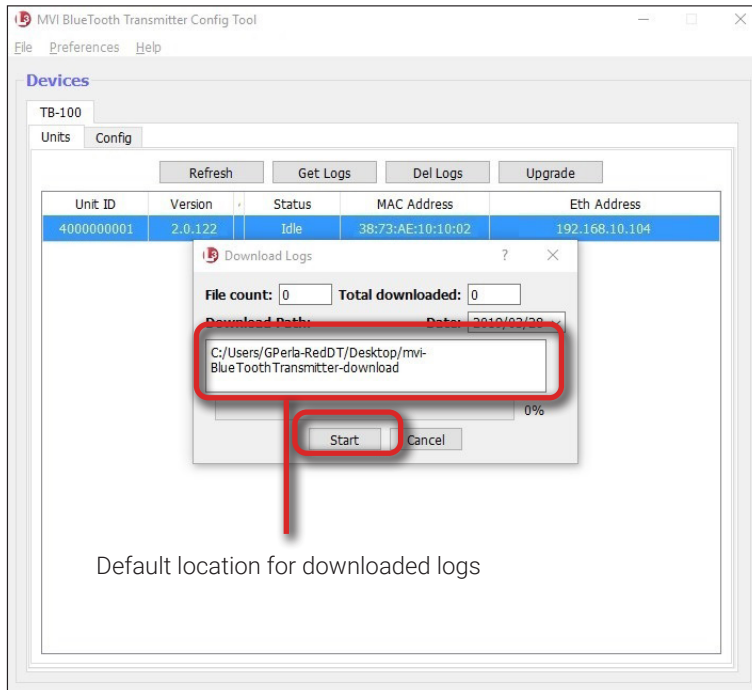
This section describes how to download the device logs for your TB-100. Perform this task when instructed to do so by your SF Mobile-Vision Inc. support representative.

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.

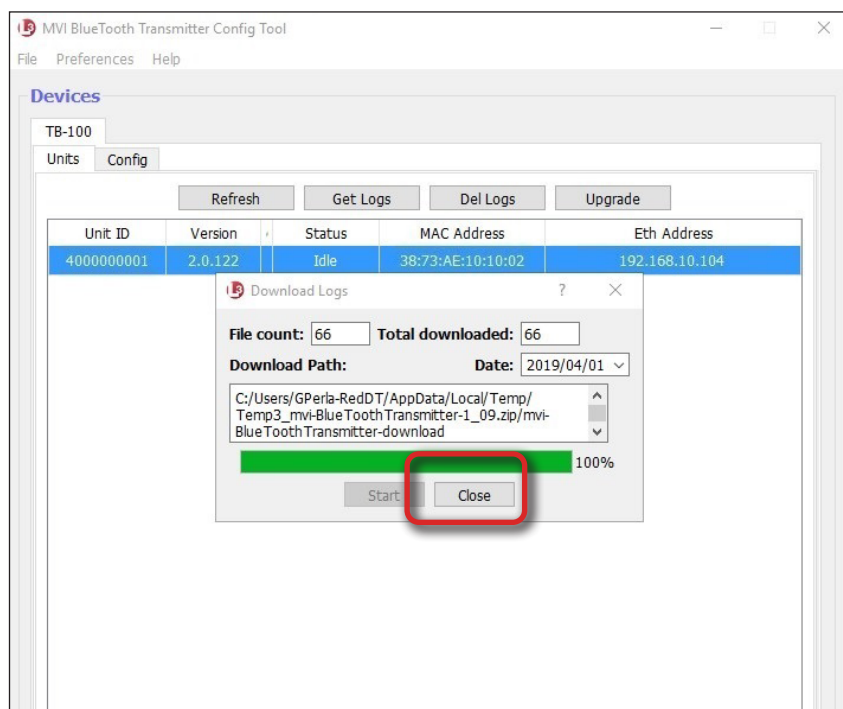


TIP!

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.

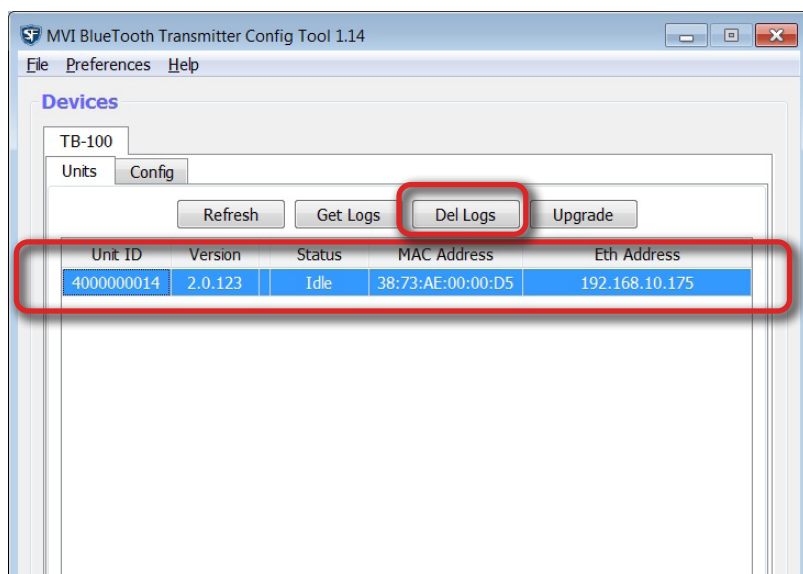
- Forward the Device Log files to your SF Mobile-Vision Inc. support representative, as per their instructions.



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.

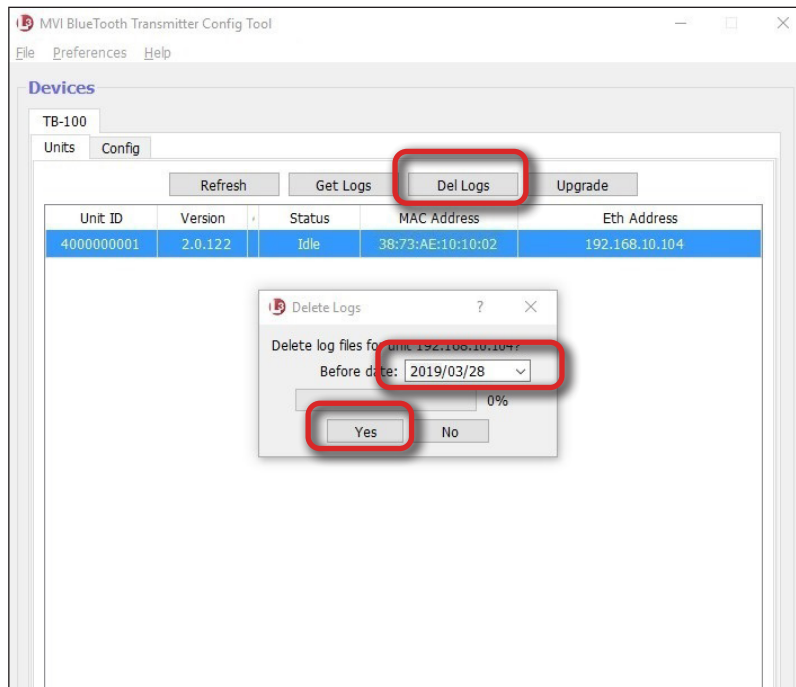


3. If you wish to delete all log files generated prior to today's date (default), then proceed to the next step.

– 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**.



Appendix H: 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.

If you require additional help with your bluetooth transmitter, please contact the Safe Fleet Law Enforcement Support Team:

Safe Fleet Law Enforcement Support

Monday - Thursday: 8am - 7pm EST

Friday: 8am - 6pm EST

Phone: 1.800.336.8475, option 3

Email: mvisupport@safefleet.net

