# BWX100



# User's Guide 1.7.28



This document consists of general capabilities information that is not defined as controlled technical data under ITAR part 120.10 or EAR

# **Important Safety & Product Information**

Take proper precautions when handling Lithium Polymer batteries. Damage from misuse or modifications will void the warranty and could lead to serious injury.

Before charging your BWX-100, always inspect the device to ensure that there are no signs of damage, deformity, or battery expansion/swelling. If you observe one of these conditions, do not attempt to charge the device. Instead, follow the proper procedures to dispose of the battery, then contact L3 Mobile-Vision Service for assistance (800-336-8475). Charging a battery that has begun to expand could cause serious personal injury, or result in smoke or fire!

DO NOT mishandle or drop the BWX-100, as this could damage the device and/or its battery, cause serious personal injury, or result in smoke or fire.

DO NOT charge the BWX-100 with a device other than the factory supplied chargers. Failure to follow these instructions could result in severe or permanent damage to the device or its battery, cause serious personal injury, or result in smoke or fire.

DO NOT allow liquids to enter the BWX-100 or its charging station. This could cause electrical shorts, fire, or other damage.

DO NOT expose the BWX-100 to extreme temperatures for an extended period of time. Prolonged exposure to heat or cold (such as in a closed vehicle) may damage the device's battery and/or decrease its lifetime.

WARNING: Our magnetic mount option utilizes rare-earth magnets that have a strong magnetic field. Please exercise caution when connecting the two plates. Keep your fingers out of the way or you could pinch or even injure them! Also, keep magnets away from electronic equipment, computer discs, credit cards, video tapes, and other magnetic media, as the magnets can damage such items.

WARNING: Persons with pacemakers or medical implants should not use the magnetic mount; its strong magnetic field could potentially interfere with the operation of your medical device.

If the device becomes hot, visibly swells, or sustains damage to the case, discontinue use and refrain from charging the device.

Any of the above conditions could cause serious personal injury or result in smoke or fire. If you have any reason to be concerned about the safety of the product, cease using the BWX-100 camera and contact L3 Mobile-Vision Customer Support at 800-336-8475.

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#### Introduction

BWX-100 is a body worn digital video recorder that can be used to capture high definition video with audio. After recording video, you upload it to DES by placing the device in a docking station connected to your DES server.

BWX-100 features include:

- □ 10.5 hours of video recording in full high definition (1080p) or 12 hours in high definition (720p)
- $\square$  129° horizontal field of view at 720p and 1080p
- □ Bi-directional record triggering between BWX-100 devices
- Built-in WiFi and Bluetooth
- **Coming Soon:** Mobile App for iOS and Android devices.

#### With BWX-100, you can:

- **T**ag video in the field
- **D** Review video in the field
- Check device status in the field, such as remaining record time and battery power.
- **C**apture a still photo "snapshot" while a recording is in progress
- □ Insert a "tracepoint" place marker while a recording is in progress
- □ Record in "Covert Mode", which deactivates all electronic audio/visual indicators
- □ Mute audio
- □ Upload video to DES via a docking station connected to the DES server
- □ Capture up to 90 seconds of pre-record video.

For more information, see:

- $\Box$  In the Box, below
- □ BWX-100 Components & Controls, next page
- **D** Docking Station, page 3
- □ LCD Menu, page 3
- □ Mount Options, page 5
- **Operating Procedures, page 11**
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- □ Contact Information, page 52.

#### In the Box

- □ BWX-100 digital video recorder with built-in battery
- **D** Docking station
- **T** Two mount hardware options: *alligator clip* or *magnetic mount*.







# **Docking Station**

The Docking Station has three purposes:

- □ Upload videos from the BWX-100 to your DES storage server
- Download configuration/device data from DES to your **BWX-100**
- □ Recharge the BWX-100's battery.

On the front of the Docking Station, there are three LEDs:

- □ The *blue* light indicates that there is a power connection to the Docking Station
- □ The green light indicates that the BWX-100 has a gigabit connection to the network
- **The** *amber* light indicates that the BWX-100 has a 100 megabit connection to the network. Also displays when a docked BWX-100 is turned off, so when you see this light, check to make sure your BWX-100 is powered on.

The Docking Station includes a clip on its side that is used to link multiple devices together to form an "Uplink Station". For more information, see "Uploading Videos to DES" on page 18.

# **LCD Menu**

The LCD menu on the top of your device is used to view device indicators, assign categories to newly recorded videos, and perform a self-test on your BWX-100.





To navigate this menu, use the buttons located on the side of the BWX-100.

Navigation arrows, used to scroll through menu options.

Select button, used to select the displayed menu option.

To exit a menu, use the navigation arrows to display the BACK option, then press the Select button.



The BACK option returns you to the previous menu







This table describes the icons used to represent various camera settings and statuses. These icons display on the device's LCD menu.

		LCD Icons						
	lcon	Description						
High charge		Battery charge indicator. Displays in the upper left corner of the LCD screen when the device is on. The more diagonal lines there are, the higher the battery charge.						
Low charge		To determine the <i>exact</i> percentage of battery power that remains on your device, see "Checking Remaining Battery Power" on page 16.						
	<u>k</u>	Mute indicator. Displays when the mute function is activated (i.e., audio is <i>off</i> ).						
	REC	Record indicator. Displays when a recording is in progress.						
	((:-	Wi-Fi indicator. Displays when device is connected to a Wi-Fi network.						
	$\ast$	Bluetooth search indicator. Displays when device is searching for a Bluetooth signal.						
	•**•	Bluetooth connection indicator. Displays when device is connected to an iOS or Android device via Bluetooth.						
	뀸	Network indicator. Displays when device is connected to the net- work on which your storage server resides.						
Little or no space left	A	Micro SD card storage indicator. Displays in the upper right cor- ner of the LCD screen when the device is on. This icon shows how much recording time you have left on your device. The fuller the icon, the less recording time you have left.						
space left		To determine the <i>exact</i> percentage of storage space that remains on your device, see "Checking Remaining Record Time" on page 16.						



**HINT**: After 45 seconds of inactivity, the LCD menu will automatically return to the READY screen. Therefore, try not to pause for too long between menu selections, or you might have to start over from the beginning!



# **Mount Options**



To attach a BWX-100 to your clothing, first determine which type of mount will work best for you: *alligator clip* or *magnetic mount*. If you are using the alligator clip, examine the clip on the back of the device to make sure it's facing in the direction you want: *left*, *right*, or *down*. For example, if you plan to clip the device to the pocket of your shirt, you would position the clip in the *down* position.







For further instructions, proceed to the appropriate section:

- □ Alligator Clip, below
- □ Magnetic Mount, page 8.

# **Alligator Clip**

The alligator clip includes pointy "teeth" that firmly grip your clothing.



(Continued)







#### Attaching the Alligator Clip to Your Camera

1 Hold the BWX-100 in one hand and the alligator clip in the other hand. The clip's tab should be facing *up*.



WARNING: Do not subject tab to excessive use of pressure.

**2** Place the mount plate in the round slot on the back of the BWX-100 with the tab in the 11:00 position for a downward facing clip, 8:00 position for a left facing clip, or 2:00 position for a right facing clip.





**3** Rotate the base mount clockwise until it snaps into place.



#### **Detaching the Alligator Clip from Your Camera**

- **1** Press the release button *down* with one thumb while you rotate the alligator clip counter clockwise with another finger.
- **2** Pull the clip up and off the camera.





# **Magnetic Mount**

This mount is comprised of two magnetic plates that snap together, referred to in this guide as the A and B plates (see illustration below). The B plate goes in *front* of your clothing and the A plate goes *behind* your clothing.



**WARNING**: The magnetic clip utilizes rare-earth magnets that have a strong magnetic field. Please exercise caution when connecting the two plates. Keep your fingers out of the way or you could pinch or even injure them! Also, keep magnets away from electronic equipment, computer discs, credit cards, video tapes, and other magnetic media, as the magnets can damage such items.



#### Attaching the Magnet Mount to Your Camera

#### Part 1: Detach the Two Magnets

 Using your thumbs, slide the A plate to the right or left so that it is half on/half off the B plate. This requires firm pressure.



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2 Twist the A plate to the right or left.



**3** Slide the **A** plate off the **B** plate.

#### Part 2: Connect the B Plate to the Back of the BWX-100

**1** Hold the BWX-100 in one hand and the **B** plate in the other hand. The arrow on the release tab should face *up*.



2 Place the **B** plate in the round slot on the back of the device. Position it so that it's tilted approximately  $30^{\circ}$  counter-clockwise, as pictured here.







**3** Rotate the **B** plate clockwise until it snaps into place and the *up* arrow points up.

#### Attaching the Camera to Your Clothing via the Magnet Mount

Position the **B** plate (now with camera attached) in front of your clothing. Next, position the **A** plate behind your clothing so that the two plates snap together and line up properly. You may have to slide the **A** plate to the right or left to achieve a proper connection.



Removing the Camera When you're ready to remove the camera, simply hold the camera with one hand while you use the other hand to reach behind your clothing and slide the **A** plate to the right or left.



#### **Detaching the Magnet Mount from the Camera**

- **1** Place the BWX-100 in one hand while you stabilize the **B** plate with your thumb.
- 2 Press the release button *down* with one thumb while you rotate the **B** plate counterclockwise with another finger.
- **3** Pull the magnet mount up and off the camera.



#### **Operating Procedures**

Proceed to the desired topic:

- **T** Turning the Device On, next page
- □ Starting a Recording, next page
- □ Stopping a Recording, page 13
- Capturing a Snapshot and/or Inserting a Tracepoint, page 14
- **T** Turning 'Covert' Mode On/Off, page 15
- □ Checking Remaining Record Time, page 16
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- □ Charging the BWX-100, page 22
- □ Viewing Officer Information, page 24
- □ Viewing Device Information, page 24
- □ Viewing Your BWX-100's IP Address, page 27
- **D** Remotely Triggering a Recording, page 28
- □ Performing a Self-Test, page 29
- **T** Turning the Device Off, page 30.





To turn the BWX-100 on, simultaneously press the *Snap/Trace* and *Mute* buttons

# **Turning the Device On**

To turn your BWX-100 on, simultaneously press the *Snap/Trace* and *Mute* buttons until the device vibrates. Next, release the buttons and wait for the device to boot. This will take approximate-ly 30 seconds. During this time, the LCD screen may be blank for several seconds. Don't worry—the device is still booting.

When the boot is complete, the device vibrates/chirps, the Power/Record LED turns green, and the word READY displays on the LCD screen.



# **Starting a Recording**

- **1** To start a recording, first make sure the device is powered on and the word READY displays on the LCD screen. (If necessary, review "Turning the Device On" above.)
- **2** Press the Record button for two seconds. The following indicators confirm that you have successfully initiated a recording:
  - □ The Power/Record LED on the top of the device changes from green to red
- Success! 🗆
  - The Recording-in-Progress LED on the front of the device turns red
  - □ The device vibrates twice and chirps once
  - The icon and the word RECORDING display on the LCD screen.

    Recording-in-Progress icon

To start or stop a recording, press – here for two seconds

As long as a video is in progress, the LEDs will remain solid red. (*Exception*: When *Covert* mode is on, audio-visual indicators will be suppressed.)

If you activated the Recording Alert feature in DES, the device will also vibrate every  $X^*$  minutes as long as a video is in progress.

<sup>\*</sup> Where X = the Recording-in-Progress time interval entered in DES



- *Problems?* If you attempt to start a recording and the device chirps three times, it means that your device is either low on battery power or storage space. When this occurs, look at the LCD screen:
  - □ If the words STORAGE FULL display and the Battery icon is blinking, you need to upload your videos right away. To do so, place the device in your agency's Uplink Station. After the videos upload, try recording again.
  - □ If the words BATTERY LOW display and the Battery icon is blinking, place the device in a docking station that's connected to a power source. Once the word CHARGED displays on the LCD screen, try recording again.

# **Stopping a Recording**

- **1** To stop a recording in progress, press the Record button for two seconds. The following indicators confirm that you have successfully ended your recording:
  - □ The Power/Record LED on the top of the device turns green
  - □ The Recording-in-Progress LED on the front of the device turns off
  - □ The device vibrates once and chirps twice\*
  - □ The LCD screen displays the words STOPPING RECORDING, followed by either SELECT CATEGORY or READY.





- $\Rightarrow$  If SELECT CATEGORY displays, proceed to the next step.
- $\Rightarrow$  If READY displays, it means that your BWX does not currently have any video categories on it. **End of Procedure**.
- 2 Press the 🖊 button. Your first video category displays.

To assign the first category to your video, press *again*. **End of Procedure**.

– OR –

To assign a *different* category to your video, proceed to the next step.

- **3** Continue pressing the **∢** or **▶** button until the desired category displays.
- 4 Press the 🖊 button. The device assigns the displayed category to your new video.



**NOTE**: If you're interrupted while performing this procedure and the READY screen displays, it means you've missed your chance to tag the video in the field. In that case, you'll have to make the category assignment from within DES.

<sup>\*</sup> If the device chirps *three* times, it indicates that your device is either low on battery power or storage space.



# Capturing a Snapshot and/or Inserting a Tracepoint

If desired, your Agency Administrator can configure the *Snap/Trace* button to perform one of the following actions while a recording is in progress:

- □ Capture a video still image or "snapshot"
- □ Insert a "tracepoint" place marker in the video. By marking a video with a tracepoint, it will allow you to quickly advance to an important segment in that video later during playback.
- **C**apture a still image *and* insert a tracepoint place marker (default).
- **1** If your BWX-100 is already programmed to perform the desired Snap/Trace action(s), skip to step 3. Otherwise proceed to the next step.
- 2 Login to your DEP, DEA Precinct, DEV, or DEF server application as an Admin user. Next, display the BWX-100's Edit DVR screen. (For detailed instructions, see "Changing a BWX-100 DVR Record" on page 39.) Finally, select a value from the *Snapshot/Tracepoint* drop-down list and click **Save**.

Once you've finished configuring your BWX-100, proceed to the next step.

**3** Press the *Snap/Trace* button while a recording is in progress.



The BWX-100 vibrates and either TRACEPOINT MARKED or SNAPSHOT TAKEN displays on the LCD screen.



TRACEPOINT MARKED displays if the device is programmed to insert a tracepoint only. SNAPSHOT TAKEN displays if the device is programmed to take a snapshot only *or* perform both actions.



# Turning 'Covert' Mode On/Off

Your BWX-100 includes a feature called "covert" mode. In this mode, the device's lights and audible sounds are disabled, allowing you to record discreetly when necessary. You can activate this feature any time the device is on, whether you're recording or not.

Before you use this feature, make sure you are familiar with your agency's policies regarding the use of covert mode.

**1** To turn convert mode *on*, press the *Covert Mode* button for two seconds.



button for 2 seconds

The device vibrates twice and the words COVERT MODE ON display.



As long as Covert mode is on, the word COVERT will display in the lower right corner of the LCD screen.



2 To turn covert mode off, press the Covert Mode button again for two seconds. The device vibrates/chirps twice and the words COVERT MODE OFF display.





# **Checking Remaining Record Time**

To determine how much recording time you have left on your BWX-100, first examine the Micro SD Card icon located in the upper right corner of the LCD screen.



The more black fill on this icon, the less storage space there is.

If you want to know the *exact* percentage of recording time that remains your device, follow this procedure.

- **1** Press the **♦** or **▶** button until DEVICE INFO displays.
- **2** Press the **4** button.
- **3** Press the **4** or **▶** button until STORAGE SPACE displays
- 4 Press the displays.
  4 Press the displays.



## **Checking Remaining Battery Power**

To determine how much battery power you have left on your BWX-100, first examine the Battery icon located in the upper left corner of the LCD screen.



The more diagonal lines there are, the higher the battery charge.

If you want to know the *exact* percentage of battery charge remaining on your device, follow this procedure.

**1** Press the **4** or **▶** button until DEVICE INFO displays.



- 2 Press the 🗲 button. The words BATTERY LEVEL display.
- **3** Press *again.* The percentage of remaining battery power displays.





**NOTE**: When your battery level is less than 10%, the Battery icon starts blinking and the words BATTERY LOW display.

# **Turning Audio Mute On/Off**

If desired, you can activate the mute feature<sup>\*</sup> so that your BWX-100 will not capture any audio during a current or future recording. You can activate this feature any time the device is on, whether you're recording or not.

**1** To turn Audio Mute *on*, press the *Mute* button for two seconds.



The device vibrates/chirps and the words MIC OFF display, indicating that audio is no longer being captured (i.e., Audio Mute is *on*).



<sup>\*</sup> Assuming that this feature has not been disabled in DES



As long as Audio Mute is *on*, the word MUTED will display in the lower right corner of the LCD screen.



**2** To turn Audio Mute *off*, press the *Mute* button again for two seconds. The device vibrates/chirps and the words MIC ON display, indicating that audio is being captured again (i.e., Audio Mute is *off*).



**Disabling the Mute Feature** If your Agency Administrator does not want users to have the capability of muting a video's audio while a recording is in progress, he needs to login to DES as an Admin user and disable the mute setting. To do so, display the appropriate DVR record or DVR Group record, deselect the *Mute Enabled* checkbox, then save your changes

# **Uploading Videos to DES**

BWX-100 is designed to work with your existing L3 Mobile-Vision DES application: DEP, DEA Precinct, DEF, or DEV. This section describes how to upload your video files to these applications.

- **1** If your agency already has a BWX-100 Uplink Station set up, skip to step 3 on page 21. Otherwise proceed to the next step.
- 2 Set up a BWX-100 Uplink Station for your officers:
  - a) Link all your BWX-100 docking stations together using the locking mechanism on the side of each device.
  - b) Select one of three configurations, as illustrated in Figures 1 3 beginning on the next page.
  - c) Using standard Ethernet cables, connect each docking station to a server switch.
  - d) Connect each docking station to a power source in one of three ways: (Continued)



Use one power adapter per docking station, as pictured in Figure 1 below. Because each of your BWX-100s comes with a power adapter, this option does not require any additional equipment.

– OR –

Use one power adapter per six docking stations, as pictured in Figure 2 on page 20.

– OR –

Use a server switch that has POE (power over Ethernet) ports. This will eliminate the need for any power adapters, as POE ports provide both server access *and* power. See Figure 3 on page 20.

e) Use an Ethernet cable to connect the back of the server switch to an Ethernet port on your DES storage server.

(Continued on page 21)









Figure 3: Uplink Station with Power-Over-Ethernet







Once the device successfully connects to your storage server, the words DES CONNECTED display on the LCD screen, as well as the network symbol.



This symbol indicates that the BWX-100 is currently connected to the server network

Next, the videos stored on that device begin uploading to the server. If there are any updates available on the storage server (device setting changes, firmware changes, etc.), that data will also download to the device. The uploading/downloading process may take several minutes or longer, depending on the size of the videos you are uploading.

**How do I know when uploading is complete?** To determine if your videos are finished uploading, login to DES. Next, check the *Free Space* indicator on the Mobile Devices page. Once it's solid green, your upload is complete.



# Charging the BWX-100

The BWX-100 comes with an internal, rechargeable battery. When the battery is very low, the words BATTERY LOW display on the LCD screen and the Battery icon appears empty, as pictured left. To recharge the battery, you can either place the device in one of the docking stations at your agency's Uplink Station, or place it in a "stand alone" docking station that's connected to a power source.

For more information, see:

- □ Charging via the Uplink Station, below
- Charging via a Stand-Alone Docking Station, page 23
- □ Battery Safety & Usage Guidelines, page 23.



**WARNING**: Do not attempt to remove the BWX's internal battery yourself. Doing so could void your warranty. When it's time to replace the battery (see guidelines on page 23), contact L3 Mobile-Vision Service at 1-800-336-8475.



#### **Charging via the Uplink Station**

The Uplink Station that you use to upload videos to your storage server doubles as a charging station. When you return to your precinct after a recording session, proceed to your agency's Uplink Station and place the BWX-100 in one of the available docking stations. While your device is charging, the LCD screen displays the word CHARGING followed by the current battery charge.





When the device is fully charged, the word CHARGED displays on the LCD screen and the Battery icon appears full, as pictured left.

Charging takes anywhere from a few minutes to a few hours, depending on how much of a charge the battery had left in it when you placed it in the Uplink Station.





#### **Charging via a Stand-Alone Docking Station**

The docking station that is included with your BWX-100 can be used to charge your device regardless of whether it's currently connected to an Uplink Station. Just make sure that the docking station is connected to a power source.

WARNING: Do not plug the micro USB plug directly into the bottom of your BWX-100. Rather, place the BWX-100 in a docking station, and plug



#### **Battery Safety & Usage Guidelines**

Battery performance will vary based on power management settings, video resolution and environmental conditions. As with all batteries, maximum capacity decreases with time and use and will need to be replaced by an L3 Mobile-Vision Service professional at least every 12 months. Battery life and charge cycles vary by use and settings.

- □ Do not mishandle or drop the BWX-100. Doing so could damage the device or its battery, cause serious personal injury, or result in smoke or fire.
- □ Do not charge the BWX-100 with a device other than the factory supplied chargers. Doing so could cause serious personal injury or result in smoke or fire.
- □ If there is noticeable damage to your BWX-100, *do not* attempt to charge the device. Doing so could damage the device or its battery, cause serious personal injury, or result in smoke or fire. Rather, contact L3 Mobile-Vision Service for assistance at 800-336-8475.
- $\square$  Never charge the BXW-100 when the device is above 113° F.
- □ **Replace the battery every 12 months**. To do so, contact L3 Mobile-Vision Service for assistance. Do not attempt to change the battery yourself.
- Avoid exposing the device to extreme temperatures for an extended period of time, such as leaving the camera unattended in a vehicle where the interior or trunk of the vehicle may get very hot or cold. Do not expose the device to



temperatures above  $122^{\circ}$  F or below  $0^{\circ}$  F, as lithium batteries are susceptible to temperature extremes.

# **Viewing Officer Information**

This section describes how to view information on the officer to whom a particular BWX-100 is currently assigned in DES, including the officer's name and assigned car number.

1 Hold the BWX-100 so that the LCD menu is visible.



- 2 Press the ◀ or ▶ button until OFFICER INFO displays.
- **3** Press the **4** button. The words OFFICER NAME display.
- **4** To view the Officer Name, press **4** again. Proceed to the next step.

– OR –

To view the officer's car number, press the  $\triangleleft$  or  $\triangleright$  button until CAR NUMBER displays, then press  $\blacksquare$ . Proceed to the next step.

- 5 When you've finished viewing a particular setting, press the button to return to the previous menu.

# **Viewing Device Information**

This section describes how to view information stored on the BWX-100's DVR record in DES.

**1** Hold the BWX-100 so that the LCD menu is visible.



- **2** Press the **4** or **▶** button until DEVICE INFO displays.
- **3** Press the  $\checkmark$  button. The words BATTERY LEVEL display.

**Operating Procedures** 





**4** To view the battery level, press **4** again.

#### – OR –

To view a different setting, use the  $\blacktriangleleft$  or  $\blacktriangleright$  button to display the setting you wish to view, then press  $\blacksquare$ . See descriptions below.

Setting	Description
BATTERY LEVEL	The percentage of charge remaining on the device's battery.
DAYLIGHT SAVINGS	YES. Your agency is recording in a region that observes daylight savings time. NO. Your agency is recording in a region that does <i>not</i> observe daylight savings time.
TIME ZONE	The time zone in which your agency is recording.
DATE	The date that the device is currently set to, e.g., FEB092018.
TIME	The time that the device is currently set to. Displays in HH MM SS format. Note: While you are in the TIME field, the "seconds" segment (SS) will not update.
HW VERSION	The device's hardware version, e.g., 01.
SERIAL NUMBER	The device's 10-digit serial number, e.g., 0000000118
BUILD DATE	The date on which the device was manufactured, e.g., JAN 01 2018.
FW VERSION	The firmware version currently installed on this device, e.g., 1.5.99
STORAGE SPACE	The percentage of storage space that remains on the device's built-in micro USB card, e.g., 90% LEFT.

- 5 When you're finished viewing a particular setting, press the button to return to the previous menu.
- 6 To exit the DEVICE INFO menu, press the or ▶ button until the word BACK displays, then press .



# Viewing Your BWX-100's IP Address

This section describes how to view your BWX-100's IP address. This is a numerical label that is required in order for the BWX-100 to communicate with your storage server. You may occasionally be asked to provide this number to your Agency Administrator or an L3 Mobile-Vision Service professional.

**1** Hold the BWX-100 so that the LCD menu is visible.



- **2** Press the **♦** or **▶** button until the word NETWORKING displays.
- **3** Press the  $\checkmark$  button. The word ETHERNET displays.
- **4** Press **4** again. The word STATUS displays.
- **5** Press the **♦** or **▶** button until the word CONFIG displays.
- 6 Press the 🗲 button. DHCP displays.
- **7** Press the **4** or **▶** button until IP ADDR displays.
- 8 Press 🖊 again. The device's IP address displays.





# **Remotely Triggering a Recording**

The *remote triggering* function will automatically trigger a recording on a remote device or devices whenever an officer manually starts a BWX-100 recording within line sight of one or more BWX-100s that are within range (assuming those devices are configured for remote triggering).



If your agency is also using the FlashbackHD in-car video system, the auto-trigger function will remotely trigger recordings in two additional ways.

Additional Triggers (Flashback Only)						
Trigger Type	Description					
BWX-to Flashback	Automatically start a Flashback recording whenever an officer starts a BWX-100 recording within line sight of a Flashback that is less than 100 feet away.					
Flashback-to-BWX	Automatically start a BWX-100 recording whenever a Flashback recording is initiated <sup>*</sup> within line sight of a BWX-100 that is less than 100 feet away.					

To configure your BWX-100 to broadcast and receive *remote record trigger* messages, login to DES and select **Enabled** from the *Remote Triggering* drop-down list. This will cause two things to happen:



Whenever you **start** a recording, your BWX-100 will broadcast a *remote record trigger* message, which in turn will cause all in-range devices to start recording.



Whenever you **receive** a *remote record trigger* message from another device when your device is idle (i.e., not recording), your BWX-100 will automatically start recording.



**NOTE**: When remote triggering is disabled, the BWX-100 will not be able to broadcast *or* receive *remote record trigger* messages.

For instructions on how to update your BWX-100's DES record, see "Changing a BWX-100 DVR Record on page 39.



# **Performing a Self-Test**

The SELF TEST feature performs a series of system checks on your BWX-100. Perform this procedure when instructed to do so by an L3 Mobile-Vision Service professional.

**1** Hold the BWX-100 so that the LCD menu is visible.



- **2** Press the **4** or **▶** button until SELF TEST displays.
- **3** Press the 🗲 button. The words RUN SELF TEST display.
- 4 Press again to begin the test. A series of characters will display on-screen, including the alphabet. This will take approximately one minute. As the test nears its end, the device icons will display one at a time.



When the test is complete, the device will vibrate/chirp three times and the word READY will redisplay.

Your next step is to review the test status (PASS or FAIL).

- **5** Press the **4** or **▶** button until SELF TEST displays.
- 6 Press the 🖊 button.
- 7 Press the  $\triangleleft$  or  $\rightarrow$  button until the word STATUS displays.
- 8 Press the 🗲 button.
- $\Rightarrow$  If PASS displays, it indicates that your device passed all components of the test. End of Procedure.
- $\Rightarrow$  If FAIL displays, it indicates that your device failed one or more components of the test.

Your next step is to review the test results.

**9** Press the **4** or **→** button until the word BACK displays.



- **10** Press the 🖊 button. The previous menu redisplays.
- **11** Press the **4** or **→** button until the word RESULTS displays.
- **12** Press the **4** button.
- **13** Press the  $\triangleleft$  or  $\triangleright$  button to scroll through your test results.



# **Turning the Device Off**

To turn your BWX-100 off after a shift or recording session, simultaneously press the *Snap/Trace* and *Mute* buttons until the device vibrates and the words SHUTTING DOWN display on the LCD screen. The device then powers off.



To turn the BWX-100 off, simultaneously press the *Snap/Trace* and *Mute* buttons

# **Getting Started**

This section describes how to get up and running with BWX-100. The following is an overview of the steps involved in setting up the BWX-100 with your DES software. The specific procedures involved in each of these steps are referenced in various sections throughout this document.

Make sure that you perform these steps in *sequential order*.

- In collaboration with your agency's Network/IT staff, determine the range of IP addresses that are not currently being used by Flashback DVRs, access points, or Backup PCs on the L3 Mobile-Vision network. Write this information down, as you will need it the next time you contact L3 Mobile-Vision Service.
- 2 Set up an Uplink Station for your BWX-100s, as pictured in Figures 1 3 beginning on page 19. The server switch should contain the network environment for your L3 specific devices (i.e., Flashback DVRs, robotic DVD burner, and wireless access points). Your agency's Network/IT staff can assist you with this task.
- Place your BWX-100 in one of the docking stations in your Uplink Station. Leave it there until the word CHARGED displays, indicating that the device is fully charged.
- A Select the appropriate DES BWX-100 download options and preferred settings, as described in "Configuring a New BWX-100 DVR in DES" on page 37.



*If you are a DEV customer*, select an option to assign an IP address to your BWX-100, as described in "DEV Customers" on page 32.

*If you are a DEP, DEA Precinct, or DEF customer,* speak with one of our Technical Support Engineers (TSEs) to help you configure the DHCP service (see **NOTE** below) and set up the storage server to assign IP addresses to your BWX-100s. To contact Mobile-Vision Support, call 1-800-336-8475 and select the **Service** option, followed by **Back Office**.



5

**NOTE**: If your agency has a DHCP server on the LAN to which you're connecting the BWX-100, you may connect the devices to the "non L3" network that interacts with your department's PCs. However, in that scenario, your department would be responsible for configuring the DHCP service.

#### **Assigning IP Addresses to Your BWX-100 Devices**

If any of these conditions apply to you, you may skip this section:

- □ You are a new DEP, DEA Precinct, or DEF customer
- □ Your agency has a DHCP server on the LAN to which you're connecting the BWX-100

If *none* of these conditions apply to you, you need to select a method for the system to "discover" each BWX-100 device and assign it an IP address. An IP Address is a numerical label that is required in order for the BWX-100 to communicate with your DES storage server. The method you select depends on the type of software you're using.

For more information, see:

- □ Existing DEP, DEA Precinct, or DEF Customers, below
- DEV Customers, next page.

#### **Existing DEP, DEA Precinct, or DEF Customers**

If you are running DEP, DEA Precinct, or DEF on a Linux server, you need to install and configure a DHCP server 'RPM' file so that the system can automatically assign IP addresses to your BWX-100s. One of our Technical Support Engineers can assist you with this task. To contact us, call 1-800-336-8475 and select the **Service** option, followed by **Back Office**.



# **DEV Customers**

If you are running Digital Evidence Viewer (DEV) on a Windows PC, you have three options to assign IP addresses to your BWX-100s (select one):

- Configure the Dell PowerConnect Ethernet switch to automatically assign IP addresses to your BWX-100s. An L3 Mobile-Vision Technical Support Engineer can assist you with this task. If you don't have a Dell PowerConnect Ethernet switch and do not wish to purchase one, select option 2 or 3 instead.

   OR –
- Install and Configure a DHCP Server Windows application provided by L3 Mobile-Vision. An L3 Mobile-Vision Technical Support Engineer can assist you with this task.

– OR –

For customers – with only **one** BWX-100 3) Configure the LAN port on your BWX-100 PC for DHCP, as described below. This procedure only applies to customers who have **one** BWX-100. If you have more than one device, you will have to use option 1 or 2.

If you're not sure which option to choose, let us know and we will help you with that decision. To reach L3 Mobile Vision Support, call 1-800-336-8475 and select the **Service** option, followed by **Back Office**.

# Configuring the LAN port on your BWX-100 PC for DHCP

If you are a DEV customer who has only **one** BWX-100, use this procedure to configure your PC's LAN port so that it will automatically assign an IP address to the BWX-100.



**NOTE**: The following instructions represent Windows 7. If you have a different version of Windows, this procedure may vary slightly.

1 Locate the Network Icon in the lower right corner of your Windows screen.



2 Right-click on the icon and select **Open Network and Sharing Center** from the popup menu.



**3** Go to the left side of your screen and select **Change adapter settings**.

(Continued)





**4** Locate the DVR network. (This is typically *not* the network that has access to the internet or your agency's intranet.)



5 Right-click on the DVR network and select **Properties** from the popup menu.



6 Click on **Internet Protocol Version 4 (TCP/IPv4)** to highlight it, then click the **Properties** button.





7 Make sure the following options are selected:

Seneral Alternate Configura	ition
You can get IP settings assig this capability. Otherwise, yo for the appropriate IP setting	ned automatically if your network supports ou need to ask your network administrator gs.
Obtain an IP address at	utomatically
Ouse the following IP add	dress:
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server addr	ress automatically
Ouse the following DNS s	server addresses:
Preferred DNS server:	· · · ·
Alternate DNS server:	
Validate settings upon	exit Advanced

- 8 Click OK.
- 9 Close all the windows that you opened during this setup process.

## **Configuring BWX-100 to Work with DES**

Before you begin using your BWX-100, you must change certain settings in DES.

As with Flashback videos, BWX-100 videos are typically linked to a particular officer, that is, the officer who recorded the video or captured the snapshot. To create this link, DES includes an *Officer Dispatch* feature that is somewhat similar to the *USB Login Key* feature used with Flashbacks. Specifically, the *Officer Dispatch* feature allows you to assign different BWX-100 devices to different officers each shift. This allows multiple officers working different shifts to share a limited number of BWX-100 devices. Once an officer completes his shift and places the BWX-100 back in its docking station, the system uploads that device's files and flags the device as "In" (i.e., available). You may then reassign that DVR to a different officer.

Alternately, some agencies may choose to assign one "take home" BWX-100 to each officer. This eliminates the need for the *Officer Dispatch* feature. Instead, you simply enter each officer's name on their BWX-100 record. In the future, all videos recorded on that device will then be linked to that officer.



**WARNING**: Under certain circumstances, your L3 Mobile-Vision Service professional may provide you with a procedure used to reset the configuration file within your BWX-100 device. If you are familiar with this procedure, do *not* use it again unless instructed to do so by an L3 Mobile-Vision Service professional! Doing so could interfere with DVR-to-server communication, making it impossible for you to upload your videos to the server.





	Edit DVR (FBBW2_3000000322)	
	DVR Video Ethernet	
Option 1: Assign different BWX-100s to different officers each shift	DVR Name:       FBBW2_300000322       Version:       1.7.28         DVR Officer Name:       No Name       Image: Constraints       Im	NOTE: If Fleet Management is - OFF, these fields will appear in a slightly different order on your screen
	Save Califer	
	Edit DVR (FBBW2_3000000322)	
	DVR Video Ethernet	
Option 2:	DVR Name: FBBW2_3000000322	
Assign one	DVR Officer Name: K McKinnis 🗸 🥥 Assigned Firmware: None 🗸 🥥	
each officer	Allow Officer Assignment:	
	Status: Enabled V V Time Zone: -05:00 Eastern Time V V	
	Group Name:	
	Save Cancel	



**NOTE**: If you are a *DEA Agency* user, you will not have access to these functions. Your DEA Precinct administrators will have to configure all BWX-100 devices.

Proceed to the next section for further instructions.



# Configuring a New BWX-100 DVR in DES

This section describes how to configure new BWX-100 DVRs. The configuration process consists of two steps:

- Select the appropriate BWX-100 download options. Perform this step *after* you've purchased your first BWX-100 device(s) but *before* you begin using the device(s). For instructions, see "Selecting the BWX-100 Download Options" below.
- 2 Upda

Update the new BWX-100 DVR record. For instructions, see "Changing a BWX-100 DVR" on page 39.

#### Selecting the BWX-100 Download Options

This section describes how to select the download options that are required for BWX-100 DVRs. You only have to perform this task *once*.

- **1** Login to your DEP, DEA Precinct, DEF, or DEV application as an Admin user.
- **2** Go to **V** Administration and click **System Setup**. The System Setup page displays.

		S	YSTEM S	SETUP		
B Mobile-Vision, Inc.						mvadmin is logged in. Logout
▼ Home Menu	Precinct System Se	ecurity Video/Ca	se Modules	DVR Firmwa	are DVD	1
Home Search Video			incuales	- Difference		
Manage Cases	Precinct Info Logos	Bookmarks				
Media Reader			Precinct			
7 Bookmarks		14 44 4	Page 1 of 1 (2 total	records)	5 55 51	
3 MVI Parature	Precinct Name 🛦	IP Address	Last Comm Date	DES Version	Status	Registration Key
Ilser Preferences	CW Forwarder	192.168.110.154	09/15/2016 22:41	trunk	CFM Enabled	15698F6E9CA0050568A065D
- Osci i reierences	VM- LZ - Central Server	Local	Local		Local	148D2EF6B4D0050568A0BE2
Administration						
System Setup						
System Status						
Assign Videos						
lanage DVRs						
Nobile Devices						
lanage Users						
Action						
lew						
dit						
lonistor						
inglister,						
vpcpropize						

#### **3** Click the **System** tab.

(Continued)



				Syst	em Se	TUP			
Mobile-Vision, Inc.							mva	dmin is logge	d in. <u>Logout</u>
Home Menu	Precinct	System	Security	Video/Case	Modules	DVR Firmware	DVD	٦	
ome barch Video	Storage	LifeOvela	Backu	n/Export Do	woload Options	Pequest Pea	eone	IMD Types	Other
nage Cases	Joinage		Dacku			Request itea	3013	JNID Types	Other
dia Reader	Interr	al Path	Exto	mal Modia LINC	Storage		IR Addrose (	of RAID unit	Status
er Help	/fbdata/00/	idi F dui	lovnort00)	inal webla DNG	(stroom0)		107.0		Enabled
Bookmarks	/fbdata/00/				/stream00		127.0.0.1		Enabled
MVI Parature	Thougharoon		iospono n		150 Califo	15 CONTON		121.1.1.2	
User Preferences									
Administration									
stem Setup									
stem Status									
sign Videos									
anage DVRs									
bile Devices									
inage Users									
Action									
N									
10									

4 Click the **Download Options** tab.

				S	STEM	SETUP				
Mobile-Vision, Inc.								mvad	min is logged in	n. <u>Loqout</u>
▼ Home Menu	Precinct	System	Security	Video/Case	Modules	DVR Firmware	DVD			
Search Video	Storage	Life-Cycle	Backup	D/Export Do	wnload Options	Request Rea	sons	UMD Types	Other	
Manage Cases Media Reader User Help	Enable F	leet Manageme	ent for DVRs:							
Bookmarks     L3 MVI Parature	Enable FB2/FB3/FBHD DVR Downloads:									
► User Preferences	C	iscover FB2/FB	3/FBHD DVR b	ny: UDP 🗸 🔮						
▼ Administration	Auto Inse	ert FB2/FB3/FBH	D DVR Device	s: 🔲 🕜						
System Setup		Ins	ert Devices A	s: Enabled 🗸 🔮						
Assign Videos										
Manage DVRs	Ena	ble Body Worn	Downloads:	<b>v</b>						
Mobile Devices		Discover Bo	dy Worn by							
Action		biotorio: bi								
Edit	Auto	Insert Body W	orn Devices:							
Refresh		Insert	Devices As:	Enabled V						

**5** Go to the Action column and click **Edit**. The Download Options popup displays.



Download Options		
Enable Fleet Management for DVRs: 🔽 🥝		
Enable FB2/FB3/FBHD DVR Downloads: 🗌 🕜		
Discover FB2/FB3/FBHD DVR by: UDP 🗸 📀		
Auto Insert FB2/FB3/FBHD DVR Devices: 🔲 🍘		
Insert Devices As: Enabled 💙 🔞		
Enable Body Worn Downloads: 🗹 🥝		
Discover Body Worn by: UDP 🗸 🍘	Requir	ed BWX-100 settings
Auto Insert Body Worn Devices: 🗹 🕜	Requi	
Insert Devices As: Enabled 💙 🧭	J	
Save Cancel		

The settings for Body Worn DVRs are on the bottom of this popup.

- 6 Make sure that all the BWX-100 settings match those pictured above.
- 7 Click Save.

Proceed to "Changing a BWX-100 DVR Record" below.

#### Changing a BWX-100 DVR Record

This section describes how to update a BWX-100 record. This procedure differs slightly depending on whether or not your agency has Fleet Management enabled.





- Changing a BWX-100 DVR When Fleet Management is On, next page
- Changing a BWX-100 DVR When Fleet Management is Off, page 46.



#### Changing a BWX-100 DVR When Fleet Management is On

This section describes how to update a BWX-100 record when the Fleet Management feature is *enabled*. If you're not sure if your agency is using Fleet Management, examine the *Enable Fleet Management for DVRs* checkbox on the **Download Options** tab, as pictured on the previous page. If the checkbox is *selected*, use this procedure. If the checkbox is *deselected*, see "Changing a BWX-100 DVR When Fleet Management is Off" on page 46 instead.

**1** Go to **V** Administration and click **Manage DVRs**. The Manage DVRs page displays.

			M	ANAGI	E DVR	s			
Mobile-Vision, Inc.							m	vadmin is logge	d in. <u>Loqout</u>
▼ Home Menu	DVRs DVR Group	3							
Home									
Search Video				DV	Rs				
Manage Cases		K	<< <	Page 1 of 1 (8	total records)	> >> >>			
Media Reader	DVR Name 🔺	Last Comm IP	DVR ID	Status	Туре	Product Code	Group	Version	Config Sync
User Help				Enabled V	<b>~</b>			<b>~</b>	
V Bookmarks	BWX-403	192,168,10,100	3000000403	Enabled	Body Worn	BWX-100			Pending
L3 MVI Parature							BodyVISION		
User Preferences	FBBW1_2081611503	169.254.121.90	2081611503	Enabled	Body Worn	FBBW1	XV DVRs		Pending
Administration	FBBW2_300000322	192.168.10.101	300000322	Enabled	Body Worn	BWX-100		1.7.28	Complete
System Setup	FBBW2_300000325	169.254.222.107	300000325	Enabled	Body Worn	BWX-100	BWX-100 Day Shift		Pending
System Status							BWX-100		
Assign Videos	FBBW2_300000327	169.254.96.159	300000327	Enabled	Body Worn	BWX-100	Day Shift		Pending
Manage DVRs Mobile Devices	FBBW2_300000339	192.168.10.222	300000339	Enabled	Body Worn	BWX-100			Pending
Manage Users	FBBW2_300000378	192.168.10.102	300000378	Enabled	Body Worn	BWX-100			Pending
Action	FBBW2_300000400	169.254.82.186	300000400	Enabled	Body Worn	BWX-100			Pending
New DVR						-			
Edit									
Export Config									
Import DVRs									
Export DVRs									
Delete									
Replace									
Refresh Page									

- 2 Locate the DVR record you wish to view. If you have a large number of records to scroll through, enter **BWX-100** in the *Product Code* field to display BWX-100 records only.
- **3** Right-click on the DVR record you wish to view, then select **Edit** from the popup menu. The BWX-100's Edit DVR record displays.



Edi	DVR (FBBW2_3000000322)
DVR Video Ethernet	
DVR Name: FBBW2_300000322	0 Version: 1.7.28 0
DVR Officer Name: No Name	Assigned Firmware: None V
Allow Officer Assignment: 🔽	Ø         DVR ID: 3000000322         Ø
Status: Enabled V	♂ Time Zone: -05:00 Eastern Time ∨
Group Name: V	🕜 Daylight Savings Time: 🖌 🥥
Mute Enabled:	⊘ Snapshot/Tracepoint: Both ♥ ∅
	Save Cancel

- **4** To change the BWX-100's system-assigned name, enter a new value in the *DVR Name* field. Otherwise proceed to the next step.
- **5** If your agency is using the Officer Dispatch feature (default), skip to step 7.

– OR –

If your agency is *not* using the Officer Dispatch feature, deselect the *Allow Officer Assignment* checkbox.

- 6 Proceed to the *DVR Officer Name* field. Using the drop-down list provided, select the name of the officer to whom you plan to assign this device.
- 7 To assign this DVR to a pre-defined BWX-100 DVR Group, select a value from the *Group Name* drop-down list. Otherwise proceed to the next step.
- 8 If you want officers to be able to mute audio while a recording is in progress (default), proceed to the next step.

– OR –

If you do *not* want officers to be able to mute audio while a recording is in progress, deselect the *Mute Enabled* checkbox.

**9** If this device will be recording in the Eastern time zone (default), proceed to the next step.

– OR –

If this device will be recording in a *different* time zone, select a new value from the *Time Zone* drop-down list.

(Continued)



Edit	DVR (FBBW2_3000000322)	×
DVR Video Ethernet		
		_
DVR Name: FBBW2_300000322	Version:         1.7.28	
DVR Officer Name: No Name 🗸		
Allow Officer Assignment: 🗹	Ø         DVR ID: 300000322         Ø	
Status: Enabled 🗸		
Group Name: 🗸 🗸	🕜 Daylight Savings Time: 🖌 🥝	
Mute Enabled:	🥝 Snapshot/Tracepoint: Both 🗸 🥥	
	Save Cancel	

**10** If this device will be recording in a region that observes daylight savings time (default), proceed to the next step.

– OR –

If this device will be recording in a region that does *not* observe daylight savings time, deselect the *Daylight Savings Time* checkbox.

**11** If your agency plans to use the BWX-100's Snap/Trace button to capture a "snapshot" still image *and* insert a "tracepoint" place marker in a recording (default), proceed to the next step.

-OR-

6

If your agency plans to use the BWX-100's Snap/Trace button to capture a "snapshot" still image only, select **Snapshot** from the *Snapshot/Tracepoint* drop-down list.

– OR –

If your agency plans to use the BWX-100's Snap/Trace button to insert a "tracepoint" place marker only, select **Tracepoint** from the *Snapshot/Tracepoint* drop-down list

– OR –

If your agency wishes to *disable* the BWX-100's Snap/Trace button, select **Off** from the *Snapshot/Tracepoint* drop-down list.

**12** Click the **Video** tab.



Edit DVR (F	BBW2_3000000322)		
DVR Video Ethernet			
Video Properties			
Pre-Event Recording: 0 🗸 🕜	Resolution:	1080p	✓ @
Recording Properties			
GPS Run Time: 0		GPS Tracking:	✓ 🥝
Audio/Video Mode: 0 🗸 🥝	Recording Alert Tin	ne (minutes): 0	0
Remote Triggering: Disabled 🗸 🕜	Age	ency Id: 0	0
Save	Cancel		

- **13** If you want to capture X number of seconds of pre-record activity (i.e., the activity that occurs just before a recording is initiated), select a numeric value from the *Pre-Event Recording* drop-down list. Otherwise proceed to the next step.
- **14** To leave the video resolution set to *full high definition* (default), skip to step 16.

– OR –

To select a *different* video resolution, proceed to the next step.



**HINT**: Video resolution is always a tradeoff between quality and the resources required to obtain that quality (i.e., storage space and battery runtime). When you select a resolution, keep the following guidelines in mind:

- □ Higher resolution recordings have the *advantage* of a better picture quality, but the *disadvantage* of an increased storage space requirement.
- □ Cropped views have the *advantage* of increased battery runtime, but the *dis-advantage* of a decreased field of view.

Generally, it's best to select the highest quality picture possible while still maintaining enough storage space and battery runtime to meet your agency's needs.

<b>BWX-100 Resolution</b>	Description
720 x 480 cropped	Standard definition video with a reduced field of view. Also referred to as "480p cropped."
1280 x 720 cropped	High definition video with a reduced field of view. Also referred to as "720p cropped."
1280 x 720	High definition video with a full field of view. Also referred to as "720p."
1920 x 1080 (default)	Full high definition video with a full field of view. This is the highest resolution available for BWX-100 video and the most resource intensive. Also referred to as "1080p." <i>System default</i> .



Edit ]	DVR (FBBW2 3000000322)	x
DVR Video Ethernet		
		_
Video Properties		
Pre-Event Recording: 0 🗸 🕜	Resolution: 1080p 🗸 🥑	
Recording Properties		
GPS Run Time: 0	GPS Tracking: 🖌 👔	
Audio/Video Mode: 0 🗸 🕢	Recording Alert Time (minutes): 0	
Remote Triggering: Disabled V	Agency Id: 0	
	Save Cancel	

- **15** Select a new value from the *Resolution* drop-down list.
- **16** To record both audio and video (default), proceed to the next step.

– OR –

To record video only, select 1 from the Audio/Video Mode drop-down list.

– OR –

To record audio only, select 2 from the Audio/Video Mode drop-down list.

- 17 If you want the device to vibrate once every X minutes after a recording is initiated—reminding the officer that a recording is still in progress—enter a number between 1 and 30 in the *Recording Alert Time (minutes)* field. Otherwise proceed to the next step.
- 18 If your agency is using the remote triggering function\*, select Enabled from the *Remote Triggering* drop-down list. For more information on this feature, see page 28.

– OR –

If your agency is *not* using the remote triggering function (default), proceed to the next step.

- **19** Enter an agency identification code in the *Agency Id* field. If you save this record without entering this field, the system will populate this field with a default value of 0x00000000.
- **20** Click the **Ethernet** tab.

<sup>\*</sup> Additional equipment may be required



	Edit DVR (bwx251)	
DVR Video Etherne	t	
	1	7
Ethernet DHCP:		
Ethernet IP:	166.20.101.251	
Ethernet Mask:	255.255.255.0	
Ethernet Gateway IP:	166.20.101.1	
Remote Broadcast IP(s):	166.20.101.69 166.20.101.70 166.20.101.61	
	Save Cancel	

**21** If your agency is running your DES product<sup>\*</sup> on a DHCP network (default), skip to step 23.

– OR –

If your agency is *not* running your DES product<sup>\*</sup> on a DHCP network, deselect the *Ethernet DHCP* checkbox.

- **22** Enter the appropriate IP addresses in the *Ethernet IP*, *Ethernet Mask*, and *Ethernet Gateway IP* fields.
- **23** If this BWX-100's Uplink Station is connected to the same network as your DES server (default), proceed to the next step.

-OR -

If this BWX-100's Uplink Station is connected to a *different* network than your DES server (such as a router between the Uplink Station and the L3 server), enter your L3 server IP address(es) in the *Remote Broadcast IP*(s) field. If there is more than one address, separate each address with a space.

24 Click Save.

<sup>\*</sup> DEP, DEA Agency, DEF, or DEV



#### Changing a BWX-100 DVR When Fleet Management is Off

This section describes how to update a BWX-100 record when the Fleet Management feature is *disabled*. If you're not sure if your agency is using Fleet Management, examine the *Enable Fleet Management for DVRs* checkbox on the **Download Options** tab, as pictured on page 39. If the checkbox is *deselected*, use this procedure. If the checkbox is *selected*, see "Changing a BWX-100 DVR When Fleet Management is On" on page 40 instead.

1 Go to **Administration** and click **Mobile Devices**. The Mobile Devices page displays.

Mobile-Vision, Inc				Mo	BILE D	EVICES		mvadmin is	logged in. Logout
▼ Home Menu	Mobile De	vices	Mobile Inventory	1					
Home	MODIle De	vices [	wobile inventory						
Search Video					Mobile Dev	ices			
Manage Cases				K << <	Page 1 of 1 (1 total	records)	× × ×		
Media Reader	Assign	Identify	Display Name	Serial #	Battery Level (%)	Free Space (%)	Status	Revision	DVR Officer Name
User Help							<b>~</b>		
V Bookmarks	Assian	JUE	EBBW2 200000222	2000000222			Idle	4 7 28	NaNama
L3 MVI Parature	Assign		FBBW2_300000322	300000322			luie	1.7.20	NO Name
► User Preferences									
▼ Administration									
System Setup									
System Status									
Assign Videos									
Manage DVRs									
Mobile Devices									
Manage Osers									
Action									
Edit Conliguration									

**2** If the BWX-100 record you wish to update displays on-screen, click on it. Skip to step 5.

– OR –

If the BWX-100 record you wish to update does *not* display on-screen, proceed to the next step.

**3** Use the navigation arrows at the top of the page to scroll through the DVR records. - OR -

Enter or select search criteria in the *Display Name*, *Serial #*, *Status*, and/or *DVR Officer Name* fields. The system automatically narrows the DVR list to those DVRs that match your newly entered criteria.

4 Once the desired record displays on-screen, click on it.



				Μ	obile D	EVICES			
Mobile-Vision, Inc.								mvadmin i	s logged in. <u>Loqout</u>
▼ Home Menu	Mobile Dev	vices	Mobile Inventory						
Home									
Search Video					Mobile Dev	ices			
Manage Cases				K << <	Page 1 of 1 (1 tota	l records)	>>>>		
Media Reader	Assign	Identify	Display Name	Serial #	Battery Level (%)	Free Space (%)	Status	Revision	DVR Officer Name
User Help					1		✓		
Bookmarks		Cold and							
L3 MVI Parature	Assign	3.6	FBBW2_300000322	300000322			ICIE	1.7.28	No Name
User Preferences									
Administration									
System Setup									
System Status									
Assign Videos									
Manage DVRs									
Mobile Devices									
Manage Users									
Action									
Edit Configuration									

**5** Go to the Action column and click **Edit Configuration**. The Edit Device popup displays.

Edit Device (FBBW2_3000000322)	×
DVR Name FBBW2_3000001 🥑 Daylight Savings Time:	2 🥝
Serial # 3000000322 🛛 🥑 Time Zone: -05:00 Eastern Time 💉	<ul> <li>Ø</li> </ul>
Allow Officer Assignment: 🗹 🥝 DVR Officer Name: admin 🔍	′ <b>(</b> )
GPS Tracking: 🗹 🥝 GPS Run Time: 🛛	0
Snapshot/Tracepoint: Both 💙 🥑 Audio/Video Mode: 0 🚿	<ul> <li>Ø</li> </ul>
Remote Triggering: Disabled 🗸 🥥 Agency Id: 0	0
Ethernet DHCP: 🗹 🥑 Resolution: 1080P	<ul> <li>Ø</li> </ul>
Ethernet IP: 192.168.1.155 @ Recording Alert Time (minutes):	0
Ethernet Mask: 0.0.0.0 🥑 Mute Enabled: [	0
Ethernet Gateway IP: 192.168.1.1 @ Pre-Event Recording: 0	<ul> <li>Ø</li> </ul>
Remote Broadcast IP(s): 255.255.255	0
Save Cancel	

- 6 Enter a name for this device in the *DVR Name* field.
- 7 If your agency is using the Officer Dispatch feature (default), skip to step 9.

– OR –

If your agency is *not* using the Officer Dispatch feature, deselect the *Allow Officer Assignment* checkbox.

**8** Proceed to the *DVR Officer Name* field. Using the drop-down list provided, select the name of the officer to whom you plan to assign this device.



		_
Edit Device (FBB)	W2_3000000322)	×
DVR Name FBBW2_3000001	Daylight Savings Time: 🗸	Ø
Serial # 300000322	Time Zone: -05:00 Eastern Time 🗸	0
Allow Officer Assignment: 🗹 🥡	DVR Officer Name: admin	0
GPS Tracking: 🗹 🥝	GPS Run Time: 0	0
Snapshot/Tracepoint: Both 🗸 🕜	Audio/Video Mode: 0 🗸	0
Remote Triggering: Disabled 🗸 🥑	Agency Id: 0	Ø
Ethernet DHCP: 🗹 🔞	Resolution: 1080P	Ø
Ethernet IP: 192.168.1.155 @	Recording Alert Time (minutes):	Ø
Ethernet Mask: 0.0.0.0	Mute Enabled:	0
Ethernet Gateway IP: 192.168.1.1	Pre-Event Recording: 0 🗸	Ø
Remote Broadcast IP(s): 255.255.255.255		Ø
Save	Cancel	

**9** If your agency plans to use the BWX-100's Snap/Trace button to capture a "snap-shot" still image *and* insert a "tracepoint" place marker in a recording (default), proceed to the next step.

– OR –

If your agency plans to use the BWX-100's Snap/Trace button to capture a "snapshot" still image only, select **Snapshot** from the *Snapshot/Tracepoint* drop-down list.

– OR –

If your agency plans to use the BWX-100's Snap/Trace button to insert a "tracepoint" place marker only, select **Tracepoint** from the *Snapshot/Tracepoint* drop-down list

– OR –

If your agency wishes to *disable* the BWX-100's Snap/Trace button, select **Off** from the *Snapshot/Tracepoint* drop-down list.

10 If your agency is using the remote triggering function\*, select Enabled from the *Remote Triggering* drop-down list. For more information on this feature, see page 28.

– OR –

If your agency is *not* using the remote triggering function (default), proceed to the next step.

**11** If your agency is running your DES product<sup>\*</sup> on a DHCP network (default), skip to step 13.

– OR –

If your agency is *not* running your DES product<sup>\*</sup> on a DHCP network, deselect the *Ethernet DHCP* checkbox.

<sup>\*</sup> Additional equipment may be required

<sup>\*</sup> DEP, DEA Agency, DEF, or DEV



- **12** Enter the appropriate IP addresses in the *Ethernet IP*, *Ethernet Mask*, and *Ethernet Gateway IP* fields.
- **13** If this BWX-100's Uplink Station is connected to the same network as your DES server (default), proceed to the next step.

– OR –

If this BWX-100's Uplink Station is connected to a *different* network than your DES server (such as a router between the Uplink Station and the L3 server), enter your L3 server IP address(es) in the *Remote Broadcast IP(s)* field. If there is more than one address, separate each address with a space.

**14** If this device will be recording in a region that observes daylight savings time (default), proceed to the next step.

– OR –

If this device will be recording in a region that does *not* observe daylight savings time, deselect the *Daylight Savings Time* checkbox.

**15** If this device will be recording in the Eastern time zone (default), proceed to the next step.

– OR –

If this device will be recording in a *different* time zone, select a new value from the *Time Zone* drop-down list.

**16** To record both audio and video (default), proceed to the next step.

– OR –

To record video only, select 1 from the Audio/Video Mode drop-down list.

– OR –

To record audio only, select 2 from the Audio/Video Mode drop-down list.

- **17** Enter an agency identification code in the *Agency Id* field. If you save this record without entering this field, the system will populate this field with a default value of 0x00000000.
- **18** To leave the video resolution set to *full high definition* (default), proceed to the next step. Otherwise select a new value from the *Resolution* drop-down list. For a detailed description of these options, see the table on page 43.
- 19 If you want the device to vibrate once every X minutes after a recording is initiated—reminding the officer that a recording is still in progress—enter a number between 1 and 30 in the *Recording Alert Time (minutes)* field. Otherwise proceed to the next step.



Edit Device (FBBW2_3000	0000322)
DVR Name FBBW2_3000001	Daylight Savings Time: 🗹 🔞
Serial # 300000322 @ Time	zone: -05:00 Eastern Time 🗸 🥝
Allow Officer Assignment: 🖌 🥑 D	VR Officer Name: admin 🔽 🥝
GPS Tracking: 🗹 🙋	GPS Run Time: 0
Snapshot/Tracepoint: Both 🗸 🥑	Audio/Video Mode: 0 🗸 🍘
Remote Triggering: Disabled 🗸 🍘	Agency Id: 0
Ethernet DHCP: 🗹 🕜	Resolution: 1080P 🗸 🥝
Ethernet IP: 192.168.1.155 @ Record	ling Alert Time (minutes): 0 🕜
Ethernet Mask: 0.0.0.0	Mute Enabled: 🗌 🥑
Ethernet Gateway IP: 192.168.1.1	Pre-Event Recording: 0 🗸 🥝
Remote Broadcast IP(s): 255.255.255.255	0
Save Cancel	

**20** If you want officers to be able to mute audio while a recording is in progress (default), proceed to the next step.

– OR –

If you do *not* want officers to be able to mute audio while a recording is in progress, deselect the *Mute Enabled* checkbox.

- **21** If you want to capture X number of seconds of pre-record activity (i.e., the activity that occurs just before a recording is initiated), select a value from the *Pre-Event Recording* drop-down list. Otherwise proceed to the next step.
- 22 Click Save.

#### **Replacing a BWX-100**

This section describes how to replace an existing BWX-100 with a new device in DEP, DEA Precinct, DEF, or DEV. Specifically, this procedure will assign the old DVR record's settings and videos to the new DVR record, then remove the old DVR record from the system.

- 1 Write down the serial number for both the old BWX-100 and the new one. You can find this number on the sticker located on the back of the device.
- **2** Place the new BWX-100 in an available docking station at your agency's Uplink Station. Once the BWX-100 connects to the server, the system will be able to discover the device on the network.
- **3** Go to **V** Administration and click **Manage DVRs**. The Manage DVRs page displays.



Mobile-Vision, Inc.	MANAGE DVRs											
								mva	dmin is logged ir	Logout		
▼ Home Menu	DVRs	DVR Group	s									
Search Video					nv	Re						
Manage Cases	8											
Media Reader	DVD	Nama A	Last Comm ID DV/D ID Status Turo Brodust Cada					Oroun Version Config C				
User Help	DVK	Name A	Last Collinn IF	UVRID	Status	Type	Flouder Code	Group	version	Coning Sync		
7 Bookmarks	-			-	Enabled							
3 MVI Parature	bw173_	1051510044	166.20.101.173	1051510044	Enabled	Body Worn	FBBW1		1.5.10b77	Complete		
Llear Proforancee	bw173_	1111510584	166.20.101.71	1111510584	Enabled	Body Worn	FBBW1		1.5.8	Complete		
<ul> <li>User Preferences</li> </ul>	D	VR FB2	166.20.101.178	000000002	Enabled	Vehicle	FB2		2.1.16	Complete		
Administration	NJ	SPFB3A	166.20.101.179	000000003	Enabled	Interview Room	FB3		3.2.6	Complete		
System Setup	NJ	SPEB3B	166 20 101 90	0000054392	Enabled	Vehicle	EB3		3252	Complete		
System Status				1								
Assign Videos												
lanage DVRs												
Nobile Devices												
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Action Action lew DVR (dit xport Config mport DVRs xport DVRs leset leate												
Atriange Users Action Lew DVR Edit Export Config mport DVRs Export DVRs Leset Delete Revolace												

- 4 Enter the serial number for the *old* DVR record in the *DVR ID* field. The associated DVR record displays.
- 5 Click on the old DVR's record to highlight it.
- 6 Go to the Action column and click **Replace**. The Replace DVR popup displays.



- 7 Using the drop-down list provided, select the name of the *new* BWX-100. To identify this record, look for the letters **FBBW2** followed by the new BWX-100's serial number.
- 8 Click Save. The system assigns the old DVR record's settings and videos to the new DVR record, then removes the old DVR record from the system.



#### **BWX-100** Dimensions



## FCC Compliance

This equipment radiates radio frequency energy and if not used properly - that is, in strict accordance with the instructions in this manual - may cause interference to radio communications and television reception. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- $\Box$  (1) this device may not cause harmful interference and
- □ (2) this device must accept any interference, including interference that may cause undesired operation of the device.



**NOTE**: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **□** Reorient or relocate the receiving antenna.
- □ Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- **C** Consult the dealer or an experienced radio/TV technician for help.

FCC ID: 2AOSO1M01831



#### **RF Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

The transmitters within this device must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **Contact Information**

- **Phone**: 800-336-8475; Fax: 973-316-9509
- Email: <u>service.MVI@L3T.com</u>
- Address: L3 Mobile-Vision, Inc. 400 Commons Way, Suite F Rockaway, NJ 07866

# **Audio/Visual Indicators**

The following table lists the various audio/visual indicators that you will see/hear/feel when you perform various actions with your BWX-100.

Action	Audio/Visual Indicator(s)	
Turn device on	Start of boot: Vibrate 1x	
	<i>End of boot</i> : Vibrate 1x / Chirp 1x / READY	
Start recording	Vibrate 2x / Chirp 1x	REC
Start recording when storage card is nearly full	Chirp 3x / STORAGE FULL	
Start recording when battery level is very low	Chirp 3x / BATTERY LOW	
Stop recording	Vibrate 1x / Chirp 1x / STOPPING RECORDIN	G
Turn Covert mode on	Vibrate 2x / COVERT MODE ON	
Turn Covert mode off	Vibrate 2x / Chirp 2x / COVERT MODE OFF	
Turn Mute on	Vibrate 1x / Chirp 1x / MIC OFF	¥
Turn Mute off	Vibrate 1x / Chirp 1x / MIC ON	
Insert tracepoint/Capture snapshot	Vibrate 1x	
Pair device with smart phone or tablet		۰∦۰
Place device in docking station connected to a USB power source	Vibrate 1x / Chirp 1x	
Place device in docking station connected to server network	Vibrate 1x / Chirp 1x	格
Remove device from docking station when battery level is medium – high	Vibrate 1x / Chirp 1x	
Remove device from docking station when battery level is low	Vibrate 3x / Chirp 3x	
Run system test	Vibrate 3x / Chirp 3x upon completion of test	
Turn device off	Vibrate 1x	

# **Contact Information**

**Phone**: 800-336-8475; Fax: 973-316-9509

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Address: L3 Mobile-Vision, Inc. 400 Commons Way, Suite F Rockaway, NJ 07866



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