

VB400 AND MOTOTRBO RADIO INTEGRATION EXPLAINED

History

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Introduction

Motorola Solutions VB400 body-worn camera can be used with MOTOTRBO radios, to provide support for workers in critical moments. When the radio's Emergency Mode is triggered (either manually, using the emergency button, or when the radio senses its wearer has fallen over), Bluetooth will prompt a paired VB400 to start recording. This ensures that events will be captured immediately, with no intervention on the part of the user.

In order to be compatible with VB400s, your MOTOTRBO radios must be Bluetooth enabled running firmware version M2023.01 or later. Compatible models are as follows:

Region	Model
North America	R7, XPR 7000e series
Europe and the Middle East	R7, DP4401e, DP4601e, DP4801e, DP3441e, DP3661e
Asia-Pacific	R7, XiR P8668i, XiR P8628i, XiR P8608i, XiR E8608i, XiR E8628i
Latin America	R7, DGP 8000e/5000e series, DGP 8050e Elite

This document outlines how to configure your radio so your VB400 will start recording when it receives a notification via Bluetooth.

Overview

A VB400 can be paired with a radio. Once a new radio has been paired and the VB400 has been docked, the pairing information is stored securely by VideoManager. The pairing information will be associated with the **user**, not the **camera**. The VB400 only stores the pairing information for the duration of the user's field trip.

This means that:

- When the user is next assigned a VB400 camera - regardless of which specific camera it is - VideoManager will configure it with the pairing information for the radio.
- An administrator only needs to pair a radio with a user **once**.
- If a user can claim (or is allocated) more than one camera, the pairing information is only applied to the **first** VB400 they have been assigned; until that VB400 is returned (or "forgotten"), subsequent cameras allocated to that user will not have the radio's pairing information applied to them.

The configuration assumes that radios are **personally issued to individual users**.

Procedure

This document assumes that you are in an administrative role and will be managing the pairing of radios on behalf of VideoManager users.

The procedure for using VB400s with radios is as follows:

1. Create two separate device profiles:
 - An **administrative** device profile which enables you to pair the radios with the VB400s for the first time.

- A **user** device profile which enables users to operate their VB400s, once the radios have been paired.
2. Add the user device profile to the *device operator* role.
 3. Create a group for radio users and the *device operator* role.
 4. Add the radio users to the group. All users in this group will be able to operate VB400s with the user device profile.

The following steps differ, depending on whether radios are being paired for the first time, or are being utilized as part of a daily workflow:

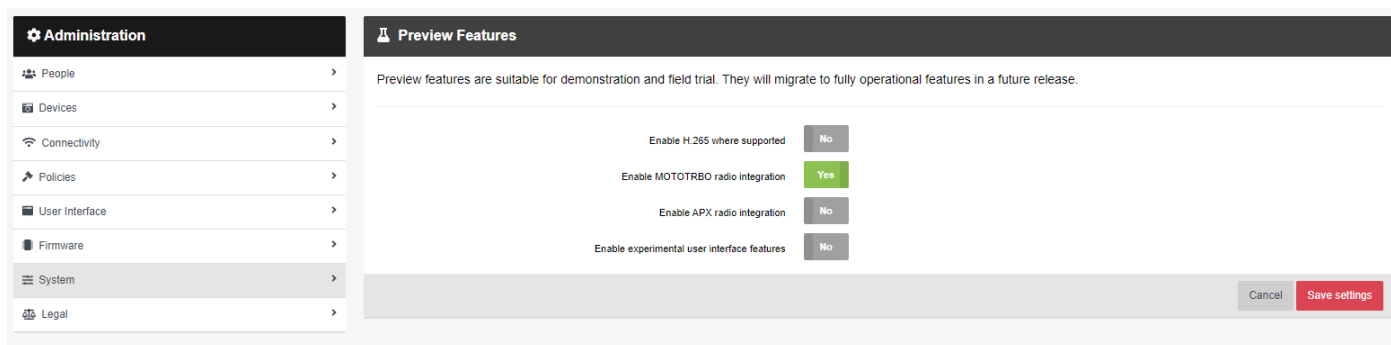
- **IF YOU ARE PAIRING RADIOS FOR THE FIRST TIME:**
 - As an administrator, assign the new user to a VB400 using the administrative device profile.
 - Pair the VB400 to the radio.
 - Dock the VB400 (to store the pairing information in VideoManager).
 - Check the pairing information is stored in VideoManager.
- **IF USERS ARE UTILIZING RADIOS AS PART OF A DAILY WORKFLOW:**
 - The user is assigned a VB400 (using RFID, or personal issue).

This workflow ensures that users cannot pair themselves with radios - instead, you (as an administrative user) will pair the radios for them, and then the users can operate those VB400s with their radios.

Enable MOTOTRBO integration on VideoManager

This step is only necessary if you are using a version of VideoManager running 16.2 or earlier. To enable MOTOTRBO integration on VideoManager:

1. Navigate to the **Admin** tab.
2. Select the **System** pane.
3. Click the **Preview Features** section.



4. Set **Enable MOTOTRBO radio integration** to **On**.
5. Click **Save settings**.

Create or edit a device profile for administrative radio pairing

Device profiles dictate how your users' VB400s will behave when in the field. You should create a device profile which enables you to pair radios with users' VB400s, as an administrator.

To create or edit a device profile for pairing radios:

1. Navigate to the **Admin** tab.
2. Select the **Devices** pane.
3. Click the **Device Profiles** section.
4. Click **Create profile**, or **Go to profile** (if you are editing a previously-existing device profile).
5. From the **Device Family** dropdown, ensure that **VB400** is selected.



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New Device Profile

Details

Name*

Device Family VB400


Configure the following settings:

- In the **Bluetooth Settings** section, from the **Motorola radio integration** dropdown, select **MOTOTRBO**.


Motorola radio integration

MOTOTRBO

- From the **Motorola radio name pattern** dropdown, choose one of the following:
 - **Use default** - this option applies if you are using the default name format for your MOTOTRBO radios.
 - **Customise** - this option applies if you have changed the name format for your MOTOTRBO radios.


 You can check the name of your MOTOTRBO radio by navigating to the menu, clicking **Utilities**, navigating to **Radio info**, and clicking **My ID**.

- In the **Controls** section, select which buttons and gestures on a VB400 will prompt the following action to occur:
 - **Pair Bluetooth Peripheral** - this will prompt the VB400 to search for nearby radios. This is the action which pairs the VB400 and radios together.

 Motorola Solutions suggests the following configuration for this action:

Function button C:	Press	No action ▼
	Hold	Bypass peripheral warning ▼
	Double click	Pair Bluetooth peripheral ▲

6. Click **Save Settings**.

⚠ Make sure this profile does **not** become the system default device profile, otherwise other users (who are not designated as radio-enabled users), might get allocated or assigned devices with radio pairing enabled. If the profile becomes the system default, click **Reorder Profile**, and click  until the device profile is no longer the system default. Click **Confirm New Order** to save the changes.

Create or edit a device profile for use with radios

As well as creating a device profile for radio pairing, you should also create a device profile for non-administrative users. This will be the device profile used with their VB400s, and associated with their *device operator* role.

Unlike the previously-created device profile, this profile will **not** enable users to pair their own radios. Instead, this will enable the radio integration when users are in the field. Please see the section [Create or edit a device profile for administrative radio pairing](#) for more information about creating a device profile for pairing.

To create or edit a device profile for use with radios:

1. Navigate to the **Admin** tab.
2. Select the **Devices** pane.
3. Click the **Device Profiles** section.
4. Click **Create profile**, or **Go to profile** (if you are editing a previously-existing device profile).
5. From the **Device Family** dropdown, ensure that **VB400** is selected.

Configure the following settings:

- In the **Bluetooth Settings** section, from the **Motorola radio integration** dropdown, select **MOTOTRBO**.
- From the **Radio emergency button activates recording** dropdown, select **Yes**.

7. Click **Save Settings**.

⚠ Make sure this profile does **not** become the system default device profile, otherwise other users (who are not designated as radio-enabled users), might get allocated or assigned devices with radios enabled. If the profile becomes the system default, click **Reorder Profile**, and click until the device profile is no longer the system default. Click **Confirm New Order** to save the changes.

Add the user's device profile to the **Device Operator** role

VideoManager comes with the *device operator* role by default. Motorola Solutions recommends that this role is the one which will be applied to users who will be utilising radios. If not all device operators will be using radios, you should copy the *device operator* role and edit and use the copy instead.

To edit the *device operator* role, or make a copy of it:

1. Navigate to the **Admin** tab.
2. Select the **People** pane.
3. Click the **Roles** section.
4. Next to the *device operator* role, either click **Go To Role** (if you are editing it directly), or **Copy Role** (if you are making a copy of it).
5. From the **Default Device Profiles** dropdown, select the device profile which was created for use with radios (**not** the device profile which was created for administrative pairing). This ensures that regardless of how VB400s are assigned to users in this role, they will utilise the radio-enabled device profile.
6. Click **Create Role** or **Save Role**.

Create a group for radio users

All users who will use VB400s with radios should be added to a group which has the *device operator* role (or the copy of the *device operator* role) enabled. This ensures that regardless of the other roles they utilise, the users will always have the correct device profile and permissions for their radios.

New Group		Roles	
Group Name *	<input type="text" value="Enter a name for this group"/>	System administrator	Off
Display Name	<input type="text" value="Enter a display name for this group"/>	Administrator	Off
Create Group		Companion App User	Off
		Device operator	Off
		Incident Reviewer	Off

To create or edit a group, to which all radio users will be added:

1. Navigate to the **Admin** tab.
2. Select the **People** pane.
3. Click the **Groups** section.
4. Click **Create Group**.
5. In the **Group Name** field, enter a name for the group which clearly identifies that it applies to users with radios.
6. In the **Roles** section, set the *device operator* role (or the copy of the *device operator* role) to **On**.
7. Click **Create Group** or **Save Group**.


Add users to the group

You must now add the users who will be utilising the radio integration to the previously-created group. To do so:

1. Navigate to the **Admin** tab.
2. Select the **People** pane.
3. Click the **Users** section.
4. Click **Create User**, or **Go to User** (if you are editing a previously-existing user).
5. In the **Group Memberships** pane, enter the name of the previously-created radio group, and click **+**.

New User		Roles	
User Name *	Enter a user name for this user	System administrator	Off
Password	Enter a password for the user	Administrator	Off
Confirm password	Confirm password	Companion App User	Off
Display Name	Enter a display name for this user	Device operator	Off
Email Notifications	Enter email address	Incident Reviewer	Off
		System manager	Off
		System supervisor	Off

6. In the **Touch Assign ID** field, you can optionally associate this user with an RFID card. This is necessary if the user will have a VB400 allocated to them using **Permanent Allocation**, which requires users to scan their RFID card before they can use their VB400.

 To discover the Touch Assign ID for a user, hold their RFID card against the RFID reader. Click **Search for recently failed RFID scans**, copy the most recent failed scan, and paste it into the **Touch Assign ID** field.




7. Click **Create User** or **Save User**.

To check that this user has received the correct permissions, click **View Effective Permissions**. In the **Assigned Groups** pane, you should see the previously-created radio group.

Radio pairing: assign a VB400 to a user, utilizing the administrative radio pairing device profile


In order to pair a user with their radios, you must first assign them a VB400 which has been configured for use with the previously-created administrative device profile. This assumes that you are assigning, and pairing, the VB400s as an administrator.

You can pair a user's radio with **any VB400**; this is because the pairing information will be associated with the **user**, not the **camera**.


Search Devices				
DockControllers				
Filter				
Found 1 matching device				List options: Pause <input checked="" type="checkbox"/> Bulk edit  
Device	Operator	Location	Status	Battery
- 230022		USB	Unassigned	

To assign a radio-enabled VB400 to a user:

1. Navigate to the **Devices** tab.
2. Select the **Search Devices** pane.
3. Filter the devices as necessary, and click **Find Devices**.
4. Next to any VB400, click **Assign Device**.
5. In the **Operator Name** field, enter the name of the user whose radio you are pairing.
6. From the **Assignment Mode** dropdown, select **Single Issue**.

 You do not need access to the user's RFID card when you pair them with their radios. Once the pairing is complete and the VB400 is redocked, the user can be assigned a VB400 through any mode (**Single Issue**, **Permanent Issue**, **Permanent Allocation**).

7. From the **Device Profile** dropdown, select the device profile which has been created for administrative radio pairing.

 This will temporarily override the device profile associated with the user's role, for one field trip only. This enables you, the administrator, to pair the radios with the VB400. Please see the section [Create or edit a device profile for administrative radio pairing](#) for more information.

8. Click **Assign Device**.

Pair a radio with a user

Once the VB400 has been assigned to the user, you must pair their VB400 with their radio. To do so:

1. Undock the VB400.

As soon as the VB400 is undocked, its bottom LED will pulse blue and it will emit a repeating alarm, unless **Enable LEDs** and **Enable Beeps** have been set to **Off** in the VB400's device profile.

2. Turn on the radio. Navigate through its menu to the Bluetooth/Discoverable option and make the radio discoverable.

3. Hold the VB400 close to the radio and perform the gesture associated with the **Pair Bluetooth Peripheral** action (e.g. pressing the C button), as configured in the VB400's device profile. Once the gesture is performed, the VB400's bottom LED will flash blue rapidly and it will beep more frequently.
4. Use the radio's menu to accept the pairing.

⚠ The VB400's regular alarm will change its pattern if the pairing has timed out - this means that the radio has **not** paired correctly.

5. Redock the VB400.

💡 VideoManager saves the pairing information, and will use that for the next VB400 assigned to the user. This means that the pairing only has to happen once.

⚠ If a user has been assigned multiple VB400s, only their **first** assigned VB400 will be paired with their radios. If a user needs multiple VB400s to be paired with their radio, they must have separate users for each camera, and be paired separately on VideoManager. Note that once their first assigned VB400 is docked again, the next VB400 assigned to the user will use the radio pairing.

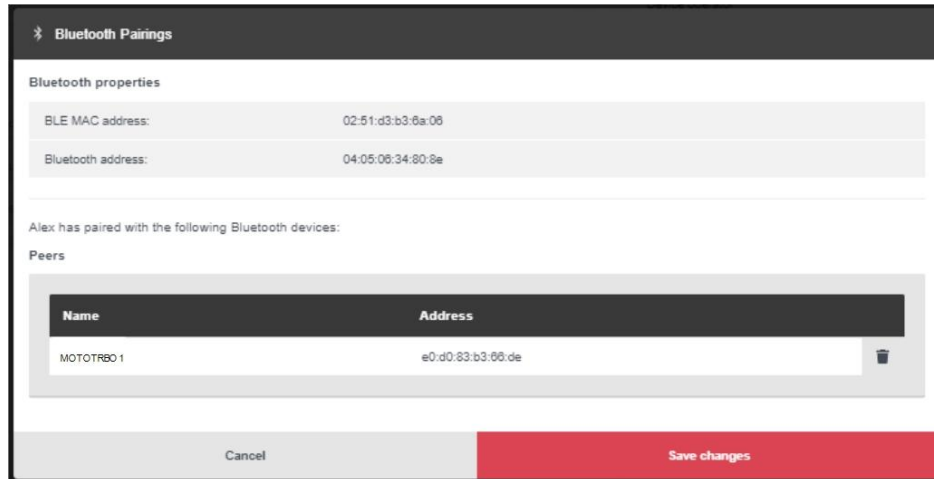
⚠ If a radio operator decides to disconnect and delete a VB400 using the radio menu then they should also use VideoManager to remove the pairing. That way the VB400 will stop trying to reconnect.

⚠ Once a VB400 user has been paired with a radio, reconnections between the VB400 and the radio should be automatic as soon as the VB400 is undocked. Always use this automatic mechanism and do not try to initiate the connection using the radio. If the VB400 fails to reconnect, try docking the VB400 and reassigning to the user again.

Check the radio has been paired to the user

You should now check that the pairing has been successful. To do so:

1. Navigate to the **Admin** tab.
2. Select the **People** pane.
3. Click the **Users** section.
4. Next to the user who has been paired, click **Go to User**.
5. Click **View device Bluetooth pairings** in the top right-hand corner.
6. The radio should be visible in the **Bluetooth MAC address** field.



7. Click **Close**.

The integration is now complete for this user, and their radio will be paired with any VB400 they are assigned. Users can be assigned VB400s in any of the following manners, from the **Devices** tab:

- **Single Issue** - the VB400 will only be assigned to the user for one trip (i.e. until it is redocked). Once it has been redocked, the VB400 must be manually reassigned to the user.
- **Permanent Issue** - the VB400 will be assigned to the user for every trip. It will remain assigned to the user, even when it is redocked.
- **Permanent Allocation** - the VB400 will be assigned to the user for every trip. The user must tap their RFID card against an RFID reader before undocking their VB400. The VB400 will remain allocated to the user, even when it is redocked.

⚠ If Permanent Allocation is selected, the user must have an RFID ID associated with them, otherwise they cannot use their VB400s. Please see the section [Add users to the group](#) for more information.

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