

DIGITAL TWO-WAY RADIO

DTR Frequently Asked Questions

(FAQ)

LEAFLET

April 2019

©2019 Motorola Solutions, Inc. All rights reserved.



MN005512A01-AA



MOTOROLA SOLUTIONS

Contents

Product Safety and RF Exposure Compliance.....	3
Notice to Users (FCC and Industry Canada).....	4
Operational Safety Guidelines.....	5
Frequently Asked Questions.....	6
Configuring a Mixed Fleet.....	10
Configuring Mixed Fleets–Scenario 1.....	10
Configuring Mixed Fleets–Scenario 2.....	10
Configuring Mixed Fleets–Scenario 3.....	12
Configuring Mixed Fleets–Scenario 4.....	13

Product Safety and RF Exposure Compliance

**CAUTION:**

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the Product Safety and RF Exposure booklet enclosed with your radio which contains important operating instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulations.

For a list of Motorola Solutions-approved antennas, batteries, and other accessories, visit <http://www.motorolasolutions.com>

**WARNING:**

This equipment is compliant with Class A of EN55032. In a residential environment, this equipment may cause radio interference.

Notice to Users (FCC and Industry Canada)

The business two-way radios operate in the license-free 900 MHz ISM Band and are subject to the Rules and Regulations of the Federal Communications Commission (FCC).

This device complies with Part 15 of the FCC rules and Industry Canada's license-exempt RSS's per the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications made to this device, not expressly approved by Motorola Solutions, could void the authority of the user to operate this equipment.

To comply with FCC/IC requirements, transmitter adjustments should be made only by or under the supervision of a technically qualified person to perform transmitter maintenance and repairs. Replacement of any transmitter component such as crystal, semiconductor, and

other that are not authorized by the FCC/IC equipment authorization for this radio violates FCC/IC rules.



NOTICE:


Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.


Operational Safety Guidelines

- Turn off the radio while charging.
 - The charger is not suitable for outdoor use. Use only in dry locations/conditions.
 - Connect charger to an appropriately fused and wired supply of the correct voltage (as specified on the product only).
 - Disconnect charger from line voltage by removing main plug.
 - Connect the equipment to an outlet which is easy to access and near.
 - For equipment using fuses, replacements must comply with the type and rating specified in the equipment instructions.
 - Maximum ambient temperature around the power supply equipment must not exceed 40 °C (104 °F).
 - Power output from the power supply unit must not exceed the ratings stated on the product label located at the bottom of the charger.
- Make sure the cord is not stepped on, tripped over, subjected to water, damage or stress.

Frequently Asked Questions

The following table explains commonly asked questions for the operation of DTR radios.

If...	Then...
<p>If you hear cross talk from other users,</p>	<p>Change the Profile ID PIN from the default 0000 to any number within 0000 to 9999. Set the non-interference feature by going to Menu/OK → Advanced → PROFILE ID.</p>
<p>If you want to use Private Reply,</p>	<p>Perform the following actions:</p> <ul style="list-style-type: none"> a Press the Programmable button within the Hang Time window, while the user is talking. The radio plays a tone and “captures” the user radio ID. b Once the user finishes talking, press the PTT button, and your radio calls the user privately. <p> NOTICE: During Group Hang Time, you can initiate a Private Reply to a user who has just finished talking.</p>
<p>If user A and user C, press their Programmable buttons at the same time to Private Reply, or Direct Call user B,</p>	<p>The action only queues the radio B ID, and does not pose an issue. However, if two users press the PTT button simultaneously to talk to user B privately, the user who presses the PTT button first is connected. The call from the other user will fail.</p>

If...	Then...
<p>If a user wants to Private Reply or Direct Call you, but you do not want to engage in the Private conversation,</p>	<p>Press the Home/Back button to end the call. The transmitting user does not know that the call has been declined.</p>
<p>If you want to end the call during a Private Call or Direct Call conversation,</p>	<ul style="list-style-type: none"> • Receiver - press the Home/Back button. • Transmitter - release the PTT button.
<p>If you pressed the Private Reply button, but the radio sounds a reject tone,</p>	<p>One of the following scenarios occurred:</p> <ol style="list-style-type: none"> a The Programmable button is disabled. b The radio did not store the radio ID of the person that you want to talk privately to. <p> NOTICE: The radio ID is not stored because the Programmable button was pressed outside of the call or outside of call Hang Time.</p>
<p>If you want to exit the request for Private Call or if you pressed the Programmable button by mistake,</p>	<p>Press and hold the Programmable button. The radio exits the private queue request and sounds an end tone, returning to the normal status.</p>
<p>If you pressed the Programmable button, but when the user finished talking and you push the PTT button to talk, the radio</p>	<p>One of the following scenarios occurred:</p>

If...	Then...
<p>gives a busy or an error tone, and you cannot make a call,</p>	<ul style="list-style-type: none"> a There are other users waiting to talk to the last person transmitting and someone else pressed the PTT button before you, giving you a busy tone. b The last person transmitting has gone out of transmission range. c The Programmable button is not set to Private Reply feature. <p>Wait and try again as the radio is still queuing until the call is successful, or cancelled by the user.</p>
<p>If you pressed the Programmable button to initiate Private Reply or Direct Call, but did not press the PTT button to talk privately,</p>	<p>The following scenarios occurred:</p> <ul style="list-style-type: none"> a You can still hear the group conversation in your channel. b While waiting in private queue mode, the display shows <code>Private Reply On</code>. After 1 minute of being in queue, you receive a call reminder tone, followed by another reminder tone after 4 minutes. No other reminder is heard afterward, but you remain in queue until Private Reply mode is exited.
<p>If want to make a Private Group Call</p>	<p>A group of radio IDs must be configured into a Private Group. Only this group is able to unmute to each others conversation.</p>

If...	Then...
If want to make a Public Group Call	Continue to use the Profile ID Call as this call is open to all users as long as the radios are in the same Channel and Hop-set.



NOTICE:

By default, the Private Reply and the Direct Call time out after 10 seconds of inactivity and both users are returned to group call mode. Check with your dealer or system administrator for more information on this configuration.

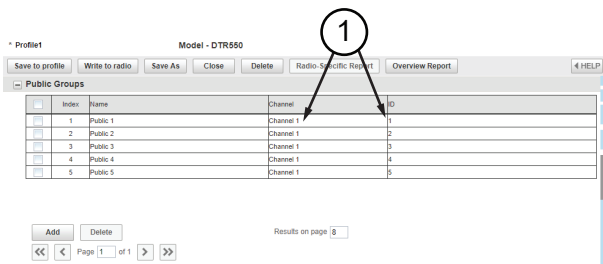
Configuring a Mixed Fleet

There are 4 scenarios to configure a mixed fleet depending on the legacy DTR settings. The following settings are applicable to the latest models.

Configuring Mixed Fleets–Scenario 1

The legacy DTR uses Public Group, Channel 1, and ID 1.

- 1 Retrieve the legacy DTR ID using the Customer Programming Software (CPS) to determine if the user has made changes.



* Profile1 Model - DTR550

Save to profile Write to radio Save As Close Delete Radio-Specific Report Overview Report HELP

Index	Name	Channel	ID
1	Public 1	Channel 1	1
2	Public 2	Channel 1	2
3	Public 3	Channel 1	3
4	Public 4	Channel 1	4
5	Public 5	Channel 1	5

Add Delete Results on page 8

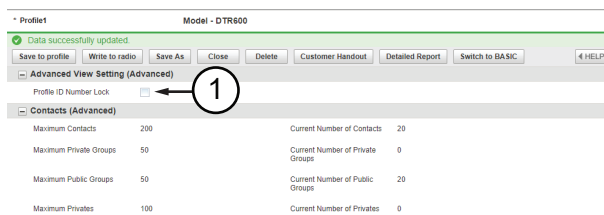
<< < Page 1 of 1 > >>

- 2 The default Profile ID for latest model remains 0000 and set Channel 1 for the public group chat.

Configuring Mixed Fleets–Scenario 2

The legacy DTR is using a different ID, for example: Public Group, Channel 1, ID30.

- 1 In **Advanced** settings, clear the **Profile ID Number Lock** check box.



* Profile1 Model - DTR600

Data successfully updated

Save to profile Write to radio Save As Close Delete Customer Handout Detailed Report Switch to BASIC HELP

Advanced View Setting (Advanced)

Profile ID Number Lock

Contacts (Advanced)

Maximum Contacts	200	Current Number of Contacts	20
Maximum Private Groups	50	Current Number of Private Groups	0
Maximum Public Groups	50	Current Number of Public Groups	20
Maximum Privates	100	Current Number of Privates	0

- 2 Add group to 21.
- 3 Ensure the **Frequency hopset** is set to 1.
- 4 Change the ID to 30 as in the legacy DTR ID.

* Profile1 Model - DTR600

Data successfully updated

Save to profile Write to radio Save As Close Delete Customer Handout Detailed Report Switch to BASIC HELP

Private Groups (Advanced)

Index	Edit More	Name	ID	All Privates	Group Members

Add Delete Results on page 1 of 1

Public Groups (Advanced)

Index	Name	Frequency Hopset	ID
17	N/A	1	N/A
18	N/A	1	N/A
19	N/A	1	N/A
20	N/A	1	N/A
21	Public 21	1	21

Add Delete Results on page 3 of 3

Annotations: 1 points to 'Switch to BASIC', 2 points to 'Add' button, 3 points to 'Public 21' row, 4 points to '21' ID.

5 Switch to **Basic** settings before adding contacts and groups into the channel.

6 Select **Public** as Mode.

7 If more than one group is available, select the type of group to assign to the channel.

8 If needed, rename the channel name for easier identification.

9 Program the settings to the radios.

10 If needed, save the file for future programming use.

* Profile1 Model - DTR600

Data successfully updated

Save to profile Write to radio Save As Close Delete Customer Handout Detailed Report Switch to ADVANCED HELP

Buttons (Basic)

Enable Internal PTT with Accessory

Programmable Button Private Reply

Direct Call OFF

Radio Name Based on Private Name

Radio Name MOTOROLA

Profile ID Number information (Basic)

Profile ID 0000

Channels (Basic)

Home Channel OFF

Home Channel Mode N/A

Index	Edit More	Name	Mode	Channel Mapping
1	Edit More	Channel 01	Public	Public 21
2	Edit More	Channel 02	Profile ID	2
3	Edit More	Channel 03	Profile ID	3
4	Edit More	Channel 04	Profile ID	4
5	Edit More	Channel 05	Profile ID	5
6	Edit More	Channel 06	Profile ID	6
7	Edit More	Channel 07	Profile ID	7
8	Edit More	Channel 08	Profile ID	8

Add Delete Results on page 8 of 8

Annotations: 5 points to 'Switch to ADVANCED', 6 points to 'Public' mode, 7 points to 'Public 21' mapping, 8 points to 'Channel 01' name, 9 points to 'Write to radio', 10 points to 'Save to profile'.

Configuring Mixed Fleets—Scenario 3

The legacy DTR is using different Channel and ID, for example: Public Group, Channel 2, and ID2.

- 1 In the **Profile ID** field, enter any 4 digit number other than zero.

Profile ID Number information (Basic)

Profile ID: 6180

- 2 In the **Advanced** settings, clear **Profile ID Number Lock** check box.

Profile ID Number Lock:

- 3 Add group to 21.

- 4 Ensure that the **Frequency hopset** is set to **2**.

- 5 Change the ID to **2** as in the legacy DTR ID.

Profile ID Number information (Advanced)

Profile ID Number Lock:

Index	Name	Frequency Hopset	ID
17	30A	10	30A
18	30A	10	30A
19	30A	10	30A
20	30A	10	30A
21	Public 21	2	2

- 6 Switch to **Basic** settings before adding contacts and groups into channel.

- 7 Select **Public** as **Mode**.

- 8 If more than one group is available, select type of group to assign to the channel.

9 If needed, rename the channel name for easier identification.

10 Program the settings to the radios.

11 If needed, save file for future programming use.

Model - DTR600

Buttons (Basic)

Profile ID Number information (Basic)

Channels (Basic)

Index	Edit More	Name	Mode	Channel Mapping
1	Edit More	Channel 01	Public	Public 21
2	Edit More	Channel 02	Profile ID	2
3	Edit More	Channel 03	Profile ID	3
4	Edit More	Channel 04	Profile ID	4
5	Edit More	Channel 05	Profile ID	5
6	Edit More	Channel 06	Profile ID	6
7	Edit More	Channel 07	Profile ID	7
8	Edit More	Channel 08	Profile ID	8

Configuring Mixed Fleets—Scenario 4

The legacy DTR is using Private Group with a Private Group Name - **Test**.

1 Open the legacy DTR Customer Programming Software (CPS).

2 Add the new DTR radios into the Private Group.

BUSINESS RADIO CUSTOMER PROGRAMMING SOFTWARE

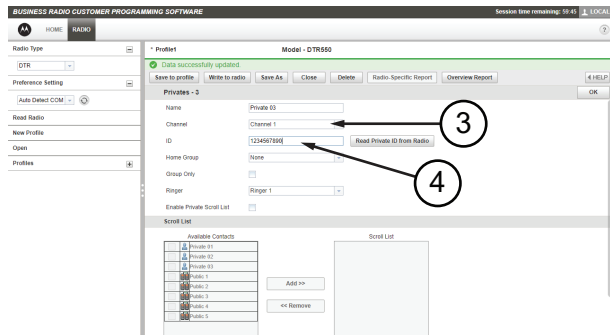
Model - DTR650

Privates

Index	Edit More	Name	Channel
1	Edit More	Private 01	Channel 2
2	Edit More	Private 02	Channel 1

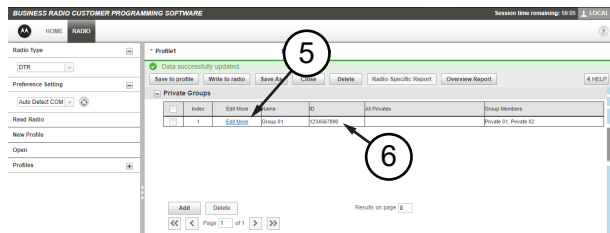
3 Ensure the Channel ID follows the legacy DTR ID.

4 Manually key in the radio ID. Repeat [step 2](#) for additional radios.

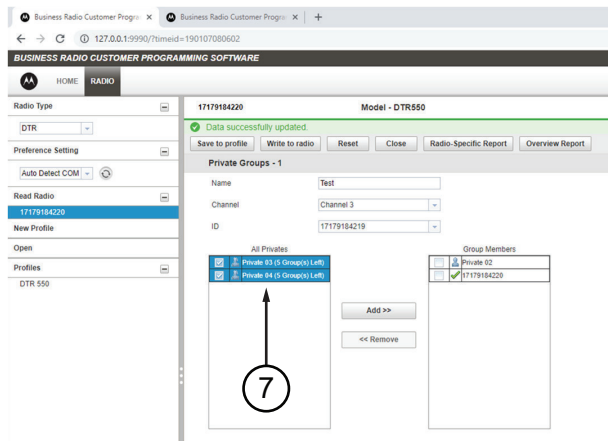


5 To add the newly added radio into the Private Group, click **Edit More** .

6 Write down the Group ID as it is needed for configuring the new DTR.



7 Select the newly added ID and click **Add**.



8 Open the new DTR Customer Programming Software (CPS).

9 Add the legacy DTR radios ID under **Privates**.

10 To add the newly added radio into this group,click **Edit More**.

11 Change the Group ID same as the previous settings.



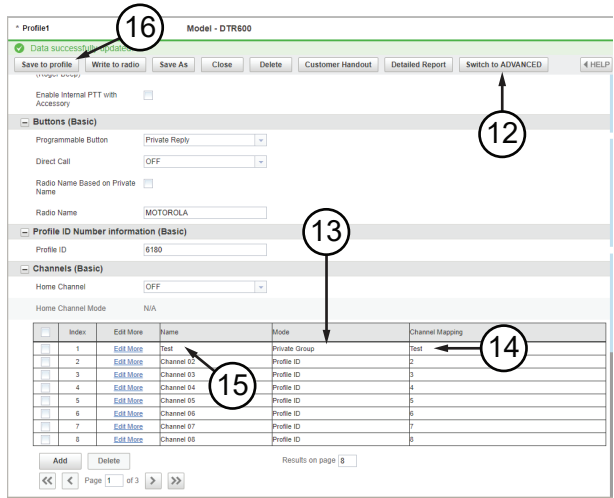
12 Switch to **Basic** settings before adding contacts and groups into channel.

13 Select **Private** as **Mode**.

14 If more than one group is available, select type of group to assign to the channel .

15 If needed, rename the channel name for easier identification.

16 If needed, save file for future programming use.



MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2019 Motorola Solutions, Inc. All rights reserved.

