DLR SERIES
DIGITAL
MADE EASY

**QUICK REFERENCE GUIDE
FOR RADIO FEATURES**

Click to begin

DLR SERIES
Quick Reference Guide

Models:
DLR 1020 – 2 channels
DLR 1060 – 6 channels

Frequency band:
ISM 900 MHz

Table of Contents:

DLR 1020/1060
Radio Overview

Power Button

Top Button

Antenna

Tx/Rx Indicator LED

Audio accessory connector

Volume/ Up-Down Control Buttons

PTT Button

Battery

Channel/Menu Button

Microphone

Speaker

Holster

MOTOROLA

Battery – Inserting

To insert or remove the battery, set the latch in the "unlocked" position, and open the battery door.

Remember to always set the latch back to the "locked" position in order to prevent battery from falling out by accident.

Unlocked/Locked latch

Battery door

MOTOROLA
BT90
3.7V LITHIUM ION BATTERY · BATERÍA DE ION DE LITIO
DE 3.7V · BATERIA DE IONS DE LÍTIO DE 3.7V · BATTERIE
AU LITHIUM ION 3.7V · 3.7V 리튬 이온 배터리 · 3.7
伏特鋰離子電池 · 3.7 伏特锂离子电池 · 廢電池請回收

⚠警告
当社の指定製品以外で使用しないこと
火の中に投入、加熱、分解、改造しないこと
充電は専用充電器を使用すること
端子をショートさせないこと
電池単体で持ち歩かないこと

定格3.7V   モトローラ・ソリューションズ株式会社

DLR 1020/1060
Battery – Charging

To charge a battery, insert the radio or a stand-alone battery into the single or multiple unit charger.

The light on the charger is red when the radio is charging. It turns to green once the radio is fully charged.

Multiple-unit charger

Stand-alone battery

Holster

Single-unit charger

LED turns green – battery is fully charged

Note: Turn off the radio prior to charging. You don't need to remove the holster to charge the radio.

DLR 1020/1060
Basic Operations

PRIVATE REPLY
Press **Top Button** to queue up for **Private Reply*** (while someone is speaking to your channel), then push **PTT** to call the last person speaking.

TALK
PTT (Push To Talk) Button – push firmly, wait for the TPT (Talk Permit Tone), speak into the mic (5 inches away from mouth)

ON/OFF
Power Button – long press to turn the device ON/OFF, short press to check battery status.

VOLUME
[+] / [-] buttons – press to **adjust volume**

CHANNELS
Channel/Menu Button – press to check the current channel. You can now use [+] and [-] buttons to switch channels. Press PTT to exit channel browsing.

Note: *Private Reply function is described here.

DLR 1020/1060
Advanced Configuration

The DLR Advanced Menu Mode allows you to configure special settings in your radio without the need programming cables or additional software.

Profile ID #	Choose a 4-digit number (0000 to 9999). Customize it to ensure interference free/private communications.
Max Channels	Choose the max. number of channels you want to allow for your radio.
Top Button	Set your Top button with one feature: Private Reply, Direct Call (only if enabled via CPS), Call All Available, Page All Available, Mute, Disabled.
MIC Gain	Choose High, Medium or Low to adjust the radio microphone sensitivity level to fit different users and/or noise environments.
Home Channel	Choose the channel you want to designate as your main channel: the radio will return to this channel in any case of longer inactivity.

DLR 1020/1060
Advanced Configuration Menu

Entering Advanced Menu

To enter the Advanced Menu, push
Power Button together with **PTT**
and **[+].**

PTT (Push-to-Talk)
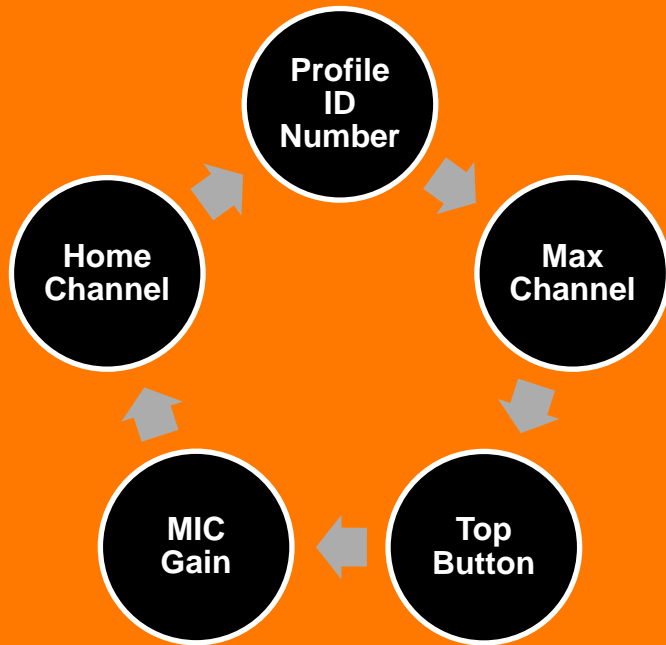Button

Power
Button

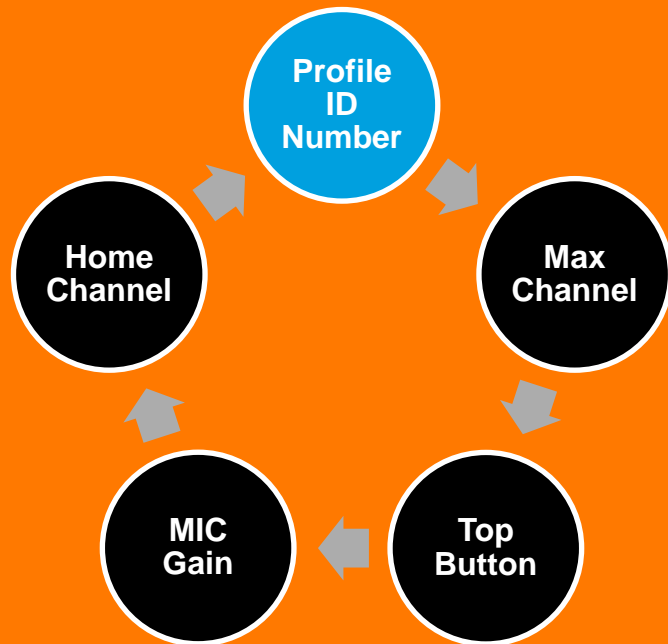[+] Button

MOTOROLA

DLR 1020/1060
Advanced Configuration Menu

1. Profile ID Number – current value

The radio announces the current PROFILE ID number and prompts you to change it:

Profile ID Number

Home Channel

Max Channel

MIC Gain

Top Button

"Current Profile ID: <Digit1, Digit2, Digit3, Digit4>; to change, press [+] or [-]"

Press [+] or [-] to **enter** the Profile ID number Sub-Menu.

Press **Channel/Menu button** to proceed to next Advanced Menu option.

Long press PTT to exit Advanced Menu Mode.

ATTENTION: Default Profile ID number is "0000"! Make sure to change it to avoid interferences and ensure privacy.
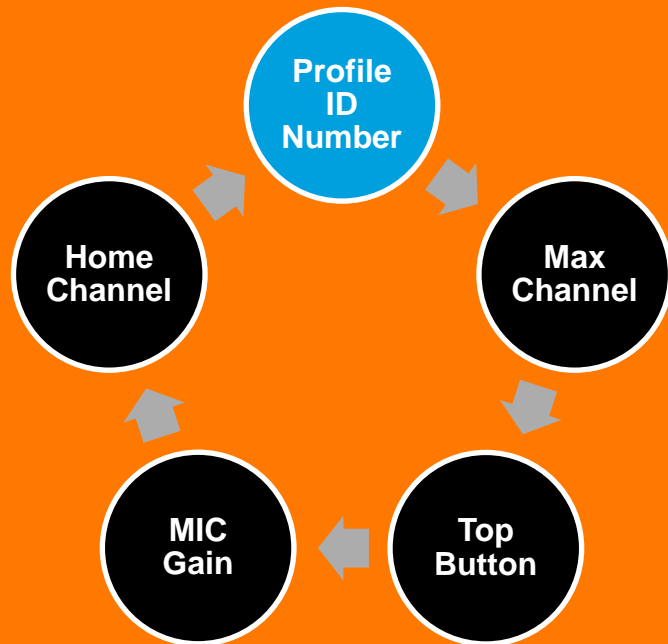
Advanced Configuration Menu

1. Profile ID Number – changing values

As you press the [+] or [-], the radio will announce the first digit value and prompt you to change it:
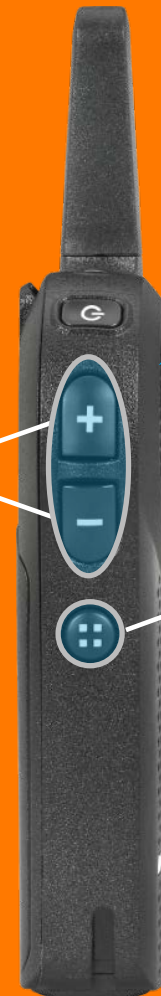
"First digit <number>.To change, press [+] or [-]."

Profile ID Number

Home Channel

Max Channel

MIC Gain

Top Button

Press [+] or [-] to **change** the first Profile ID digit.

Press **Channel/Menu button** to continue to the next digit.

Long press PTT to exit Advanced Menu Mode.

Note: Profile ID numbers to choose from: 0000 to 9999 – 10,000 possible combinations.
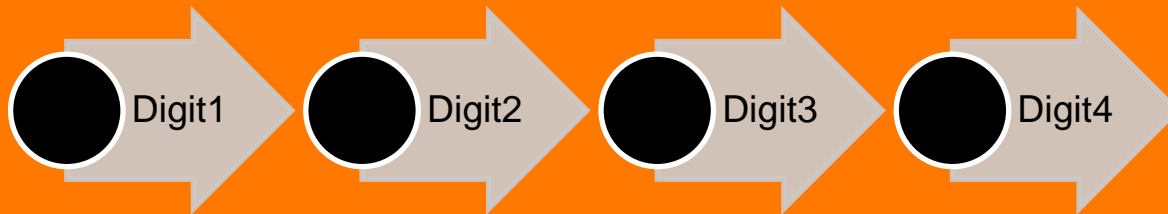
DLR 1020/1060
Advanced Configuration Menu

1. Profile ID Number – sub-menu

As you press [+] or [-] to change the current digit, radio will announce the values.

"zero, one, two, (…), nine, zero…"

Digit1 → Digit2 → Digit3 → Digit4 →

Once you set the last digit of the Profile ID Number with the **Channel/Menu button**, you will proceed to the next Advanced Menu option.

Press **Channel/Menu button** to set digit and proceed to the next one.

Long press PTT to exit Advanced Menu Mode.

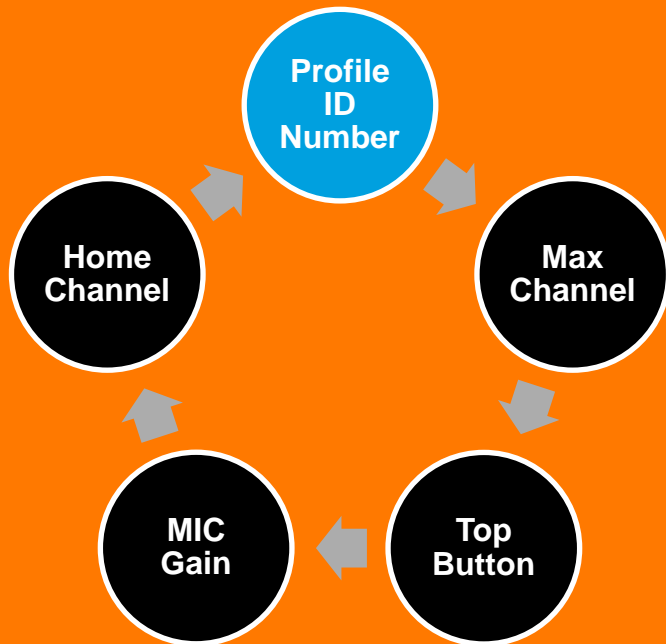**Note:** You can move forward through the 4 digits, but not backwards.

DLR 1020/1060
Advanced Configuration Menu

1. Profile ID Number – modification confirmation

Once you've done setting the 4-digits profile number, the radio will confirm the new Profile ID value.

Profile ID Number

Home Channel

Max Channel

MIC Gain

Top Button

"Profile ID saved as: <digit1, digit2, digit3, digit4>. Press Menu to continue."

Press **Channel/Menu button** to proceed to the next Advanced Menu option.

Long press PTT to exit Advanced Menu Mode.

Note: If you realize the number set is not the one you want, press the Menu/Channel button and go through the Advanced Menu options until you're back on the beginning of the Profile ID option and repeat the steps.
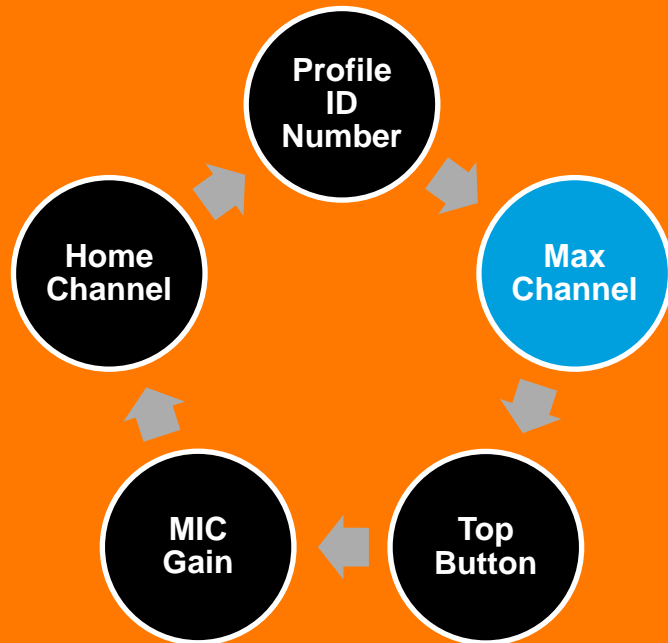
DLR 1020/1060
Advanced Configuration Menu

2. Maximum Channels

The radio announces the current maximum number of channels and prompts you to change it:

"Max Channels <number>. To change, press [+] or [-]."

Profile ID Number

Home Channel

Max Channel

Top Button

MIC Gain

Press [+] or [-] to **change** the number of channels.

Press **Channel/Menu button** to proceed to the next Advanced Menu option.

Long press PTT to exit Advanced Menu Mode.

Note: The maximum number of channels you can set up depends on the radio model: DLR1060 – 6 channels; DLR1020 – 2 channels.
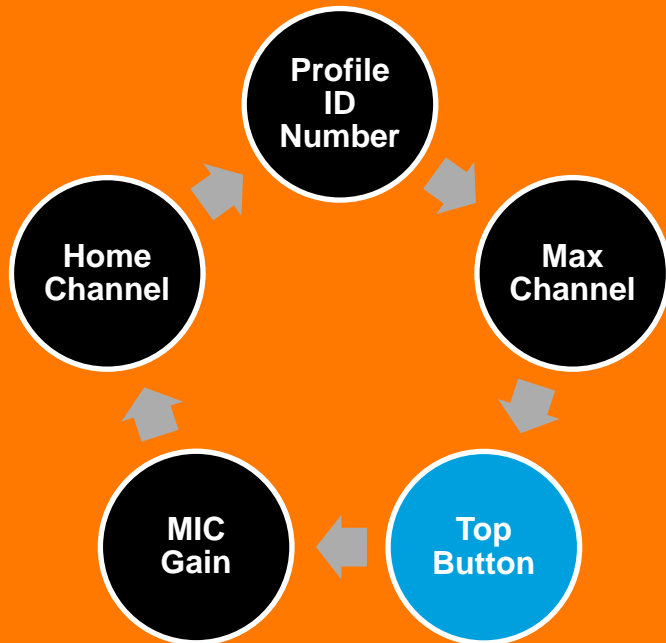
Advanced Configuration Menu

3. Top Button – current feature

The radio announces the current Top Button feature and prompts you to change it:

Top Button

"Programmable Button <Top Button Feature>. To change, press [+] or [-]."

Profile ID Number

Home Channel

Max Channel

Press [+] or [-] to **change** the Top Button feature.

Press **Channel/Menu button** to proceed to the next Advanced Menu option.

MIC Gain

Top Button

Long press PTT to exit Advanced Menu Mode.

Note: The default function of Top Button is "Private Reply".

Advanced Configuration Menu

3. Top Button – sub-menu options

Use [+] / [-] buttons to browse the Top Button functions – you will hear their names read.

Top Button

"<Top button feature>"

Private Reply

Disabled

Direct Call*

Top Button

Mute

Call All Available

Page All Available

Press [+] or [-] to **change** the Top Button feature.

Press **Channel/Menu button** to proceed to the next Advanced Menu option.

Long press PTT to exit Advanced Menu Mode.

Note: In order to use the Direct Call option, you must first set it up using CPS software – otherwise, the top button will respond with a "bonk" sound.
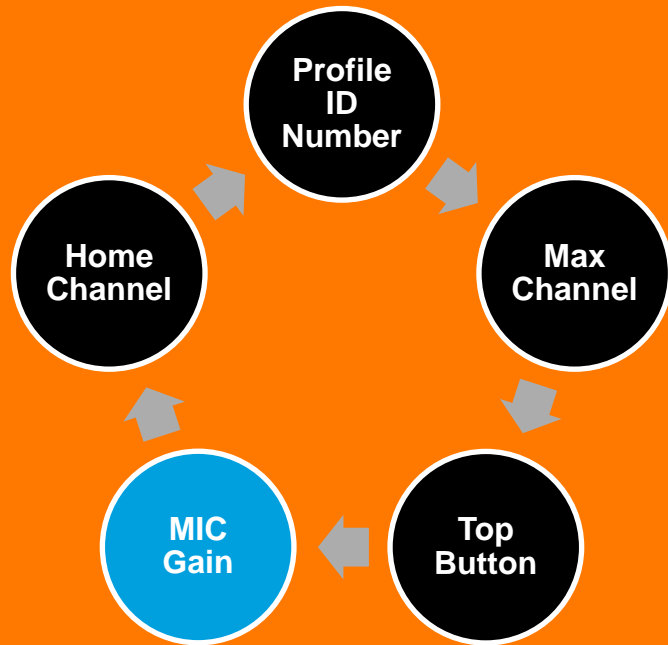
Advanced Configuration Menu

4. MIC Gain

The radio announces the current MIC Gain setting and prompts you to change it:

"MIC Gain <MIC gain level>. To change, press plus or minus."

Profile ID Number

Home Channel

Max Channel

MIC Gain

Top Button

Press [+] or [-] to **change** the MIC Gain level.

Press **Channel/Menu button** to proceed to the next Advanced Menu option.

Long press PTT to exit Advanced Menu Mode.

Note: You can switch between Low/Medium/High gain settings. The default value is "Medium".
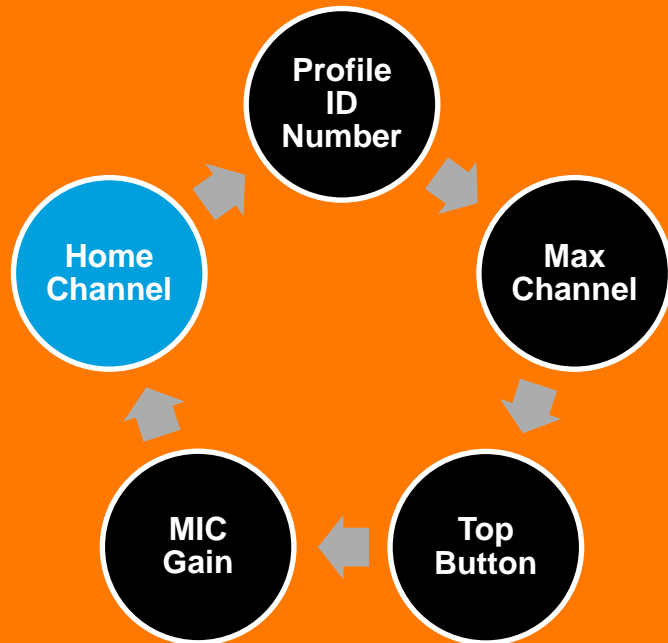
DLR 1020/1060
Advanced Configuration Menu

5. Home Channel

The radio announces the current Home Channel setting and prompts you to change it:

"Home Channel <Home channel setting> to change press [+] or [-]."

Press [+] or [-] to **change** the Home Channel setting.

Press **Channel/Menu button** to proceed to the next Advanced Menu option.

Long press PTT to exit Advanced Menu Mode.

- Profile ID Number
- Max Channel
- Top Button
- MIC Gain
- Home Channel

Note: The options to choose from are "Disabled" or "Channel #" (or channel name, in case it has been set up via CPS). The default setting is "Disabled".

Special
Call
Features

Special Call Features

As mentioned before, the Top Button can be configured to serve different functions:

Special Call Features:

• Private Reply

• Direct Call

• Page All Available

• Call All Available

Mute: instant mute function

Disabled: disables the Top Button

*Except for Private Reply and Mute, you can also assign special call features to a **designated channel** instead of the Top Button.

Private
Reply

Disabled

Direct
Call*

Top
Button

Mute

Call All
Available

Page All
Available
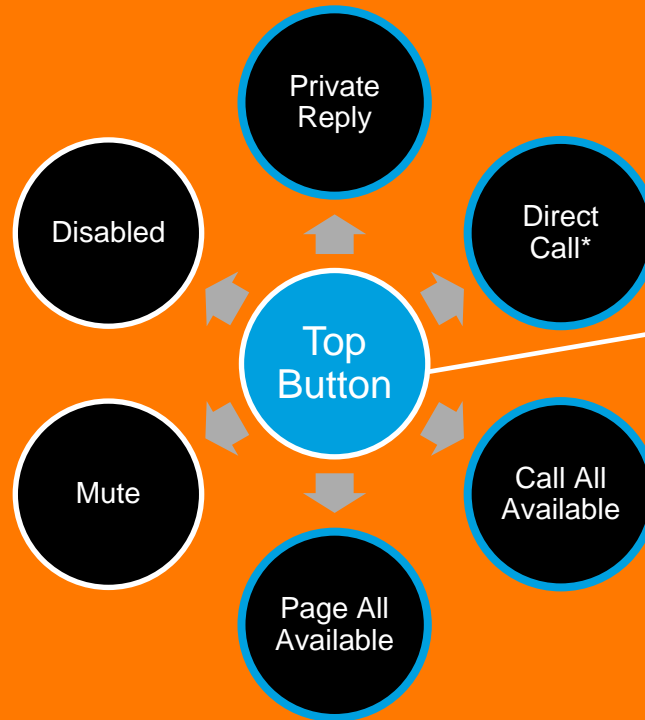
Note: Private Reply is the default Top Button function. Go to Advanced Functions Menu to learn how to change it.
** To set up Direct Call function for the first time (Top Button or specific channel) you will need to use the CPS. Learn more here.

Special Call Features – Private Reply

Private Call feature allows you to talk privately to the person currently talking to a group after the group radio transmission is over. This allows to free the radio channel from unnecessary back and forward chatter.

This function engages the Top Button and the PTT button.

Top Button
(with LED)

PTT Button

Go to the next slide to see how it works.

Note: Private Reply is the default Top Button function.
Go to "Advanced Functions Menu" chapter to learn how to change it.

Special Call Features – Private Reply
Step by step

1. User A is talking to a group.

2. **You** want to talk privately to the User A (currently speaking). You push the **Top button** and hear a *"Private Reply"* prompt. The LED light begins to blink, and the private talk is in queue.

3. When the group talk is over, you push **PTT** – User A hears a *"Private"* prompt, and you start a private talk. Whenever they press PTT to reply back, they are talking privately and nobody else can hear them. The radio plays a distinctive **private TPT** (Talk Permit Tone) during the private talk.

User A

You

Next step

Special Call Features – Private Reply
Step by step

1. User A is talking to a group.

2. **You** want to talk privately to the User A (currently speaking). You push the **Top button** and hear a *"Private Reply"* prompt. The LED light begins to blink, and the private talk is in queue.

3. When the group talk is over, you push **PTT** – User A hears a *"Private"* prompt, and you start a private talk. Whenever they press PTT to reply back, they are talking privately and nobody else can hear them. The radio plays a distinctive **private TPT** (Talk Permit Tone) during the private talk.
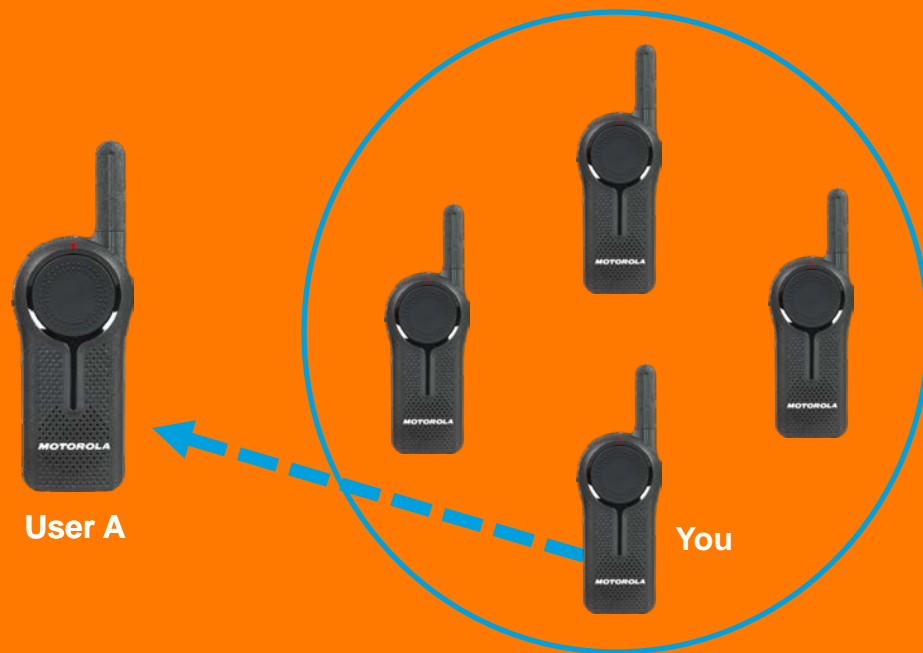
User A

You

Previous step

Next step

Special Call Features – Private Reply
Step by step

1. User A is talking to a group.

2. **You** want to talk privately to the User A (currently speaking). You push the **Top button** and hear a *"Private Reply"* prompt. The LED light begins to blink, and the private talk is in queue.

3. When the group talk is over, you push **PTT** – User A hears a *"Private"* prompt, and you start a private talk. Whenever you or User A presses PTT to reply back, you are talking privately and nobody else can hear you . The radio plays a distinctive **private TPT** (Talk Permit Tone) during the private talk.

User A

You
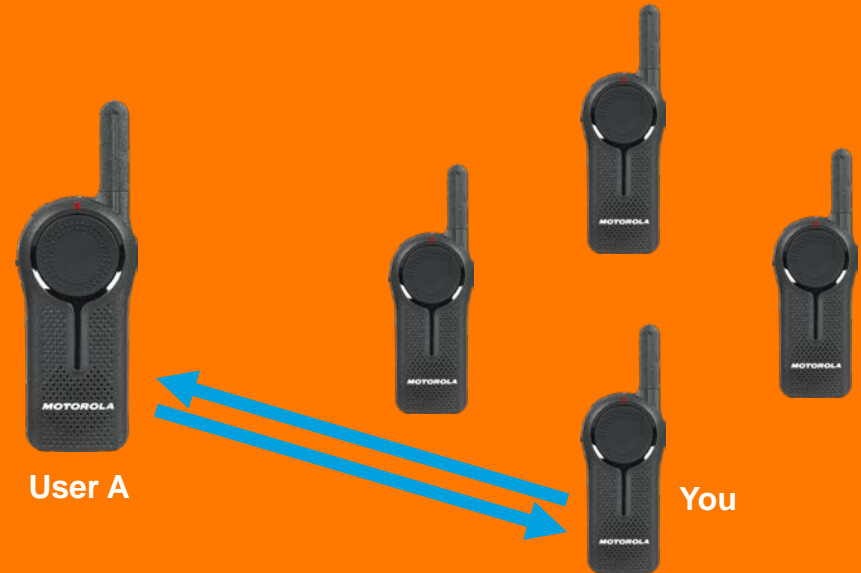
Previous step

Special Call Features – Private Reply

During the private communication, the LED on the Top Button illuminates a solid light.

If any of the radio users take too long to push the PTT button (**10 seconds** by default*), the private communication ends with a *"Private Over"* voice prompt on both radio, and LEDs go off – you are back in the *normal group call* mode.

If your request is not successful because, for example, another person's private reply request has been queued first, the radio will give you a busy tone.

Top Button(with LED) – solid light when in Private

Private Hang Time = 10 seconds

PTT Button

Note: *The length of inactivity period is called "Private Hang Time" and can be changed using the CPS.

Special Call Features – Private Reply
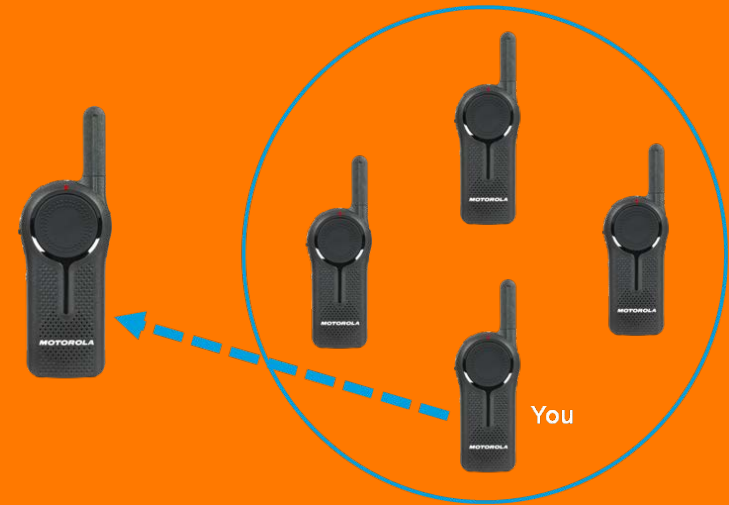
A tip: How to apply **Private Reply** in your daily job

The use of this feature **reduces the need for phone extensions or cell phone calls** to talk privately.

Simply **call on the radio the name of the person** you want to talk to privately. When he or she responds to you, simply push the Private Reply button and then press the PTT to initiate the one to one private conversation.

You

Special Call Features – Direct Call

The Direct Call Feature allows you to call one-on-one privately another **pre-determined user** that has been mapped into the radio Top Button (this feature needs to be pre-programmed*) or to any radio channel instead.

This way your radio can have Top Button available for other radio features (like Private Reply or Mute) and Direct Call set up in a special channel.

You can set up different direct calls in different channels.

Top Button
(with LED)

PTT Button

Go to the next slide to see how it works.

*Note:** To set up Direct Call function for the first time (Top Button or specific channel) you need to use the CPS. Learn more here.

Special Call Features – Direct Call
Step by step

1. To talk directly to **User B** press Top Button*. Your radio plays voice prompt with the **"Private Name"** *(as* programmed in CPS, if enabled) and **top LED starts blinking orange,** showing you are in queue waiting to talk privately to User **B**.

2. Now, **Press PTT** to talk Privately to User B (who is NOT in a radio conversation). Both radios illuminate **solid orange.** Radio **B** hears radio voice prompt **"Private"** indicating there is a Direct Private Call in progress. **Radio plays a distinctive Private TPT tone.**

3. Whenever you or User B **presses PTT** to reply back, you will talk privately to each other. (Radio plays a distinctive Private TPT tone)**.** Nobody else will hear you.

"<User B> Name"

You

User B

Next step

*Note: Top Button should be previously configured to Direct Call function and direct call User ID should be configured via CPS).

Special Call Features – Direct Call
Step by step

1. To talk directly to **User B** press Top Button*. Your radio plays voice prompt with the **"Private Name"** *(as* programmed in CPS, if enabled) and **top LED starts blinking orange,** showing you are in queue waiting to talk privately to User **B**.

2. Now, **Press PTT** to talk Privately to User B (who is NOT in a radio conversation). Both radios illuminate **solid orange.** Radio **B** hears radio voice prompt **"Private"** indicating there is a Direct Private Call in progress. **Radio plays a distinctive Private TPT tone.**

3. Whenever you or User B **presses PTT** to reply back, you will talk privately to each other. (Radio plays a distinctive Private TPT tone)**.** Nobody else will hear you.

Direct Call in progress

You

"Private"

User B

Previous step

Next step

*****Note:** Top Button should be previously configured to Direct Call function and direct call User ID should be configured via CPS).

Special Call Features – Direct Call
Step by step

1. To talk directly to **User B** press Top Button*. Your radio plays voice prompt with the **"*Private Name*"** *(as* programmed in CPS, if enabled) and **top LED starts blinking orange,** showing you are in queue waiting to talk privately to User **B**.

2. Now, **Press PTT** to talk Privately to User B (who is NOT in a radio conversation). Both radios illuminate **solid orange.** Radio **B** hears radio voice prompt **"*Private*"** indicating there is a Direct Private Call in progress. **Radio plays a distinctive Private TPT tone.**

3. Whenever you or User B **presses PTT** to reply back, you will talk privately to each other. (Radio plays a distinctive Private TPT tone)**.** Nobody else will hear you.

Direct Call in progress

You

User B

Previous step

Next step

*****Note:** Top Button should be previously configured to Direct Call function and direct call User ID should be configured via CPS).

Special Call Features – Direct Call
Step by step

4A. If any of the radio users takes too long to push the PTT and reply back, the radio will time out ("Private Hang Time" of 10 sec) and end the private communication while a playing "*Private Over*" voice prompt that both users will hear. The TOP button LED will go OFF .

4B. If the radio user B (who initiated the Direct Call), wants to end the call he can do so by long pressing the Top Button and the radio will play "*Private Over*" voice prompt that both users hear, indicating the private call is over. The TOP button LED will go off.

5. After you and User B finish your Direct Call, you will be back to join the radio group transmissions in your channel.

"Private Over"

10 sec Private Hang Time is out

You

"Private Over "

User B

Previous step | Next step

*Note: Top Button should be previously configured to Direct Call function and direct call User ID should be configured via CPS).
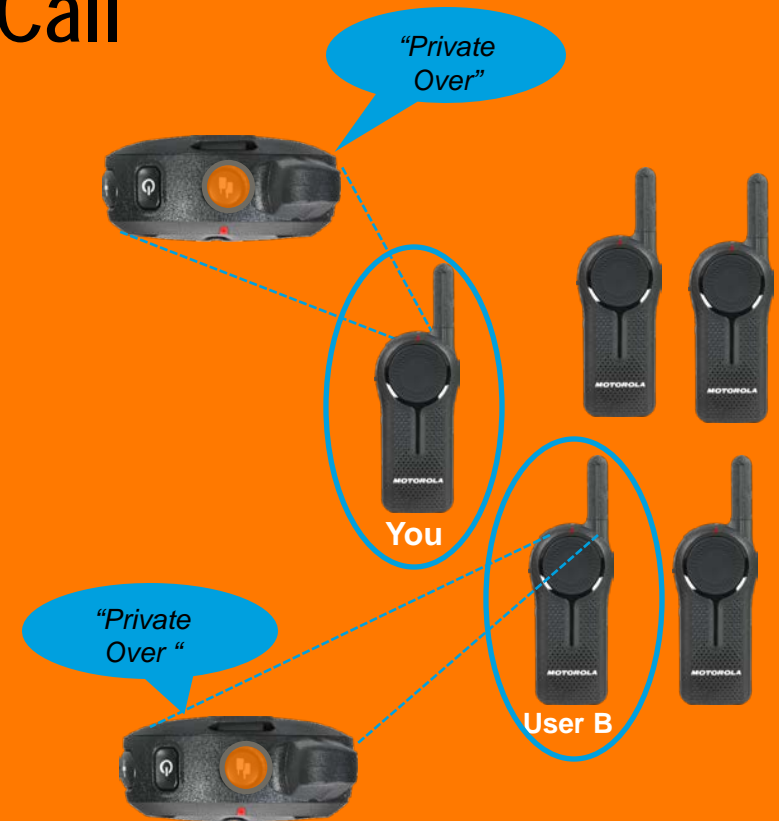
Special Call Features – Direct Call
Step by step

4A. If any of the radio users takes too long to push the PTT and reply back, the radio will time out ("Private Hang Time" of 10 sec) and end the private communication while a playing "**Private Over**" voice prompt that both users will hear. The TOP button LED will go OFF .

4B. If the radio user B (who initiated the Direct Call), wants to end the call he can do so by long pressing the Top Button and the radio will play **"Private Over"** voice prompt that both users hear, indicating the private call is over. The TOP button LED will go off.

5. After you and User B finish your Direct Call, you will be back to join the radio group transmissions in your channel.

"Private Over"

You

"Private Over "

User B

| Previous step | Next step |

*Note: Top Button should be previously configured to Direct Call function and direct call User ID should be configured via CPS).

DLR 1020/1060
Special Call Features – Direct Call
Step by step

4A. If any of the radio users takes too long to push the PTT and reply back, the radio will time out ("Private Hang Time" of 10 sec) and end the private communication while a playing "*Private Over*" voice prompt that both users will hear. The TOP button LED will go OFF .

4B. If the radio user B (who initiated the Direct Call), wants to end the call he can do so by long pressing the Top Button and the radio will play **"*Private Over*"** voice prompt that both users hear, indicating the private call is over. The TOP button LED will go off.

5. After you and User B finish your Direct Call, you will be back to join the radio group transmissions in your channel.

Back to group transmission

You

User B

Previous step

*Note: Top Button should be previously configured to Direct Call function and direct call User ID should be configured via CPS).

Special Call Features – Direct Call

A tip: Why and how to use **Direct Call:**

Set up your employees to be able to **contact directly** and privately their **supervisor**, the **Manager** on Duty or to reach a designated person for special requests.

To make a Direct Call simply press the Top Button and then push the PTT button to talk.

If the Direct Call was set up in a specific channel, simple change to the Direct Call Channel and press PTT to talk privately.
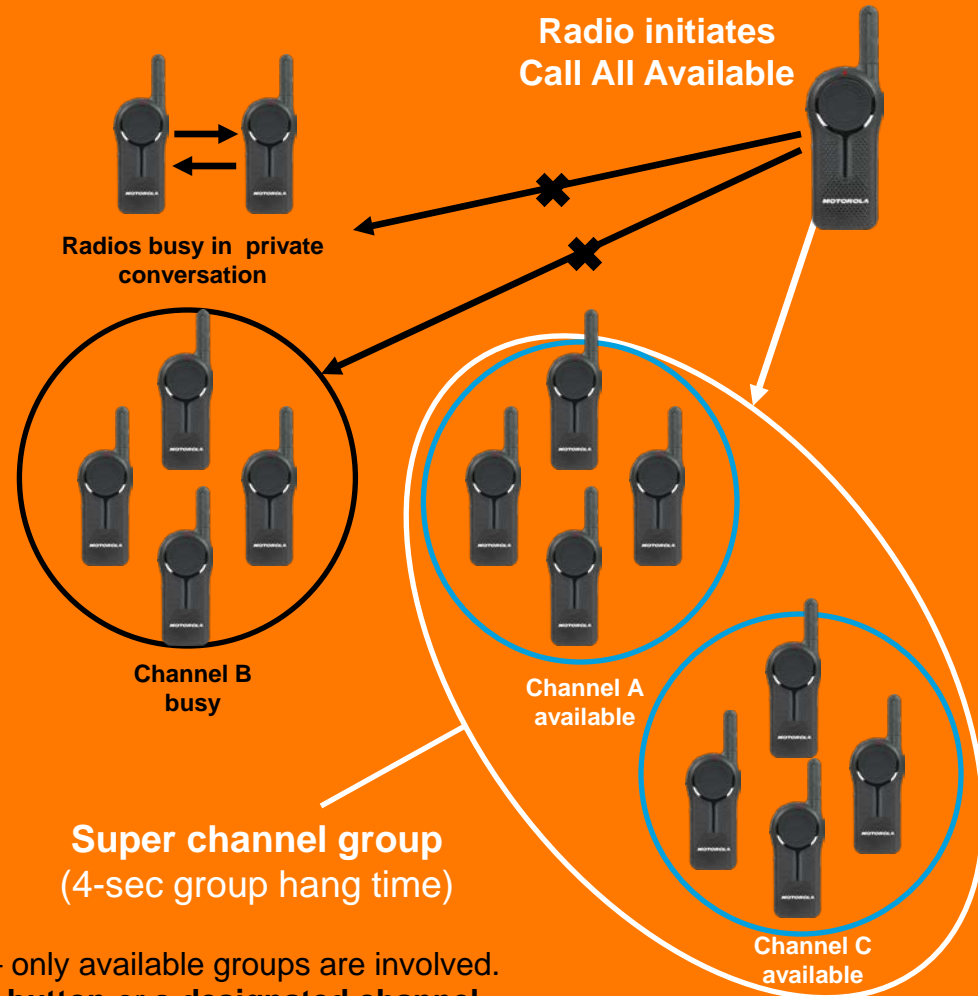
Top Button
(with LED)

PTT Button

Special Call Features – Call All Available

Call All Available allows to start a group transmission to anyone not engaged in a call. This creates a Group Call in a temporary "super channel group" with a 4-second group hang time. This means that anyone within this super group can respond by simply pushing the PTT – but after 4 seconds of inactivity the group will terminate.

This is in order to avoid all users to be tied up indefinitely in unnecessary group conversations.

In the picture →,
the radio will create a "super channel group" consisting of all radios from channel A and C.

Radio initiates Call All Available

Radios busy in private conversation

Channel B busy

Channel A available

Super channel group (4-sec group hang time)

Channel C available

Note: This feature does **not** interrupt ongoing communications – only available groups are involved. Call All Available feature can be assigned to either the **radio top button** or a **designated channel**.
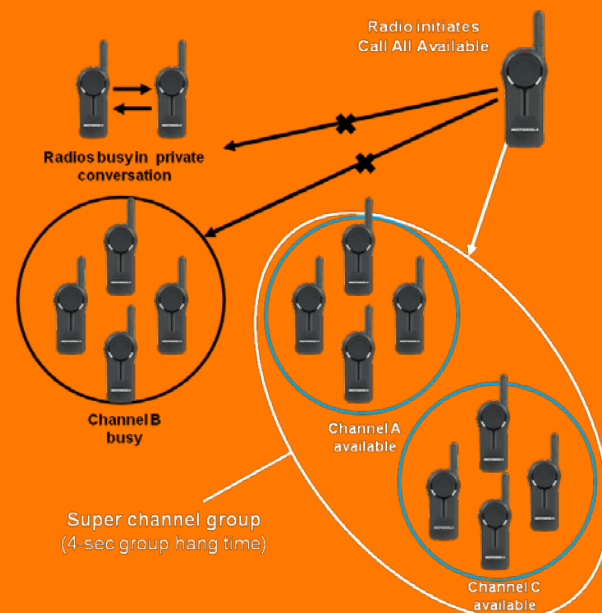
Special Call Features – Call All Available

A tip: How **Call All Available** can be applied:

An employee in a retail store is trying to see if anyone took the backroom scanner.

He presses the Top Button, then the PTT button and asks: "***Does anybody know who has the backroom scanner? "***.

>>> Whoever is available in any of the channels can **talk back to all the whole group** of users (who were tied up in the super-channel group call) and provide information.

Radio initiates
Call All Available

Radios busy in private
conversation

Channel B
busy

Channel A
available

Super channel group
(4 sec group hang time)

Channel C
available

Note: This feature does **not** interrupt ongoing communications – only available groups are involved.
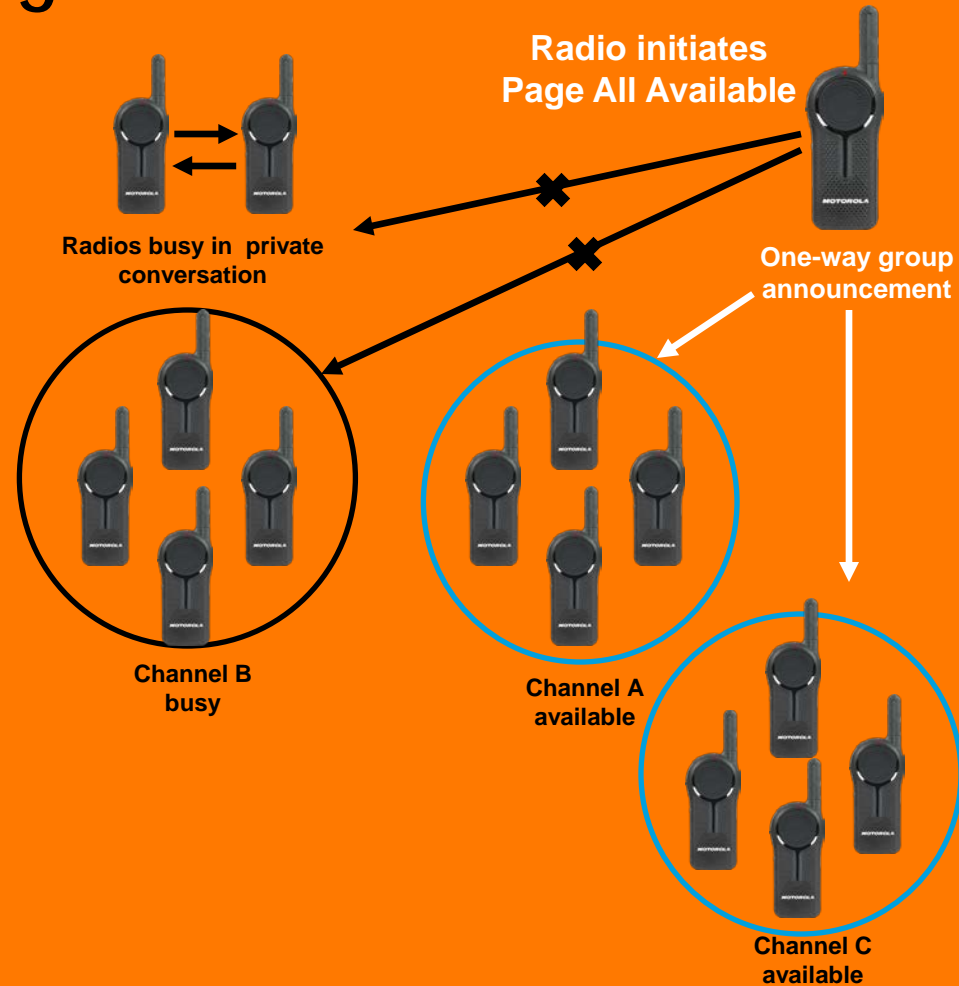
Special Call Features – Page All Available

This feature is useful if you have **more than 1 or 2 channels**. It allows the ability to communicate a message to all available radio users at once, without having to change through each channel individually.

Page All Available is a **one way group voice announcement** to all users in different channels, who are **not currently tied up in ongoing radio conversation***.

Receivers of Page All Available announcement can only reply with a Private Call.

In the picture →,
a one-way announcement will be transmitted
to all radios from channel A and C.

Radio initiates Page All Available

Radios busy in private conversation

One-way group announcement

Channel B busy

Channel A available

Channel C available

Note: *This feature does **not** interrupt ongoing communications – only available groups are involved.

Special Call Features – Page All Available

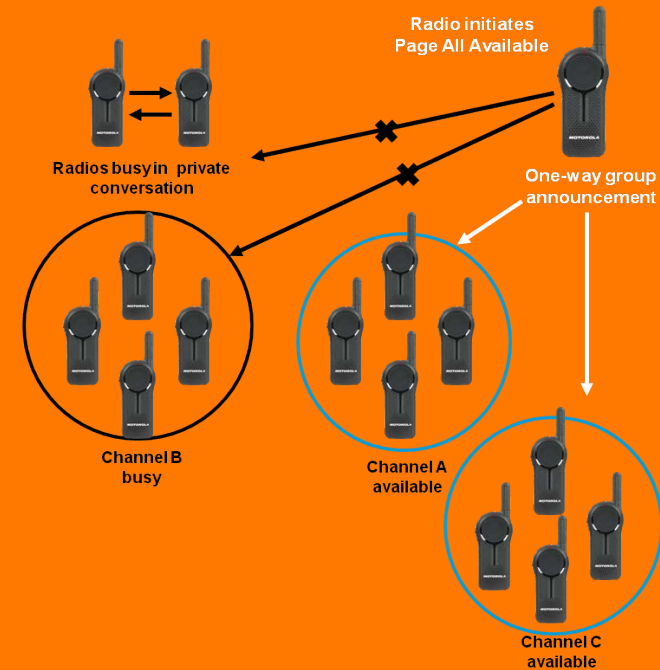**Application examples:**
6 channel radio
Top Button: Private Reply
Channel 1: Page All Available

Example 1: An employee in a retail store is looking for anyone (in any of the group radio channels) who can come over to give him a hand in the back room. He presses the Top Button (or changes to Page All Available channel), then pushes the PTT button and says: "*We need someone to come over to the warehouse to help unload the truck* ".
> >> Whoever is available can Privately Reply him asking more details or confirming they are available .

Example 2: Anna needs to talk privately John and she is not sure in which channel to find him. It is cumbersome to browse all channels asking for John. She speaks in Channel #1 (assigned Page All Available) and asks: "*John Smith, are you available ?*"
> >> If John is available, he will reply privately (Top Button). If no response is heard, it means he is busy in another radio call or not within the range.

Radio initiates
Page All Available

Radios busy in private
conversation

One-way group
announcement

Channel B
busy

Channel A
available

Channel C
available

Customer Programming Software – CPS

Customer Programming Software (CPS) allows you to program or change features in your radio. To use CPS, you need to download it from the internet and connect your radio with the computer using the CPS Programming Cable.

Using CPS, you can set **Private Hang Time**, **Group Hang Time**, program all radio buttons, channels and much more. Please refer to the User Manual for details.

CPS software is available for free as web-based downloadable software at:
www.motorolasolutions.com/DLR

DLR 1020/1060
Customer FAQ and Troubleshooting

To help you answer some of the Frequently Asked Questions and give you some Troubleshooting tips here are some useful documents.
Click adequate buttons to open PDF attachments:

DLR Troubleshooting

Private Reply & Direct Call FAQ

For more information refer to the User Guide or go to our DLR website:
www.motorolasolutions.com/DLR

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