



WM500

WM500 WIRELESS REMOTE SPEAKER MICROPHONE

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WM500 WIRELESS REMOTE SPEAKER MICROPHONE

PMMN4127A



SPECIFICATIONS

Kit Includes	USB-A to USB-C for charging
Mic Sensitivity	-44 ± 3 dBV typical
Audio Loudness	100 ±3dBphon at 30cm wideband audio
Speaker Rated Audio/ Distortion	1W, < 5% distortion
Dimensions (W x L x D)	58 x 81 x 24.5 mm (2.28 x 3.18 x 0.96 in)
Operating temperature	- 20°C to +60°C (-4°F to 140°F)
Weight (includes RSM and cable)	128 g (5.4.54 oz.)
IP Rating	IP67
Battery	1130mAh
Battery Life	BYOD: 40 hours (5/5/90 duty cycle) LMR: 17 hours
Charge Time	2 hours typical
Bluetooth Range	100m line of sight
Compatible Radios	LEX L11, BYOD Android, TLK 100, TLK 150 and SLN 1000 ION (Requires WM500 firmware R03.00.00 and beyond) MXP600 and R7 (Requires WM500 firmware R04.00.00 and beyond)

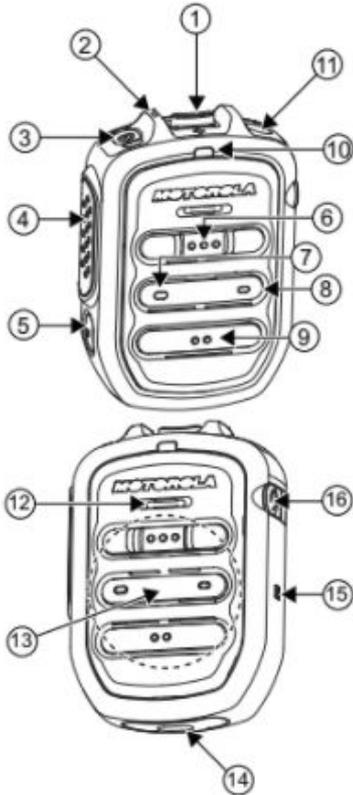
COMPATIBLE ACCESSORIES

PMLN7560	Receive only earpiece with translucent tube
42009312001	Belt Clip
4205823V01 (Inbox)	
CB000756A01 (Inbox)	USB-C Cable (1m)
HKNN4014	Replacement battery to order



WM500 WIRELESS REMOTE SPEAKER MICROPHONE

PRODUCT OVERVIEW



No.	DESCRIPTION
1	Volume toggle
2	Power Indicator
3	Power button
4	Push-To-Talk (PTT) button PTT call can be either transmitted to a talkgroup or individual user
5	Multifunction (MFB) Button Available multiple functions: <ul style="list-style-type: none"> To change language/tone in disconnected state To answer telephone calls upon incoming telephone call To reject telephone calls upon incoming telephone call To end telephone calls upon ongoing telephone call To mute/unmute microphone while call (Kodiak/telephone call) is active Note: The MFB button is not available for TLK series
6	P1 button Function configured on the host or the WAVE application. WAVE default function: WAVE OSM
7	P2 button Function configured on the host but not the WAVE application. WAVE default function: Channel Down

No.	DESCRIPTION
8	P3 button Function configured on the host but not the WAVE application. WAVE default function: Channel Up
9	P4 button Function is set by the host: Function configured on the host or the WAVE application. WAVE default function: WAVE OSM
10	Audio/Bluetooth Indicator
11	Emergency button
12	Microphone
13	Speaker
14	Charging port
15	NFC Location
16	Audio Jack

Note:

- * Optional Status Messaging (OSM) require pre-configuration in the WAVE Application.
- * Answer/reject/end call and microphone mute functionalities are not applicable for the radios.
- * More programmable functions may be added on the WAVE application in the future. Refer to Kodiak User Guide for details.



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CHARGING THE BATTERY

GETTING STARTED

Before you start, fully charge the RSM. To charge, connect the USB charging cable to the RSM and plug it to the USB power source.

TABLE 3: CHARGING INDICATOR BEHAVIOR

POWER INDICATOR	DESCRIPTION
Blinking red ¹	Battery is low
Solid red	Battery is charging
Solid green	Battery is fully charged
Blinking green	More than 90% charged
Rapid blinking red	Charging error

¹ Charge the RSM immediately to prevent flat-battery condition.

When RSM is not charging, read the following table to understand the indication.

TABLE 4: BATTERY INDICATION

POWER INDICATION	DESCRIPTION
Rapid blinking red	Battery is critically low
Blinking red	Battery level is low
Off ²	Battery is medium or high

² Press the Power button to get the status.



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LED STATUS INDICATION

Read the following table to understand the audio and Bluetooth status indication

TABLE 5: AUDIO AND BLUETOOTH STATUS

AUDIO/BLUETOOTH INDICATION	DESCRIPTION
Blinking in blue	Enter pairing
Solid blue	Disconnected
Double blinking blue (once)	Connected
Solid red	Mic muted
Blinking in red	Voice prompt/Tone mute
Blinking in green	Receiving incoming call

Short press the Power button to determine the details status of the RSM.

TABLE 6: STATUS INDICATION

INDICATOR	STATUS	DESCRIPTION
Audio/Bluetooth	Double-blinking blue	Connected
Power	Double-blinking green	Battery level is high
	Double-blinking amber	Battery level is Medium



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RSM BUTTON OPERATIONS

BUTTON	WM500 STATE	BUTTON SHORT PRESS	BUTTON LONG PRESS (>1.5s)	BUTTON VERY LONG PRESS (>3s)
Power	Off	N/A	Power on	Enter pairing
	On	RSM turns on	N/A	Power off
PTT	Connected	PTT for Kodiak Group Call		
	Not connected	Kodiak pairing	N/A	N/A
Power + PTT	Off	N/A	N/A	Power on and clear PDL
Power + Call button	On	N/A	N/A	Enter/Exit Dark mode
Call button	Not connected	Switched language	N/A	N/A
	Incoming call	Answer call	Reject call	N/A
	On call	Mic mute	End call	N/A
Volume +	Connected	Volume increase by one step	Volume ramp up	
	At maximum volume	Volume max tone		
Volume -	Connected	Decrease volume by one step	Volume ramp down	
	At minimum volume	Volume min tone		



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PAIRING TO DEVICES

PAIRING THE RSM THROUGH BLUETOOTH

1. While RSM is power off, press and hold the Power button until you hear “Power On” followed by “Searching for Host”, and the blue LED blinks for 90 seconds during pairing mode.
2. From the compatible device, search and select “WM500_xxxx” from the Bluetooth list.
3. Once the devices are paired successfully, a tone is played.
4. A voice prompt from the RSM indicates that the device is “Connected”.
5. Perform the following choices based on your device:

If you are using...	then, you...
Android Devices	No further actions is required after step 4
iPhone	a. Choose RSM from the Bluetooth list b. Pair again for second time
MXP600	No further actions is required after step 4
ION	Radio display prompts another pairing request with RSM. Tap Pair when prompted. When successful, a tone is played from the RSM.
R7	Press the MFB button to start the connection process when you hear the “Ring” tone indicating Host is requesting for connection.

Note: The WM500 supports various pairing methods depending on the compatible device. If you are using TLK100 or TLK150, refer to Wave Portal User Guide for bluetooth pairing process. If you are using SLN1000, refer to Nitro Portal User Guide for bluetooth pairing process.

PAIRING THE RSM THROUGH NFC

1. While RSM is power off, press and hold the Power button until you hear “Power On” followed by “Searching for Host”, and the blue LED blinks.
2. Align the NFC locations on both the RSM and the compatibles devices.
3. Check the compatible device for indication of successful pairing.

UNPAIRING THE RSM

1. While RSM is power off, press and hold the Power button and PTT buttons. The blue LED blinks and a voice prompt from the RSM indicates that the paired device is “Cleared”.

Note: Always unpair the WM500 from the Bluetooth host and ensure that the paired device is “Cleared” before starting another pairing process.

UNPAIRING WITH TLK/SLN

1. For TLK100/TLK150, refer to Wave Portal for Bluetooth pairing process.
2. For SLN1000, refer to Nitro Portal for Bluetooth pairing process.



A person is holding a smartphone in their hands. The phone's screen is lit up, and a small blue horizontal line is visible on the screen. The background is dark and out of focus, showing what appears to be an office or laboratory setting with some equipment.

ACCESSORY MANAGER APPLICATION

WM500 WIRELESS REMOTE SPEAKER MICROPHONE

ACCESSORY MANAGER APP - FOR FUTURE SW UPGRADES



DOWNLOAD FROM GOOGLE PLAY STORE



or Apple App Store



https://www.motorolasolutions.com/content/static/dm_app/get_dmapp.html



ACCESSORY MANAGER APP ICON & APP NAME

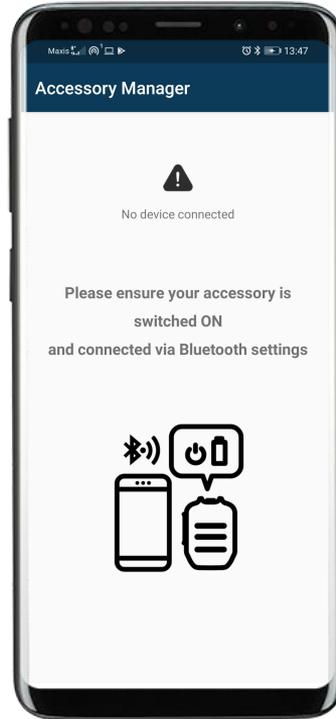


Note: Install Accessory Manager application to upgrade WM500 firmware to the latest version for the first time before use.
The URL will redirect user to Google Play Store or Apple App Store upon clicking Google Play or App Store.



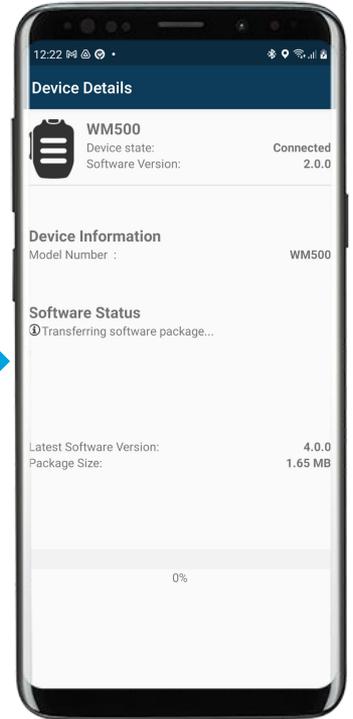
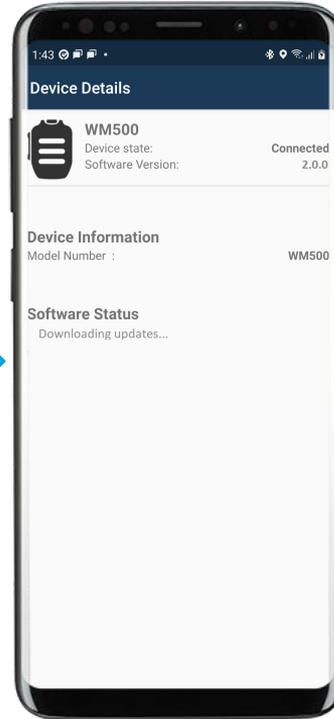
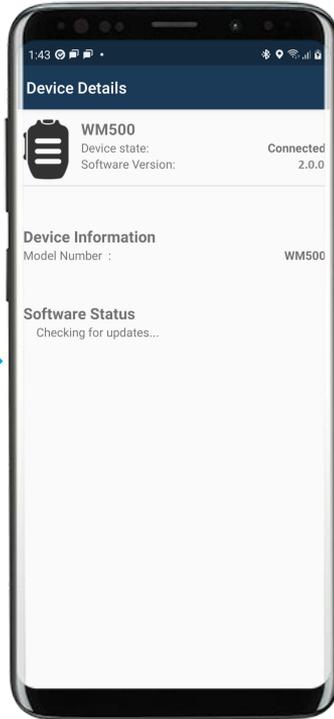
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OPENING THE APP



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PRIMARY FLOW WHEN DEVICE IS CONNECTED

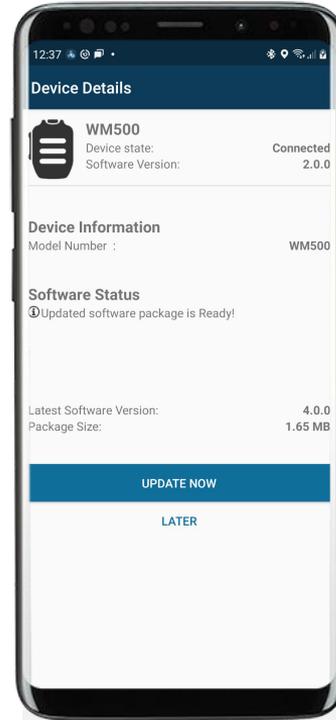
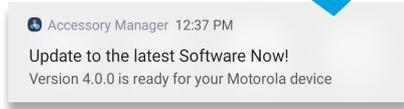


WM500 WIRELESS REMOTE SPEAKER MICROPHONE

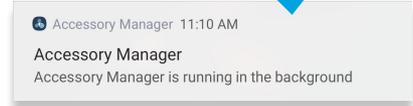
PRIMARY FLOW WHEN DEVICE IS CONNECTED



Note: Notification will show on phone once transfer progress is 100% when app is minimized

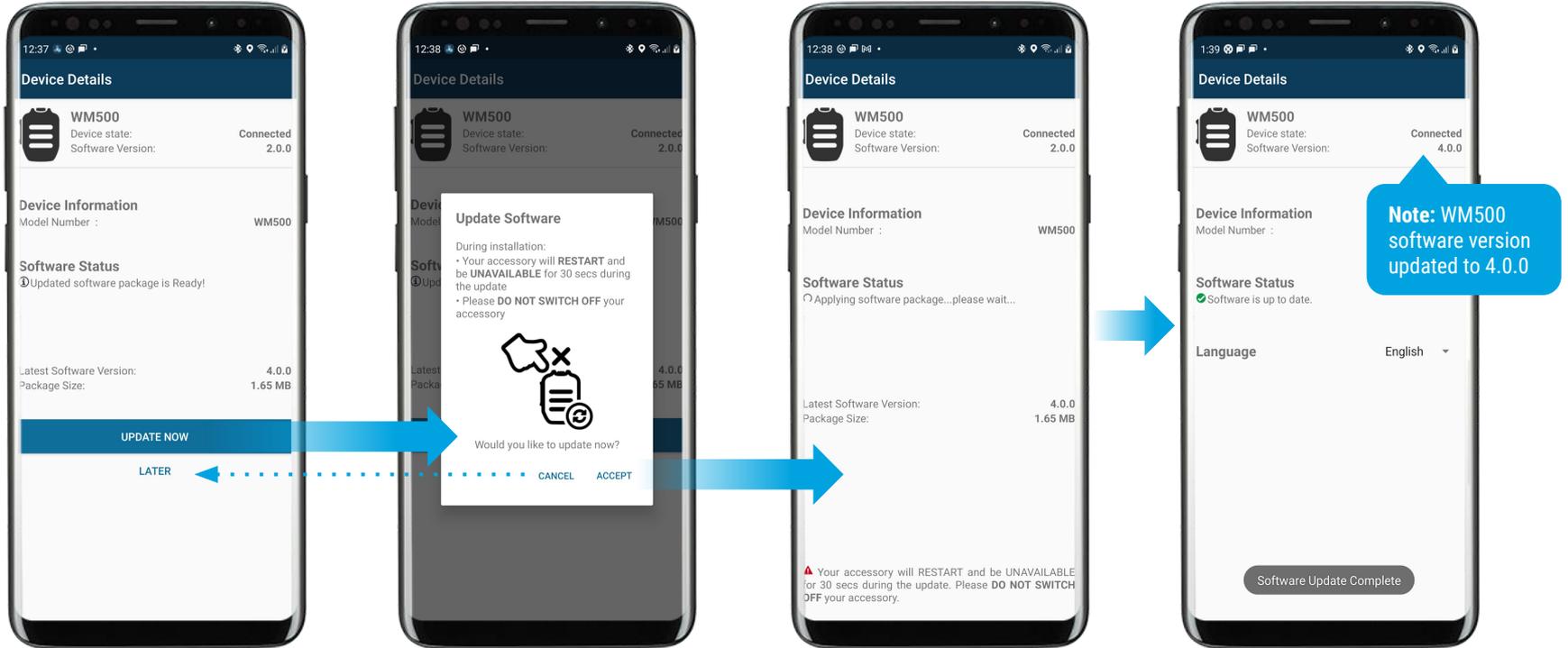


Note: Notification will show on phone when app is minimized



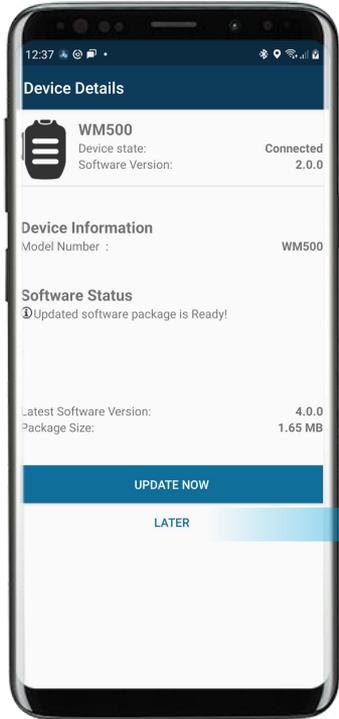
WM500 WIRELESS REMOTE SPEAKER MICROPHONE

UPDATE SOFTWARE

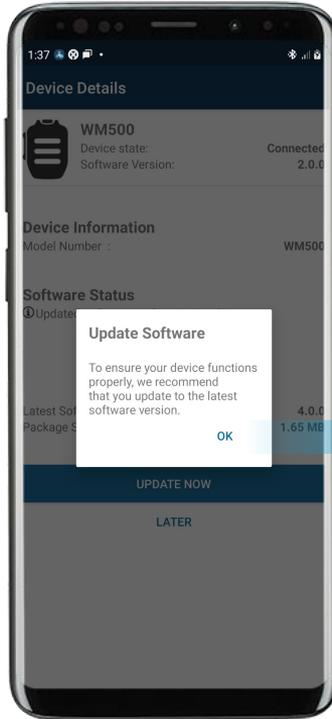


WM500 WIRELESS REMOTE SPEAKER MICROPHONE

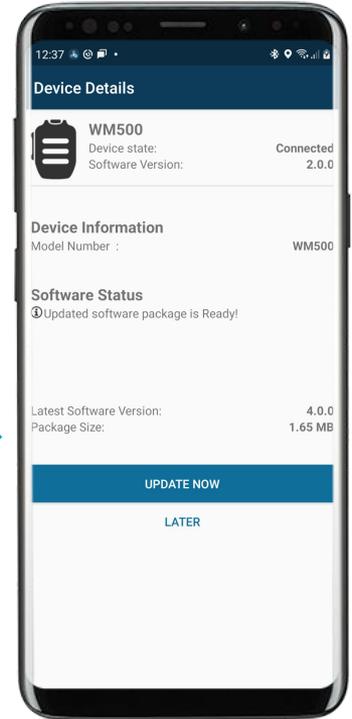
UPDATE SOFTWARE LATER



If select update **LATER**

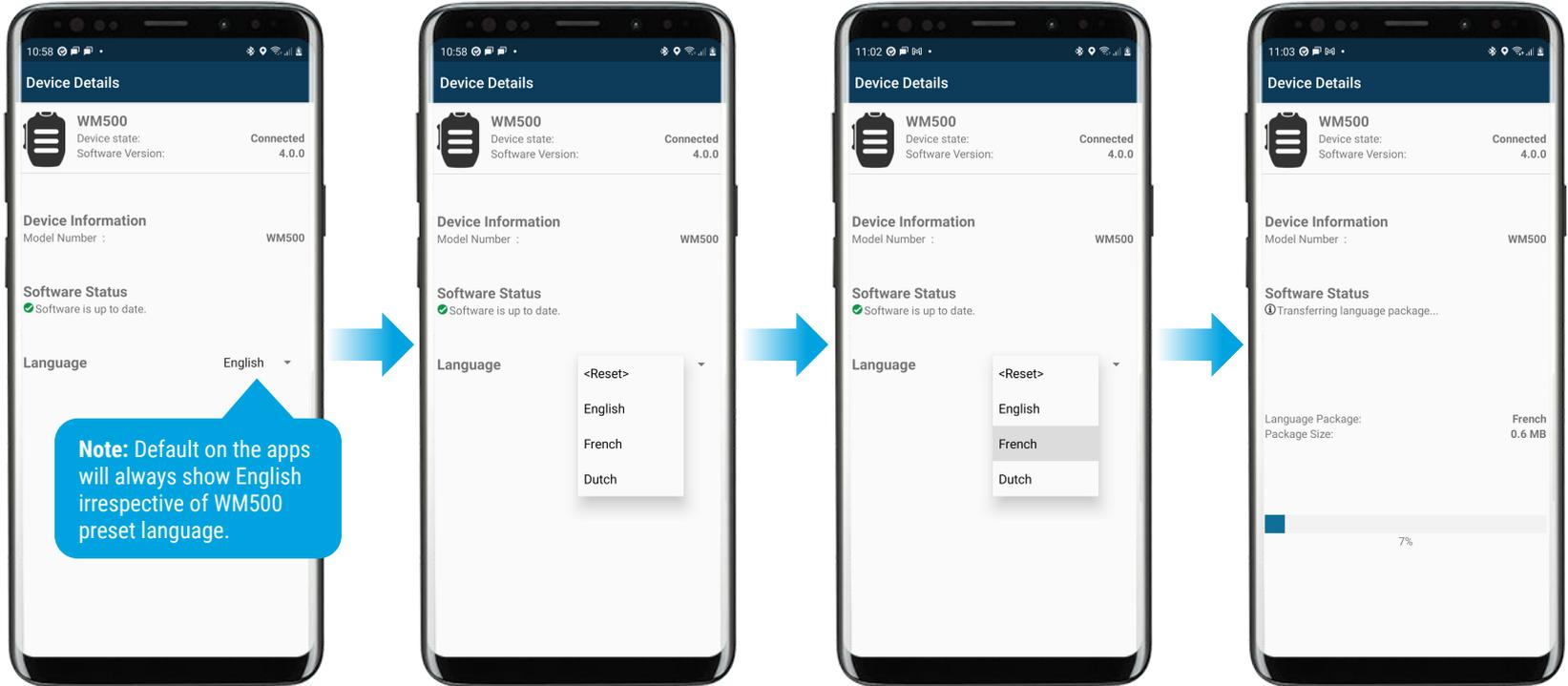


Select **OK**



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PRIMARY FLOW OF LANGUAGE PACK UPGRADE

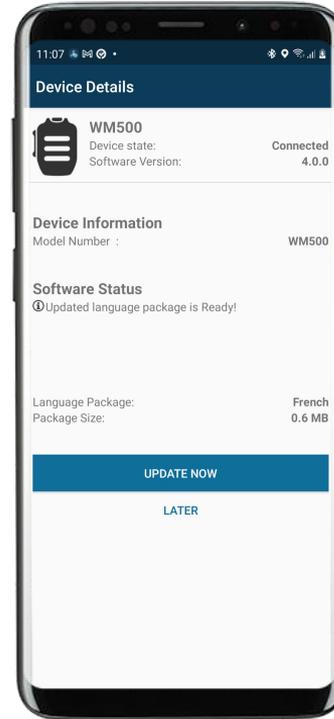
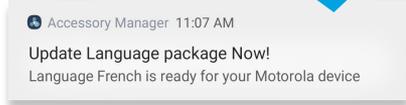


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PRIMARY FLOW OF LANGUAGE PACK UPGRADE

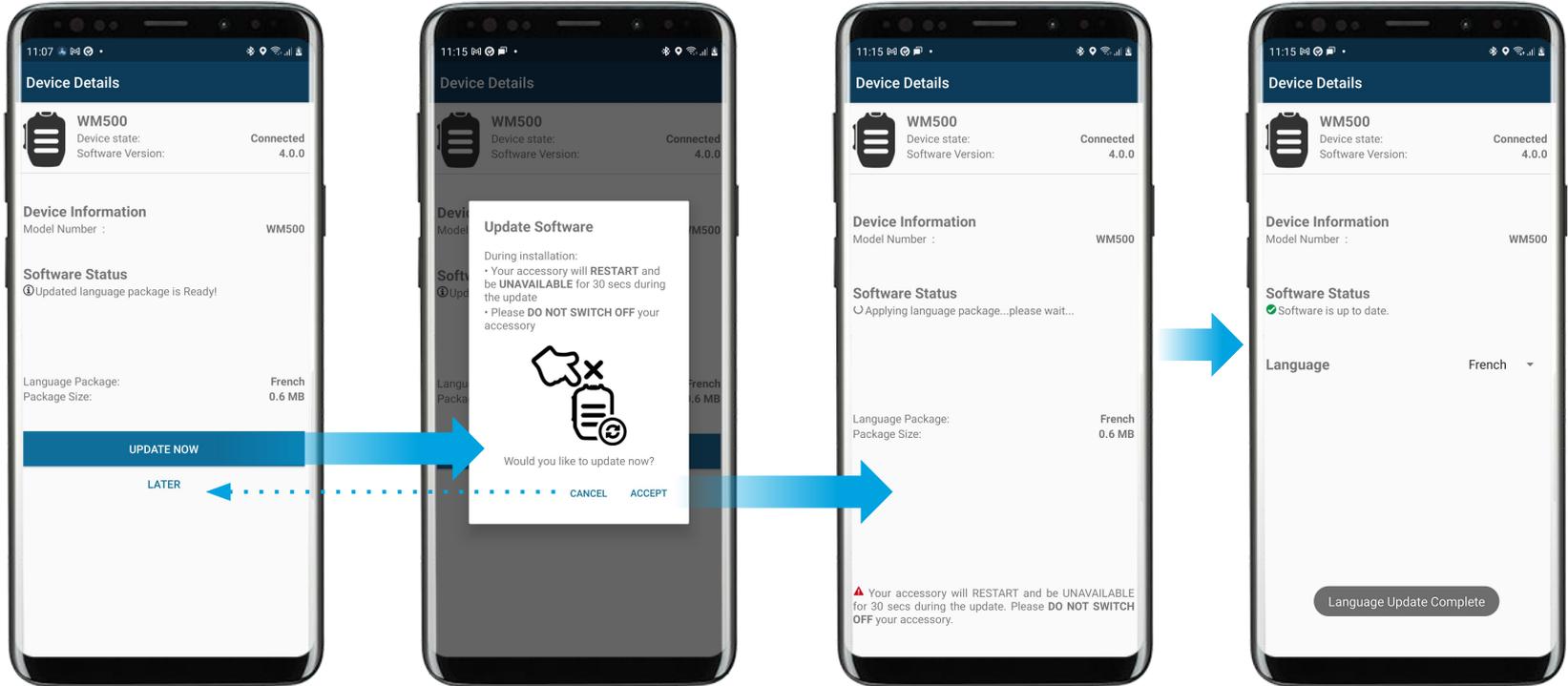


Note: Notification will show on phone once transfer progress is 100% when app is minimized



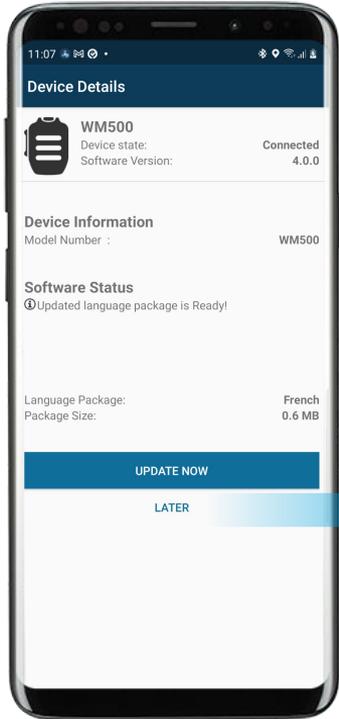
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LANGUAGE PACK UPGRADE

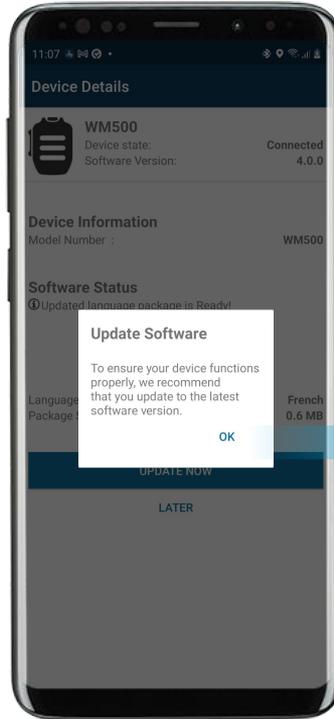


WM500 WIRELESS REMOTE SPEAKER MICROPHONE

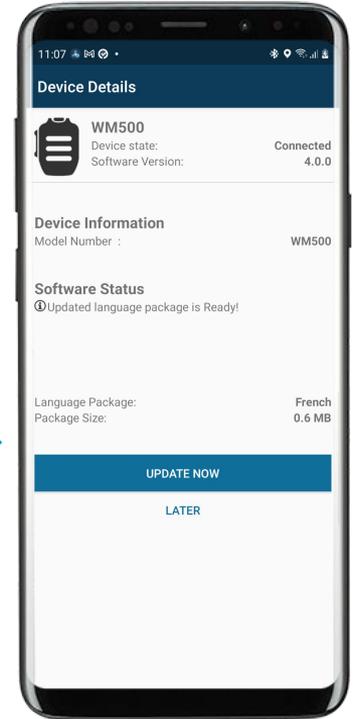
LANGUAGE PACK UPGRADE LATER



If select update **LATER**



Select **OK**



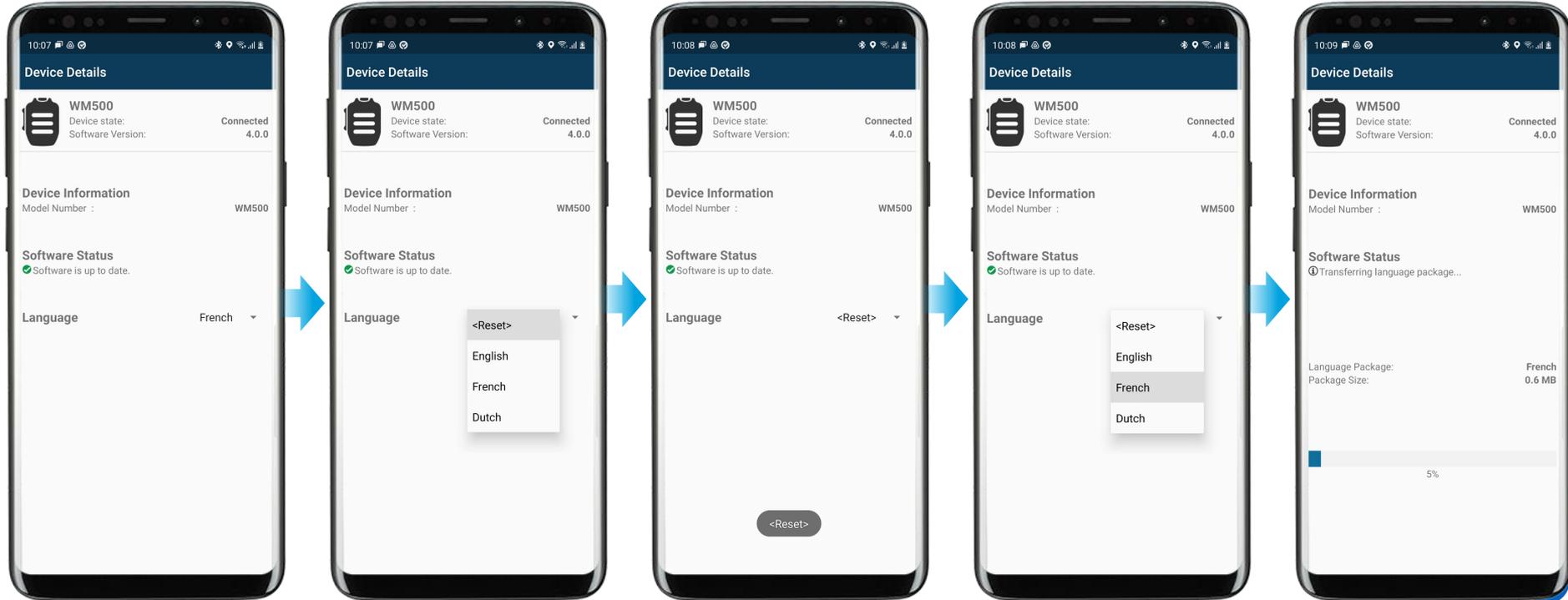
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LANGUAGE PACK UPGRADE FOR MULTIPLE WM500s



Accessory Manager application is able to support language upgrade for multiple units of WM500

- To upgrade multiple units of WM500 to the same language (e.g.: French), please use the 'RESET' function & choose French again



A man with short, light-colored hair, wearing a dark long-sleeved shirt, is shown in profile from the chest up. He is holding a black walkie-talkie to his mouth with his right hand, looking upwards and to the right with a focused expression. The background is a blurred industrial or warehouse environment with wooden pallets and metal structures. A small blue horizontal line is positioned above the text.

CONNECTING TO WAVE AND NITRO DEVICES

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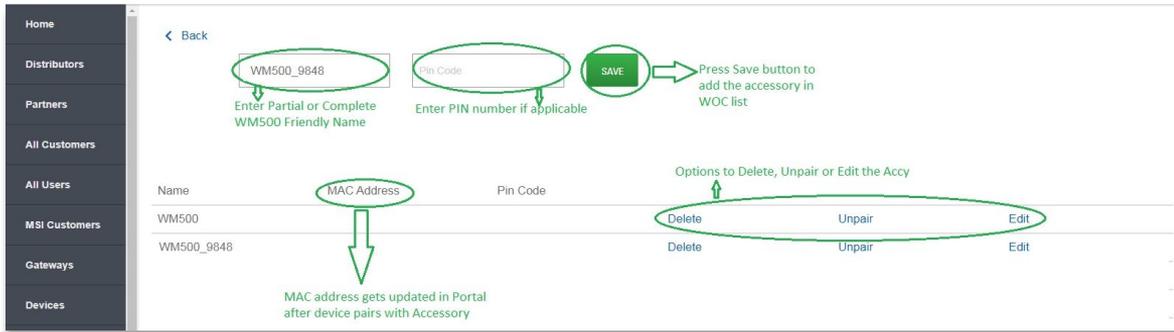
PAIRING TO DEVICES via WAVE and NITRO PORTALS

BLUETOOTH ACCESSORY CONFIGURATION IN WAVE PORTAL

1. From Wave On Cloud portal, select desired WAVE or SLN1000 Device
2. Select "Actions" > "Bluetooth Accessories"



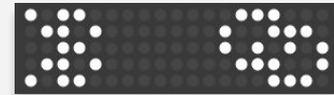
3. Insert Friendly Name, Pin Code (if applicable)
4. Once done, click "SAVE"



BLUETOOTH STATUS AT RADIO



"Bluetooth Searching"



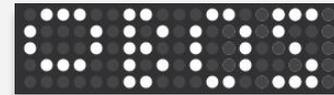
"Bluetooth Connected"

CLEAR PAIRING FROM RADIO

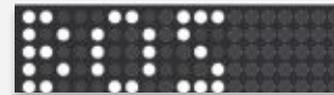
1. Press Top Button (i) to navigate to view the Bluetooth Status information.
2. Press volume +/- to cycle through the list
3. To clear a pairing, long press the side button while on the device name "friendly name."



"Bluetooth Connected"



"Bluetooth paired"



"Pairing Cleared"



WM500 WIRELESS REMOTE SPEAKER MICROPHONE

PROGRAMMING BUTTONS via WAVE and NITRO PORTALS

CANCEL SAVE

Device Info

Settings

Menu Visibility

PTT App Settings

Accessory Button

	Reported	Desired
P1 Short Press	Bluetooth Toggle	Bluetooth Toggle ▼
P1 Long Press	Channel Up	Channel Up ▼
P2 Short Press	Scan Toggle	Scan Toggle ▼
P2 Long Press	None	None ▼
P3 Short Press	None	None ▼
P3 Long Press	None	None ▼
P4 Short Press	Voice Announcements Toggle	Voice Announcements Toggle ▼
P4 Long Press	Channel Down	Channel Down ▼

1. From Wave On Cloud portal, select desired WAVE or SLN1000 Device.
2. Select "Accessory Button" configuration.
3. Configure desired button functions.
3. Once done, click "SAVE."



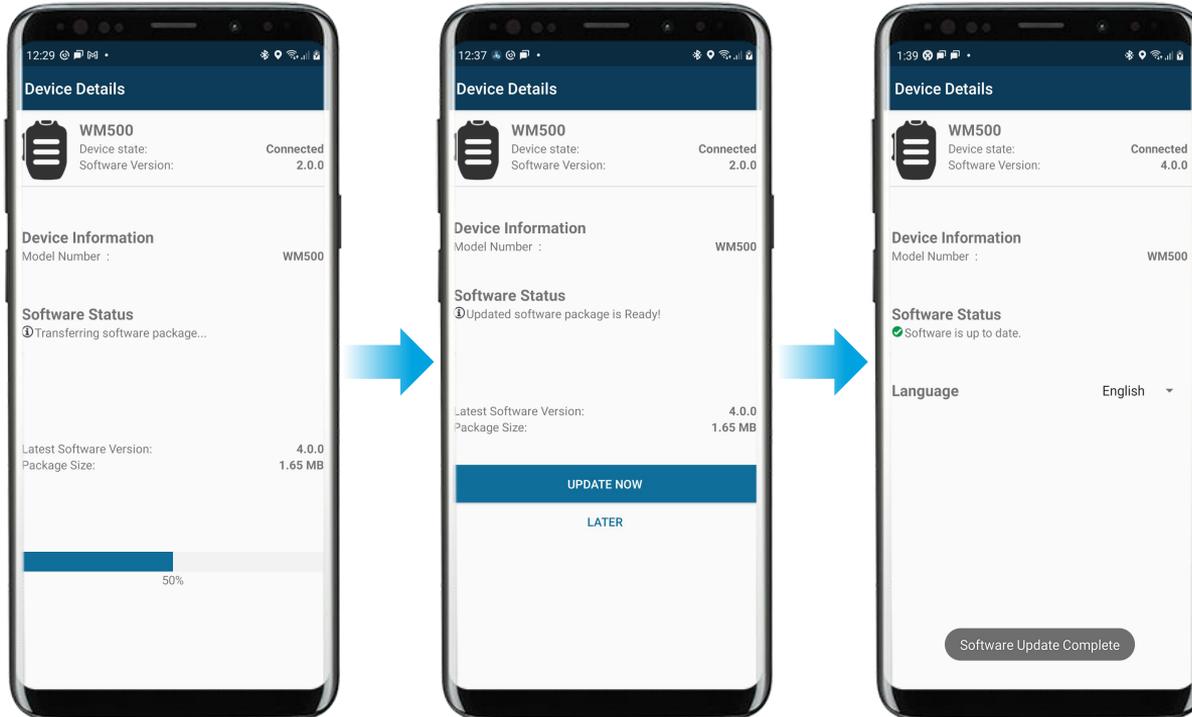
A close-up, low-angle shot of a person's hand holding a mobile phone. The phone is held horizontally, and the hand is positioned in the center of the frame. The background is dark and out of focus, emphasizing the phone and the hand. A small blue horizontal line is positioned above the text.

**UPGRADING WM500
TO SUPPORT MXP600 AND R7**

WM500 WIRELESS REMOTE SPEAKER MICROPHONE

COMPATIBILITY WITH MXP600 and R7

- WM500 v4.0.0 onwards is compatible with MXP600 and R7.
- Should your WM500 is not v4.0.0 (or R04.00.00), please upgrade the RSM with [Accessory Manager application \(click here\)](#)



A woman wearing a white hard hat and a blue work shirt is looking down at a tablet device in a dark industrial setting. The background is dimly lit, showing some machinery and chains. The overall tone is professional and focused.

FAQ

WM500 WIRELESS REMOTE SPEAKER MICROPHONE

FAQ

1. How do I change voice announcement language of my WM500?

Step 1: Upgrade Accessory Manager apps to V1.0.11 and beyond from Google Play Store.

Step 2: Upgrade WM500 software version to R04.00.00 via Accessory Manager apps.

Step 3: Update language options accordingly (available to select French, Dutch and English).

2. Do we have Accessory Manager available in Apple App Store?

It is currently in development stage, shall be available in Q1-2022.

3. What happen if WM500 is facing the following reconnection behavior with R7 radio?

- a. Radio display shows "Connecting Failed".
- b. WM500 Bluetooth LED indication shows solid blue.
- c. WM500 prompts a bad bonk audio when button is pressed.
- d. WM500 prompts "Disconnected" audio notification.

Recovery method: Power off WM500, power cycle R7 radio and clear WM500 pairing info from R7 radio.

Perform a fresh pairing between WM500 and R7 radio.



A panoramic view of the Chicago skyline at dusk, featuring prominent skyscrapers like the Willis Tower. The sky is filled with dark, dramatic clouds, and the city lights are beginning to glow. The foreground shows a calm body of water reflecting the city.

—
THANK YOU