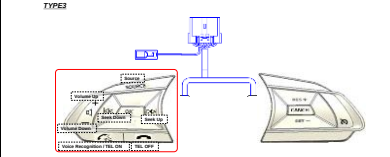
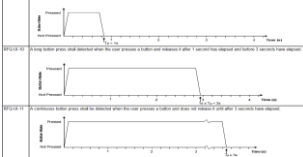


Transition Matrix (12)

Fascia button layout	SWHC button layout	Short/Long/Continuous press guide
		

Note	[A. Mode change rule] A1. Radio mode cycle by pressing RADIO button: FM1 → FM2 → AM / Wmap around A2. Media mode cycle by pressing MEDIA button: USB/Port → BT/A → AUX / Wmap around (if connected) A3. Audio source cycle by pressing SOURCE button: FM1 → FM2 → AM → USB/Port → BT/A → AUX / Wmap around (if connected) A4. If pressing MEDIA button in radio mode, go to the last media mode. If the last media mode is not available, go to the next media mode on media mode cycle. (ex. The last media mode is USB, but USB device is removed in Port mode. If pressing MEDIA button in FM1 mode, go to BT audio mode. If BT audio is not available also, go to AUX mode.) A5. If pressing RADIO button in media mode, go to the last radio mode. A6. If USB or iPod device is inserted and it contains any playable file, go to the corresponding mode automatically A7. If USB or iPod device is removed while playing it, go to the previous audio source. If the previous audio source is not available, go to the audio source before the previous audio source. A8. At the end of call, go to the last audio source. (ex. If the call received in FM1 mode is ended, go to FM2 mode.) A9. If a iPod device is connected via both of iPod and BT, BT/A is disabled. A10. If two iPod devices with the same name are connected via iPod and BT, BT/A is disabled. [B. Comment for power state transition] B1. If any event causing the mode change occurs in OFF state, go to ON state. (ex. Pressing RADIO/MEDIA button, incoming call and USB/iPod insertion) B2. If POWER button is pressed in incoming call or active call, ignore it. [C. Comment for media playing control] C1. If playing TRACK, in 3 sec after starting playback, go to the beginning of the current playing file. Otherwise, play the previous file. C2. If reaching the end of file during FF, start playing the next file and keep FF on it. C3. If reaching the beginning of file during FR, start playing the previous file from the end and keep FR on it. [D. Comment for radio seek and FM list update feature] D1. SEEK+: Increase or decrease the frequency until a station is found. D2. Continuous SEEK+: Keep increasing or decreasing the frequency. D3. Stop SEEK: Stop at the current frequency. D4. Cancel updating: Cancel updating and tune to the frequency turned before starting update. The existing FM list is not overwritten by partial FM list found during cancelled update. D5. Next preset: If the current frequency is corresponding to one of preset stations, go to the next preset. Otherwise, go to the first preset station. D6. If starting FM list update in AM mode, switch to FM1 mode automatically. [E. Comment for BT call] E1. If there is no test call when try to redial the last call, "Call failed" message is displayed. E2. If ACCIGN is turned off during active call/handset, start call in mobile/handset. E3. Changing volume in handset mode doesn't affect the volume of mobile. It will affect the call volume in handset/hue mode later. E4. If going to ON state by incoming call in OFF state, go to the last audio source at the end of call. (the return to OFF state) [F. Comment for multi-button press] F1. If pressing two or more fascia buttons simultaneously, nothing happens. (Exception: (POWER + one button combination) - If POWER button and other button are short pressed simultaneously, both buttons are working. F2. If pressing two SWHC buttons on the different ADC channel simultaneously, nothing happens. - Channel A: SOURCE, SEEK+, SEEK-, YES - Channel B: VOL+, VOL-, YES, END F3. If pressing two or more SWHC buttons on the same ADC channel simultaneously, one of them works. However, it should not cause any unexpected behavior.
------	---

Screen Priority	Highest priority	Medium screen	Notification, warning, error	Normally, it use timeout. Moved by pressing any button. (Pressing OK/BACK button just closes popup. Pressing other buttons not only closes it but also works as their original function.)
	Lowest priority	Low level media screen	TOUCH screen	Quick screen
		Low level media screen	2-DIMPLET media, FM file, music browser	Screen to be available through only media browser and playback.
		Media screen	Normal operation screen without displaying menu	Screens in the same level can't be interrupted. When covering one screen, exit the other.
				Normally, it use timeout. Covered by primary any button. (Pressing OK/BACK button just closes volume control bar. Pressing other buttons not only closes it but also works as their original function.)
				Covering in radio, playing media file, recording/intercoming call

Hereby, Harman Automotive Co., Ltd. Declares that this CMF-43300A-16C is in compliance with the essential requirements and other relevant provisions of directive 1999/5/EC.

FCC Information to User

The 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 of the following measures:

Operation on reduced receiving sensitivity.

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.

Consult the dealer or an experienced radio/TV technician for help.

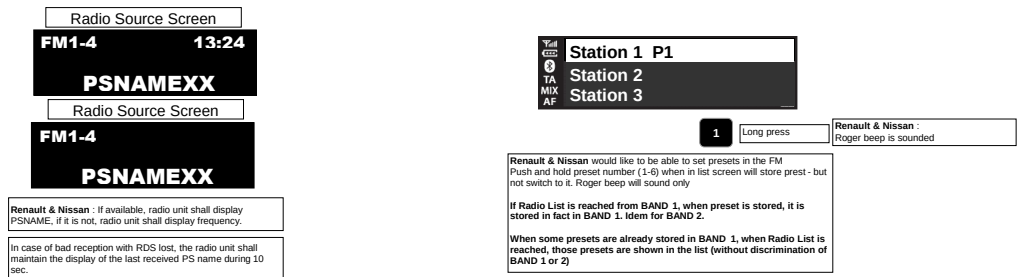
North American customers: Approval for this equipment is for compliance could void the user's authority to operate the equipment.

NOTE: This device has not been approved for use in Canada or in jurisdictions not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

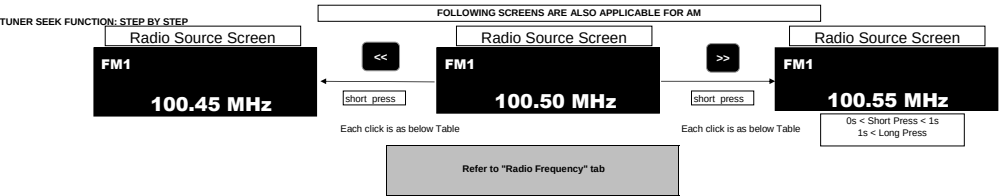
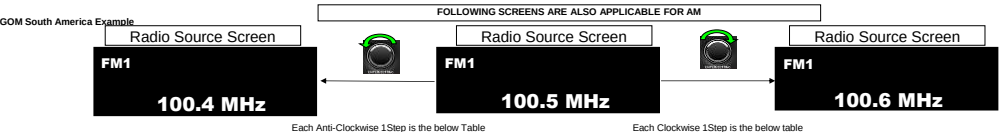
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.

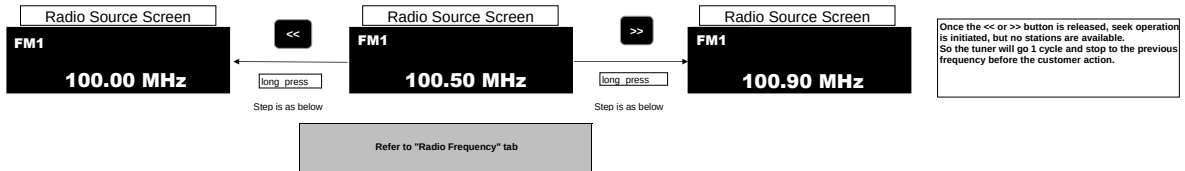
AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.



Manual Tune: STEP BY STEP

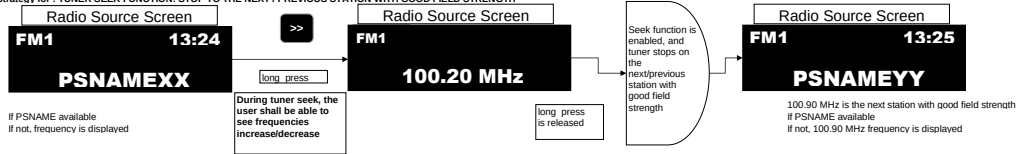


TUNER SEEK FUNCTION: STOP TO THE NEXT / PREVIOUS STATION WITH GOOD FIELD STRENGTH



Behaviour is the following :
Once the Press is a Long Press -> Continuous frequency scrolling until Button is released
Once the Button is released, then it is seek +/- function

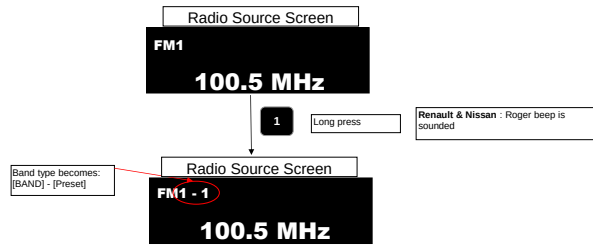
Display Strategy for : TUNER SEEK FUNCTION: STOP TO THE NEXT / PREVIOUS STATION WITH GOOD FIELD STRENGTH



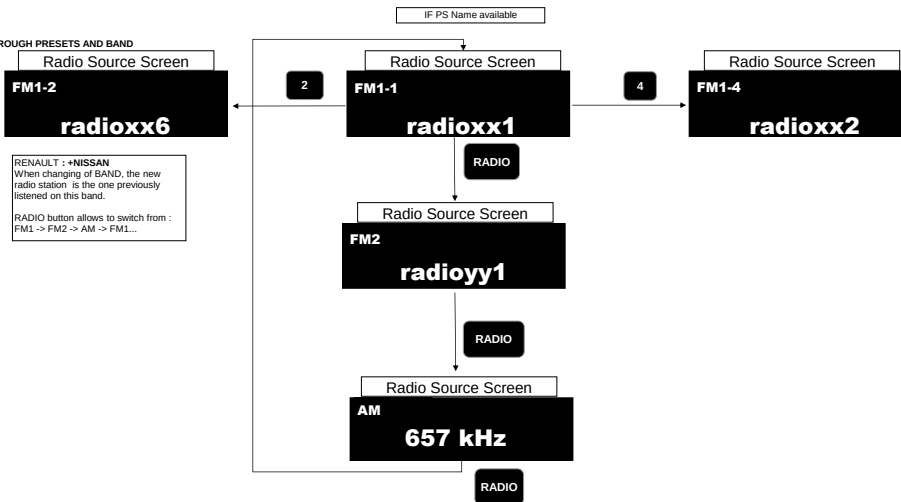
Renault & Nissan : Regarding AM, alongside Presets features, frequency management will be as following :

- TUNER SEEK FUNCTION: STEP BY STEP
- TUNER SEEK FUNCTION: STOP TO THE NEXT / PREVIOUS STATION WITH GOOD FIELD STRENGTH

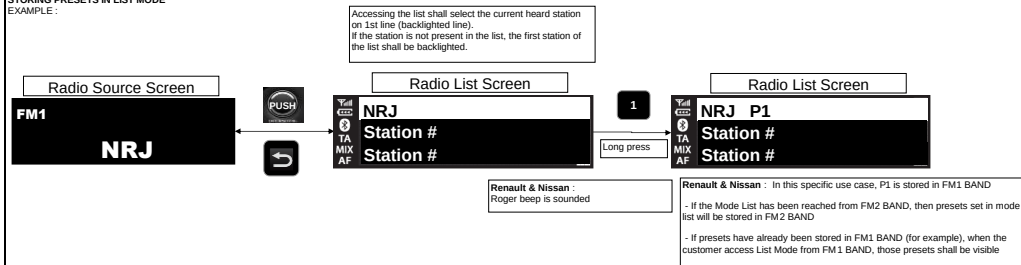
STORING A PRESET



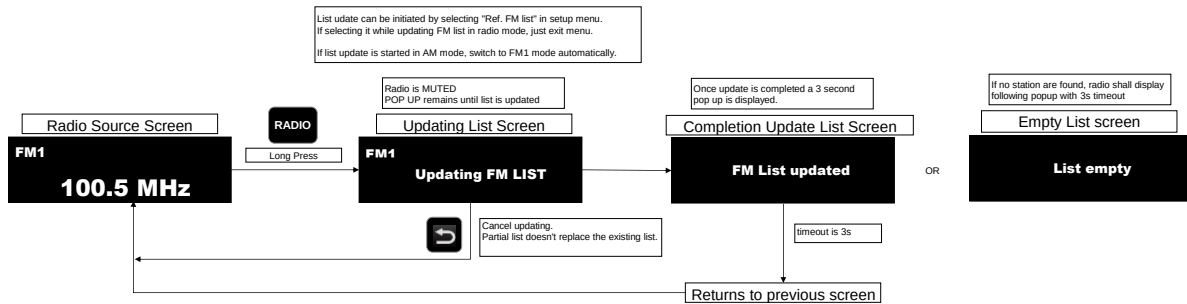
MOVING THROUGH PRESETS AND BAND



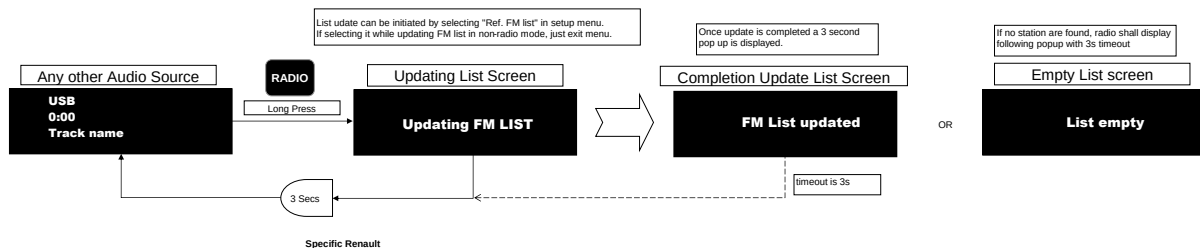
STORING PRESETS IN LIST MODE EXAMPLE :



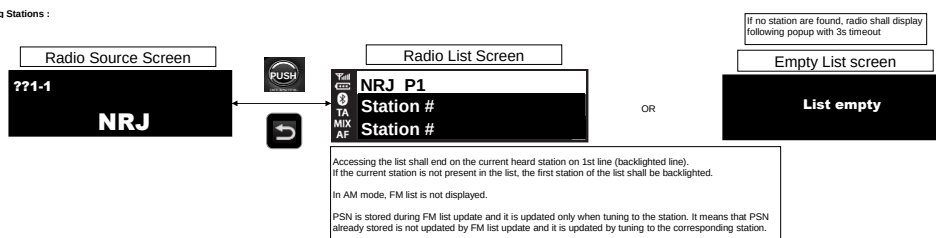
INITIATING LIST UPDATE - COMMON PROPOSAL in radio :



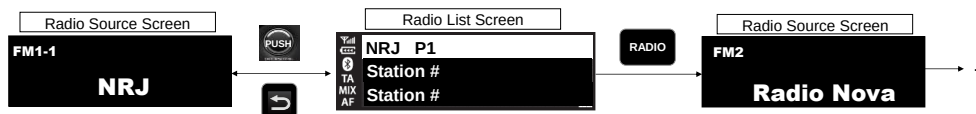
In other source :



Browsing Stations :

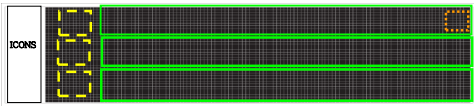


Moving from List to Bands

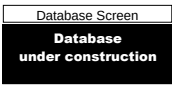
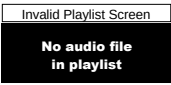


USB Source

	Name	Content	Example
	List Items	USB list items	"Andrews Music"
	Selected Item Icon	See below	See below
	Now Playing Icon (1 character)	See below	▶



Folder/Album	Folder icon
File/Track	Note icon
Playlists	List icon



This screen doesn't have timeout, but user can exit it by pressing BACK button.

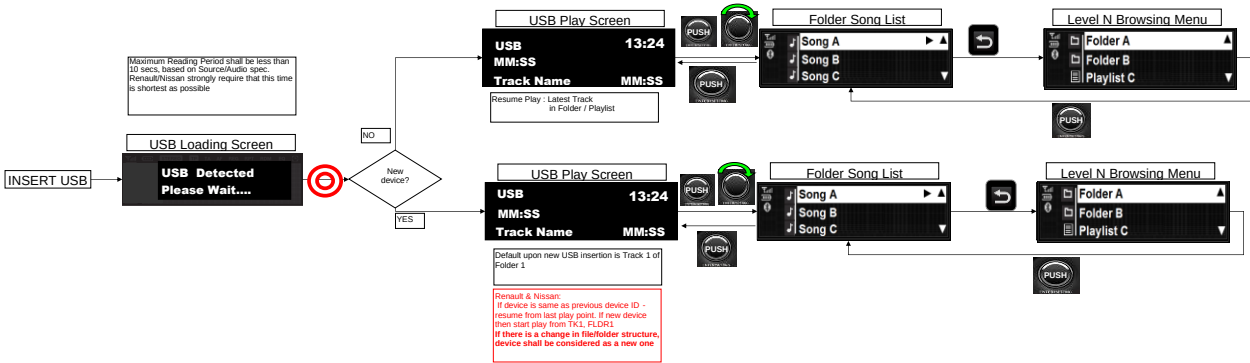
USB Playlists (M3U, WPL) appear alongside folders in the list structure.
Once a USB playlist is selected the tracks in the playlist will loop continuously until the user selects another playlist or folder.

- If playlist has some files missing or invalid, radio shall skip those and go to the next available file.
- If playlist has no valid files, radio shall still display Playlist Name, but once user select it, then display the following popup screen (applicable for all media).
Then go back to previous screen (the one, just before playlist has been selected by user).
Until user action, there shall be no audio feedback.

Database is constructed whenever inserting USB memory. (It is not stored into the audio.)
While constructing database, the above database screen is displayed if trying to enter music browser or pressing MIX button.

On insertion

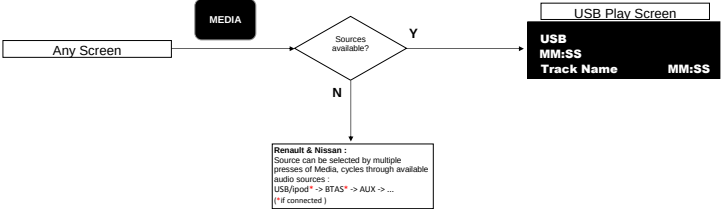
For PLAYBACK screen, "track names" shall be the "file names".
Just for Playback screen...



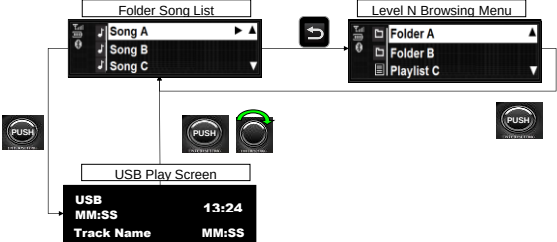
Selecting Source when listening to another source

This loop becomes populated by the available sources:
USB*,
BT*,
AUX
(*if connected)
Source can be selected by:
- multiple presses of Media button cycles through sources, audio play back switches at the same time.

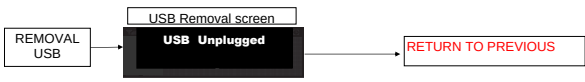
1. USB device inserted during power off: trigger USB insertion screen at power up, if the last source before power off is USB. Otherwise, go to the last source without showing USB insertion screen.
2. USB was playing and then removed during power off: the previous source (before USB) will be selected.
3. Previously active USB device removed and new one inserted during power off: Go to USB at power up
4. USB was playing then turned inactive (radio is playing): after power OFF/ON.



During Play



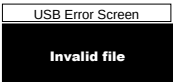
Removing device



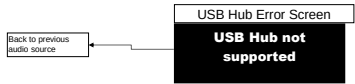
If USB device is not supported (communication failure)



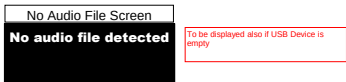
If the song selected from browser is not valid audio file, then show "Invalid file" for 3 seconds. And then play previous audio file with focusing last selected file in browser. If not requested from browser, next audio file should be played without this message.



If USB with several USB devices is connected

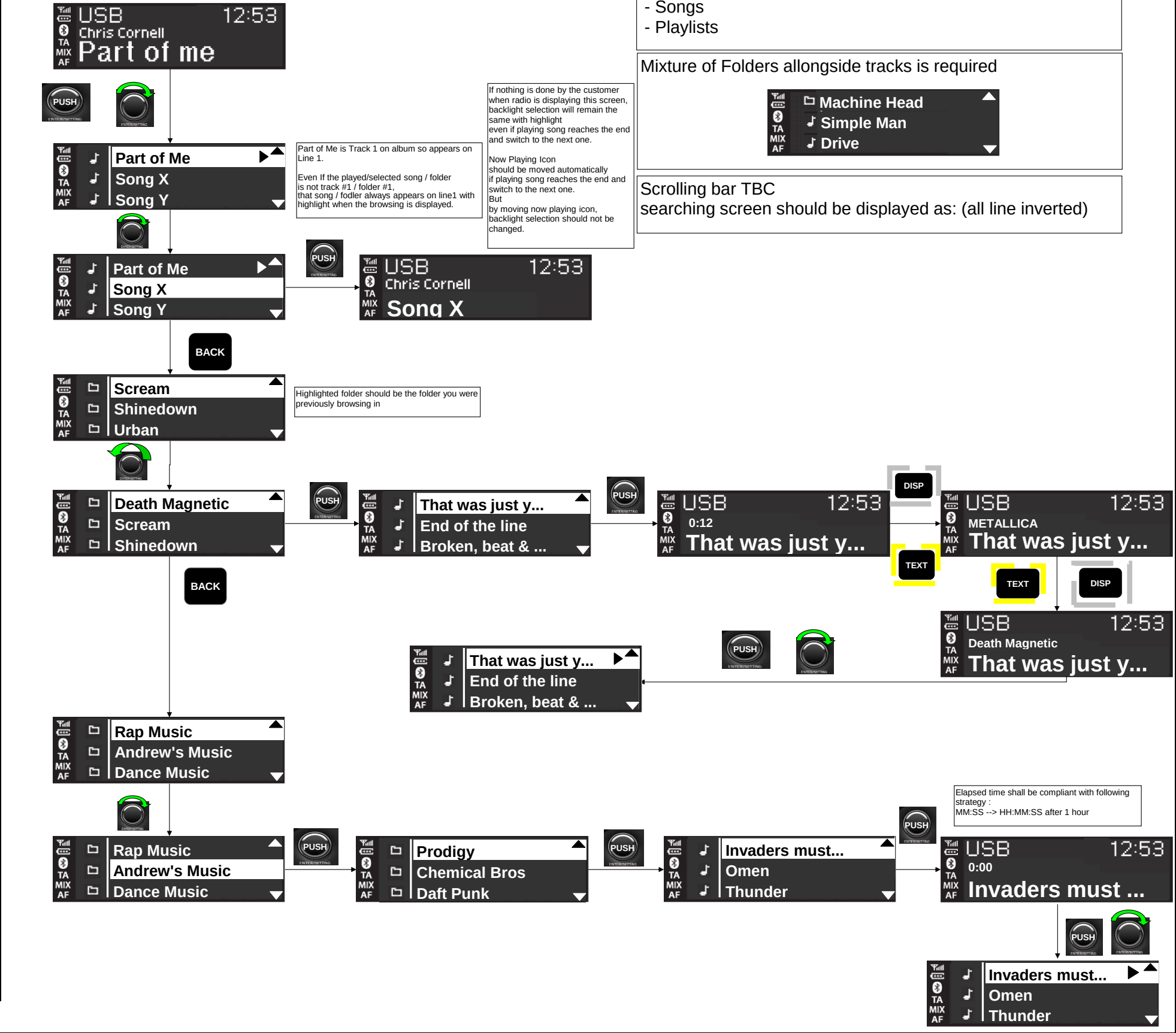


If USB device does not contain audio files

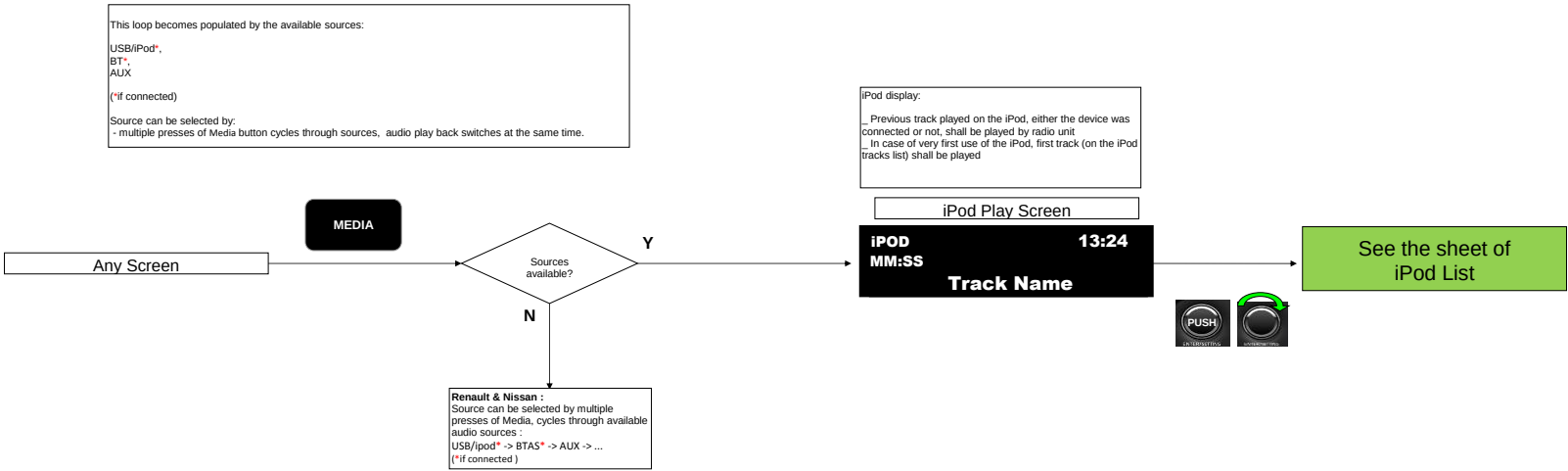


USB Browsing

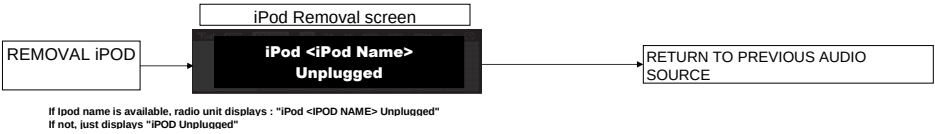
Audio playback screen



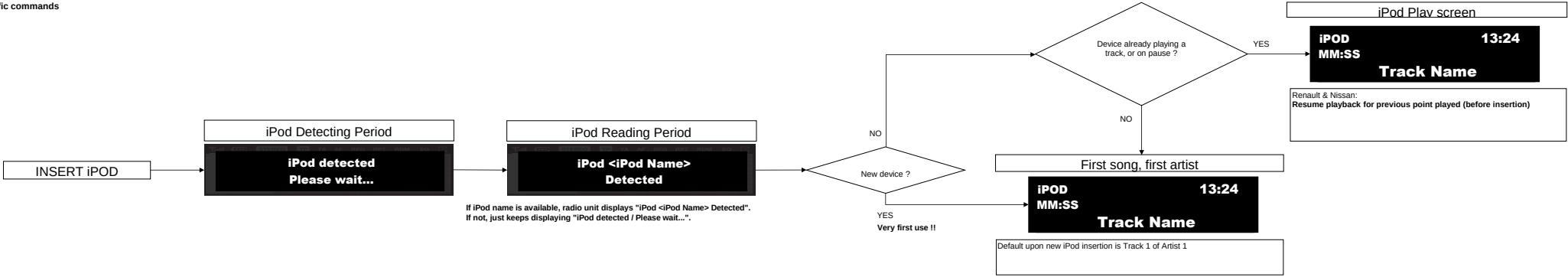
iPod Source



Removing iPod



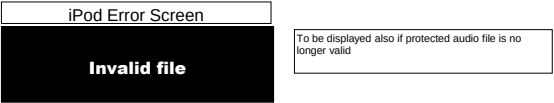
iPod specific commands



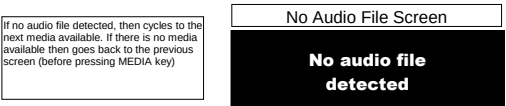
If IPOD device is not supported (communication failure)



If IPOD device contains no longer valid audio files



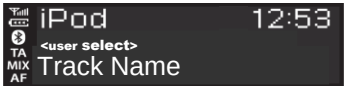
If IPOD device does not contain audio files



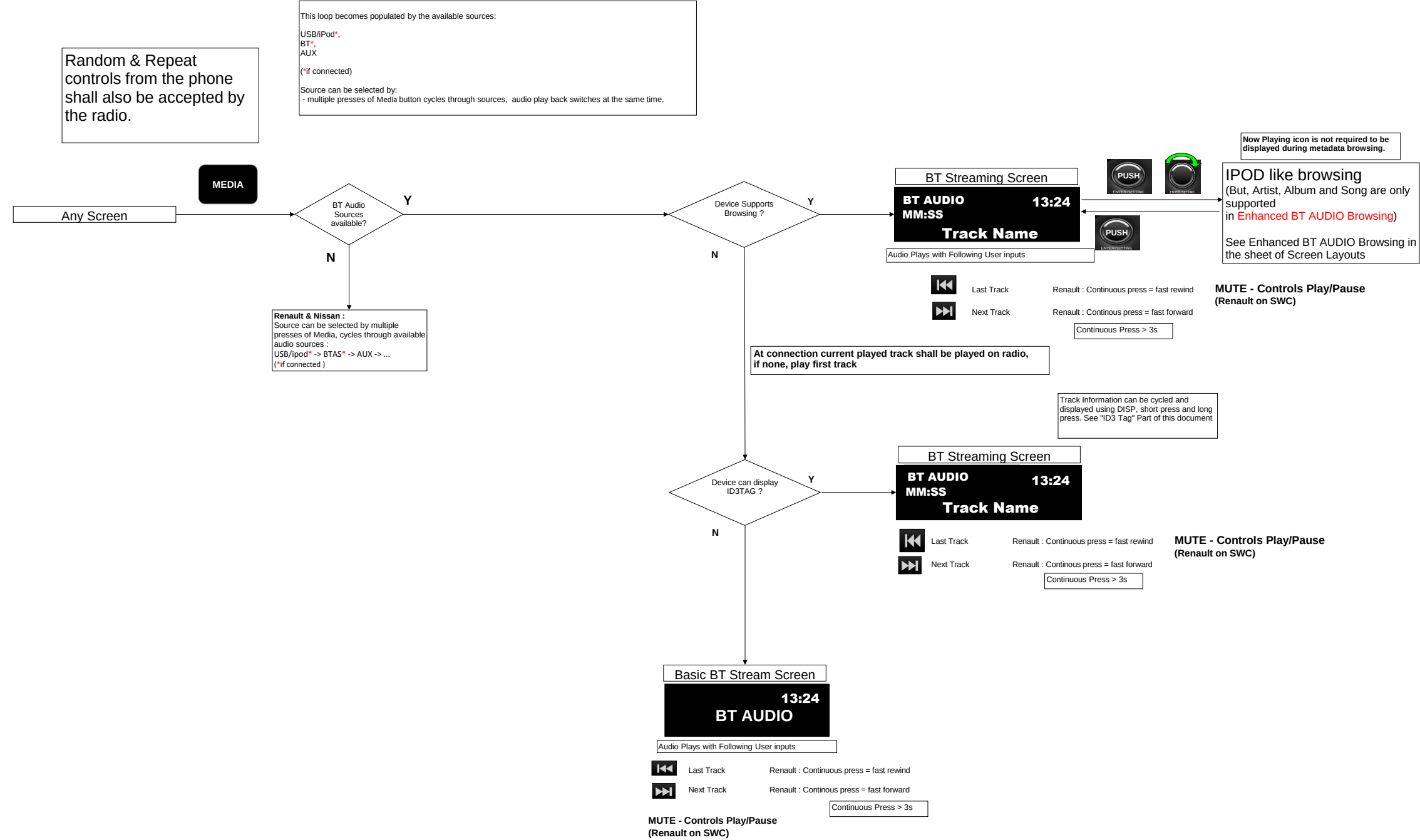
iPod List

iPod display:
List must be in order:
Playlists
Artists
Albums
Tracks
More... --> Audiobooks
Composers
Genres
Podcasts

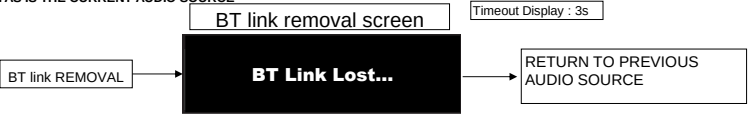
Depth 1	Depth 2	Depth 3	Depth 4	Depth 5	Depth 6
Playlists	List of playlists	List of tracks	List of tracks		
Artists	All albums	All tracks	List of albums		
	List of artists	List of albums	List of tracks		
Albums	All tracks	List of albums			
	List of albums	List of tracks			
Tracks	List of tracks				
More...	Audiobooks	List of audiobooks			
	Composers	All albums	All tracks	List of tracks	
		List of albums	List of albums	List of tracks	
	Genres	All artists	All albums	All tracks	List of tracks
		List of genres	List of artists	List of albums	List of tracks
	Podcasts	List of Podcasts	List of artists	List of albums	List of tracks



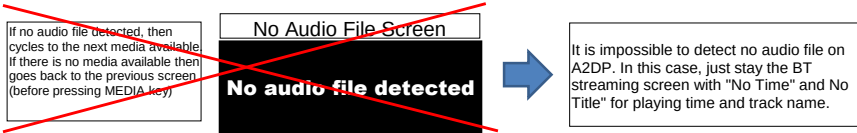
Bluetooth audio streaming (A2DP) Source



Bluetooth link Removal
ONLY WHEN BTAS IS THE CURRENT AUDIO SOURCE



If BT device does not contain audio files

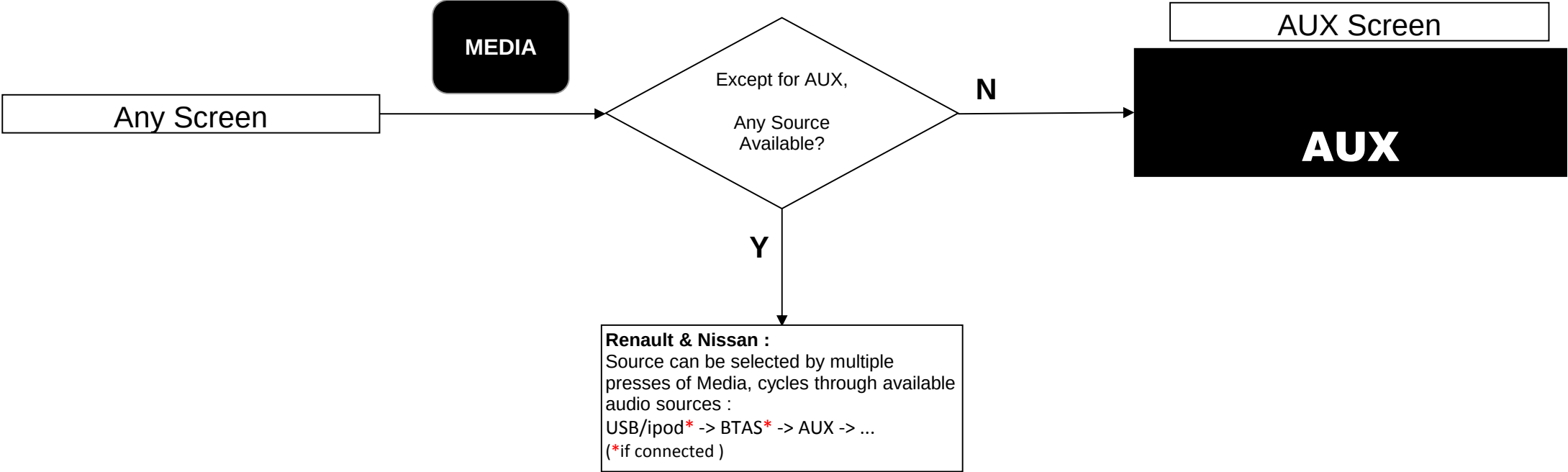


AUX Source

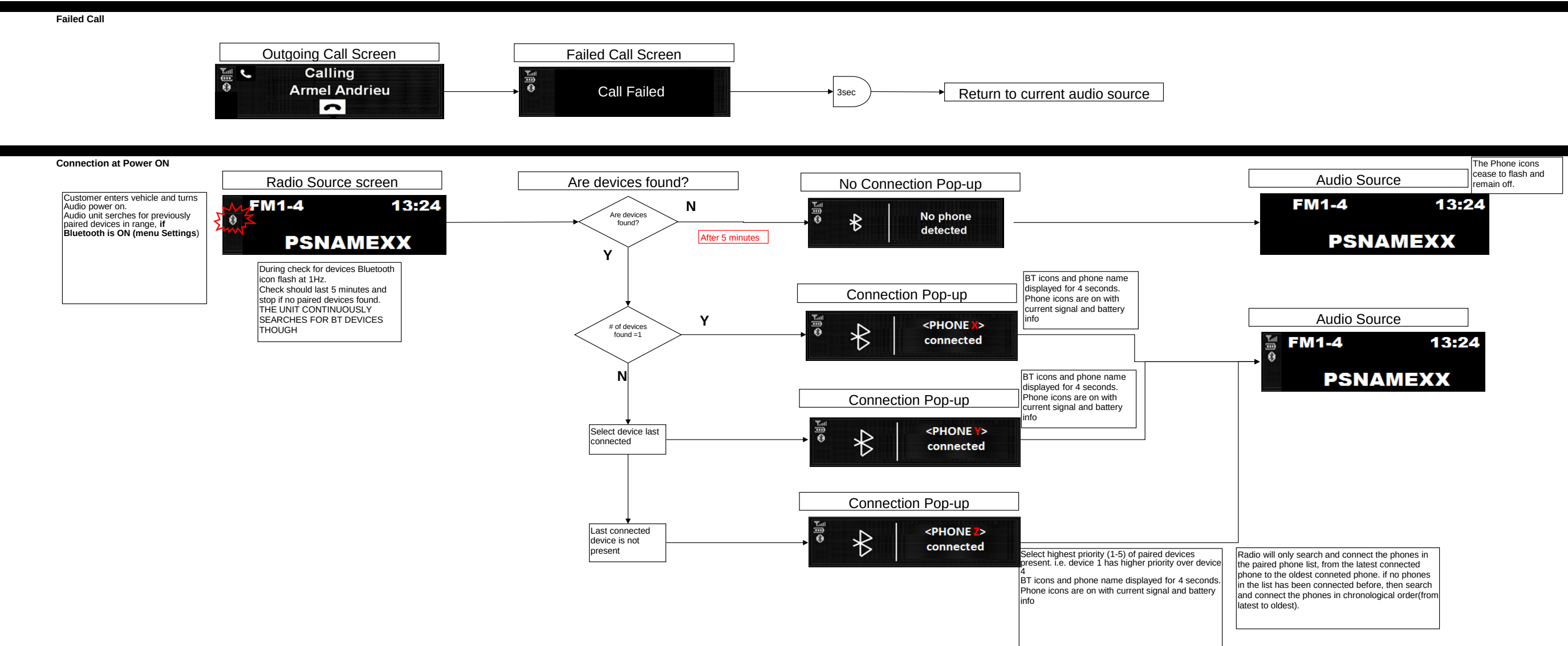
This loop becomes populated by the available sources:
USB/iPod*,
BT*,
AUX

(*if connected / AUX is alway available even if not connected.)

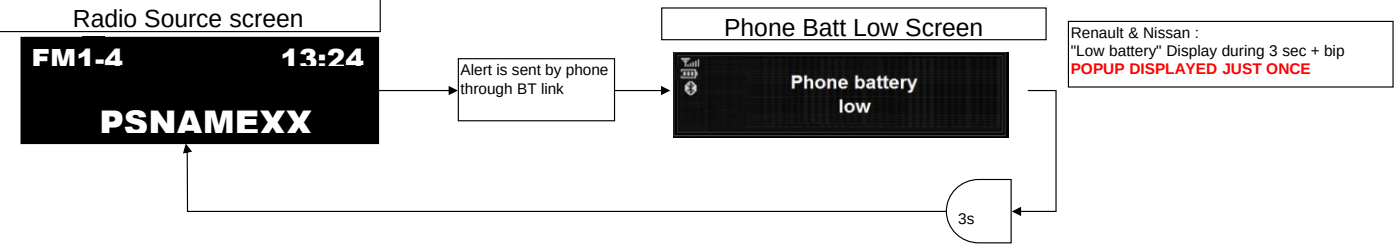
Source can be selected by:
- multiple presses of Media button cycles through sources, audio play back switches at the same time.



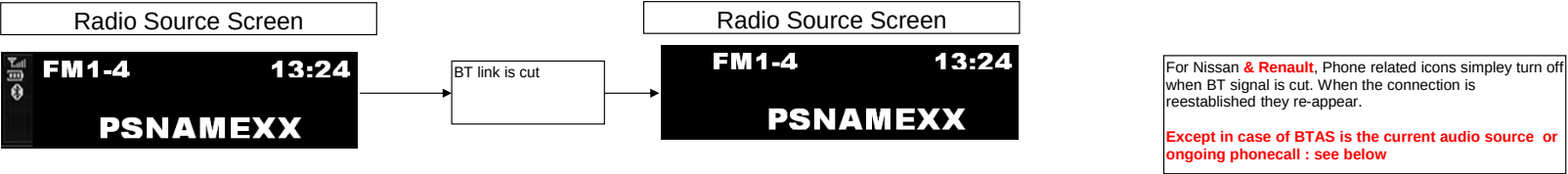
Telephone Operations



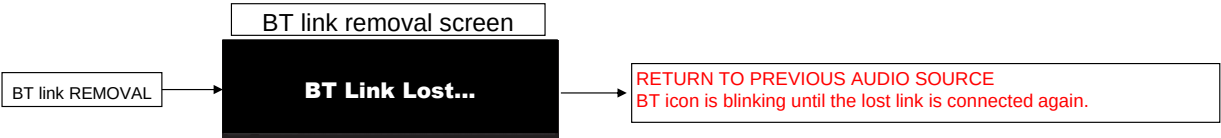
Low Battery Warning



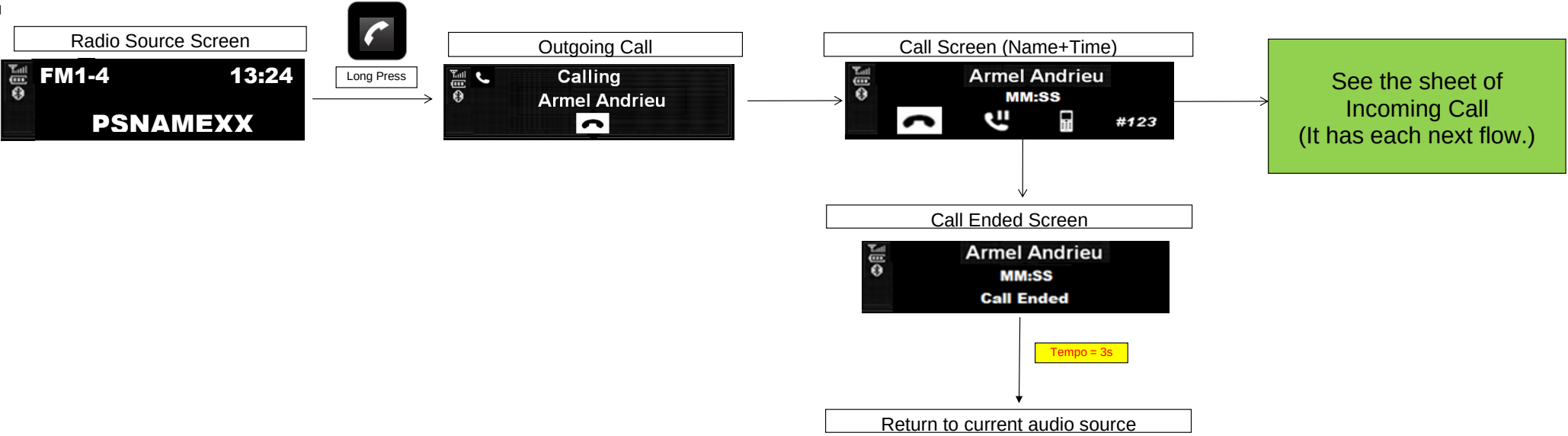
Disconnection



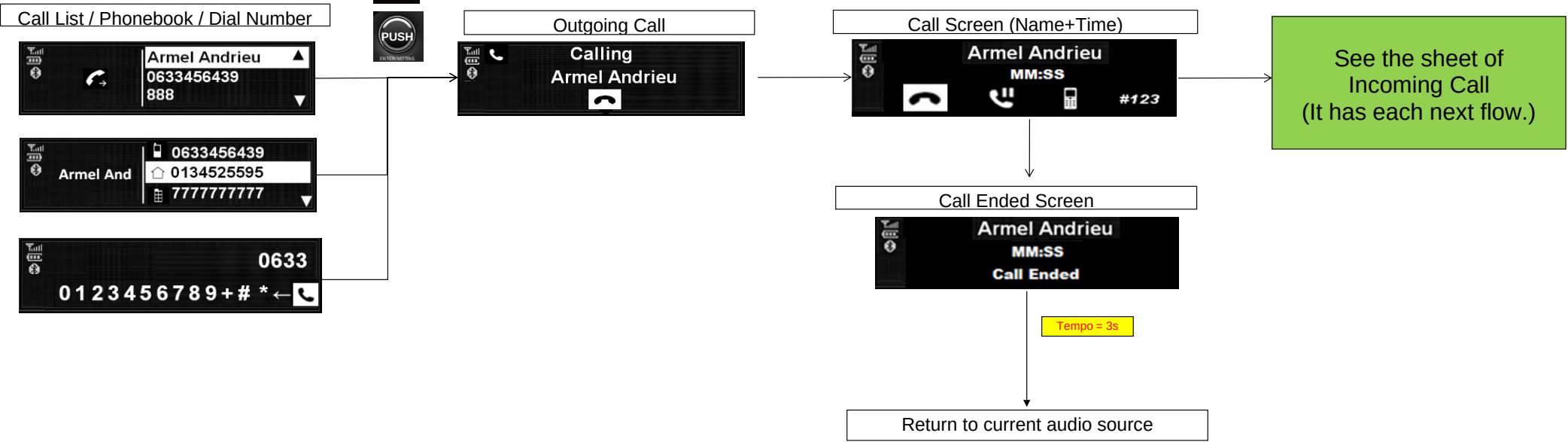
In case of Ongoing Call or BTAS as main audio source



Redial



Outgoing Call by Call List / Phonebook / Dial Number



- In communication :
=> **Short press** : Hang up, whatever the state
- During incoming call :
=> Short press : Pick-up the call
=> Long press : Reject the call
- In call list or phonebook :
=> **SP** Select the call number or name, and launch the call
- Any other state :
=> Enter in the telephony menu
=> When a phone is connected, LP shall redial the last phone number previously called

Name or Number Display Strategy

Priority 1 > Name
Priority 2> Number

If contact's name is on the phonebook or contact list, CMF-B should be display the contact's name firstly.
If not, CMF-B should display the number, alternally.

example

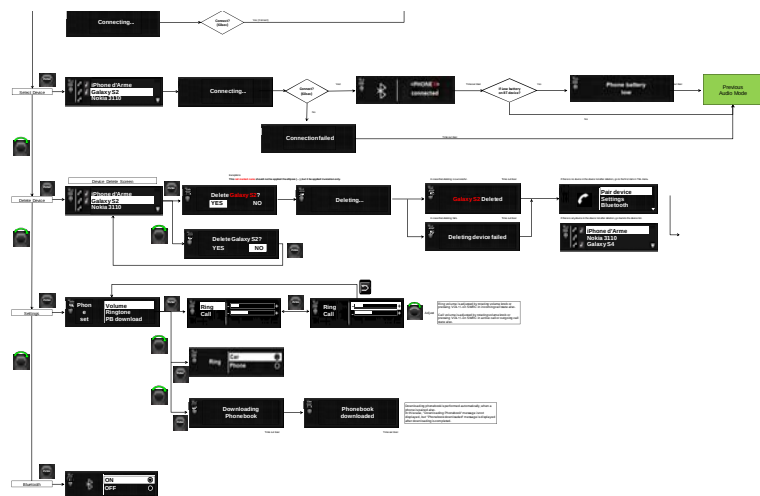
In case of Name



In case of Number



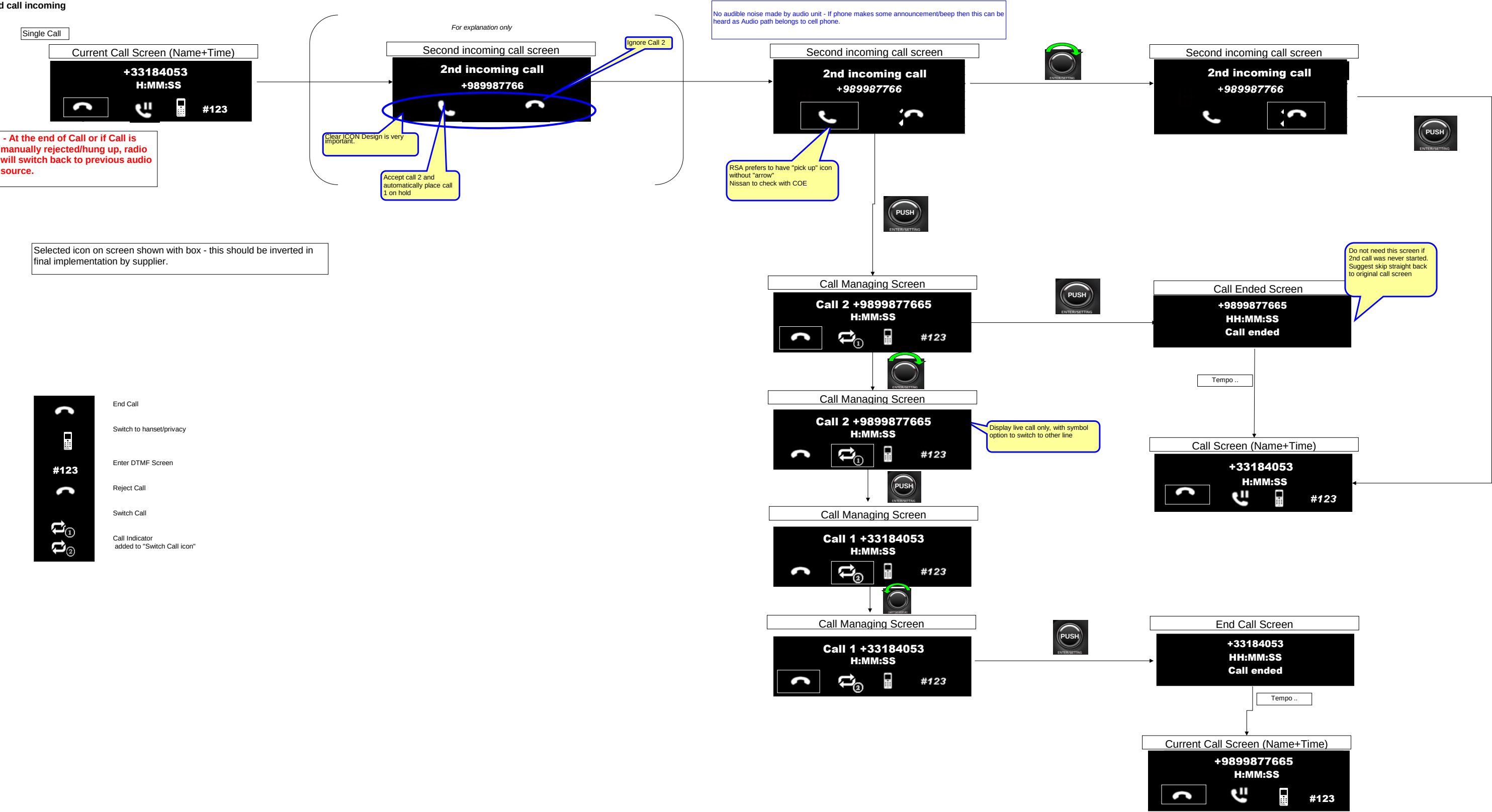




Incoming Call

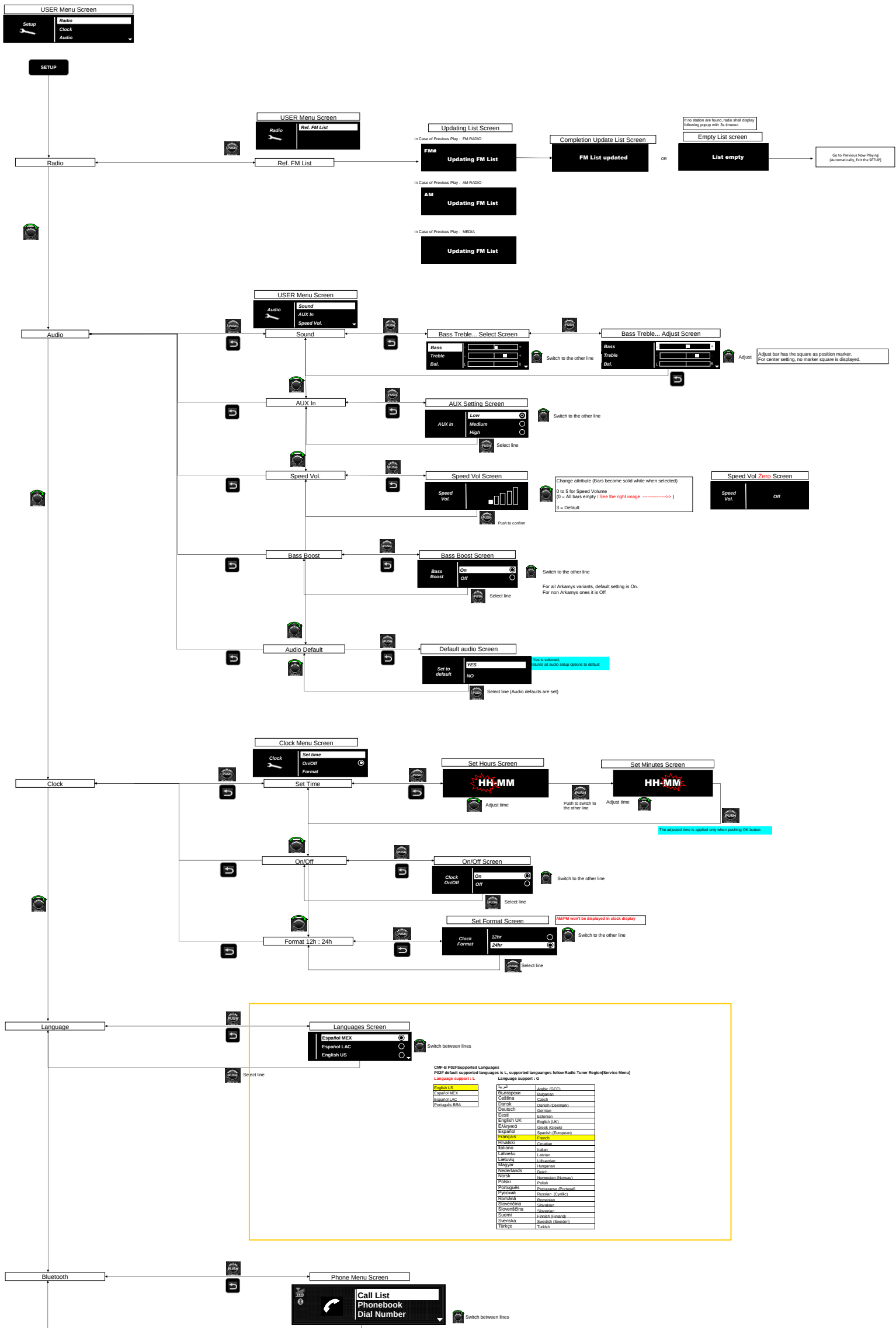


Second call incoming

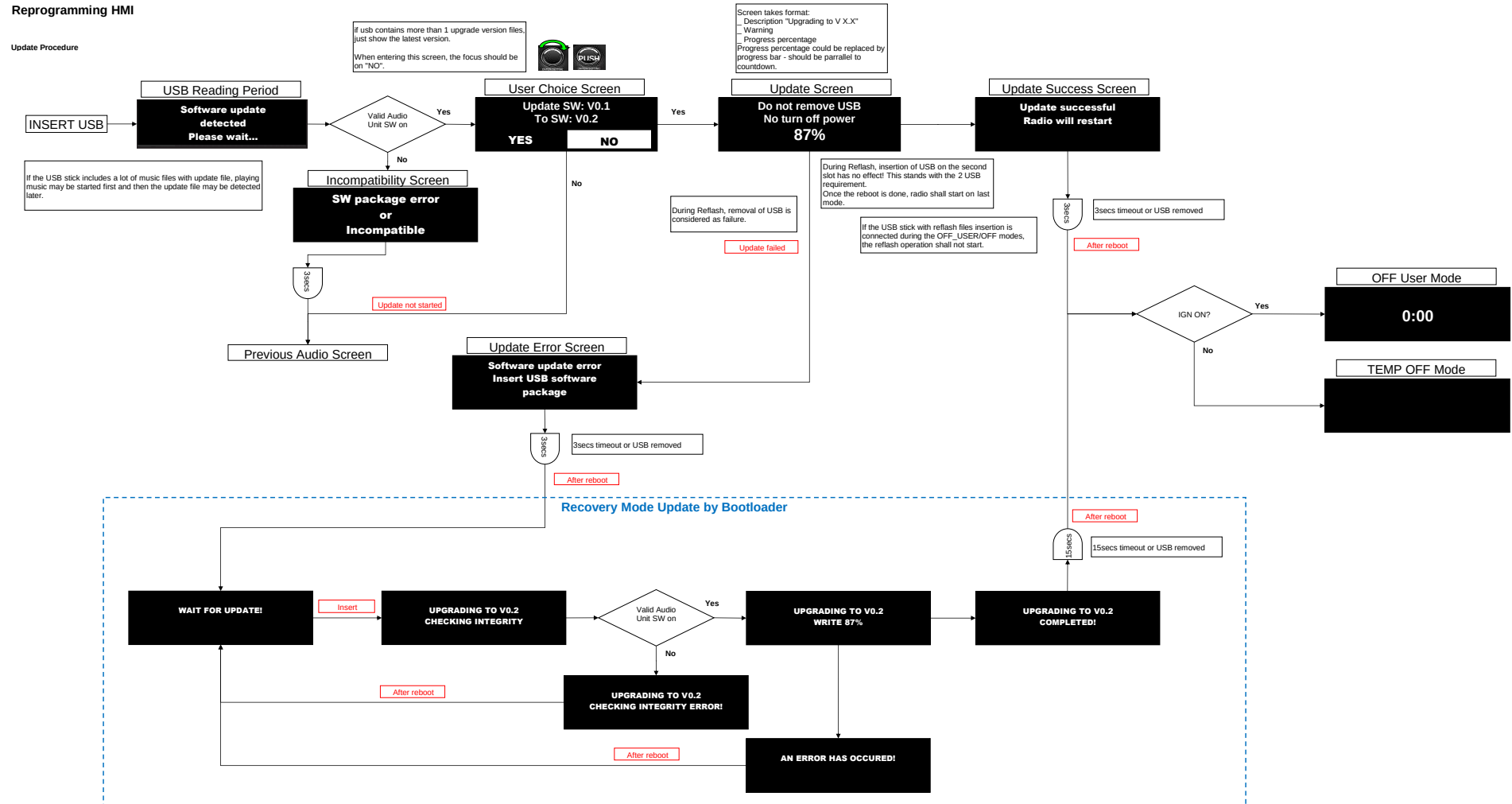


| SETUP MENU

Depth1	Depth2	Depth3	Cell Name	Option Values	Default Value
Audio	Sound	Bass	Control B	-5 ~ +5	0
		Treble			
		Balance			
		Fader			
	ALIN In		Select item	Low / Medium / High	Medium
	Speed Volume		Select item	SCOFF - 5	1
Clock	Basic Boost		Select item	On / Off	On
	Audio: Default		Select item	YES / NO	YES
	Set Time	Edit item		00:00 ~ 23:59	12:00, 12:00
	On/Off	Select item		On / Off	Auto ~ 00:00
	Format		Select item	12hr / 24hr	24hr
	Ref TM Lin		Select item		
Radio	Ref FM Lin		Action Item	Spanish MEX	English US
				Spanish LAC	
				English US	
				Portuguese BRA	
Language			Select item		



Update Procedure



- 1 - Press and hold Setup
- 2 - Rotate Time Encoder for minimum 2 clicks Anti-Clockwise
- 3 - Rotate Time Encoder for minimum 5 clicks Clockwise
- 4 - Rotate Time Encoder for minimum 2 clicks Anti-Clockwise

upon 4th click of rotation in step 4 the screen should switch to Service Menu

