

LX-LC200 toyota

ANDROID INTERFACE

2019.01.28



2018.11.28

2018.03.28

2018.04.26

COMPONENTS – LC200

LX	Capacitive Touch Cable	Universal Cable
AV Cable	IR Cable	Speaker
External GLONASS GPS Antenna	WiFi/BT Antenna x 2	MIC
Key Pad	GVIF OLD TYPE	Power Toyota
Power Default		

TOUCH COMPONENTS

Option (LC200 Touch In/Out)

LC-TOUCH	TOUCH-to-ANDROID	TOUCH-SUB
TOUCH-OUT (4Pin)	TOUCH-IN (4Pin)	FFC Cable (4Pin)

TOUCH COMPONENTS

Option (LX570 Touch In/Out)

LX-TOUCH	TOUCH-to-ANDROID	TOUCH-SUB
TOUCH-OUT (8Pin)	TOUCH-IN (8Pin)	FFC Cable (8Pin)

SPEC

※ ANDROID

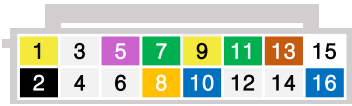
OS	Android 7.1.2(Nougat)
CPU	Six-Core 64bit Server Class Cortex-A72 Core @2.0Ghz, Mali-T860 Quad-Core GPU (Total Ten-Core)
VPN	H.264/H.265/VP9 up to 4Kx2K@60fps (4K Video)
Memory	2GB DDR3
USB	USB2.0 High Speed Port x 1
USB 3.0	USB3.0 5.0Gbps Port x 1
Wireless	2.4GHz/5GHz Dual-Band WiFi, Support 802.11a/b/g/n/ac, Bluetooth 4.1
GPS	Ublox8 GPS(GLONASS/BEIDOU/GALILEO/QZSS/SBAS)
HDMI OUT	HDMI 2.0, Support maximum 4K@60Hz display
Speaker	2W
I/O	Mic (voice recognition),
Temperature	-20°C ~ 80°C
Operating	-15°C ~ 70°C

※ INTERFACE

Input Spec.	1 x HDMI IN (1280x720), 2 x A/V Input (external video source) 1 x CVBS (Front Camera) 1 x CVBS (Rear Camera)
Output Spec.	1 x Audio L/R Output 1 x LVDS Output (LCD Operation)
Power Spec.	Input Power : 12V DC ~ 24V DC Consumption Power : 12 Watt Max
I/O	Input : 10P Dip Switch Output : 12V Output (3A Max) DVB-T IR (Remote Control) DVD IR (Remote Control)

CONNECTOR PIN ASSIGNMENT – LC200

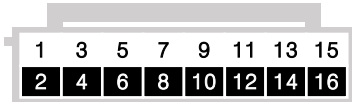
Power Cable
(POWER/CAN)



1	3	5	7	9	11	13	15
Red	Green	Purple	Blue		Purple	Purple	
ACC	REVERSE IN	TOUCH_SW	ST ADC2		PAD_CAN IN_H	T-BUS P	
2	4	6	8	10	12	14	16
Black			Orange		Brown	Brown	
GND		N.C	RELAY B/L		PAD_CAN IN_L	T-BUS M	

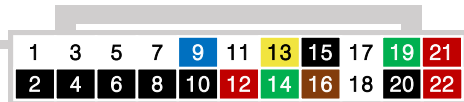


AV Cable
(AV IN)



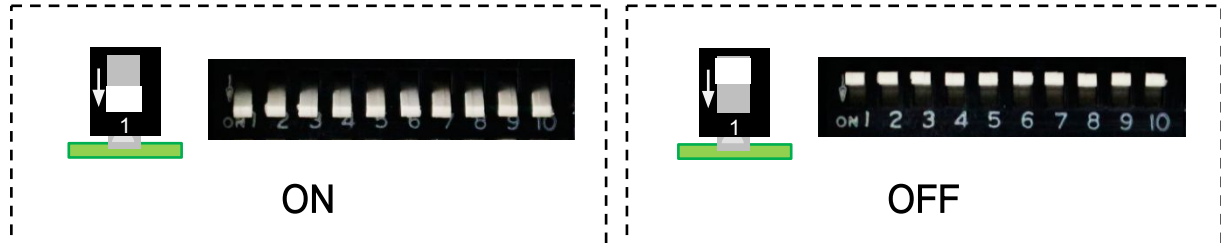
1	3	5	7	9	11	13	15
White	White	White	White	White	White	White	White
AV1_IN_V	AV1_IN_R	AV1_IN_L	AV2_IN_V	AV2_IN_R	AV2_IN_L	FRONT_IN	REAR_IN
2	4	6	8	10	12	14	16
Black	Black	Black	Black	Black	Black	Black	Black
GND	GND	GND	GND	GND	GND	GND	GND

Universal Cable
(AV IN/OUT)



1	3	5	7	9	11	13	15	17	19	21
White	White	White	White	Blue	White	Yellow	Black	White	Green	Brown
SPK_P	AUX_OUT_R	AUX_OUT_L	MIC_P	Capacitive Touch SCL	Capacitive Touch SDA	Capacitive Touch Interrupt	Resistive Touch X-	Resistive Touch Y-	Resistive Touch X+	Resistive Touch Y+
2	4	6	8	10	12	14	16	18	20	22
Black	Black	Black	Black	Black	Red	Green	Brown	White	Black	Red
SPN_N	GND	GND	MIC_N	GND	Capacitive Touch 3.3V	Capacitive Touch Reset	DVBT-IR	IR_IN	IR_GND	IR_POWER

DIP S/W INFORMATION – LC200



Pin No.	ON	OFF
1	Capacitive Touch	Resistive Touch, UART Touch
2	GOODIX Capacitive Touch	ILITEK Capacitive Touch
3	Android Resolution (ON)	

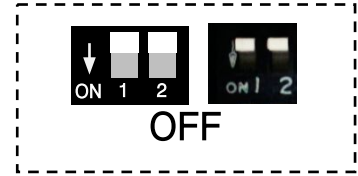
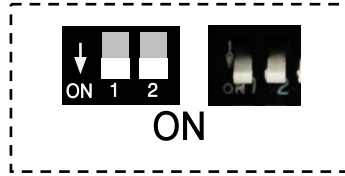
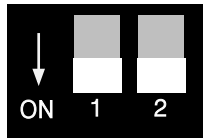
4	5	6	7	8	9	10	Car Model
Off	Off	Off	Off	Off	Off	Off	Lexus RX
Off	Off	Off	Off	On	Off	Off	Lexus RX200T
Off	Off	Off	On	Off	Off	Off	Lexus LX570 (2013 – 2015)
Off	Off	Off	Off	Off	On	Off	Lexus LX570 (2016 – 2018)
Off	Off	Off	On	Off	On	Off	Lexus ES350
Off	Off	Off	Off	On	On	Off	TOYOTA LC200

RX200T = RX model small monitor

LC200 = TOYOTA LAND CRUISER 200

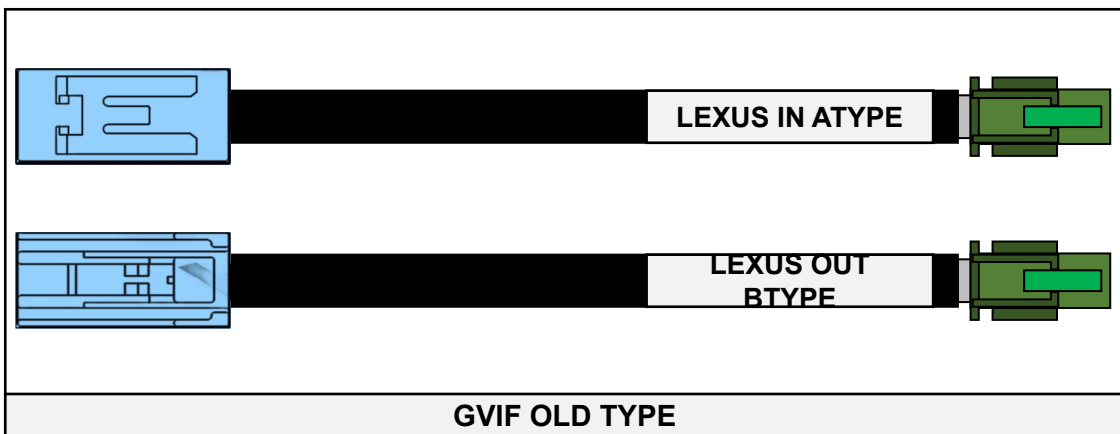
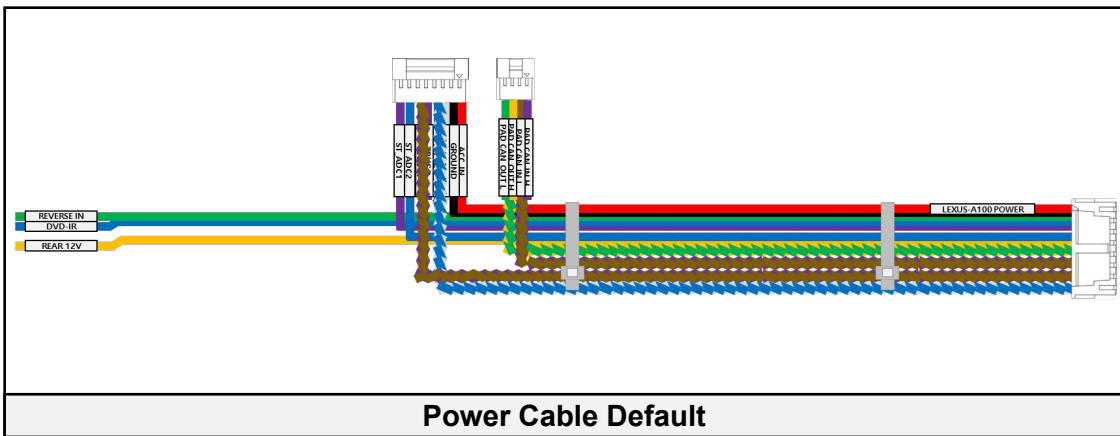
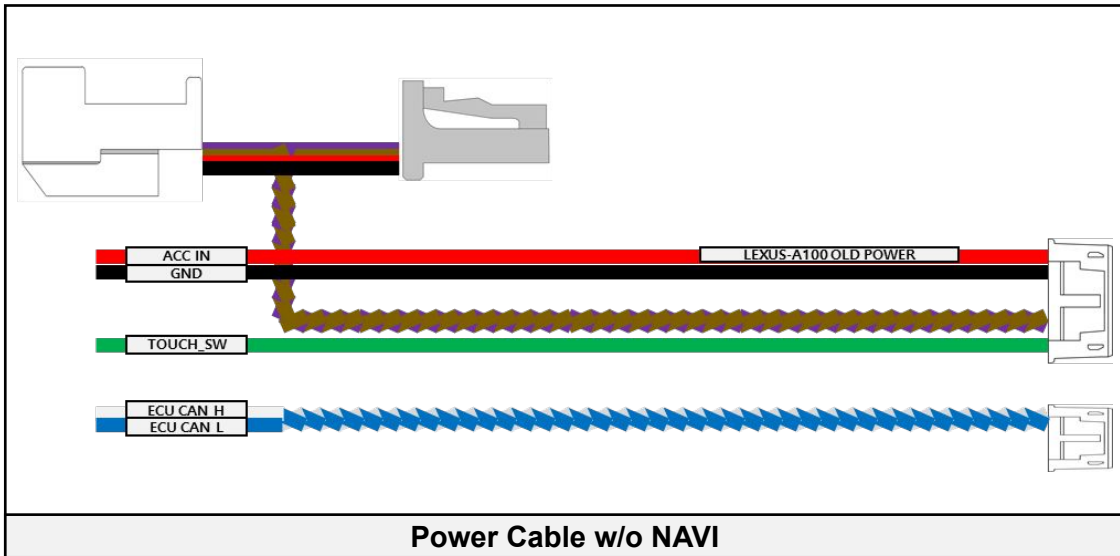
TOUCH IN/OUT BOARD IS OPTIONAL PART

DIP S/W INFORMATION

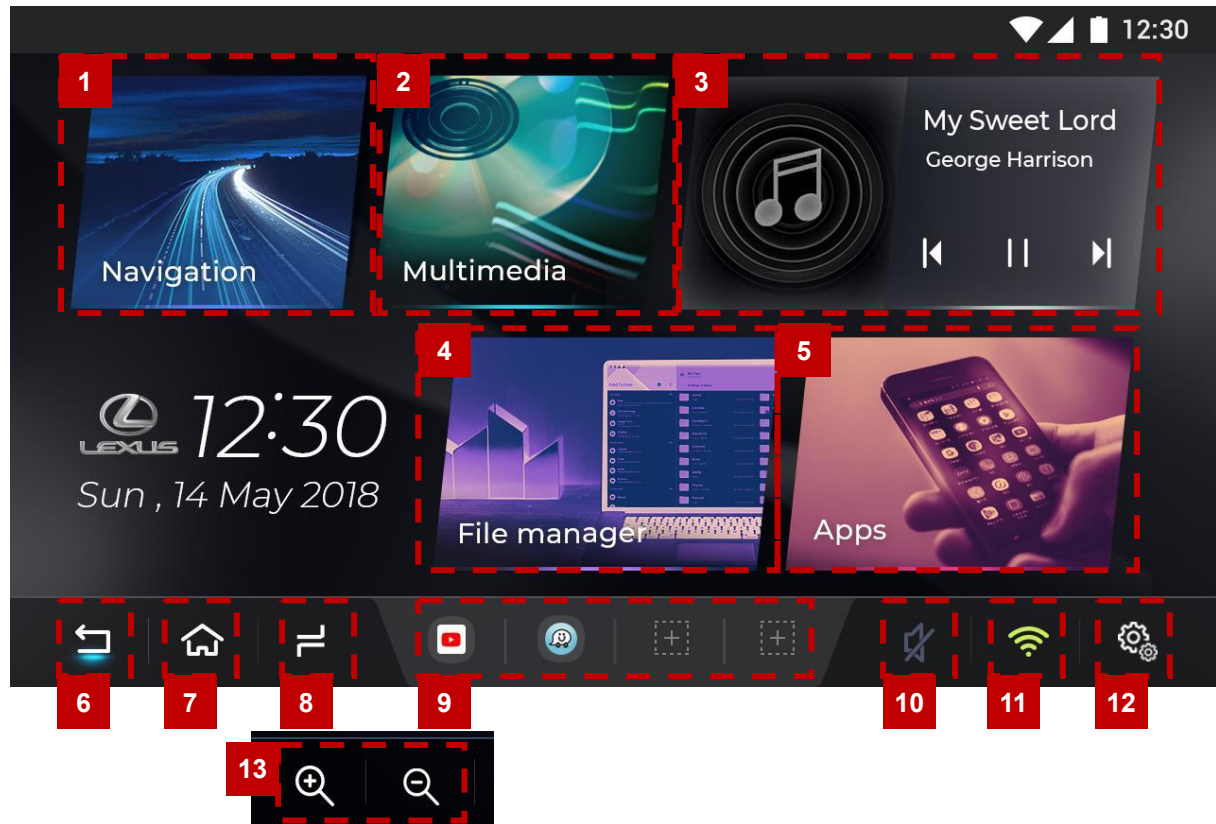


Pin No.	On	Off
1	N.C.	N.C.
2	Use External GPS Antenna (DIP S/W 2 Must ON)	Use Car GPS Cable (Option)

POWER CABLE INFORMATION - LC200

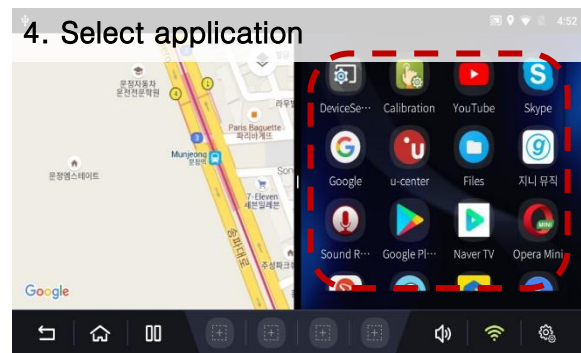
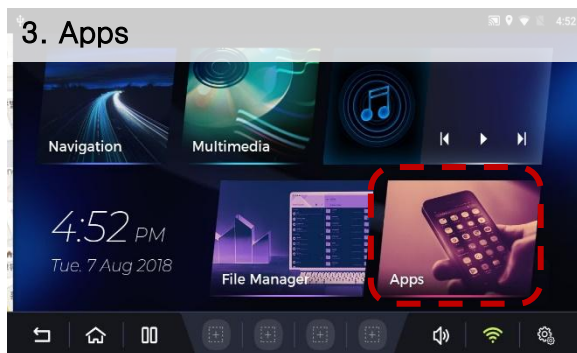
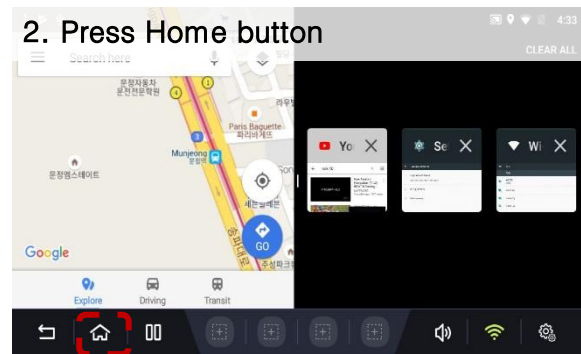
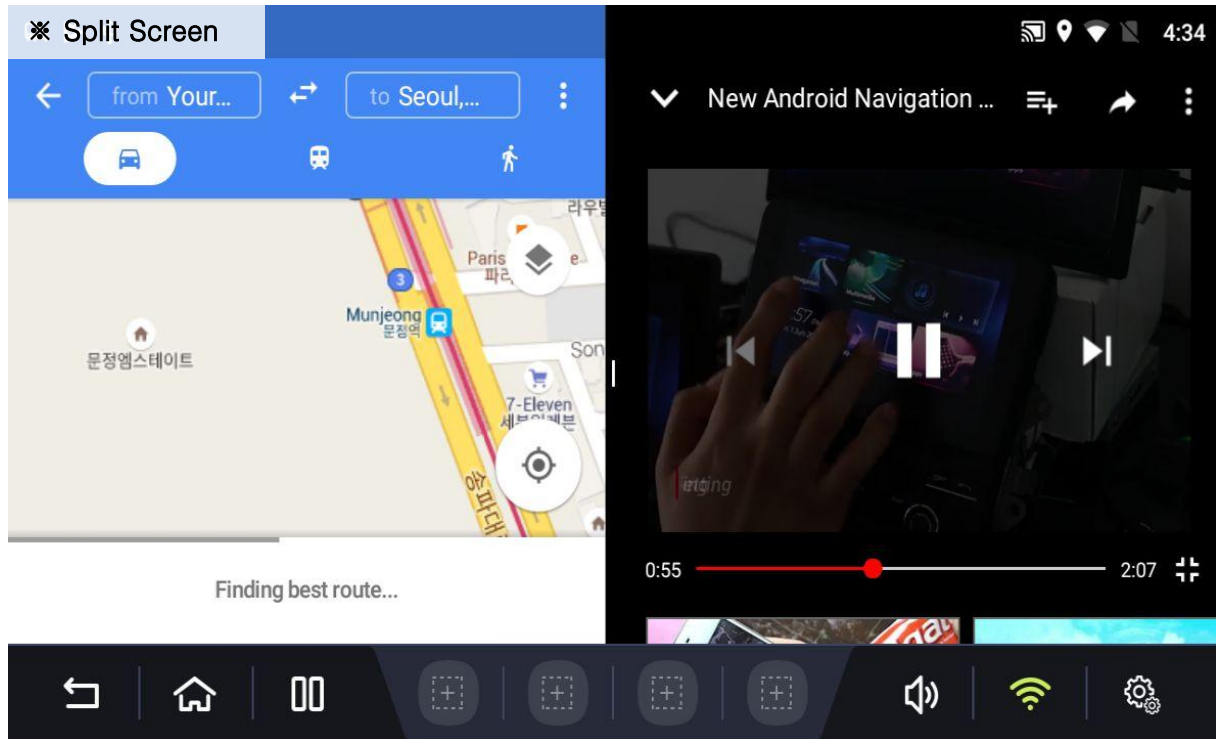


SCREEN VIEW



1	NAVIGATION	Quick icon for Navigation Application
2	Multimedia	Quick icon for Multimedia Application
3	Music Player	Music player Widget
4	File Manager	Quick icon for File Manager Application
5	APPS	Application List
6	Back Button	Return
7	Home Button	Home
8	Multitasking	1. Multitasking 2. PIP Mode by Long Press
9	APP Shortcut	Quick icon
10	Sound	Volume control
11	WiFi	Open Wifi setting screen
12	Settings	Open Android Settings
13	Zoom Tool	Screen Zoom in / out * This icon will show when car monitor have "Resistive Touch",

SCREEN VIEW – Split Screen Mode



※ Some apps are not work on Split Screen Mode

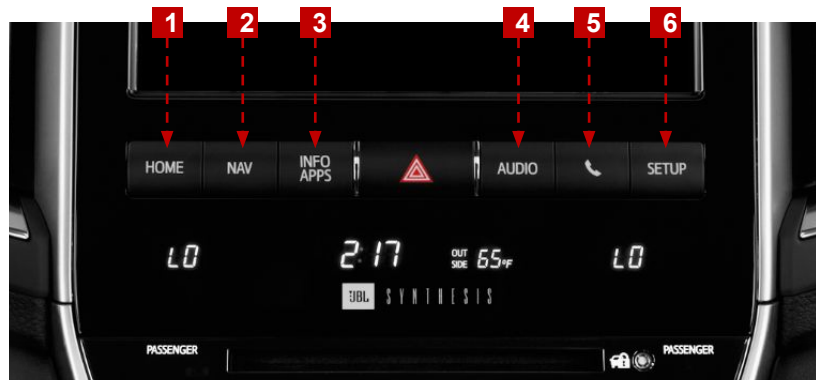
OEM BUTTON USAGE

LX570 (2016 - 2018))



No.	Button	Press	Mode	Function
1	MAP	Short Press	ROiK	to Oem screen
		Long Press (2sec)	OEM	to ROiK screen
2	BACK	Short Press	ROiK	Back key for Android
3	MENU	Short Press	ROiK	to Oem screen
4	▲(UP)	Short Press	ROiK	Seek up down
5	▼(DOWN)	Short Press		
6	JOG	Short Press	ROiK	Mouse

LC200



No.	Button	Press	Mode	Function
1	HOME	Short Press	ROiK	to Oem screen
2	NAV	Short Press	ROiK	to Oem screen
		Long Press (2sec)	OEM	to ROiK screen
3	INFO	Short Press	ROiK	to Oem screen
4	AUDIO	Short Press	ROiK	
5	PHONE	Short Press		
6	SET UP	Short Press	ROiK	

OEM BUTTON USAGE

RX200T



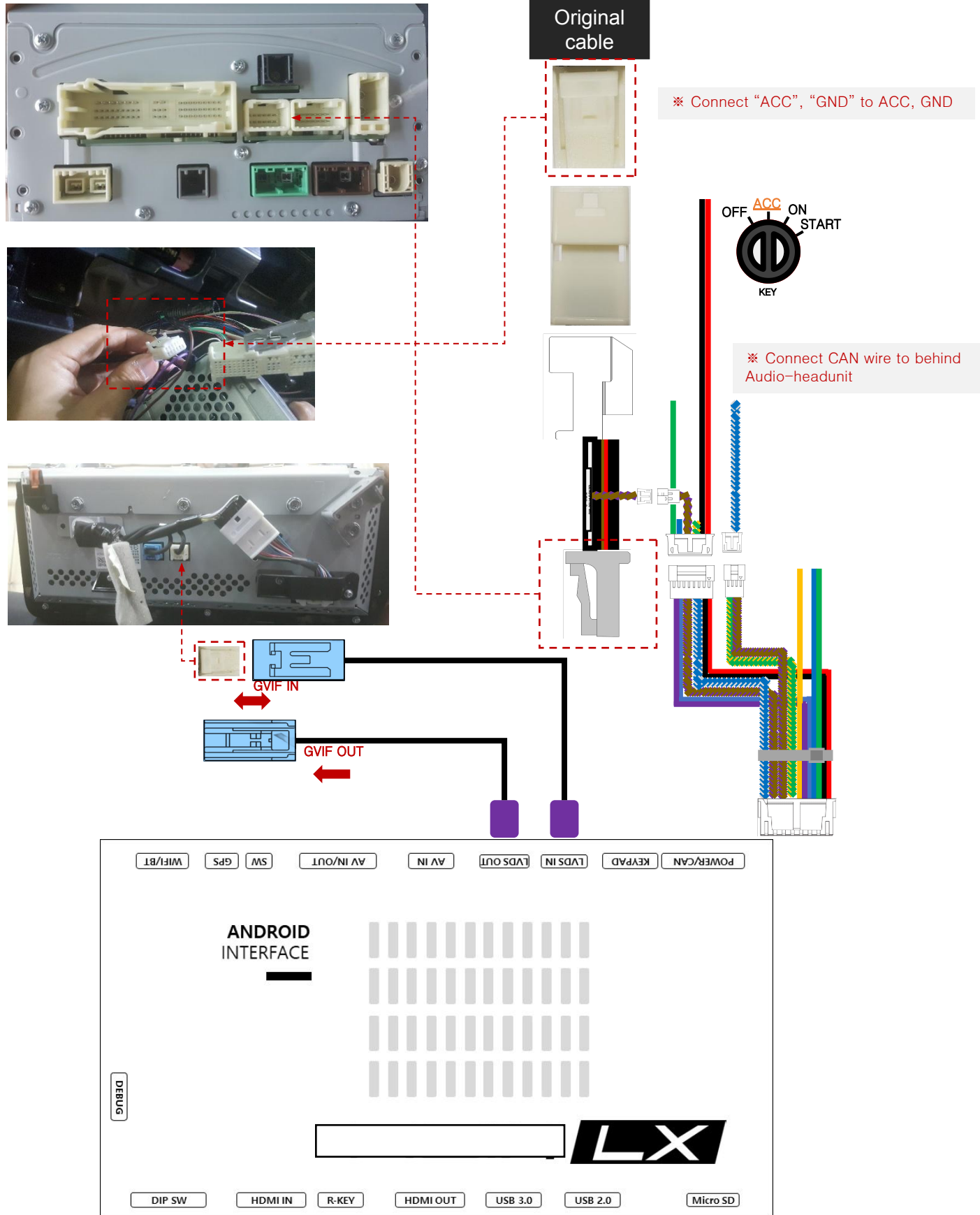
No.	Button	Press	Mode	Function
1	AUDIO	Short Press	ROiK	to Oem screen
2	MENU	Short Press	ROiK	to Oem screen
3	BACK	Long Press (2sec)	OEM	to ROiK screen
4	DIAL	Short Press	ROiK	Mouse

LX570 (2013 - 2015)

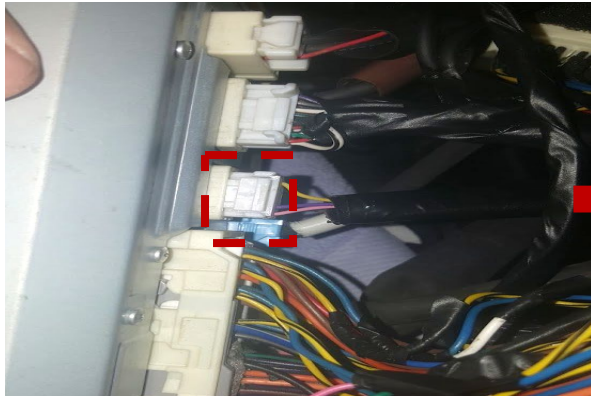


No.	Button	Press	Mode	Function
1	HOME	Short Press	ROiK	to Oem screen
2	AUDIO	Short Press	ROiK	to Oem screen
3	HOME	Short Press	ROiK	to Oem screen
4	NAV	Short Press	ROiK	to Oem screen
		Long Press (2sec)	OEM	to ROiK screen
		Long Press (2sec)	HDMI	to ROiK screen
5	INFO	Short Press	ROiK	to Oem screen
6	PHONE	Short Press	ROiK	to Oem screen
7	SETUP	Short Press	ROiK	to Oem screen

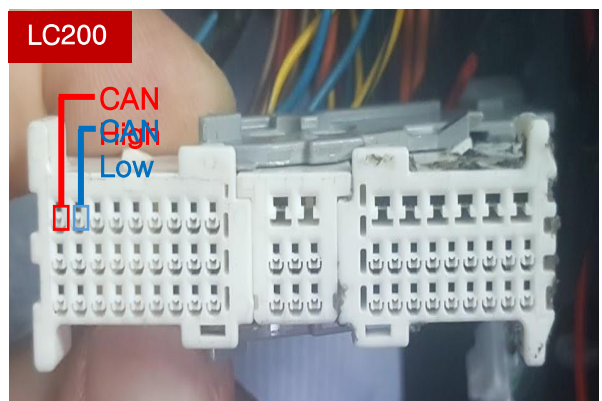
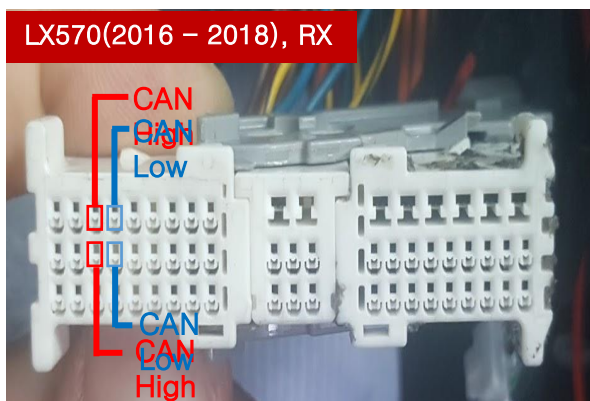
CONNECT CAN/POWER DIAGRAM



CONNECT CAN/POWER CONNECTOR

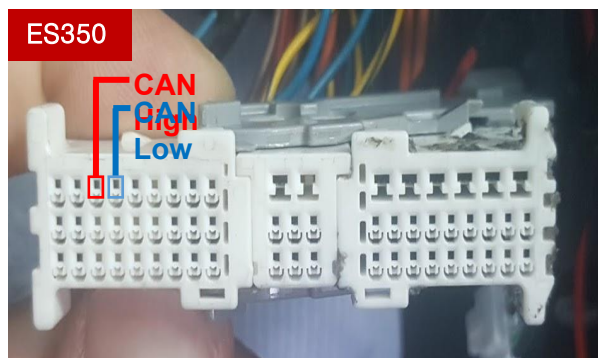


- Remove original connector.
- Connect supplied connector to audio and original connector.



※ Depending on the type of vehicle, the position of "can" may be different.

- Connect "CAN High/Low" to the original connector from supplied connector

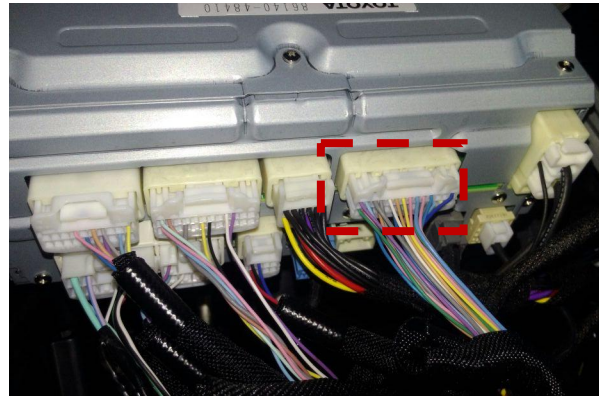
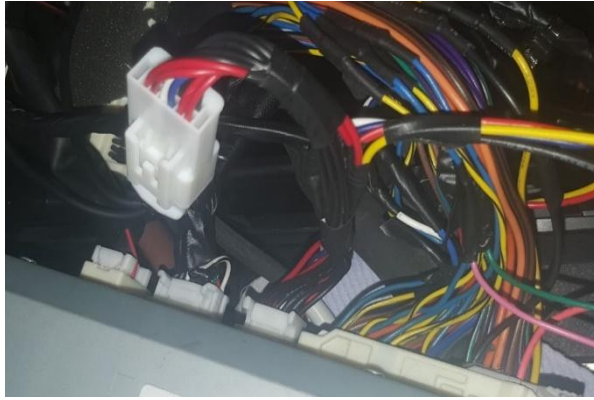


1	3	5	7	9	11	13	15
2	4	6	8	10	12	14	16

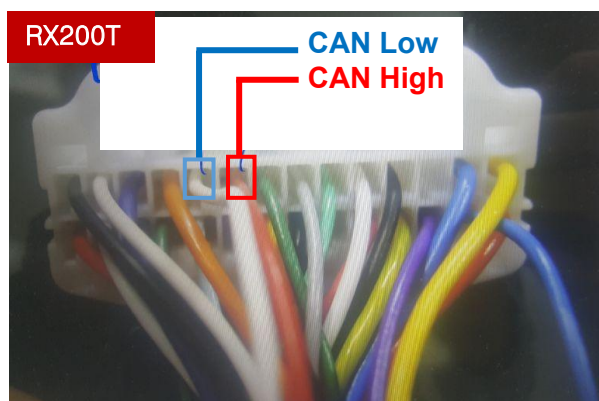
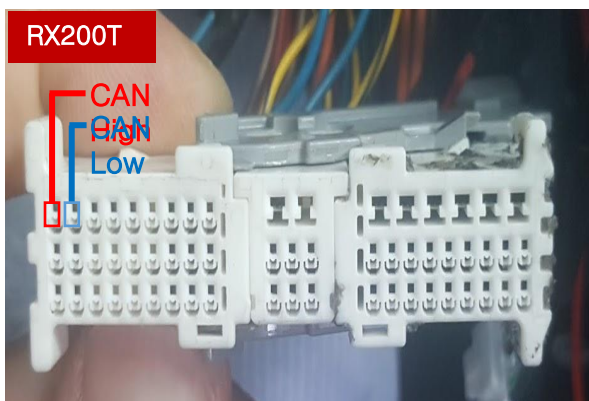
※ Please connect power of interface to ACC.
 ※ If connect to BAT. There is case of that Rear camera would be not working.

- Connect supplied connector to connector on HeadUnit
- Connect "CAN High/Low" to the original connector from supplied connector

CONNECT CAN/POWER CONNECTOR

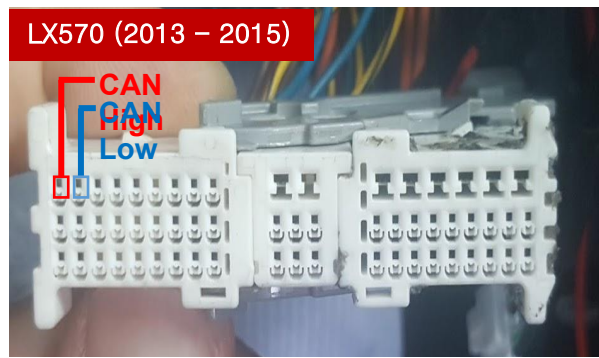
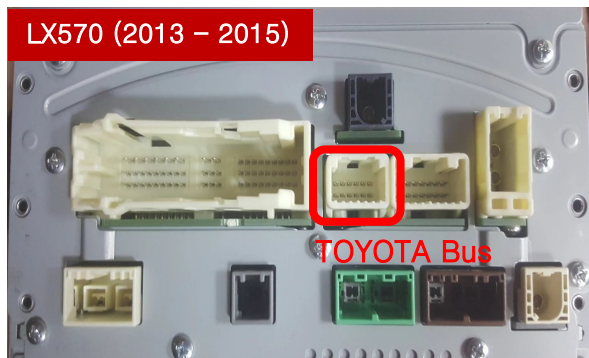


- Remove original connector.
- Connect supplied connector to audio and original connector.



※ Depending on the type of vehicle, the position of "can" may be different.

- Connect 'CAN High/Low" to the original connector from supplied connector

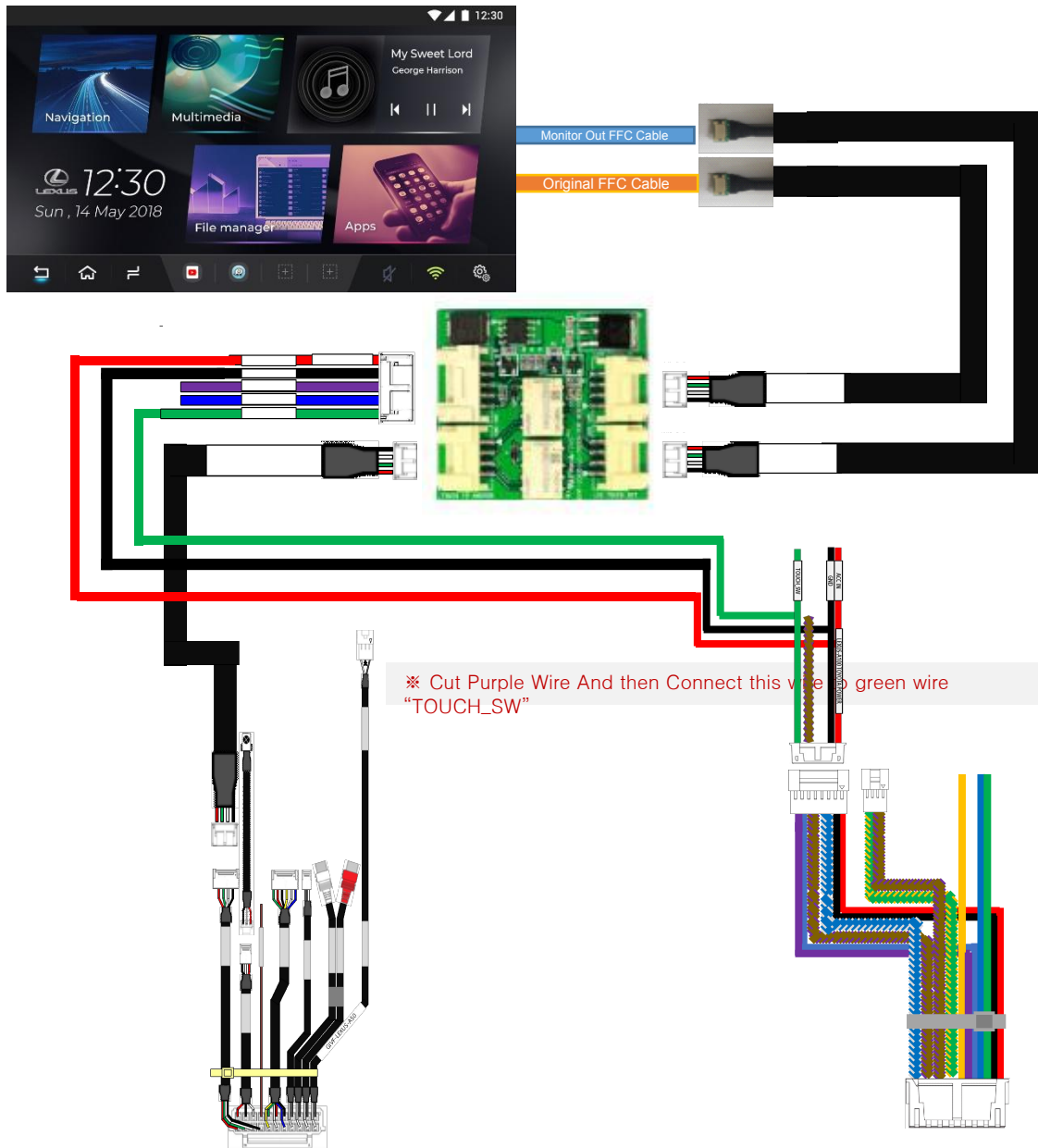


※ Please connect power of interface to ACC.

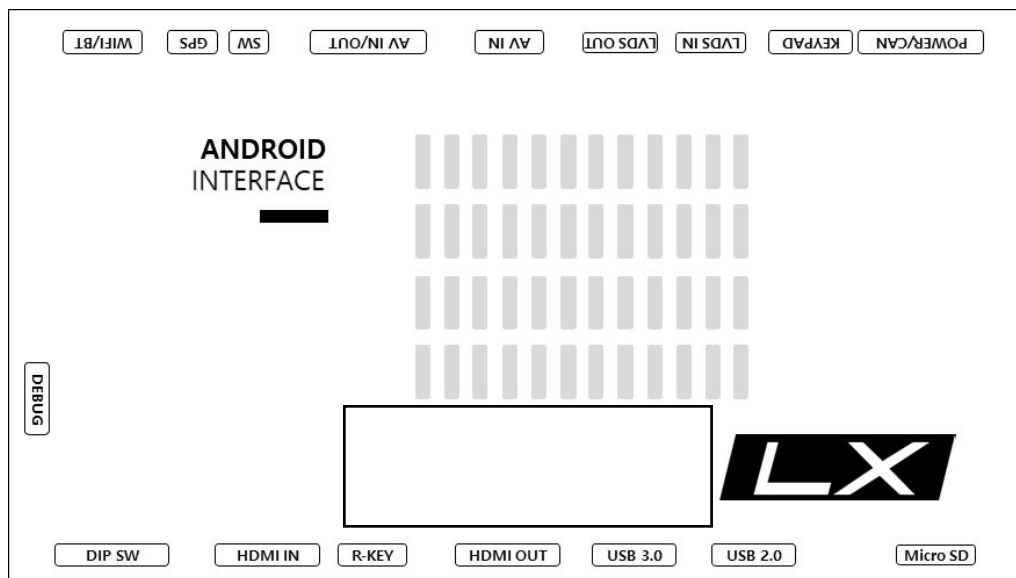
※ If connect to BAT. There is case of that Rear camera would be not working.

- Connect supplied connector to connector on HeadUnit
- Connect 'CAN High/Low" to the original connector from supplied connector

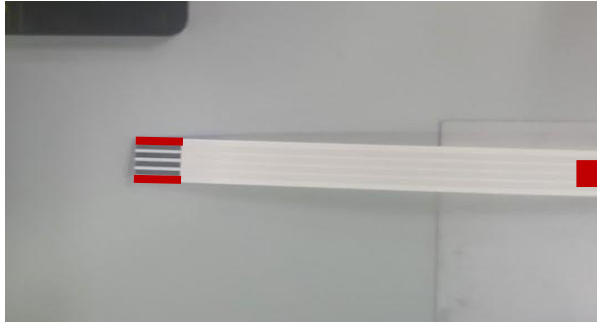
TOUCH CABLE DIAGRAM – LC200 / LX570



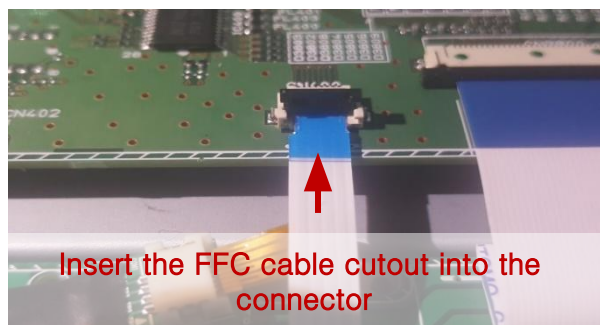
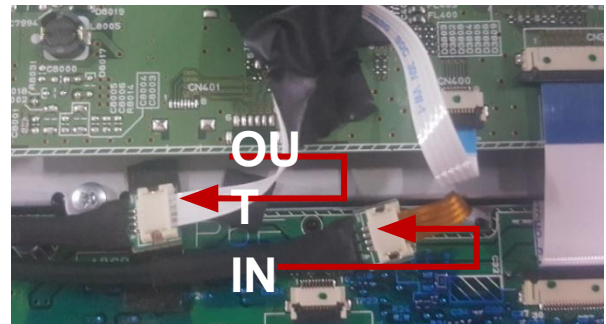
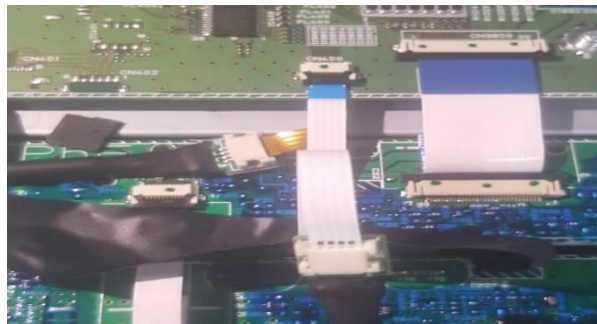
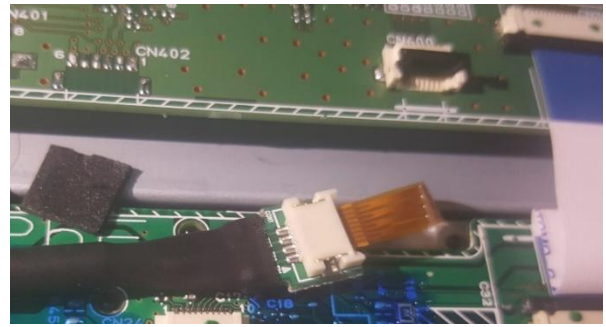
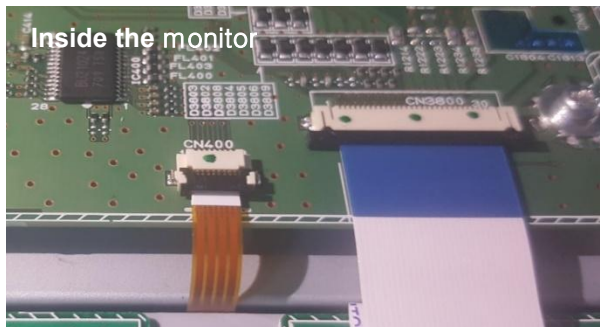
* Cut Purple Wire And then Connect this wire green wire
"TOUCH_SW"



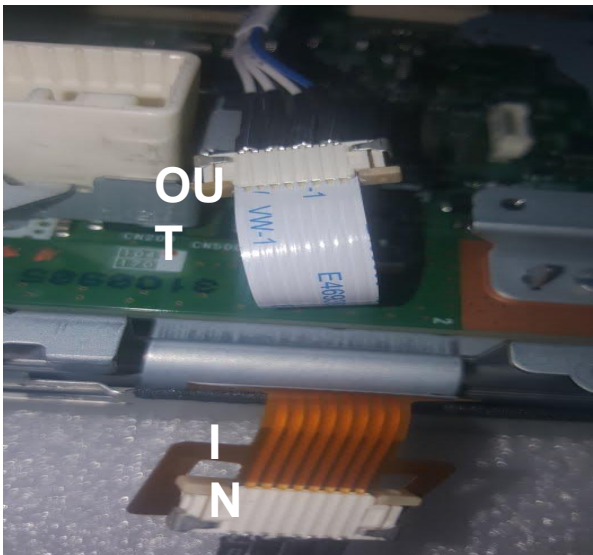
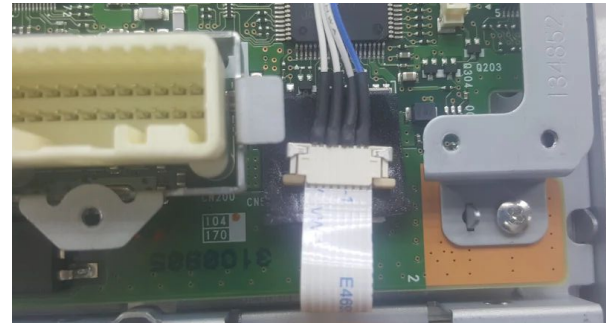
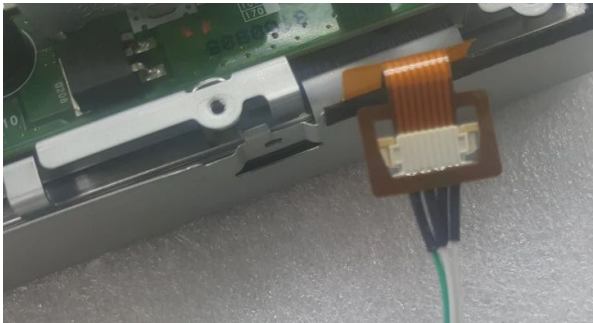
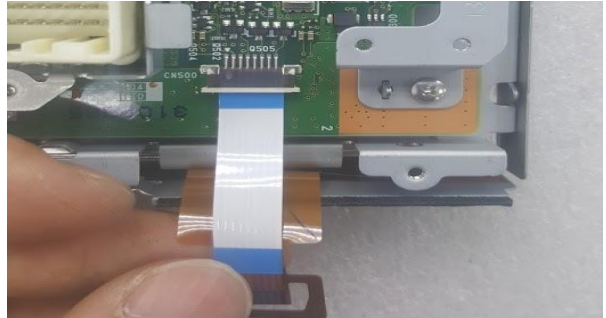
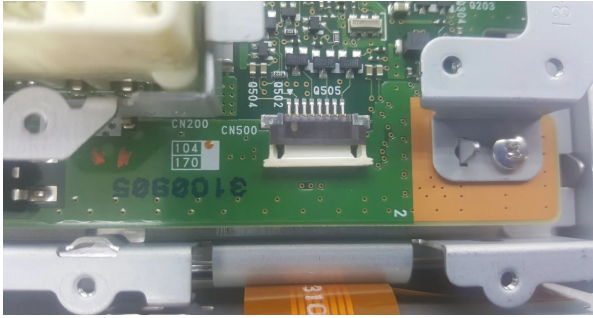
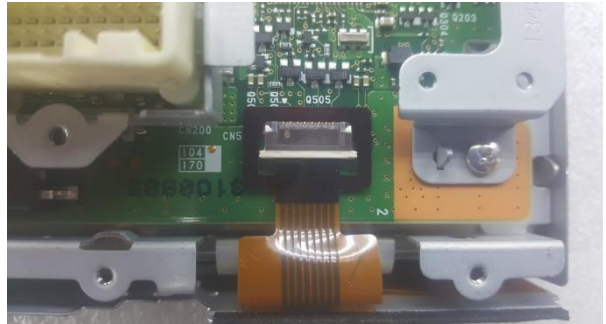
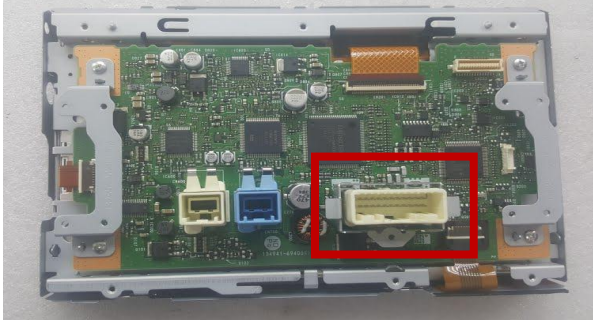
MONITOR FFC SETTING – LC200



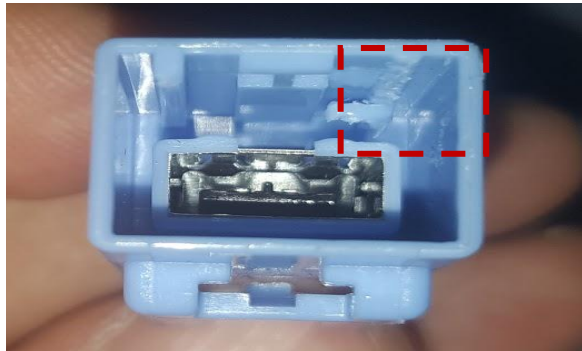
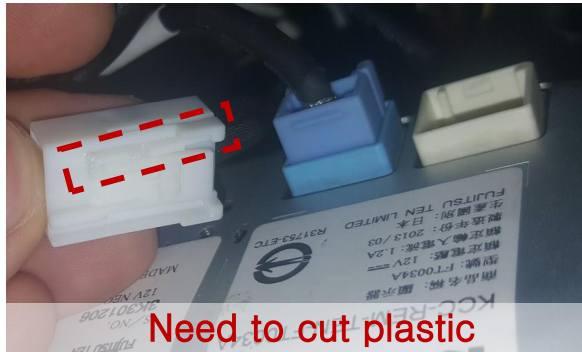
Cut off the supplied FFC cable



MONITOR FFC SETTING - LX570



CONNECT LVDS IN/OUT

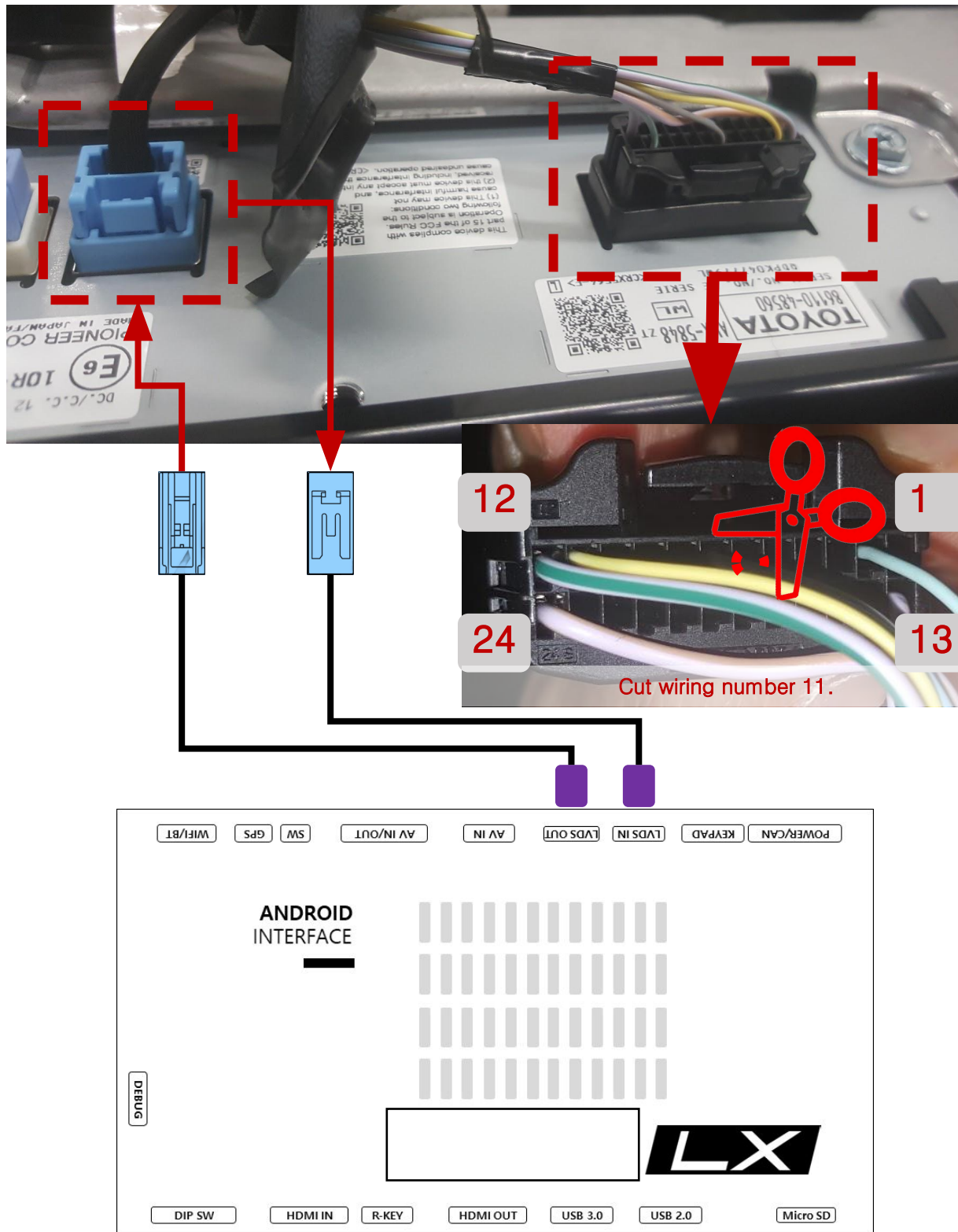


- Remove white connector on behind of monitor.
- Cut plastic of white connector and supplied connector
- Connect white connector to supplied connector and supplied connector to behind of monitor.

Car Model	GVIF IN/OUT Connector Color Behind Monitor
Lexus RX	White
Lexus LX570 (2013 – 2015)	Blue
Lexus LX570 (2016 – 2018)	White
Lexus RX200T	Blue
Lexus ES350	Blue
Toyota LC200	White

※ Different In/Out GVIF according to Car Model

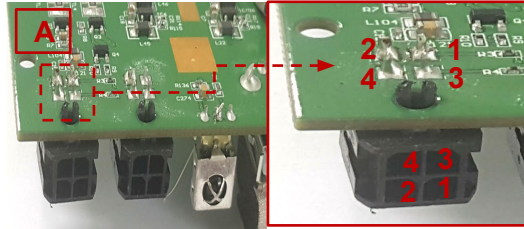
CONNECT LVDS IN/OUT



※ RX200T

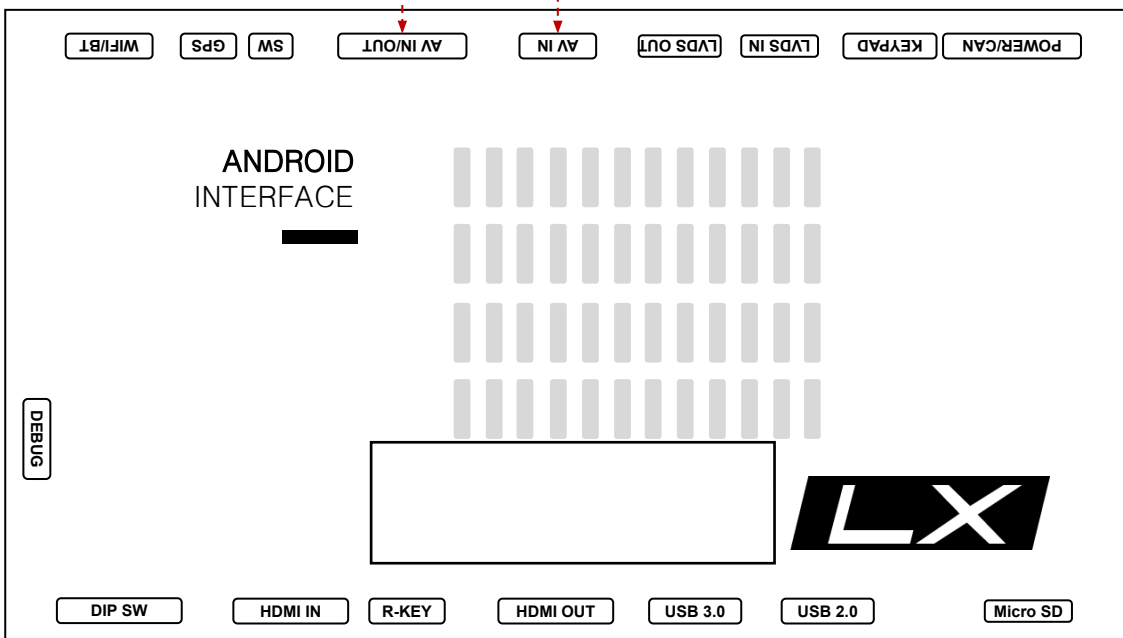
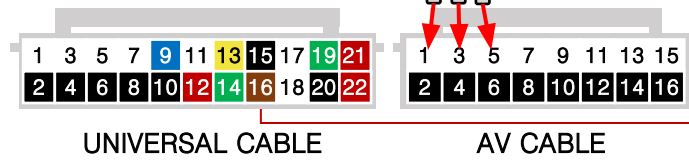
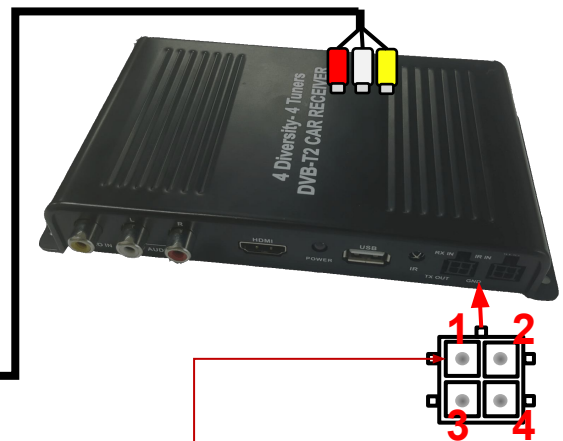
- Remove blue connector on behind of monitor.
- Cut plastic of blue connector and supplied connector
- Connect blue connector to supplied connector and supplied connector to behind of monitor.

DVB-T CONNECTION DIAGRAM FOR AV INPUT



1	IR - DVB-T
2	DO NOT USE.
3	DO NOT USE.
4	DO NOT USE.

Open the cover of DVB-T.
Connect 'DVB-T-IR' provided to 'A' on picture



DVB-T CONNECTION DIAGRAM FOR ASUKA



SETTINGS ROiK-LX

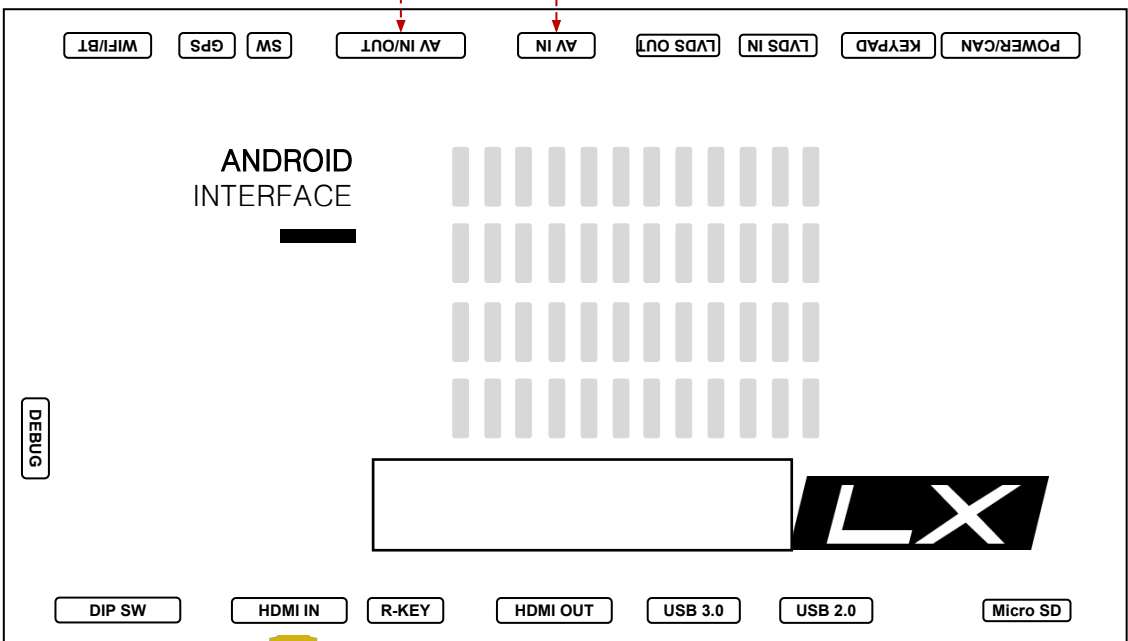
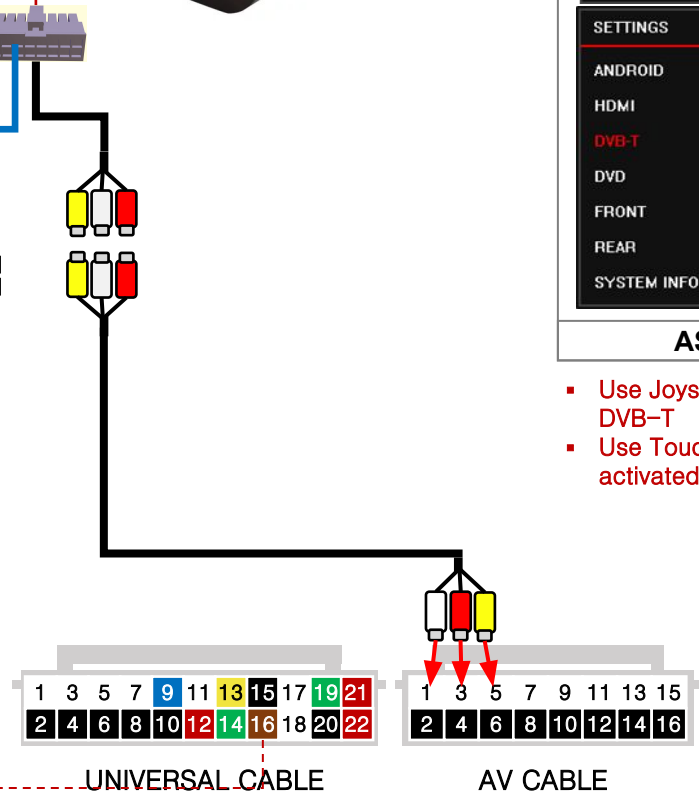
ANDROID	ON / OFF	<input type="checkbox"/> NORMAL
HDMI	IMAGE DISPLAY	<input checked="" type="checkbox"/> ASUKA DVB-T
DVB-T	SOURCE	
DVD		
FRONT		
REAR		
SYSTEM INFO		

SETTINGS ROiK-LX

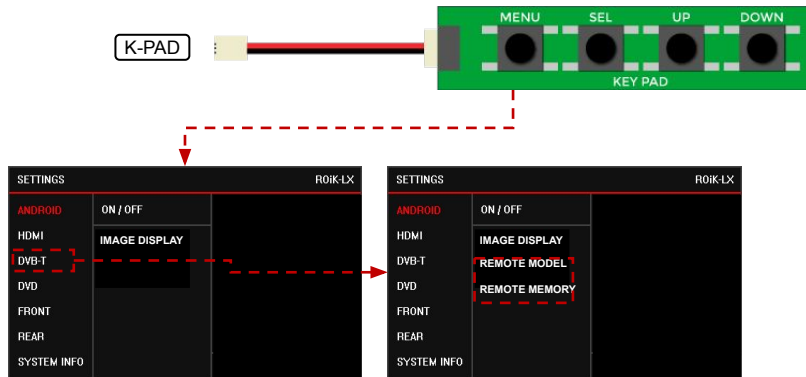
ANDROID	ON / OFF	<input type="checkbox"/> Gex909
HDMI	IMAGE DISPLAY	<input type="checkbox"/> ANT019
DVB-T	REMOTE MODEL	<input type="checkbox"/> HFT2A
DVD	REMOTE MEMORY	<input type="checkbox"/> DhaS690
FRONT		<input type="checkbox"/> Dvh570
REAR		<input checked="" type="checkbox"/> ASUKA
SYSTEM INFO		

ASUKA DVB-T in SETTINGS

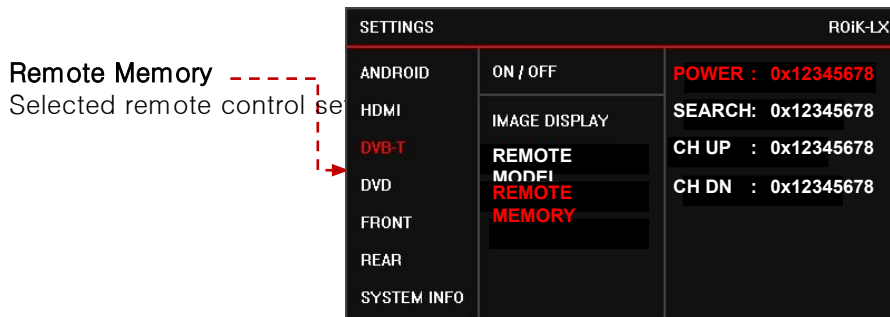
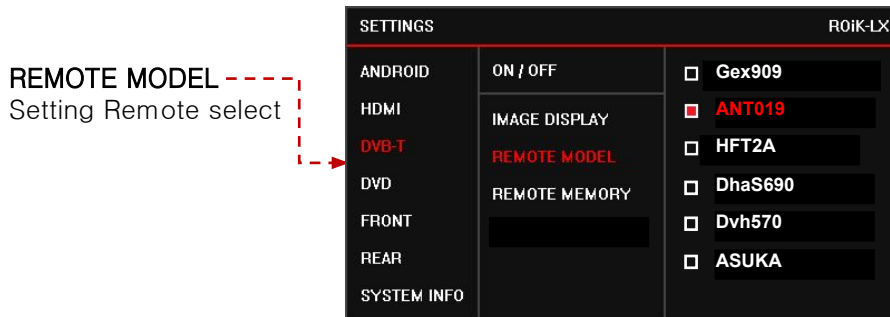
- Use Joystick of Car as mouse for controlling DVB-T
- Use Touch panel for controlling DVB-T Touch be activated in 20 sec after turn on ACC.



ADD REMOTE CONTROLLER





Enter the setting menu. And DVB-T select.



TOUCH PAD GESTURE -RX



 **Click**
Push Joystick and release

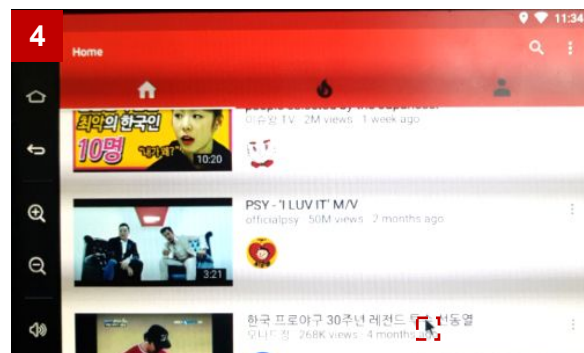
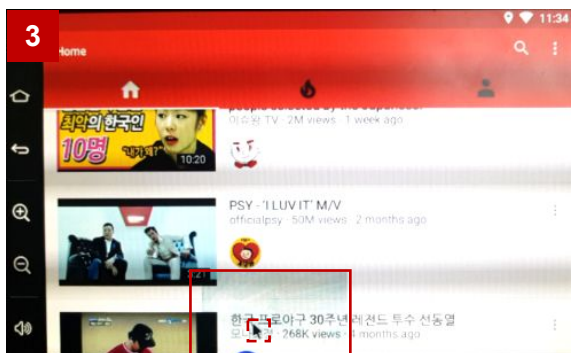
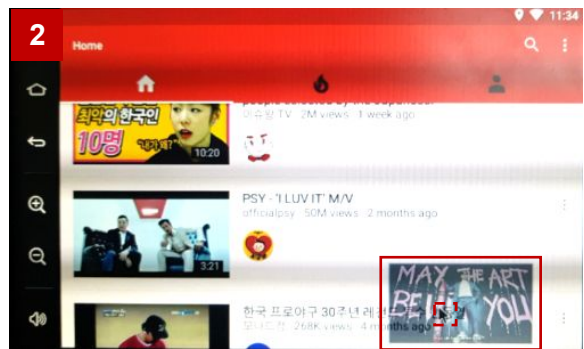
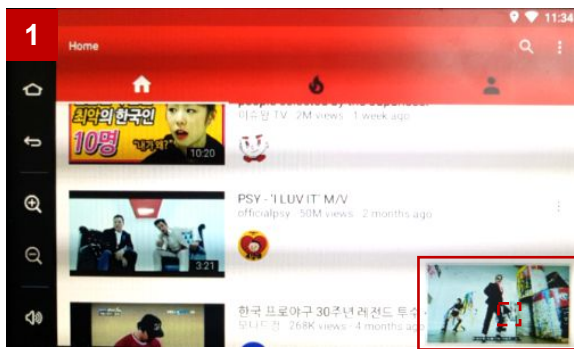
 **Scroll**
Push Joystick and move Joystick to scroll.

YouTube



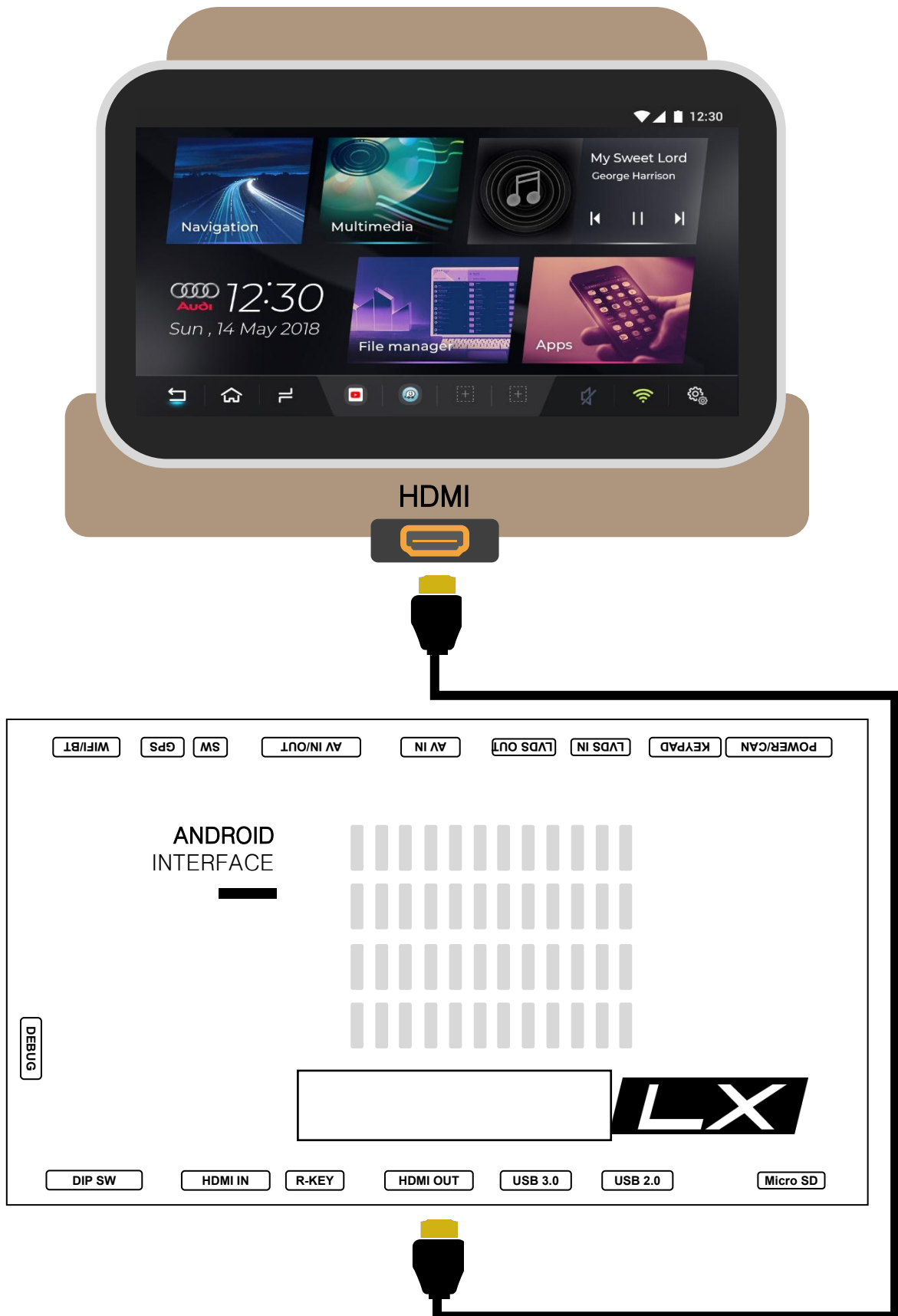
Apply YouTube gesture

By watching video on YouTube, press the Touch pad and Slide Touch Pad to close Video.

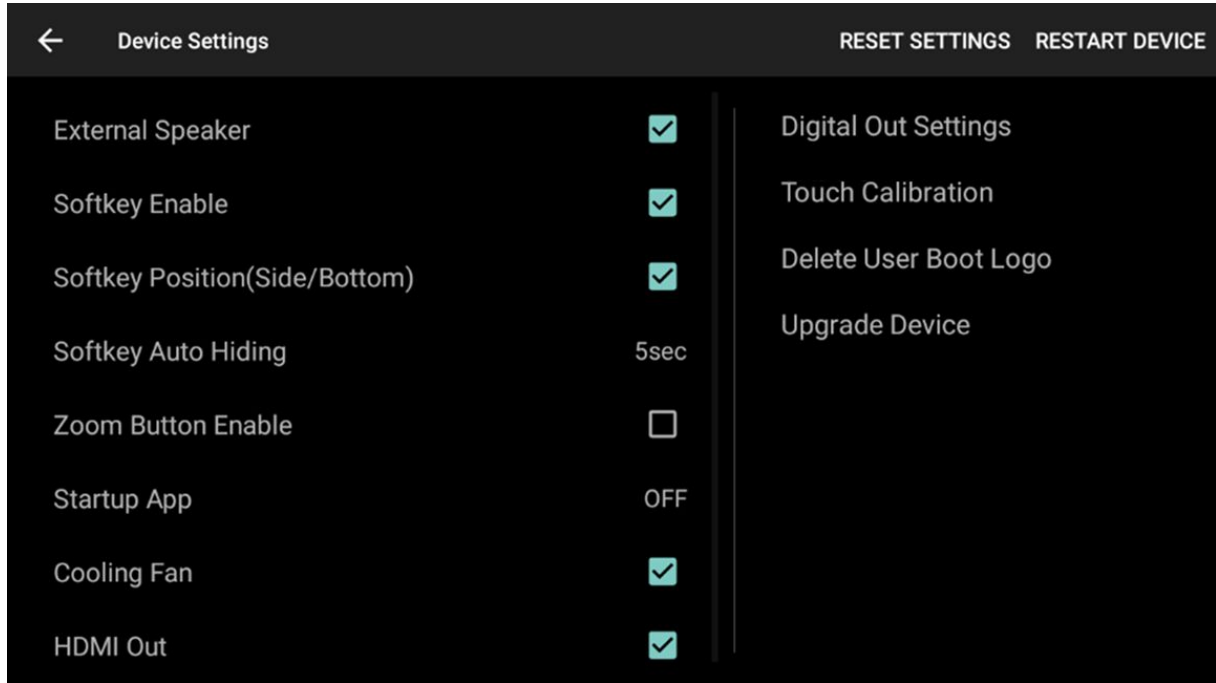


HEADREST MONITOR

※ Headrest Monitor (HDMI Out)



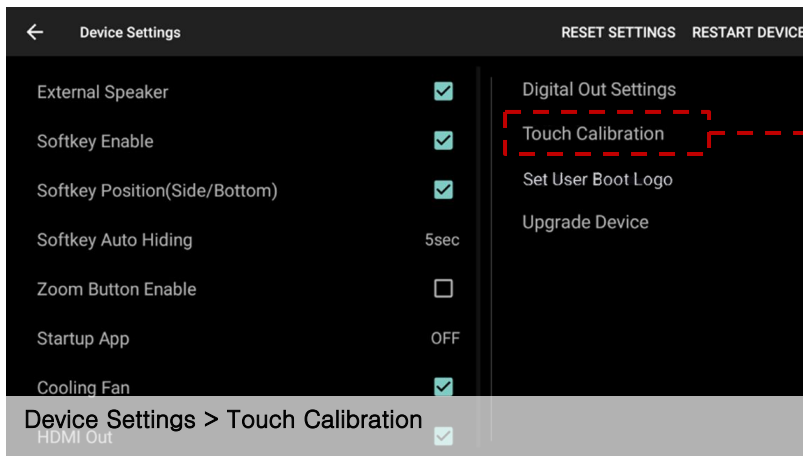
DEVICE SETTINGS



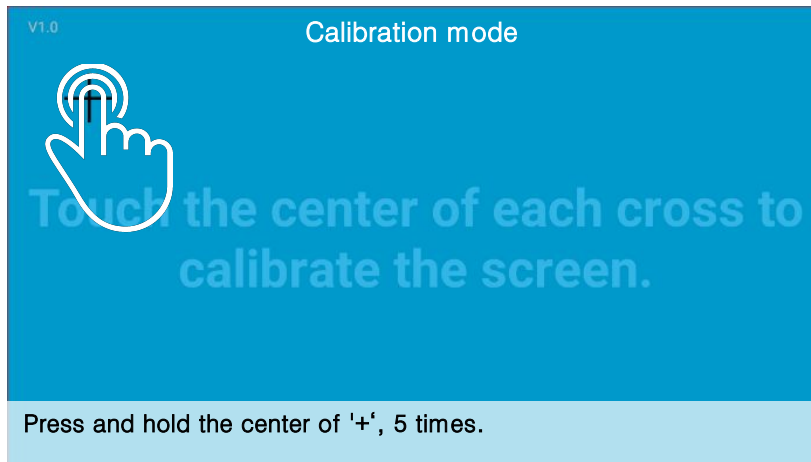
No.	Button	Function
1	RESET SETTINGS	Reset settings to default
2	RESTART DEVICE	System Reboot
3	External Speaker	Turn on/off external speaker
4	Softkey Enable	Use soft key or disable (Floating button when disabled)
5	Softkey Position	Soft key position setting (side, bottom)
6	Softkey Auto Hiding	Set softkey auto-hide time
7	Zoom Button Enable	Enable or Disable the Zoom Button on the Soft Key
8	Startup App	Select Startup APP
9	Cooling Fan	Turn on / off Cooling Fan
10	HDMI OUT	Turn on / off HDMI Out
11	Digital Out Settings	(Developer menu) DIGITAL LVDS only, Screen Settings – Position, Brightness, Contrast, Sharpness
12	Touch Calibration	Touch Calibration (for UART Touch)
13	Set User Boot Logo	File Format : PNG, JPG, BMP Image Size : 1280 X 720 pixel
14	Upgrade Device	(Hidden menu) Firmware update is available.

DEVICE SETTINGS – CALIBRATION (Capacitive, Resistive)

※ Capacitive touch panel no need set calibration



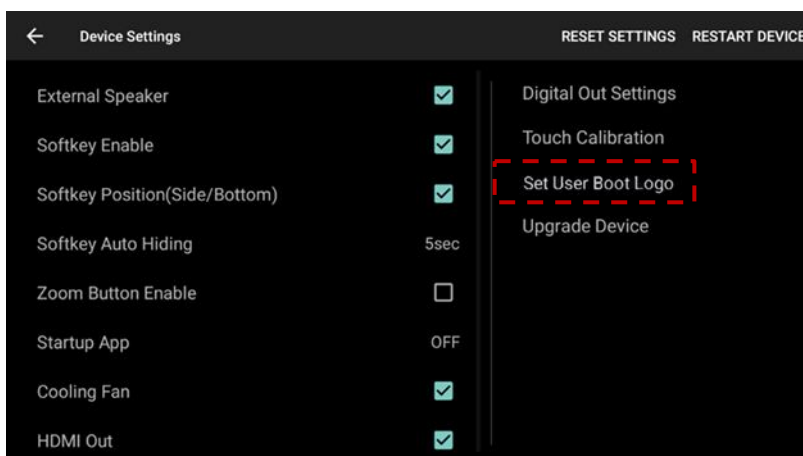
※ Press “Recovery Key” for 2 sec to set calibration



DEVICE SETTINGS – USER LOGO UPDATE

Set User Boot Logo Activate

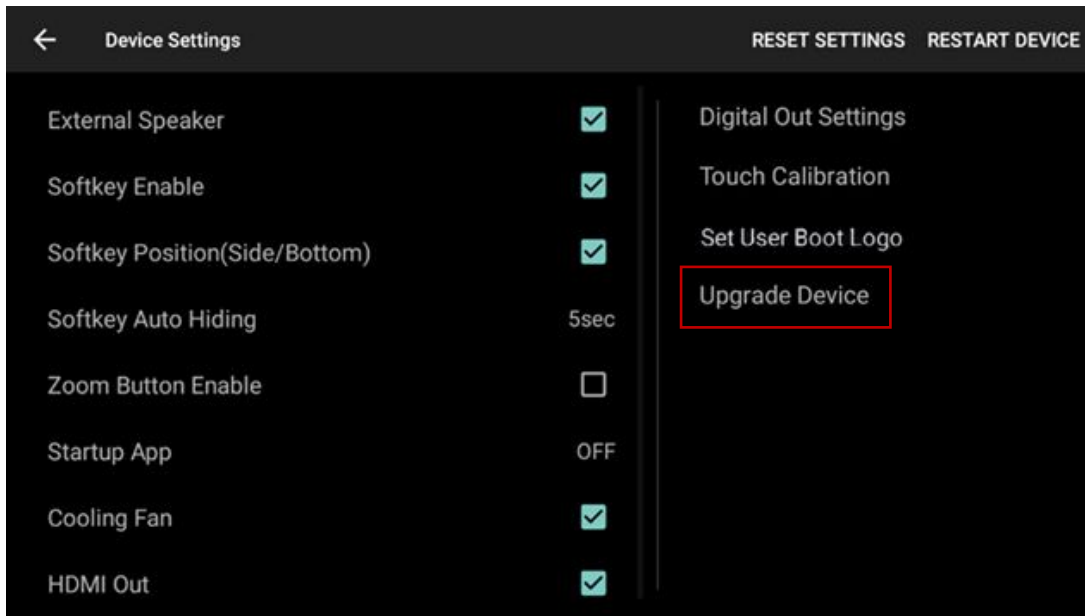
1. Device Setting
2. Click 'Set Use Boot Logo' and select boot logo image.



※ File Format : PNG, JPG, BMP
※ Image Size : 1280px X 720px

FIRMWARE UPGRADE

A Recommended

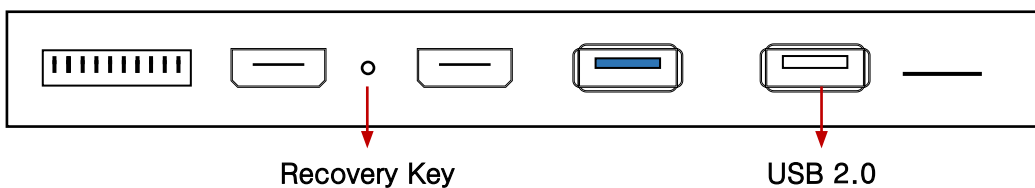


Copy 'system_roik10' folder to USB Memory root and insert to USB1 Port.

Select Upgrade Menu, it will start upgrade

- ※ '/usb disk/system_roik10' Folder have 'update.img' file
- ※ If there is no update file, "Upgrade Device" menu is not show
- ※ After firmware update, be sure to perform factory reset to apply the firmware.
- ※ Update Time will 3~4 min, after first time booting take 3~4 min.
- ※ USB format type = FAT32 / use on USB1 Port only.

B



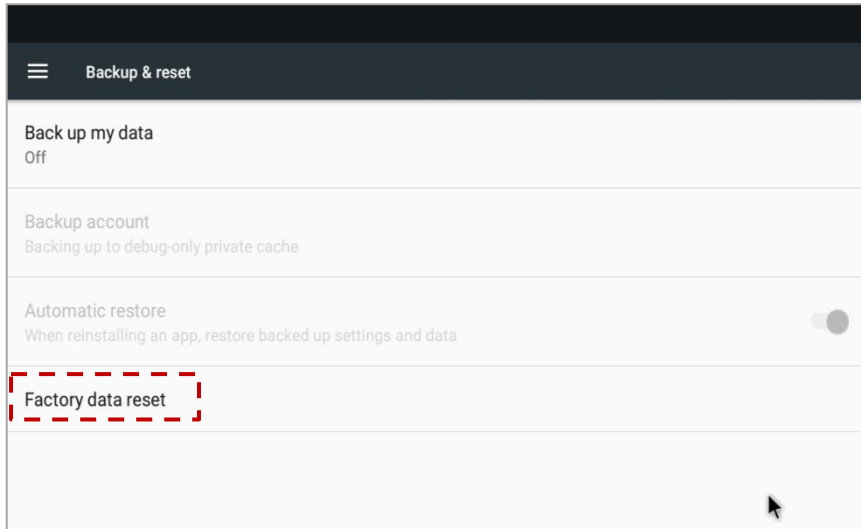
Copy 'system_roik10' folder to USB Memory root and insert to USB1.

Push hold "R-Key" and turn on (re-connect power cable), it will start upgrade

- ※ '/usb disk/system_roik10' Folder have 'update.img' file
- ※ After firmware update, be sure to perform factory reset to apply the firmware.
- ※ Update Time will 3~4 min, after first time booting take 3~4 min.
- ※ USB format type = FAT32 / use on USB1 Port only.

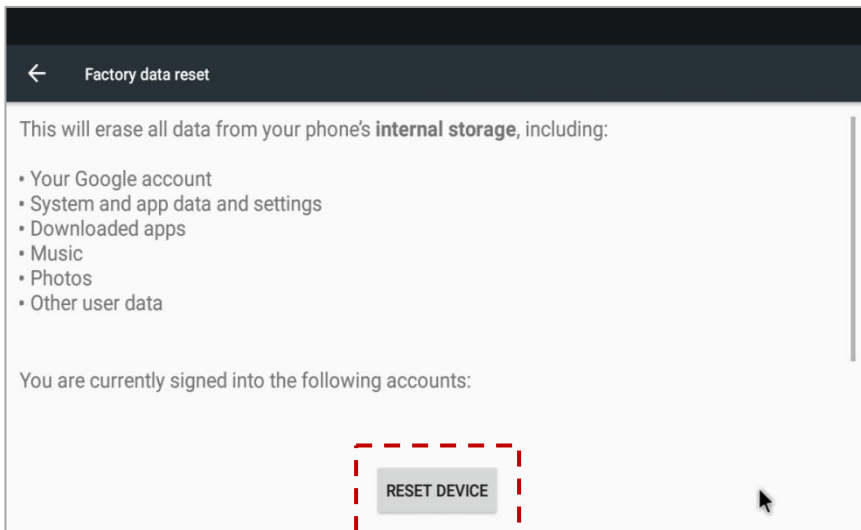
FACTORY RESET

A Recommended



01. Setting

- ▶ Backup & Reset
- ▶ Factory data Reset

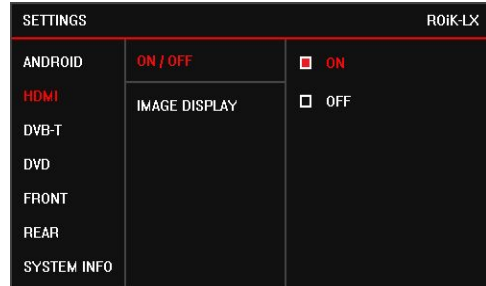
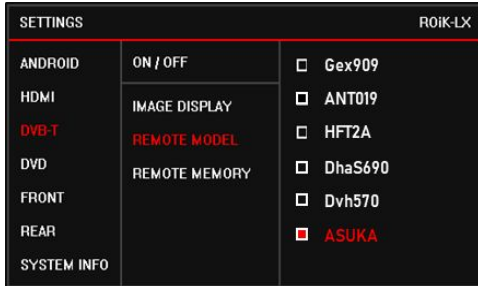
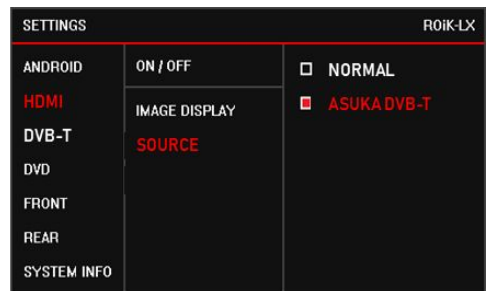
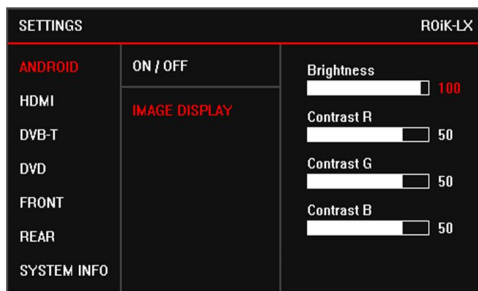
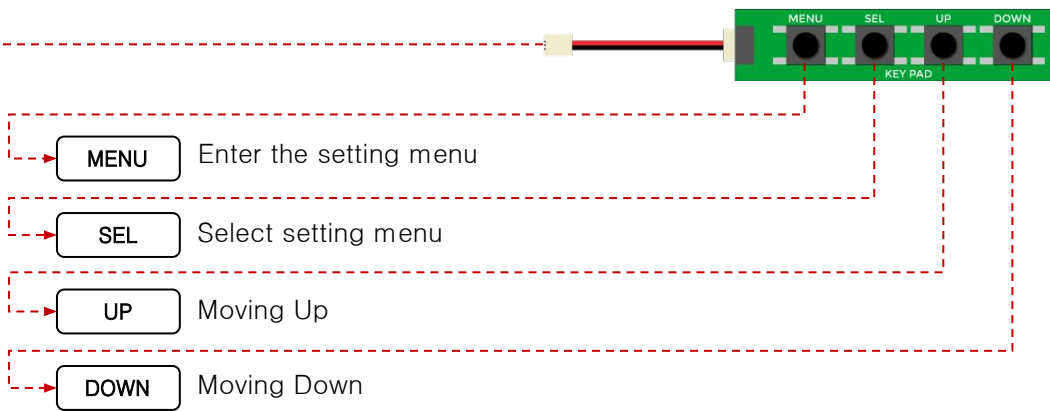
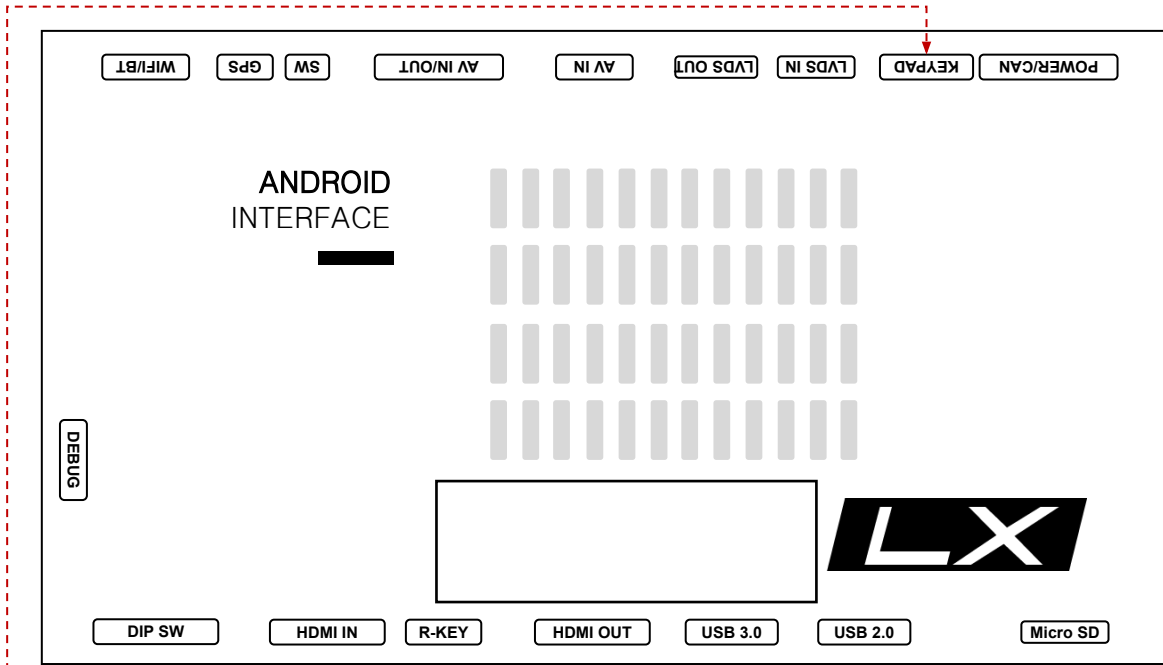


02. Select "RESET DEVICE"

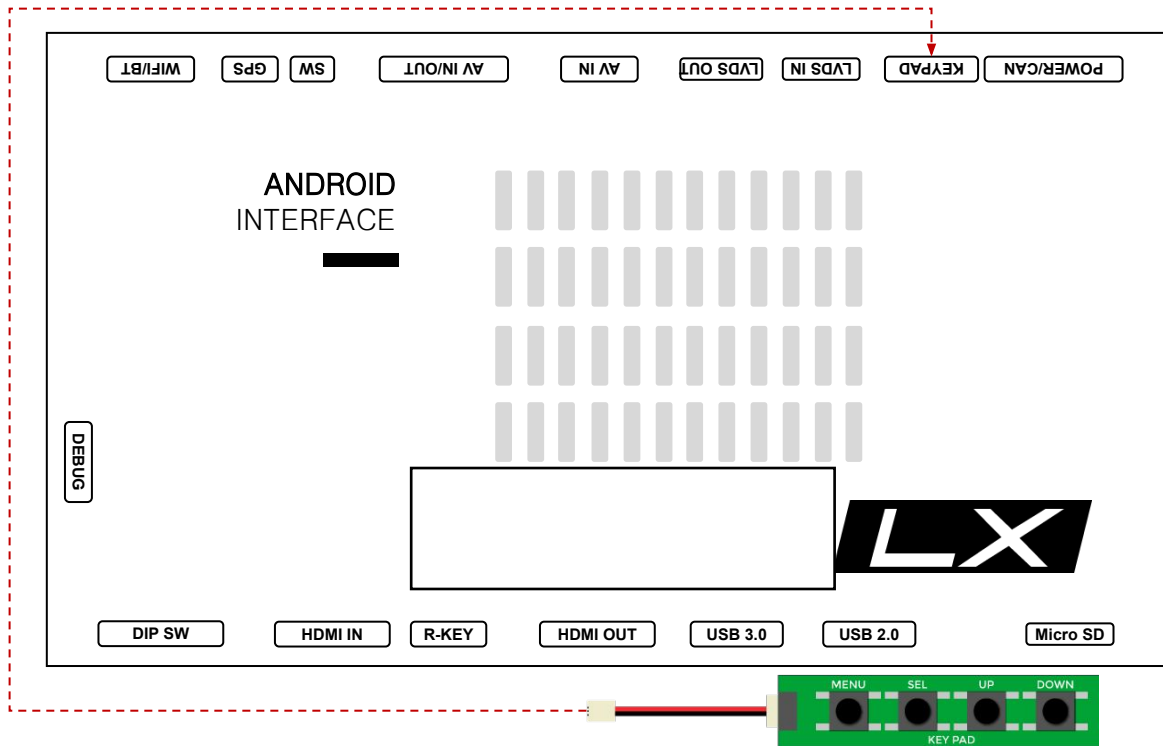
= Factory Reset
Wait until restart unit

※ After reboot system, it takes 3~4 min

INTERFACE SETTING



QUICK INFO



To Enter Quick Info.

1. Press MENU Button to change OEM screen to Interface screen.
2. Press DOWN Button in the interface screen for 3 seconds.

