# RCD 510 Specification&Installation

(RCD 510 2009 ~)



-. MODEL: QVL - RCD510-V0

-. P/N: AD-0909-001





# INDEX



Feature······	3
Precaution······	
Main Spec·····	5
System Composition ·······	
Outline Dimension ·······	7
External Appearance ····································	<b>8</b>
Connector Pin Assignment ······	
DIP Switch Setting ······	12
How to use remote	13
OSD(On Screen Display)	14
How to use parking guide line	18
Product Composition ······	20
Installation Structure ······	23
Installation guide ····································	24
FAQ······	

### -RCD 510 Feature



- -High Quality
- Auto detection for NTSC, PAL signals
- -AV source switching by remote and toggle switch
- Possible to control displayed external NAVI, AV image
- -AV source controlling by original touch

### **Precaution**



- You must keep the car key taken off from the car while you work this and finally, connect power of the interface.
- -When to connect the interface cable, you must keep the power cable taken off.
- You must work this at the environment without any static electricity or damages.
- -All of process on this installation should be done by professionals.
- You must not break the labels attached on the board, if it's broken, no warranty.
- -When you receive this package you have to check whether there's any parts not included and you have to contact us right away.
- -Our repair service do not accept any problems caused by user's any fault or carelessness.

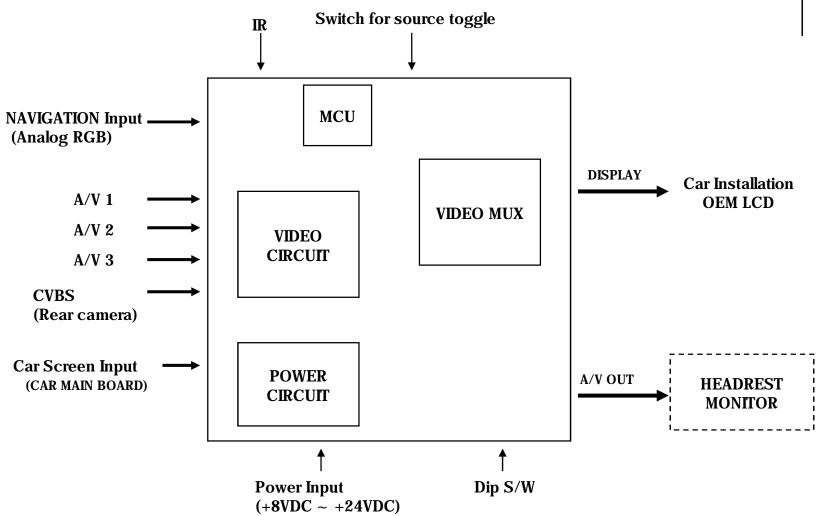
# -Main Spec.



- 1. Input Spec. (MULTI VIDEO INTERFACE)
  - -. 3 x A/V Input (External video source).
  - -. 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
  - -. 1 x Analog RGB Input (Navigation System output)
  - -. 1 x LCD Input (Car system Input)
  - -. 1 x OEM Input
- 2. Output Spec.
  - -. 1 x OEM Output
  - -. 4 x Audio Select (12V power comes out from 4wires of cable by video, Navi mode)
- 3. Power Spec.
  - -Input Power: 8VDC ~ 24VDC
  - -Consumption Power: 12WATT, Max
- 4. Switch Input mode
  - -Input Video MUTE Function: Possible to make each input mute by operating Dip S/W.
  - -Possible to switch Input mode with Keypad(or Remote control)
  - -Possible to switch Input mode with switch for source toggle

# -System Composition





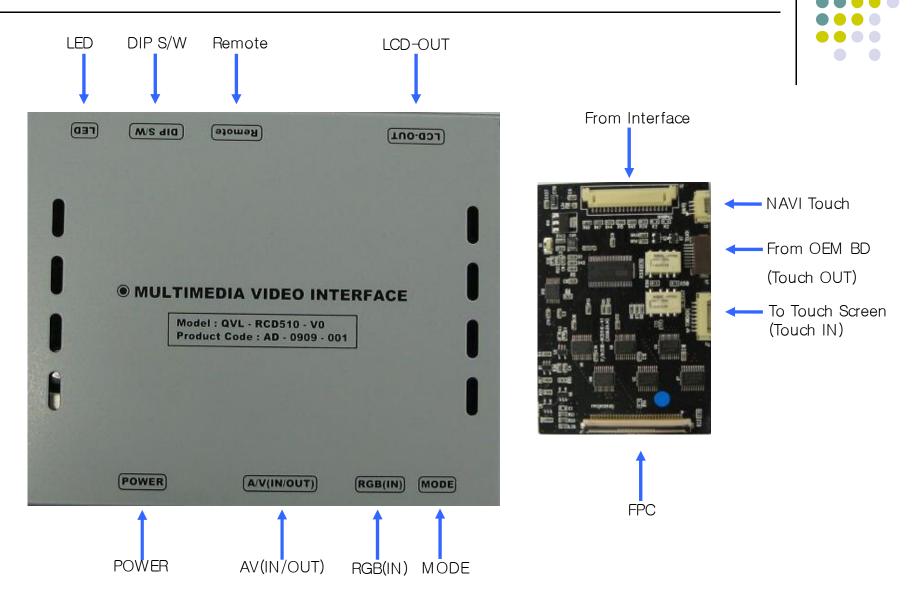
# -Outline Dimension

125mm \* 105mm \* 22mm

#### 125mm

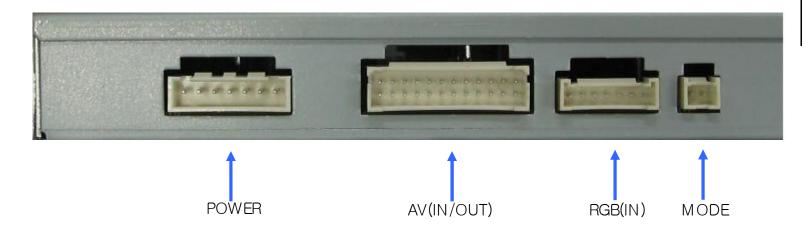


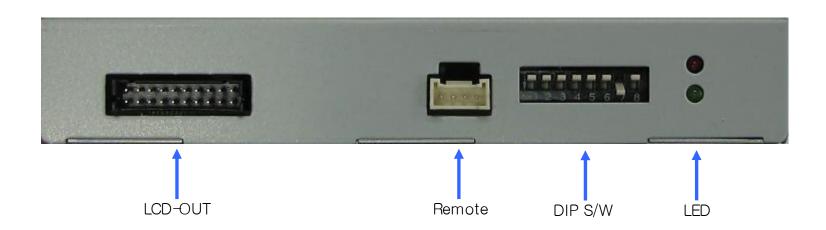
# External Appearance



# External Appearance

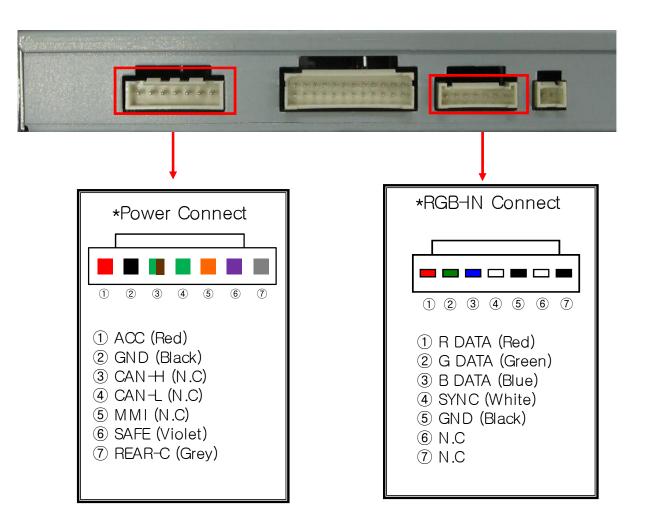


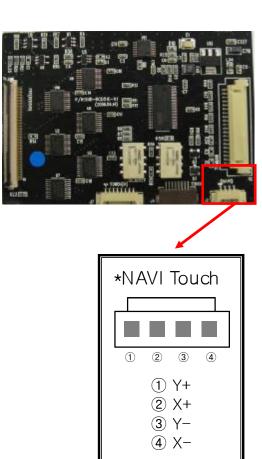




# -Connector Pin Assignment

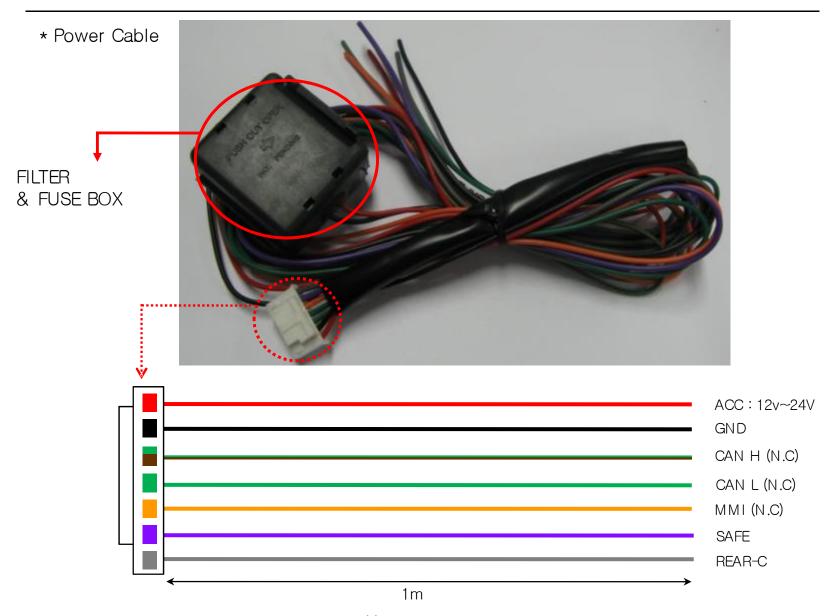






# -Connector Pin Assignment





# -DIP SW Setting

% ON : DOWN, OFF : UP ; Default : all OFF

#PI N	FUNCTION	DIP S/W Selection
1	RGB INPUT MUTE	ON: Skipping RGB Mode OFF: RGB Display
2	A/V 1 MUTE	ON: Skipping A/V 1 OFF: A/V1 Display
3	A/V 2 MUTE	ON: Skipping A/V 2 OFF: A/V2 Display
4	A/V 3 MUTE	ON: Skipping A/V 3 OFF: A/V3 Display
5	N.C	
6	N.C	
7	When to choose rear mode (ON : CVBS4, OFF : MAIN)	
8	N.C	



#### **\*DIP S/W Use Example**

-. Use Input Mode: A/V2, A/V3

-. Use original Navigation

DIP S/W : 1,2 -à ON (INPUT MODE SKIP)

DIP S/W:3 -à OFF (enable A/V3)
 DIP S/W:4 -à OFF (enable A/V3)

DIP S/W : 5,6,7 -à OFF
 DIP S/W : 8 -à OFF



### How to use remote





POWER, PIP: N.C

MENU: OSD Menu

OK: Select

**▲**: Up

▼ : Down

**◀**:Left

▶ : Right

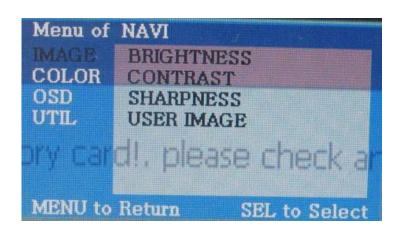
\*FACTORY MODE (Interface setting)

: To press  $\blacktriangleleft$  button for 2 sec, or  $\blacktriangle \to \blacktriangledown \to \blacktriangle \to \texttt{MENU}$  in sequence

# -OSD(On Screen Display)



Analog RGB Mode



· Video Mode



#### **IMAGE Menu**

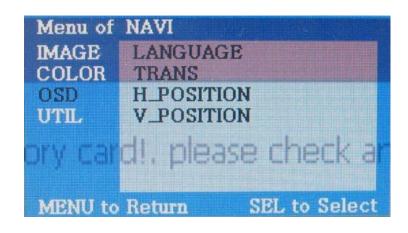
- BRIGHTNESS: It is used to adjust brightness of the screen.
- CONTRAST: It is used to adjust distinction (Image noise clearness).
- SATURATION: Adjust the saturation the picture.
- HUE: It is used to adjust the display hue adjustment of the screen.
- SHARPNESS: Adjust the sharpen or soften the picture.
- USER IMAGE :select color of screen (only four type)

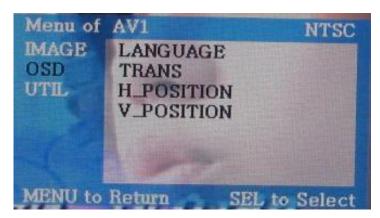
# OSD(On Screen Display)

Analog RGB Mode









#### **OSD Menu**

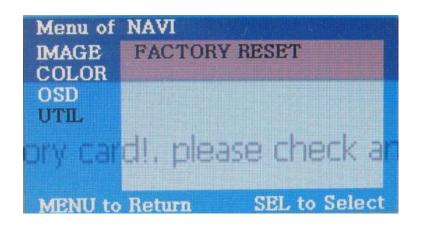
- LANGUAGE
- TRANSPARENT
- H\_POSITION : Move the position of AV sources to Left, Right
- V\_POSITION : Move the position of AV sources to Up, Down

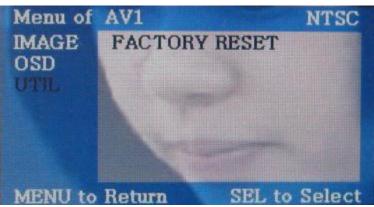
# OSD(On Screen Display)

Analog RGB Mode









#### **UTIL Menu**

- FACTORY RESET: Initializing of all values of OSD setting (Impossible to reset of screen position, only possible for functions in OSD)

# -Factory Mode

 Factory Mode - Operated by pressing ▲ → ▼ → ▲ →MENU of remote or keypad in order.









#### **Factory Mode**

- IMAGE - H-POSITION : Move to Left, Right

- V-POSITION: Move to Up, Down

- PARK - PARK ENABLE : Setting to use 'Parking guide line'

- H-POSITION : Move the lines to Left, Right

- V-POSITION: Move the lines to Up, Down

# -Factory Mode: Parking Guide Line

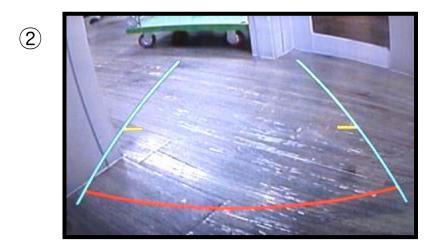


Factory Default: PARK ENABLE - OFF

- Menu of FACTORY(Ver1.1-090430)

  IMAGE PARK ENABLE
  PARK SETUP
  UTIL

  MENU to Return SEL to Select
- 1 Set "PARK ENABLE" to "ON" on The park mode like the left picture no.1
- \* If you would like to remove this line, just select "ON" on the above process.



2 After setting, once you put the gear to rear, the screen displays the parking guide line like the left picture no. 2.

# Factory Mode: Parking Guide Line



3



3 The way to move the lines: Once you operate "\*Factory Mode" again, when the lines are appeared,OSD image will be displayed like the left picture no.3

After that, you select "PARK" and can move the lines by 'UP','DOWN' keys of keypad.

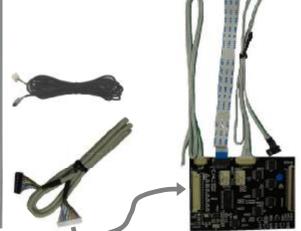
H-POSITION: Move to Left, Right V-POSITION: Move to Up, Down

# Product Composition







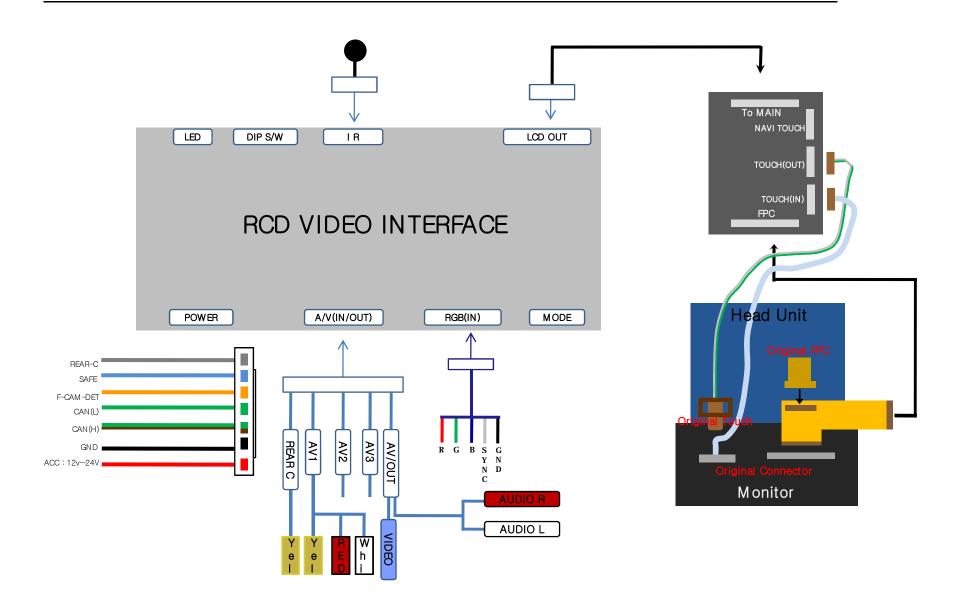




- -LCD cable 1 EA
- -Toggle Switch 1 EA
- -A/V cable 1 EA
- -Sub Board 1 EA
- 지지대 2 EA
- -Remote

- -Navi Cable 1 EA
- -Power Cable 1 EA
- -IR cable 1 EA
- -FPC Cable 1 EA
- -Touch Cable 3 EA (8P, 4P, FFC)

### Installation Structure

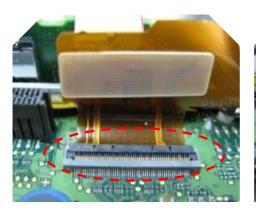


# **Hnstallation Guide**

#### 1. Original FPC cable connection

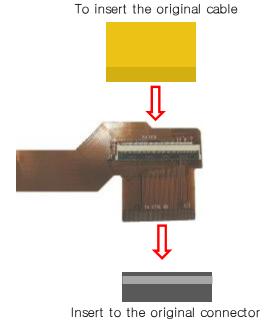


 After separating LCD and Head unit board, take apart the original FPC cable.





O Connect the separated FPC cable to provided Interface FPC cable (TO LCD), connect the Interface FPC cable (To CTRL BD) to the original connector.



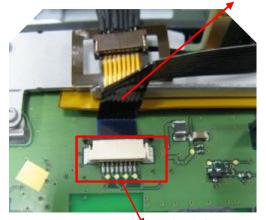
### **Hnstallation Guide**

#### 2. Touch Cable connection



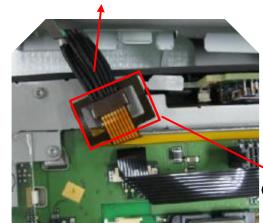
After taking apart the original touch cable from LCD side, connect the provided interface touch cable. (Refer to the below how to connect)

Provided interface Touch OUT



Original Connector
Insert the provided "Touch
Out" Cable to the original
connector like the above
picture.

Provided interface Touch IN cable

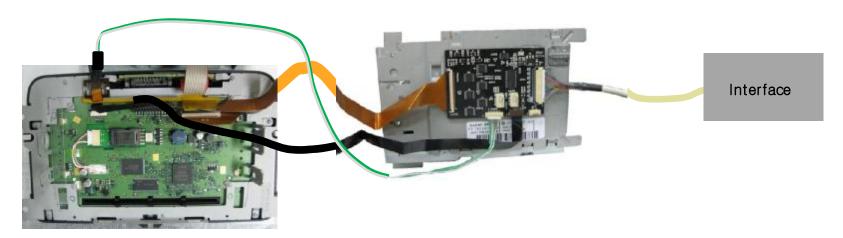


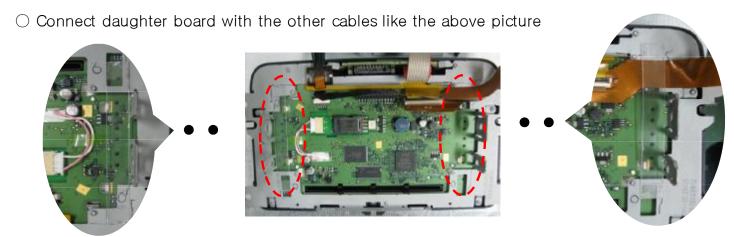
Original touch cable

O Connect the original touch cable (FPC) to the provided "Touch IN" cable.

# **Installation Guide**

#### 3. Daughter Connection

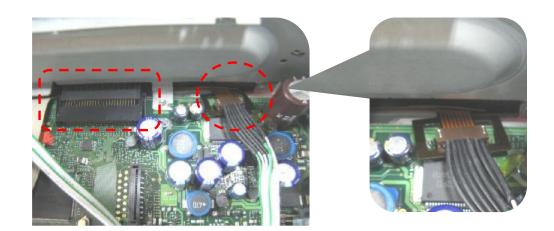




O Fix the both edge points on the backside of LCD by supporter panel.

### Precaution in Installation

#### \* Recommended installation method



Like the left pictures, for safety, connect the original cable which was connected with Touch IN cable, after taking out to head unit side. Otherwise, LCD might be able to be damaged by contact error of LCD connector.





Connect Touch cable taken out to head unit side to out side like the left picture.

### -FAQ



- 1. When can not change mode.
  - -. Check if the IR Cable (Remote) is connected or not.
  - -. Check if LED is turned on or not. If it is not turned on, Check if power cable is connected or not.
- 2. When the screen is displaying only black color.
  - -. Check if 2nd LED is turned on or not. If it is not turned on, please check all video sources that you will connect with the interface is operating well or not.
  - -. Check if interface is connected well
  - -. Check if the touch cable interferes the connection between LCD and Head unit board
- 3. When displayed color of screen is not proper. (If it's too dark or the color is not proper)
- -. Try to do "Initializing in Factory, If the color of screen keeps on displaying wrong color, you have to ask manufacturer for the problem.
- -. Check if LCD is connected well with FPC cable of sub-board.
- 4. When Back-up camera is not displayed on the screen.
  - -. Turn Dip S/W no.7 on.
- 5. When the mode you set is not skip.
  - -. Check if Dip S/W is set in proper way.
- 6. When Main screen on the car is not displayed.
  - -. Check if In/Out cables are connected well. If it keeps showing the same problem, you have to ask manufacturer for the problem.
- 7. When the screen is displaying only white color.
  - -. Check if out cable is connected well. If it keeps showing the same problem, you have to ask manufacturer for the problem.