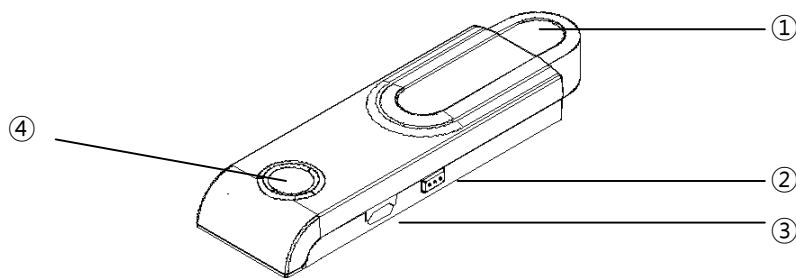# Miracast Dongle Quick Manual

ver 1.2

Before Getting Started

- ✓ For better performance on the Miracast function, must use after re-booting your Smartphone.
- ✓ Before connecting cables, please turn off all devices(TV/Dongle).
- ✓ Connect the power cable(Micro USB cable) inside the package.
- ✓ Some of Smartphone models specification depending on countries may not work with the Miracast Dongle. User must check the device whether it supports the functions.
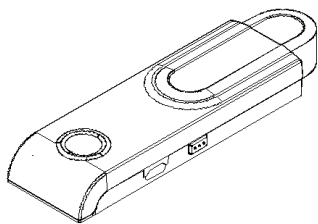- ✓ Performance can be different by wireless environment.

Appearance

① HDMI port output connector : HDMI A/V signal out(plug to HDMI IN port of TV rear panel)
② **PBC/WPS button** : button for Dongle setting
③ micro USB connector : for dongle power
④ LED : power and mode indication

Miracast Dongle

Packaging Contents

Miracast dongle   microUSB power cable

Installation

- ✓ Connecting the Dongle's HDMI port to Display(TV) HDMI in port.
- ✓ Connecting Display(TV) and Miracst Dongle with the Micro-USB cable.

  (*microUSB cable is used for power of dongle)
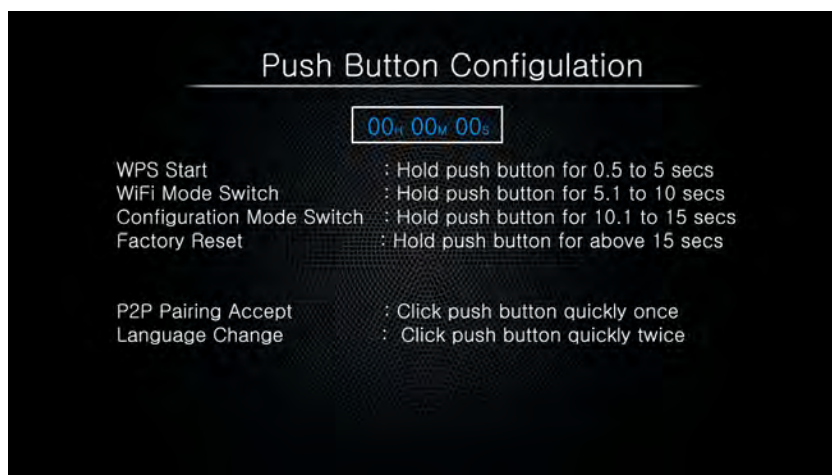
How to use Miracast dongle

\<Notice\>

- ✓ Please whether your Smartphone supports Miracast.
- ✓ In order to use the DLNA function, a Smartphone or Laptop must be installed with a DLNA App or program.

  *For DLNA, please check whether your Smartphone/Tablet PC/Laptop support DLNA function.

  *Free DLNA program : you can download iMediaShare Personal for Android and iOS in iTune.

  * Samsung smart phones support "Samsung Link" App for DLNA and you can use this. For the usage this, you need to access internet temporary when you start the Samsung Link App.

- ✓ For DLNA play, smart phone must be connected to External AP(WiFi Router) or Dongle itself AP in Soft AP mode.

Push Button Configuration(PBC) menu

- ✓ Mode changing or selecting specific function can be done by PBC button. Once you press PBC button, "Push Button Configuration" Menu will guide to choose PBC button action.
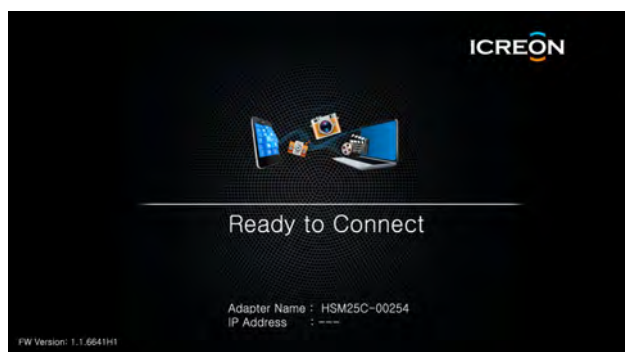- ✓ Push Button Configuration Menu items

Miracast Dongle

- WPS Start : it is for external AP connection for DLNA external AP mode. It searches external AP during 2min. (*This function is disabled and can be enabled for specific OEM model.)
- Wi-Fi Mode Switch : mode switching between Miracast and DLNA(Soft AP mode).
- Configuration Mode Switch : starting soft AP for Firmware S/W upgrading or device name change etc.
- P2P Paring Accept : It is needed when you set Manual PBC in Auto PBC web configuration
- Language Change : Language can be selected by cycle.

Miracast Setting:

Dongle setting :

After connecting power, wait until you find 'Ready to connect' appearing on the screen. This default screen is Miracast/DLNA auto mode.

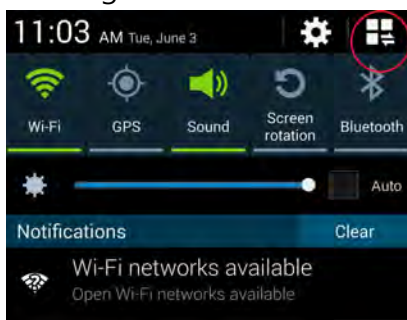< Miracast/DLNA Auto mode>

Miracast Dongle

Smartphone Setting:

✓   Go to the setting menu and search for Miracast , select to activate.

* Miracast activation menu could be different by Smartphone's manufacturer.

* Example:

Samsung Galaxy S3/Note2 :   more settings---> AllShare Cast

Samsung Galaxy S4/Note3:   settings ---> Screen Mirroring

LG Optimus G/Gpro : Miracast

Google Nexus 4 : Display ---> Wireless display on

✓   After selecting Miracast, your Smartphone will start searching for the Dongle's signal. Find a match with your Dongle's ID showing up on the screen, and select.

✓   In 30 seconds, your Smartphone screen will show up on the display and your successfully connected. your smart phone screen will be mirrored to TV.

Miracast menu types in Android smart phones

There are two ways to go Miracast menu as bellow.

- quick menu shown by pulling down the top side of screen.

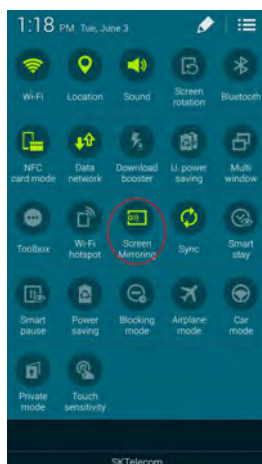- finding Miracast menu in the setting menu.

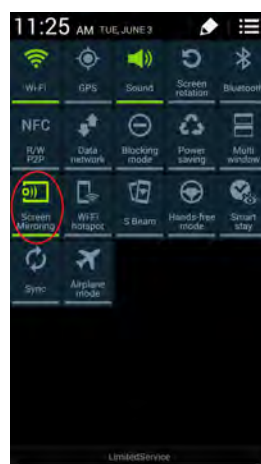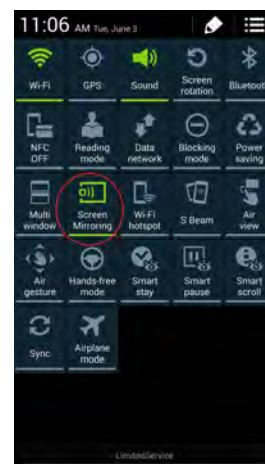Quick menu position in Samsung Galaxy model.

By quick menu

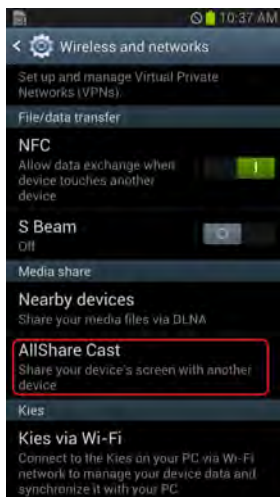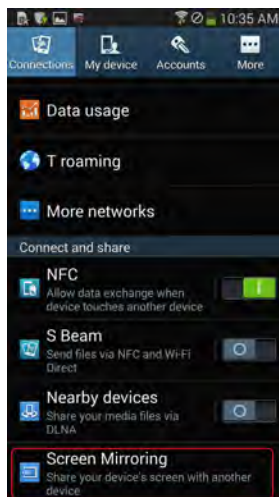Samsung Galaxy S 4   Samsung Galaxy S 5   Samsung Galaxy Note 2   Samsung Galaxy Note 3
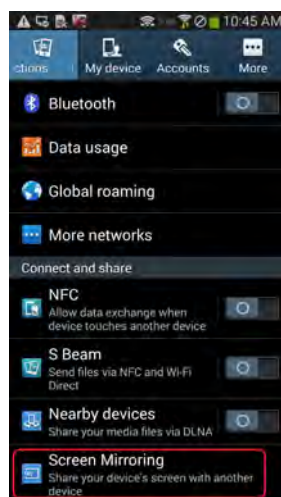
Miracast Dongle

Samsung Galaxy S3

Samsung Galaxy S4

Samsung Galaxy Note2

Samsung Galaxy Note3

DLNA Setting:

There are two ways to set up DLNA ready mode as bellow.

- **by Soft AP mode**: It is easy for DLNA setting because you don't need external AP. You can choose DLNA mode in the PBC configuration page. It is very useful in the place where Wi-Fi AP is not available. Ex) car, school, public place etc.

- **by connecting External AP router**: You can setting up in the web configuration page. It is useful because you can access internet and share if the contents in the external AP network are shared.

Connecting by Soft AP mode(recommended)

- ✓ Power on miracast dongle.
- ✓ Press the PBC button during 6 sec for mode changing.
- ✓ Mode will be changed to DLNA mode(Soft AP mode).
- ✓ You can find the the device with your Dongle name in the Wi-Fi AP list and connect the device in Wi-Fi AP list in the smart phone.
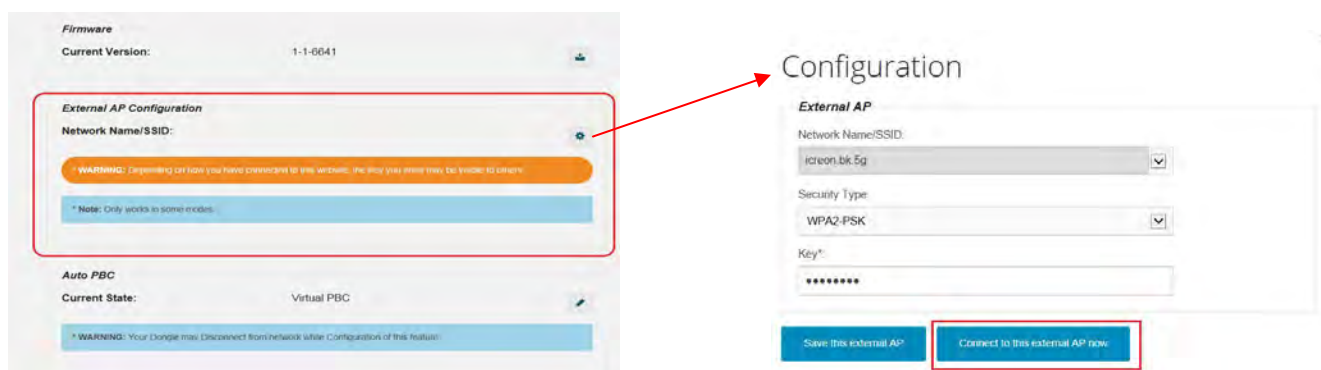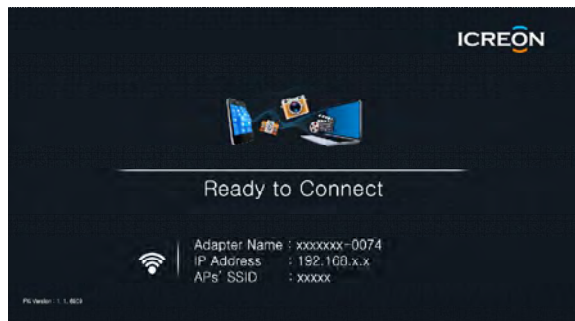- ✓ Go to "DLNA Play" section of this manual.

<Soft AP mode screen >

Miracast Dongle

Connecting by External AP mode

- ✓ go to web configuration mode by using PBC button. Refer the "How to go web configuration page".
- ✓ go to External AP configuration section and select available Wi-Fi external AP with pass key.
- ✓ select the "Connect to the external AP now".
- ✓ After reboot, you can see the external AP mode screen with external AP connected by your dongle.
- ✓ connect your phone to the external AP and now ready to use DLNA in external AP mode.

< External AP configuration section>

<external AP mode ready screen>

(*If external AP is turned off, Soft AP will be on instead of external AP)
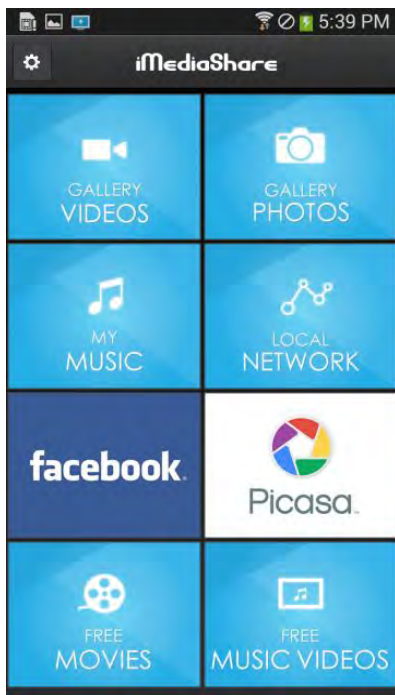
DLNA play

- ✓ You prepare Soft AP mode or External AP mode with connected external AP.
- ✓ On your laptop/Tablet PC/Smartphone, Select and connect to the external AP which has been setup with Dongle or Soft AP.
- ✓ On your Laptop/PC/Tablet PC/Smartphone, run DLNA program/App.
- ✓ On your Laptop PC/Smartphone, must select DLNA player device same as your Dongle name when you play the contents.
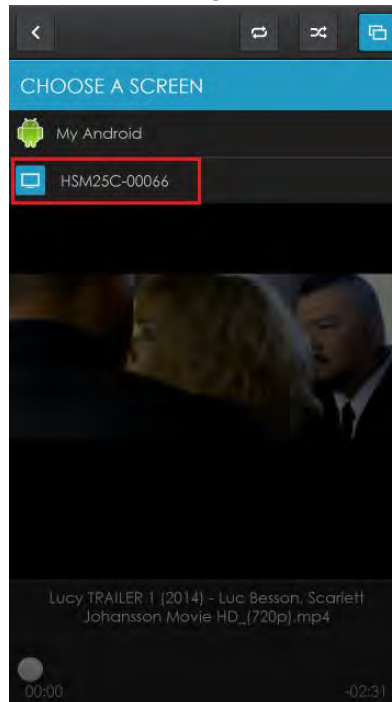
Miracast Dongle

    ✓   DLNA performance could be different by the environment. (AP routers ability/Smartphone ability)

Example) iMediaShare Personal APP in Android and iPhone.

This app may take more than one minute for connecting.
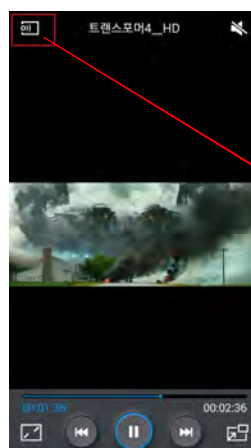

           main screen   user Dongle player selection.

Example) Samsung Video Player in the Samsung Galaxy Phone

    In the Soft AP mode,

    ✓   Run the Samsung Video Player.

    ✓   You connect the Dongle name of Soft AP mode in Wi-Fi AP list to connect P to P.

    ✓   When you play media, touch the screen then you can find All share symbol on the top side. you touch the symbol and select your Dongle adapter.
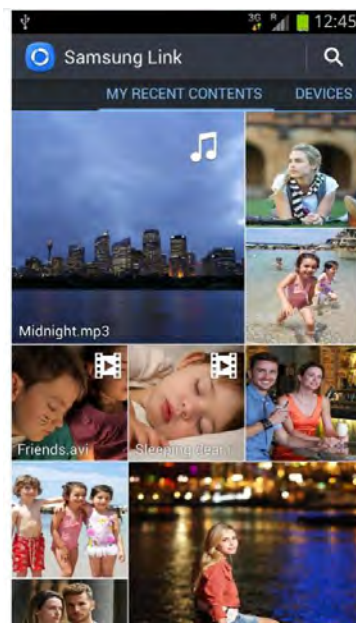
Miracast Dongle

Example) Samsung Link APP in the Samsung Galaxy Phone

    In the Soft AP mode,

- ✓ Run the Samsung Link APP with internet enabled.
- ✓ You connect the Dongle name of Soft AP mode in Wi-Fi AP list.
- ✓ When you play media, you need just to select your Dongle adapter as play device.

<Samsung Link App icon>

| <Select content> | <touch AllShare icon> | <AllShare enabled> |

Connecting Using Laptop which has Intel WiDi function

    Please following Windows 8.1 WiDi connection method.

Dongle configuration in web

    User can configure

Miracast Dongle

- Dongle name
- Protocol
- Language
- Firmware
- Auto PBC : when pairing first time, you can make connection allowance by setting. Virtual PBC is default. If you select Manual PBC mode, user need to accept first connection by pressing PBC button.
- Soft AP password

How to go into Dongle configuration web page?

✓ Press PBC button during 12 seconds on "Ready to Connect" screen
✓ It goes into "Firmware Upgrade Mode".
✓ Find and connect Wi-Fi AP with the Adapter Name.
✓ Open the web browser and put http://192.168.8.1:8000 in the address.
✓ You can see following configuration web page.

Default setting in Protocol
Mode   : WFD DLNA
WiFi Mode   : AP P2P STA

Auto PBC
Virtual PBC

Miracast Dongle

Specification

- ✓ Power input   :   5V/0.5A
- ✓ Wi-Fi   :   IEEE 802.11b/g/n 2.4GHz/5GHz Dual Band/Dual Streams,
- ✓ Max data rate   : 300Mbps /2Tx - 2Rx
- ✓ Temperature   :   0~50℃
- ✓ Resolution   : 1080p   video decoder
- ✓ Output   : HDMI 1.3/HDCP 2.x
- ✓ Video mode support : Miracast, DLNA, WiDi 3.5 later in Win 8.1

FCC Statement

This device complies with part 15 of FCC Rule. 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 undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 and 2 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and. if not installed and used in accordance with the instruction guide, 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 or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult a service representative for help.

Properly shielded and grounded cables and connectors must be used in order to comply with FCC emission limits. Changes or modifications not expressly approved by the party responsible for compliance 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 undesired operation

This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or   transmitter. A minimum separation distance of 20 ㎝ must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Indoor use only.