

User's Manual

DLP ANDROID PICO PROJECTOR



DLP PICO PROJECTOR

TABLE OF CONTENTS

Introduction -----	1
Box Contents -----	1
Projector Controls and Indicators -----	2
Setting Up the Pico Projector -----	4
Using the Mouse Pad -----	5
Using an External USB Mouse -----	6
Applications Drawer -----	6
Projector Settings -----	7
Connecting to Wireless Network -----	9
Installing New Applications -----	12
Connecting to External Sources -----	13
LED Indicators -----	18
Charge Mobile Devices -----	18
Useful Apps -----	19
Care and Maintenance -----	19
Cleaning the Pico Projector Housing -----	19
Cleaning the Projection Lens -----	19
Transporting the Pico Projector -----	19
Troubleshooting Guide -----	20
Appendix 1 (Product Specifications)-----	21

Notes:

1. The appliance inlet of the power supply is the disconnecter from mains and must be anytime easily accessible.
2. The maximum noise level of the product is $L_{PA} \leq 70 \text{ dB (A)}$ DIN 45635-19-01-KL2.
1. Der Gerätestecker des Netzteiles bildet die Trennvorrichtung zum Versorgungsstromkreis und muß jederzeit leicht zugänglich sein.
2. Max. Geräuschpegel: $L_{PA} \leq 70 \text{ dB (A)}$ DIN 45635-19-01-KL2.

Acknowledgments

The followings are registered trademark or trademarks of their respective corporations: Google, TI, Microsoft etc.

Safety Information

Please read these instructions before using your Pico Projector. Failure to comply with these instructions could result in electric shock, fire, personal injury or damage to your Pico Projector.

Power Source

Check the power specification plate on the back of the Pico Projector. Ensure that your line voltage matches with the power adapter rating of the Pico Projector. **The Power Adaptor accepts AC power 90-264V, 50-60 Hz.**

Power Adaptor

Use only the power adaptor supplied with the Pico Projector. Do not use the power adaptor if it has become damaged or frayed. For a replacement power adaptor, contact your authorized dealer. Do not allow anything to rest on the power adaptor. Do not place this projector where the adaptor may be abused by persons walking on it.

Overloading

Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

Liquid Spills

Do not set drinks or other liquids on top of the Pico Projector. Do not place the Pico Projector near water, for example, near a bathtub, washbowl, kitchen, sink, or laundry tub, in a wet basement, or near a swimming pool. Spilled liquids can flow inside the Pico Projector and cause damage.

Repair

Do not disassemble the Pico Projector. Take it to an authorized technical staff when service or repair work is required.

Technical Service

Please refer servicing to authorized technical staff under the following conditions:

- When the power adaptor or plug is damaged or frayed.
- If liquid has been spilled into the Pico Projector.
- If the Pico Projector has been exposed to rain or water.
- If the Pico Projector does not operate normally by following the operating instructions.
- If the Pico Projector has been dropped or the cabinet has been damaged.
- If the Pico Projector exhibits a distinct change in performance.

Introduction

The DLP Pico Projector is a convenient, versatile, state-of-the-art presentation system. It is an effective and valuable tool for projecting computer-generated video information or full motion video signals onto a front or rear projection screen. The built-in Google Android Operating System allows playback of PDF, photos, Excel files, Powerpoint presentations and various video files directly from the Pico Projector without the need for external signal sources. This, coupled with the rechargeable battery, allows easy presentations on the fly. The Pico Projector is an ideal companion to travelling executives, sales personnel and anyone who wants to do presentations and entertainment on the spot. Photos and videos can easily be shared in group meetings or parties. Apps can be downloaded to extend the applications of the Pico Projector. For some Smartphones, wireless projection can be done via DLNA or Miracast broadening the connectivity of this Pico Projector.

The following lists some of the specific features of the DLP Pico Projector:-

- **Small & Simple to Operate**
- **Built in Google Android OS 4.2 with Built-in WiFi**
- **WVGA 854x480 DLP resolution**
- **100 Lumens brightness**
- **2000 : 1 High contrast ratio**
- **Battery operated**
- **2 USB ports,OTG & standard USB A host for flash drives, wireless mouse, harddisk (self powered)**
- **Touch Sensitive Mouse Pad for Easy Navigation**
- **Various Audio Visual interface connections including HDMI input**
- **Built-in Speaker**

Box Contents

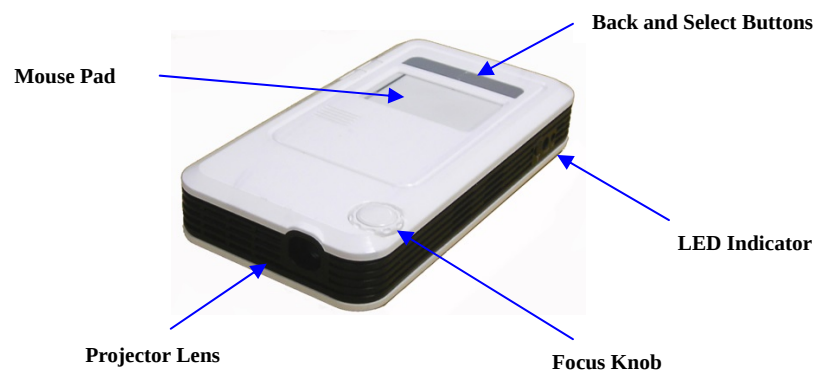
Handle your DLP Pico Projector carefully as you remove it from the packing box. The following items should be included in your package:-

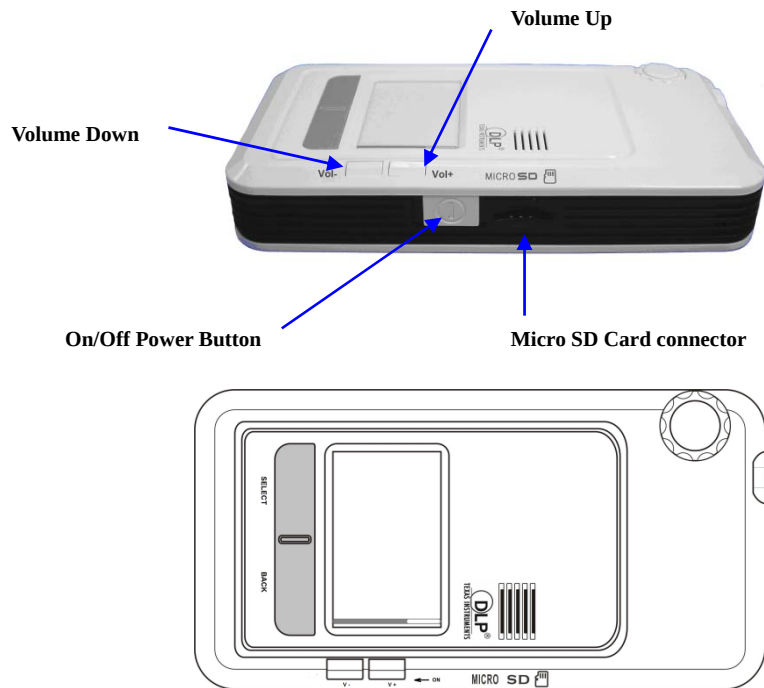
- DLP Pico Projector
- AC Power Adaptor with Power Cord (plug according to national spec)
- AV cable
- VGA cable
- USB OTG cable
- Earphone or external speaker adapter
- Quick Startup Guide

Check to make sure all parts are included in the shipping box. If any are missing, contact your dealer immediately.



Projector Controls and Indicators





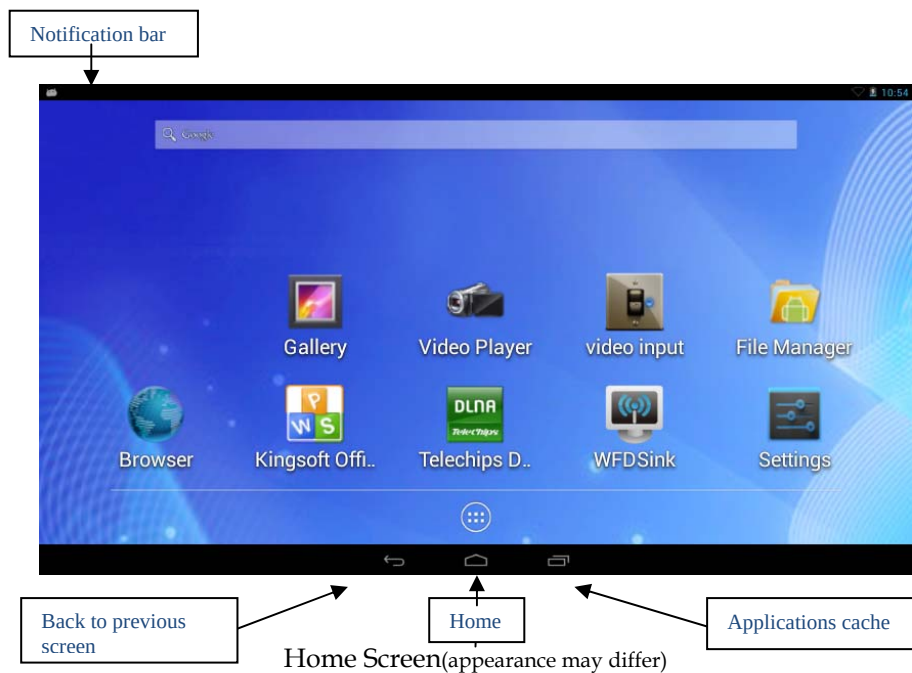
- On/Off Switch** Slide the On/Off switch and hold for 1 second then release to turn on the Pico Projector.
Slide the On/Off switch in the same way to turn off the Projector.
- Vol. + / -** Press the “Vol.” button to control the volume of the Pico Projector. The volume will first increase and when it reaches the maximum volume, the sound volume will start decreasing.
- Focus Knob** To adjust the image focus.
- Mouse Pad** To move cursor and select options
- Select Button** To select applications
- Back Button** Press to go back to previous screen

Setting Up the PICO Projector

1. Plug the Power Adaptor to the DC in connector at the rear of the DLP Pico Projector.
Note : For first time use with internal battery, charge unit for about 4~5hours
2. Slide the ON/OFF power switch towards the rear of the unit and hold until the display turns on, "Booting Up----". The Projector will take a short while to initialize. After booting up, the projector will display the Home Screen
3. Place the Projector at a suitable distance so the image size is around 30" to 80" diagonal
4. Turn the Focus Knob to bring the image into focus.
5. Navigate the Mouse Cursor with the built-in Capacitive Mouse Touch Pad to operate the projector. Alternatively, connect a wired/wireless mouse to the USB A connector.
6. External signal source can also be played through the projector via the HDMI, AV and VGA input connectors.



Caution: Always use the power adaptor that was shipped with the Pico Projector. The adaptor accepts power 90-264V 50-60 Hz. Check to ensure that the main voltage is within the range on the rating plate on the rear of the projector. When disconnecting the Pico Projector, always power off the unit before attempting to remove the AC plug from the power source.



Using the Mouse Pad: All features of the Pico Projector can be controlled by the mouse pad.

Moving the cursor : Place finger over and in contact with the mouse pad, gently move the finger across the mouse pad surface.

Select applications : move cursor over the application icon then gently tap once on the mouse pad.

Moving to a different screen : Press and hold the *select button* then move the cursor to the up/down/left/right. Alternatively, for one handed operation simply tap twice in quick succession on the mouse pad and to keep in contact with the mouse pad on the second tap. With the finger in contact with the mouse pad move the cursor up/down/left/right

Using an External USB mouse

Controlling the cursor : Move the computer mouse over a flat surface and the cursor will follow.

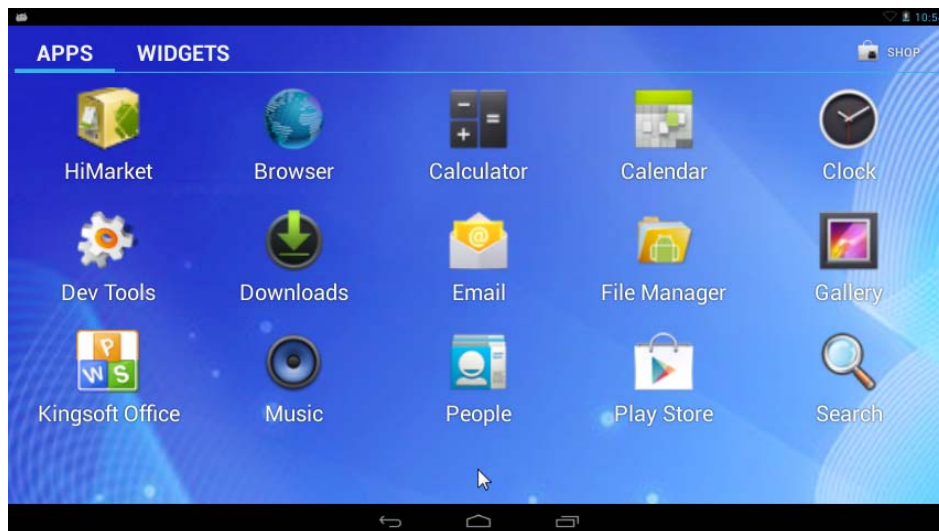
Select applications : move cursor over the application icon then click the left mouse button

Return to previous screen : the right mouse button doubles up as the back button, click to return to previous screen

Relocating applications icon : move cursor over the icon then click and hold the left mouse button then move the mouse and release the left mouse button to drop into position.

Applications (Apps) Drawer

To see installed applications (apps), move the cursor over the ALL APPS SCREEN icon  then gently tap once on the mouse pad or press the SELECT button.



ALL APPS SCREEN (Apps shown are for reference only)

For convenience, links to frequently used Apps can be placed on the Home Screen.
To create an APP link to the Home Screen :

1. Display the ALL APPS SCREEN
2. Move the cursor over the required App icon (Launcher)
3. Press and hold the SELECT button, the icon automatically moves to the Home Screen
4. Use the mouse pad to move the icon to a preferred location then release the SELECT button

Projector Settings

Activate the **Settings** App:

Sound : options to change projector volume and system sounds

Display : options for changing *Brightness, Wallpaper, Sleep, Font size* and to set *wireless display ON/OFF*.

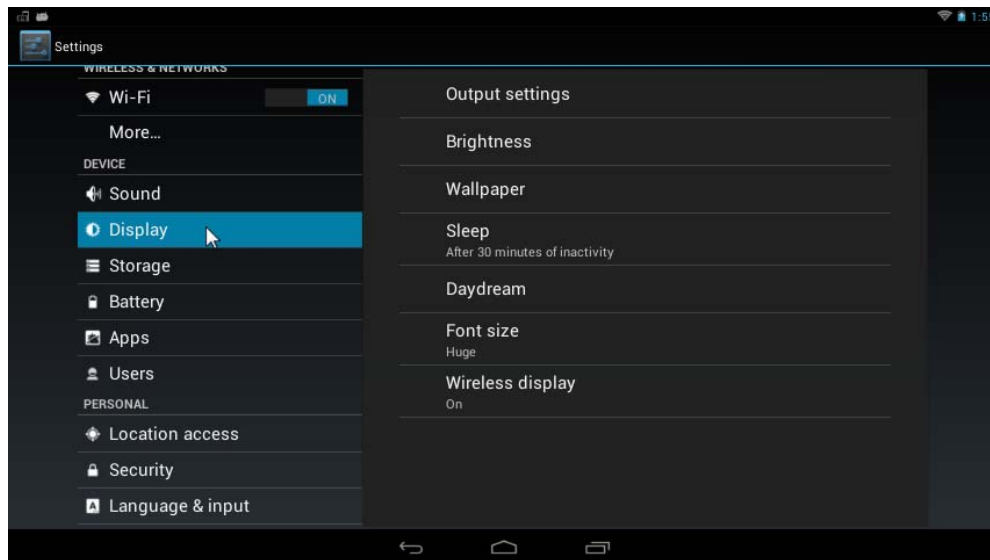
Brightness: sets display brightness

Wallpaper : allows user to change wallpaper for Home Screen

Sleep: turns off the display after a period of inactivity

Font Size : change size of font for display

* Please note : approx. 7 minutes after expiry of the sleep time the projector unit will automatically power off.



Storage: shows internal and external storage connected to the projector

Battery : shows state of charge of battery

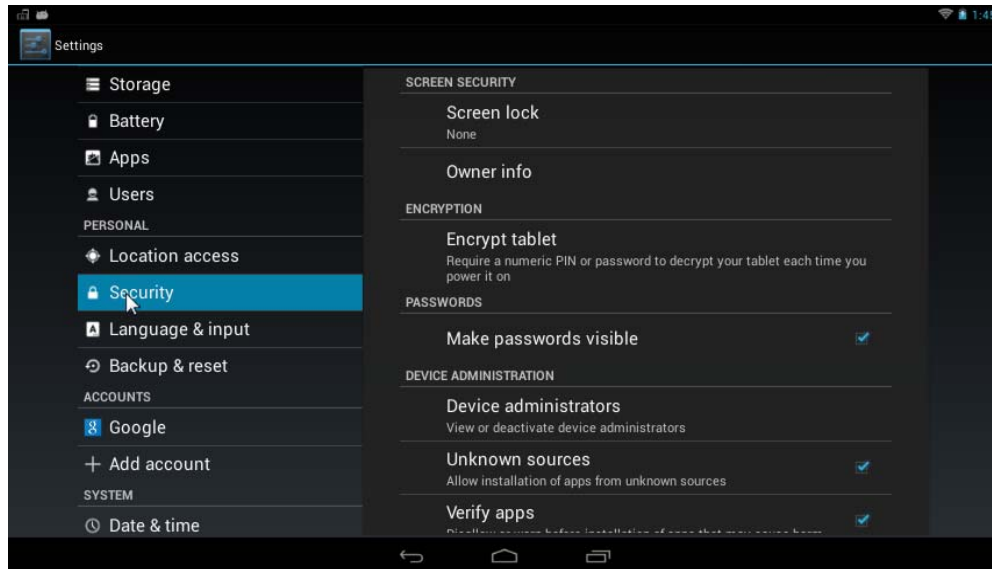
Apps : lists show *Downloaded*, *Running* (cached) and *All* applications installed in the projector. Applications installed by the user can be removed at any time.

1. Select Downloaded from the *Apps* option
2. Move cursor over the applications to be uninstalled
3. Tap on the mouse pad then select *Uninstall* option

Security : allows user to setup various security features such as *Screen Lock*, install applications from sites other than from Google Playstore.

Screen Lock : allows user to setup a security procedure to access the projector (Please note : forgetting user passwords can render the projector inaccessible).

Unknown sources : If user wishes to install from external storage or websites other than from Google Playstore then this option must be enabled (checked)



Language & Input

Change System Language :

1. In **Settings** select Language
2. Scroll to the preferred language then select with the Select button or a tap on the mouse pad

Choose Keyboard and Input method :

1. In Settings select the preferred input method for KEYBOARD & INPUT METHODS, e.g. for onscreen Android keyboard with English input, the physical keyboard option must be turned OFF

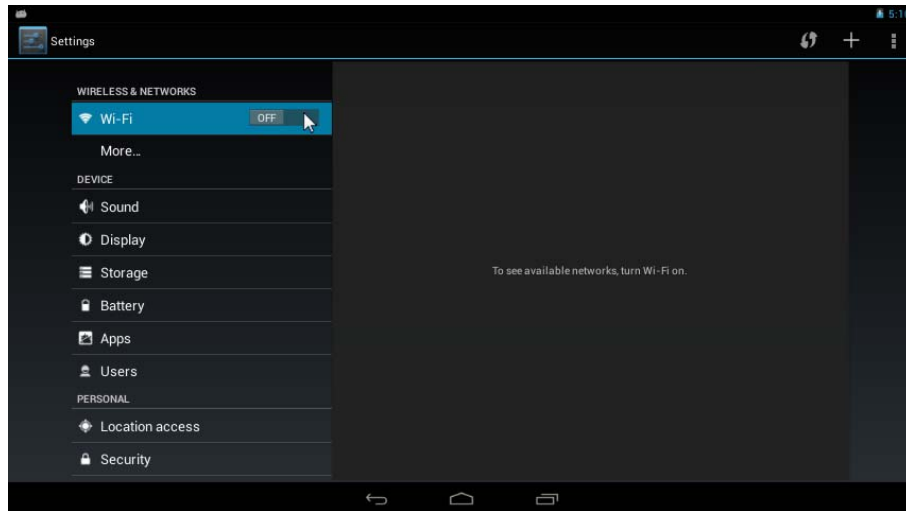


Factory Reset

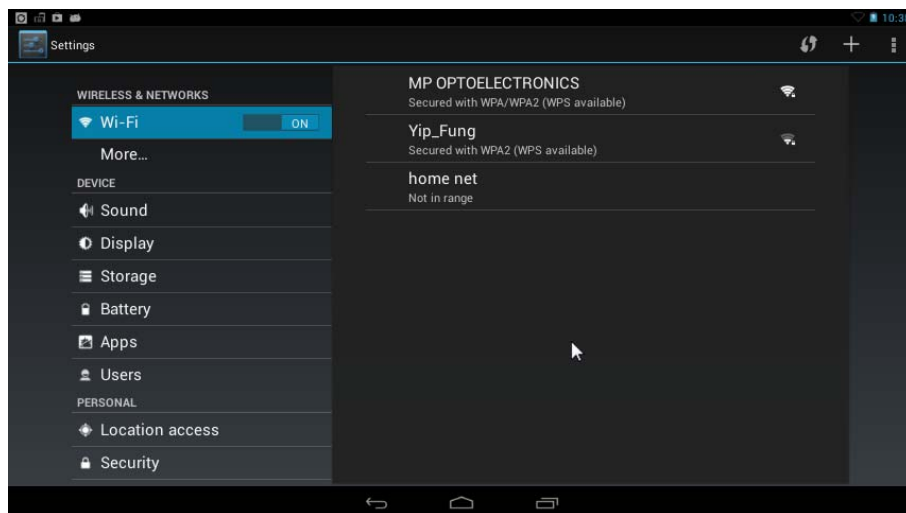
- SETTINGS/Backup & RESET/ select Factory data reset
- Slide and hold the ON/OFF switch until factory reset action is complete
- In the pop up select CANCEL
- Select RESET TABLET
- Select ERASE EVERYTHING. The projector will power off
- After the BOOT UP SCREEN appears, release the ON/OFF switch

Connecting to Wireless Network

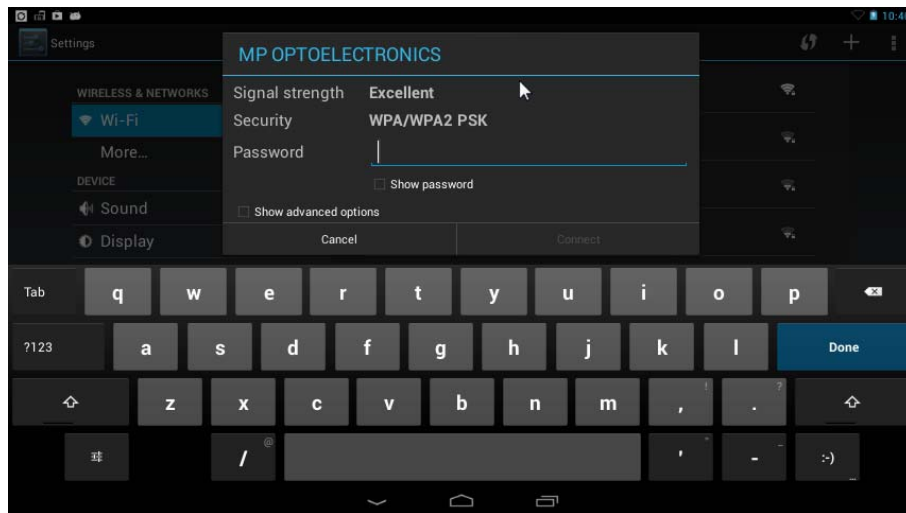
1. Move cursor over the **Settings** icon then tap on the mouse pad/press the SELECT button.



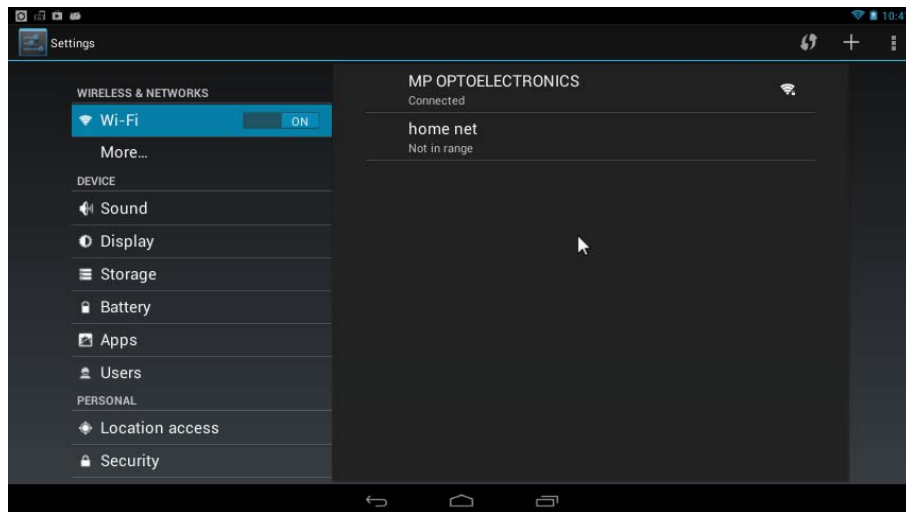
2. If WiFi is not already **ON**, move the cursor to the positions shown above then tap on the mouse pad to turn WiFi **ON**. A list of available networks should then be displayed on the right side of the screen.



3. Select the name of your own network



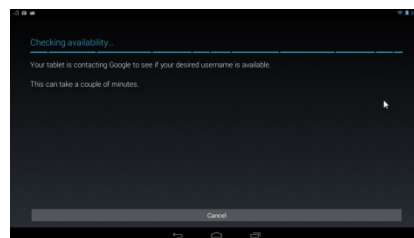
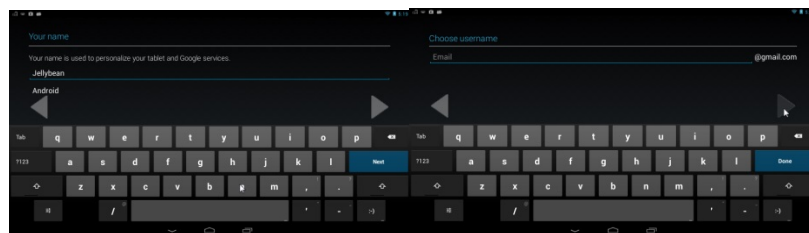
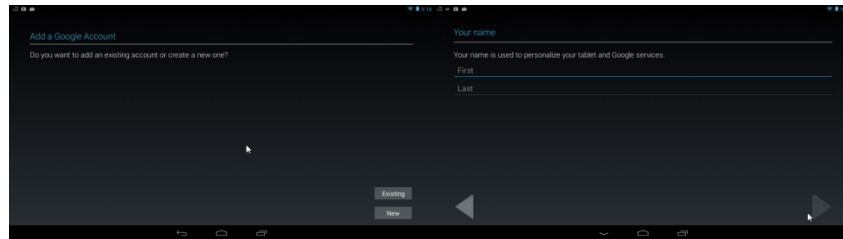
4. Input the network **Password** then select **Connect**. If all is correct, the connection status changes to **Connected**.



Installing New Applications :

From Google Playstore : for a new Playstore account you must have a gmail email account

1. Activate the **Playstore**  app then follow instructions



Installing Apps from other Sources : (not recommended, may compromise security)

1. In **Settings**→**Security** enable (check) Unknown sources
2. If install from SDCard/USB drive or internal memory : click on the apk file then follow instructions

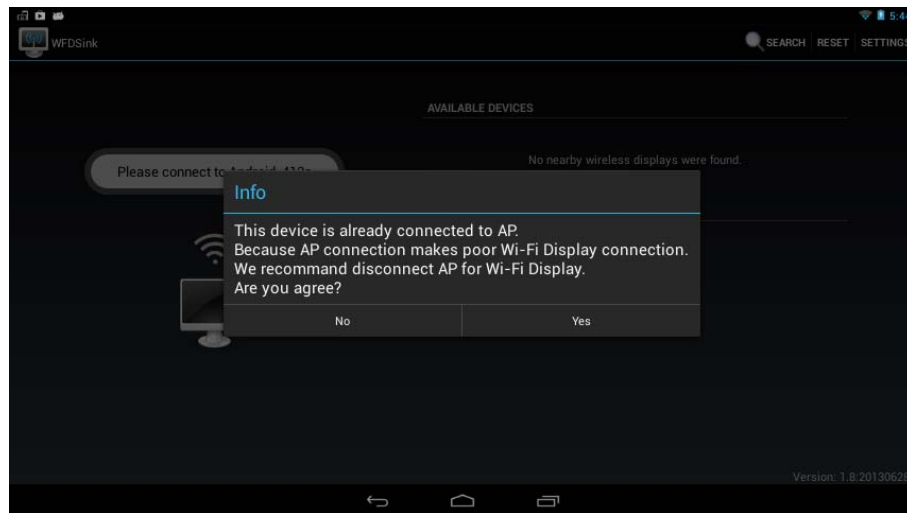
Connecting to External Sources

Wireless Display : requires mobile device with compatible wireless display function (android OS 4.2 and above)

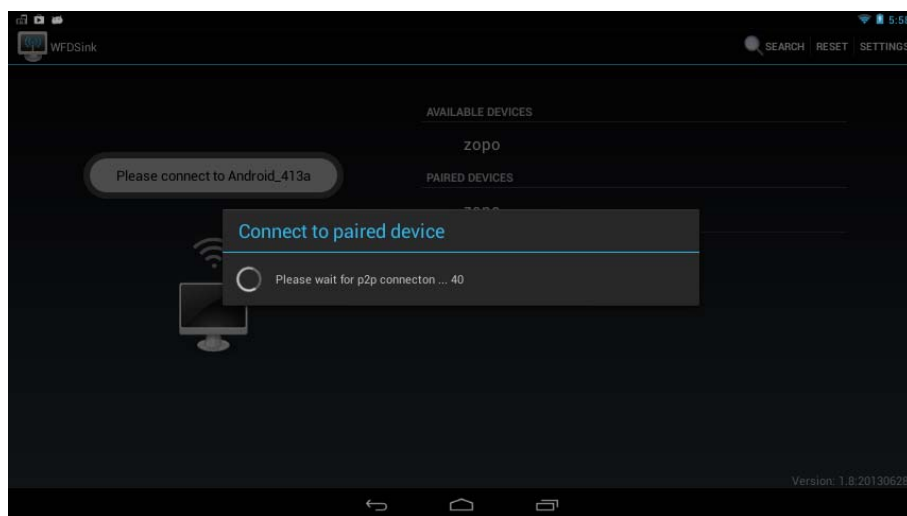
1. On mobile device turn on Wireless Display function. For non-modified OS 4.2, it is located in **Settings→Display→Wireless display→ ON**



2. On Pico projector, activate **WFDSink**, then select “Yes” for the onscreen prompt.



3. On the wireless display compatible mobile device select the name displayed by the projector, in the example Android_413a



4. After having connected to compatible device the projector displays an identical image of the connected device.

Wireless DLNA(Pico projector and mobile device connected to same network) :

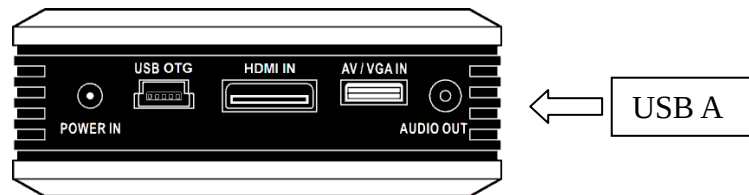
- 1) If you have not already done so, install a network media player, such as BubbleUpnp or IMediashare or equivalent application to the connecting media device (e.g. mobile phone).

- 2) In the Pico projector, click on the  app. The display should show media devices connected to the same network. Following is a sample screen.



- 3) On the media device, select the video/photo/music to play to the Pico Projector, then select the device to use. On the Pico projector click on YES. Following is a sample screen.





This illustration shows the connector panel at the rear of your DLP Pico Projector. Refer to this figure when making wired connections to the DLP Pico Projector.

HDMI IN :

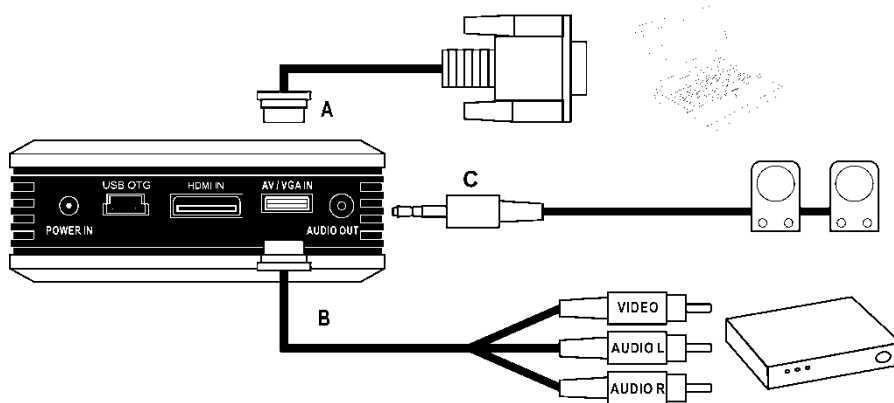
1. Connect Pico projector to HDMI source with a HDMI cable.
2. Start the **Video Input**  application and the Pico projector automatically detects and displays the source image (Note : HDMI connection from computer may not always have sound as it depends on the capabilities of the computer sound card).

VGA IN

1. Connect Pico projector to VGA source with the supplied custom VGA cable.
2. Start the **Video Input**  application and the Pico projector automatically detects and displays the source image.

AV IN

1. Connect the Pico projector to AV source with the supplied custom AV cable.
2. Start the **Video Input**  application and the Pico projector automatically detects and displays the source image.

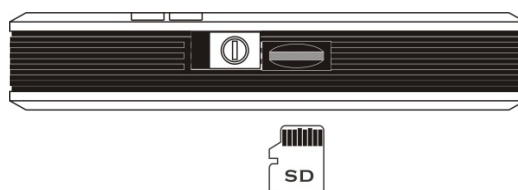


AUDIO OUT

1. Connect a self-powered Audio Speaker to the AUDIO OUT port to enjoy louder sound output. The sound volume can be adjusted on the video/ music player or via the VOLUME CONTROL BUTTON.

Micro SD Card Slot

1. Insert MICRO SDcard into the card slot and use the **file manager**  to view files and folders on the SDcard.

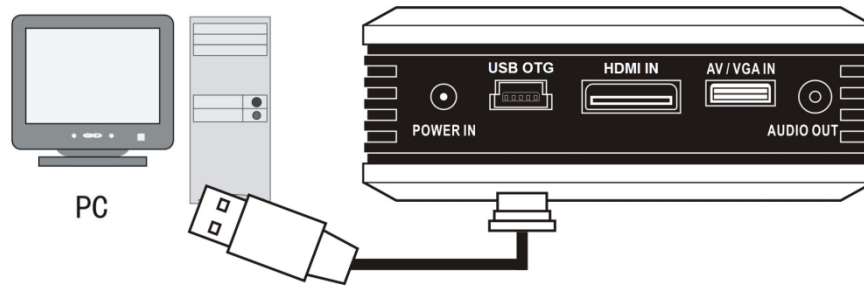


USB Host Port

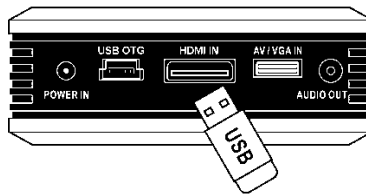
1. Insert USB device into the USB Host port. If device is a flashdrive, use the **file manager** to view files and folders.
Supports most flashdrives, self powered harddisks, USB input devices etc

USB Device/OTG Port

1. Connect the Pico projector to a computer with a standard USB to mini USB cable. The Pico projector behaves identically to a flashdrive.



2. Connect a USB device to the OTG port with the supplied OTG cable to double up as a USB host port.

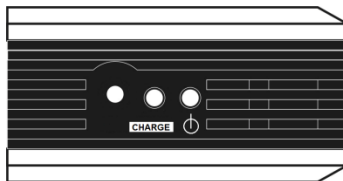


LED Indicators

Charge : when on (red) the unit is charging. After battery is fully charged the red LED turns off.



: When turned on (blue) unit is powered up



Charge Mobile devices

The Pico projector can be used as a backup charger for mobile devices with USB

power connections. Only use this in cases of emergency as the Pico projector battery can be drained quite quickly.

Useful Apps from Google Playstore

- *Rotation Lock Adaptive*, from MICGOOWARE
- *Adobe Reader*, from Adobe Systems for pdf files
- *Easy Direct*, from WCROW for WiFi direct file transfer

Care and Maintenance

The information in this chapter describes how to care for and prevent accidental damage to your Pico Projector. You should treat your Pico Projector with the same care you would give to any other valuable equipment.

Cleaning the Pico Projector Housing

DO NOT try to service the Pico Projector. Refer all Pico Projector servicing to your dealer. Failure to do so can result in serious personnel injury or damage to the Pico Projector.

DO NOT clean the housing with organic solvents, such as those containing acetone. Wipe the exterior of the housing with a soft, damp cloth. Protect the Pico Projector from rain, snow or extreme temperature.

Cleaning the Projection Lens

To clean the projection lens:

Use a cotton-bud stick to gently wipe dust or oil from the projection lens surface. Also, do not use abrasive cleaners, solvents, or other harsh chemicals that might scratch the lens.

Transporting the Pico Projector

The DLP Pico Projector is a highly sophisticated piece of electronic equipment that is sensitive to impact, excessive heat, cold and humidity. When transporting the Pico Projector, use a protective bag or use the original packing carton to

minimize shock and impact.

Store and transport the Pico Projector at temperature between 0 and 140 degrees Fahrenheit (-17 to 60 degrees Centigrade). Avoid storage in automobiles during seasonal temperature extremes. Automobile interior temperatures can exceed 160 degree Fahrenheit (70 degrees Centigrade) in summer. If the Pico Projector has been exposed to extremely hot, cold or humid conditions, allow it to stand at room temperature for 30 minutes before use. Extended use of the Pico in high temperature environments may cause a reduction in brightness of the projected image.

Troubleshooting Guide

If you are having a problem operating the Pico Projector, first make sure you have set it up according to the Section on *Setting Up your Pico Projctor*. You should also check the adjustments and the INPUT connections. Verify that all power is switched on. Before calling for service, check the troubleshooting suggestions in this Section.

Problem

Solutions

The Mouse Cursor does not move

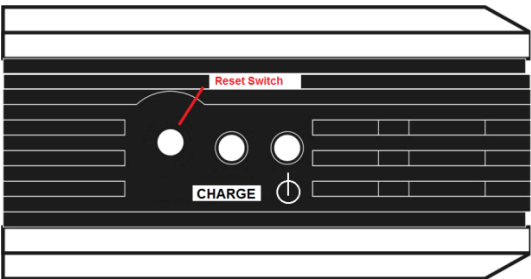
Battery remaining power too low

There is no sound from speaker

Set volume to a higher setting

Unable to power off unit

with the aid of a thin pointed instrument (e.g. toothpick) to activate the reset switch



Appendix 1

Product Specifications

Product Specification	
Display Technology	DLP Technology
Light Source	RGB LED
Resolution	WVGA (854 x 480 pixels)
Brightness (Typical)	100 Lumens
Contrast Ratio	2000 : 1
Built in OS	Android OS 4.2 capable of playing pdf, Powerpoint, Excel, Word files directly without connecting PC
Rechargeable Battery	Battery capable of running for approx 60 mins
Touch Pad Control	For navigating the cursor
Speaker	Mono
External Connection	USB OTG, VGA in, AV in & Audio out, HDMI in
Dimensions / Weight	75 (W) x 142 (L) x 28mm (H) / 250g
Power Consumption	<12W (pico projector only)
Built-in Memory	8 GB ROM, 1GB RAM
Max SD-memory support	32 GB
USB accessories	USB flash drives, USB hard disks (externally powered), keyboard, mouse

FCC Statement

This 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 or more of the following measures:

- Reorient or relocate the receiving antenna.
- 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.

To assure continued compliance, any changes or modifications not expressly approved by the party Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment 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.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.