

User Manual

Version 1.0

For

Mini-InFinity Android Media Player with Touch LCD

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.

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

NOTE: 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 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 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 technician for help.

Description: These are the user Manual for a Mini-InFINITY Android media player with touch LCD. This unit will be a smaller version of the Darko InFINITY unit, but will utilize an Android processor. This unit will have capacitance touch screen.

Specifications:

1. Housing :

- ☐ Will be made of 4 main parts

Back Housing - will hold a majority of the components and is where the access panel will be located

Front Ring - will hold acrylic panel in place, used to connect back housing to acrylic panel.

Access Panel Cover - will cover the access panel, will have holes for power input and headphone output, holes will be covered with thin grommet

2. 7.0in TFT LCD Screen:

- ☐ LCD Resolution: 800x480
- ☐ Video Resolution: 720x480
- ☐ Innolux: AT070TN92
- ☐ Capacitive Touch Screen Overlay

3. Processor:

- ☐ Allwinner Technology: A13 Processor

4. 1pc SD Card Slot:

- ☐ Supports SDHC and up to 16GB
- ☐ For external memory
- ☐ For software update
- ☐ Accessible from access panel

5. Internal Memory:

- ☐ Standard 2GB built in memory

6. 2pcs built in tact switches

- ☐ Accessible from access panel
- ☐ Will be used to enter CSR mode and update the OS

7. 2pcs Standard USB-A jack mounted to main PCB

- ☐ For internal memory access
- ☐ Accessible from access panel
- ☐ For software update
- ☐ Will be able to connect to different components for additional accessories such as:

- Wi-Fi Dongle (not include in package of the product)
 - USB Printer (not include in package of the product)
 - USB camera (not include in package of the product)
 - Product Selector Module
8. 1pc DTCN-A-4F - 4-pin female connector
 - ☐ Accessible from access panel
 - ☐ Will be able to connect to barcodescanner module
 9. 1pc Female Barrel Jack mounted to main PCB
 - ☐ For power input
 - ☐ Accessible from access panel
 - ☐ Note: All AC adapters must have "I" type barrel jack
 10. 1pc 3.5mm Female Headphone Jack
 - ☐ Will connect to customer supplied headphones or other audio device
 - ☐ Will output 85mW audio
 - ☐ Accessible from access panel
 - ☐ Audio will not pop, buzz, or hiss during playback, video switching, or standby
 11. 1pc 1" Speaker
 - ☐ Will be mounted inside back housing
 - ☐ Will output 2W audio

Production Parameter:

1. Power Supply: Input 100-240VAC, 50-60Hz, Output 12VDC 1.5A
2. Working power: 8W (12V 650mA)
3. Working temperature: -10°C——+40°C
4. Working humidity: 10%——95%
5. Store temperature: -20°C——+60°C

Functions & Features:

This media player will function as an Android OS based device. It will utilize several different applications that will allow several different functions depending on the modules connected to the device.

Modified Android OS

Will use a modified version of the DUCO Android OS, with customized powering ON, loading, and desktop screens;

Note: OS will be 3-tiered

Application Level - In the application a preset application will play constantly. A standard level user will not be able to access any level other than the application level.

CSR Level - In this level a CSR will be able to perform various actions such as viewing metrics, setting up the Wi-Fi setting, and updating both the internal and external memory. This level will have limited options so that a CSR does not have the ability to disable the unit accidentally.

Administrative Level - This level will completely unlock the unit and allow it to be used as a standard tablet.

Most production units will utilize custom applications;

- ☐ Custom Applications

The custom applications will allow interaction between the optional USB modules

The custom applications will be either designed by the marketer of the media player or by the manufacturing factory.

All custom applications must be ran from internal memory

Software Update

- ☐ All modes must be accessible via software update
- ☐ Software update can be done via SD card or USB drive

Software update procedure must be similar to current android media player software update procedure

Custom Android 4.0 OS Specifications

Description : This software will be the custom OS software for Mini-InFinity Android Media Player, this OS will allow 3 different levels of users.

This software will perform the following functions; allow added security at the store level by prevent an in-store user the ability to perform any actions with the unit other than interact with the intended application; an in-store CSR (customer service representative) or assembly technician will have the ability to perform simple setting changes such as adjusting the network settings, changing the application and/or videos/images installed on the unit; an administrator will have the ability to adjust the unit as a user would be able to adjust settings as a standard Android OS user, which access to settings that are unavailable to the CSR level user.

Unit Model #: DK-13001

Functions & Features:

- **Level 1 - Application Level**

- o The unit will spend 99.99% of the time in the application level.
- o When unit is powered ON, unit will automatically enter the application level.
- o This will be the level presented to users in a retail environment.
- o On this level a default application (selected in the CSR or Administrator levels) will be constantly displayed on the screen. A retail level user will not be able to exit the application on this level.
 - All system keys and commands (home button, back button, time settings) will be hidden and inaccessible on this level.
- o Sleep Mode:
 - The unit will not go to sleep mode from inactivity on this level.
- o Reset Function:
 - The unit will automatically reset itself at a specified time which can be set by the CSR or administrator on this level.
 - By default the automatic reset time will be 2:00am
 - When the unit resets, it will completely power down itself, then power itself back up

- **Level 2 - CSR Level**

- o The unit will enter the CSR level very infrequently.
- o This level will be accessible only through pressing a sequence of buttons located on the back panel of the unit.

- Pressing the STOP button followed by the SETUP button on the back of the unit will allow the user to enter the CSR level of the software.
 - Pressing any other combinations of buttons will not enter the CSR level.
- o Setup Menu:
 - The CSR level will not give users full access to the different settings of the unit.
Instead it will give the user access to a menu setup that will allow limited changes to select settings.
 - From this menu, the CSR user will be able to make the following changes;
 - Change the current default application.
 - Install a new application to the unit.
 - Update/Replace the videos/images installed on the internal memory.
 - Change network settings - both wireless and wired.
 - Change the current time/date.
 - Change/Turn OFF the unit reset time.
 - Reset the unit to the default settings.
 - See the software version of the unit.
 - Pressing the EXIT button on the unit will exit the setup menu and return the unit to the application level.
- o Timeout Function:
 - This level will have an inactivity timeout period of 60-seconds to prevent unauthorized access in the event that an in-store CSR leaves the display without exiting the setup menu.
After the 60-second timeout the unit will return to the application level.
- o **Level 3 - Administrator Level**
 - o The unit will enter the administrator level only a few times throughout the life of the unit.
 - o This level will be accessible only if the user attaches a security dongle to the unit.
 - When the security dongle is removed, the unit will exit the administrator level and return immediately to the application level.
 - o This level will be the full standard Android OS, it will allow the user to make all the adjustments that are available to a standard Android based unit, such as but not limited to removing applications, updating the OS via PC/laptop with USB connection, updating all available settings, etc...
- o **SETUP MENU** - Accessible in the CSR level.
 - o The setup menu will offer limited access to the different settings/functions available on the unit.
 - o The different settings/functions will be as follows;
 - Application List
 - This will display a list of the applications currently installed on the unit.
 - Each application will have a checkbox to the right side of the screen, this will allow the user to select the default application that plays on the application level. Checking one application will uncheck the previously

selected application.

- Install New Application
 - This option will allow the user to install a new application on to the unit.
 - From this location, the user will be able to select the application (.apk) software that is located on either the SD card or USB flash drive and install the software.
 - Before installing the unit will ask the user for confirmation to install the new software.
- Update Media Content
 - This option will allow the user to load content from an SD card or USB flash drive onto the unit easily.
 - When selected, the unit will display a list of all content that is available on the SD card and/or USB flash drive with a checkbox to the right of each item. By default all items will be checked.
 - The checkbox will show whether a file will be transferred or not.
 - When a "Transfer Now" button is touched, a confirmation window will appear warning the user that the current files installed on the player are about to be overwritten. If the user selects yes, the items with the checkbox checked will be transferred onto the internal memory, overwriting the content that is currently stored there. If the user selects no, the unit will return to the Update/Replace Media Content option.
- Network Settings
 - This option is the same as the current network setup options on the unit, it will allow the user to search for a wireless network, enter a password, select the encryption type, etc...
- Date/Time
 - This option will allow the user to manually set the current date/time if necessary.
 - If the unit is connected to the network, the unit should automatically pull the current date/time from the internet.
 - The option to set the reset time should also be available under this setting.
- Default Settings
 - This function will restore the settings to the default settings.
 - Before performing this option, the unit will need to display a warning message letting the user know that all the units settings will be reset to the manufacturer's default settings. If yes is selected the unit will set all the settings to default and return to the setup menu, if no is selected the unit will return to the setup menu without changing any settings.
- About
 - This will be the same as the "About Tablet" setting on the current android based units. It will display the media player model #, android version, last update date, etc...

RF Safety Declaration

The product have 4 wall mounting bracket location hole on the back of the enclosure, the product can be used as wall mounted only, and can not be used as portable device. The distance between user and product during the operation shall be no less than 20 cm.