PRODUCT MANUAL – **GENIE AIR™**

Version 1.3.0, 11/22/2016
AT&T DIRECTV, Inc. Proprietary and Confidential

REVISION HISTORY

Date	Author	Description of Change	Version
Sept 02,2016	S. Pardue	First Draft	0.0.1 DRAFT
Sept 21, 2016	S. Pardue	Initial Review with Eng	0.0.2 DRAFT
Oct 7,2016	S. Pardue	Review with Eng and Care	0.0.3 DRAFT
Nov 18, 2016	S. Pardue	Received Updated tech comm and Product Name	0.0.4 DRAFT
Nov 22, 2016	S.Pardue	Updated draft with latest tech comm changes	0.0.5 DRAFT
Apr 8, 2016	S. Wrobel	Reviewed Draft	0.0.6 DRAFT
Apr 13, 2016	S. Kobayashi	Reviewed STB Features	0.0.7 DRAFT
Apr 13, 2016	G. Bicanek	Reviewed HW Details	0.0.8 DRAFT
Apr 14, 2016	T. Brusehaver	Reviewed Initial Installation	0.0.9 DRAFT
Apr 18, 2016	B. Toupin	Reviewed UE Features	0.1.0 DRAFT
Apr 18, 2016	S. McNabb	Reviewed Installation, Verification & Manage	0.1.1 DRAFT
Apr 18, 2016	S. Lee	Reviewed Internal WVB	0.1.2 DRAFT
Apr 20, 2016	K. Kaushik	Updated tech comm with changes	0.1.3 DRAFT
Apr 22, 2016	K. Kaushik	-0- rev for Distribution	1.0.0
July 5, 2016	K. Kaushik	Updates to Features	1.0.1 DRAFT
July 19, 2016	S. Wrobel	Reviewed draft and made changes to Installation	1.0.2 DRAFT
July 22, 2016	S. Wrobel S. McNabb	Reviewed draft and made updates to Activation, Manage & Troubleshooting	1.0.3 DRAFT
July 25, 2016	S. Wrobel	Reviewed draft and made additions to Installation	1.0.4 DRAFT
July 26, 2016	K. Kaushik	Updated tech comm with changes	1.0.5 DRAFT
July 26, 2016	S. Wrobel	Added new sections Menu UI & Feature Changes	1.0.6 DRAFT
July 26, 2016	K. Kaushik	Updated tech comm with changes	1.0.7 DRAFT
July 29, 1016	K. Kaushik	Updated tech comm with changes after Team Review	1.0.8 DRAFT
Aug 8, 2016	K. Kaushik	Updated wireframes with screenshots	1.0.9 DRAFT
Aug 9, 2016	S. Wrobel	Reviewed draft	1.0.10 DRAFT
Aug 15, 2016	S. Kobayashi	Reviewed STB Features	1.0.11 DRAFT
Aug 16, 2016	T. Wood T. Brusehaver	Reviewed draft Reviewed BSL	1.0.12 DRAFT
Aug 17, 2016	M. Gabeler Lee	Reviewed draft	1.0.13 DRAFT
Aug 19, 2016	P. Stein M. Finegan	Reviewed draft Reviewed Mobile Features	1.0.14 DRAFT
Aug 22, 2016	A. Rathert C. She	Reviewed draft Reviewed HW Features	1.0.15 DRAFT

REVISION HISTORY			
Date	**Author**	**Description of Change**	**Version**
Aug 23, 2016	B. Toupin D. Kuether	Reviewed UE Features Reviewed draft	1.0.16 DRAFT
Aug 24, 2016	E. Mateik	Reviewed draft	1.0.17 DRAFT
Aug 30, 2016	S. McNabb	Reviewed draft	1.0.18 DRAFT
Aug 31, 2016	K. Hughes	Reviewed Recording & Streaming Conflicts	1.0.19 DRAFT
Aug 31, 2016	K. Kaushik	Updated tech comm with changes	1.0.20 DRAFT
Sep 1, 2016	K. Kaushik	-0- rev for Distribution	2.0.0
Oct 14, 2016	K. Kaushik S. Wrobel S. McNabb	Updates to Resource Conflicts, Troubleshooting & Addressing questions from 2.0 review	2.0.1 DRAFT
Nov 3, 2016	S. Wrobel	Reviewed drafts and suggested edits to Installation & troubleshooting	2.0.2 DRAFT
Nov 4, 2016	K. Kaushik S. McNabb	Updated LED table with troubleshooting states	2.0.3 DRAFT
Nov 4, 2016	S. Wrobel	Reviewed draft	2.0.4 DRAFT

Introduction

Before using the equipment, read the “Important safety instructions” of this manual. This manual outlines safeguards information. The safety information contained in this manual was developed and provided solely by the manufacturer.

Safety Information is found in the back of this document

Product Manuals are intended to aid a customer in understanding the workings of the hardware devices. This Product Manual will be posted online at ATT.com for customer access.

The purpose of this document is to communicate information associated with the Genie Air™, and to provide an overview addressing specific functions of the device.

Field Engineering Technical Communications are internal communiqués that aid in preparing customer-facing departments ahead of product launches. Technical Communications comprise much of the source documentation that is subsequently transformed into customer facing materials such as scripts for Agent Call Center, troubleshooting guidelines, dot com web site content, and other materials that are customized for various agent or technician audiences.

The purpose of this document is to communicate the technical information associated with the Genie Air, and to provide an overview addressing how the new capabilities may impact the customer, agent and field technician.

Any references to specifications developed by other departments defining this release are linked here, if available.

Field Engineering staff wishes to aid and facilitate DIRECTV departments providing customer service at all levels. Please send any requests or suggestions for any additional materials or modifications to sswrobel@DIRECTV.com.

CONTENTS

I. Overview ..... 6~~6~~
II. Hardware Information ..... 7~~7~~
A. Front Panel ..... 7~~7~~
B. Top Panel ..... 7~~7~~
C. Rear Panel ..... 8~~8~~
D. Side Panel ..... 9~~9~~
E. Remote ..... 9~~9~~
F. Power Supply ..... 9~~9~~
G. SIM Card and SIM Card Interface ..... 10~~10~~
H. Specifications ..... 10~~10~~
III. Features ..... 12~~11~~
A. Hardware Feature Comparison ..... 12~~11~~
B. Software Feature Comparison ..... 13~~12~~
IV. Minimum Requirements ..... 14~~13~~
V. Installation ..... 15~~14~~
A. Genie Air™ Initial Installation ..... 15~~14~~
1. Physical Installation ..... 15~~14~~
2. Genie Air™ Boot-Up & Activation ..... 15~~14~~
B. Client Installation ..... 20~~19~~
1. Genie Wired Client ..... 20~~19~~
2. Genie Wireless Client ..... 20~~19~~
3. RVU TV / 4K RVU TV ..... 21~~20~~
C. Add a Client Process ..... 21~~20~~
D. Add External WVB ..... 23~~22~~
E. Program Remote to Genie Mini Clients ..... 24~~23~~
F. Program Remote to RVU TV using RF4CE to Server ..... 24~~23~~
VI. Manage (Replace & Remove) ..... 25~~24~~
A. Replace Genie Air™ ..... 25~~24~~
B. Replace Client ..... 25~~24~~
C. Remove Client ..... 25~~24~~
D. Replace External WVB ..... 25~~24~~
VII. Internet Configuration ..... 27~~26~~
A. Never Connected Flow ..... 27~~26~~
B. Previously Connected Flow ..... 29~~28~~
VIII. Menu and UI Differences ..... 30~~29~~

功能變數代碼變更

A. Main Menu ..... 30~~29~~
B. My DIRECTV ..... 30~~29~~
C. Search & Browse ..... 30~~29~~
D. Recordings ..... 30~~29~~
E. Extras ..... 30~~29~~
F. Settings & Help -> Settings ..... 30~~29~~
1. Settings & Help -> Settings -> Info & Test Screen Differences ..... 31~~30~~
2. Settings & Help -> Settings -> Whole-Home Screen Differences ..... 34~~33~~
3. Settings & Help -> Settings -> Reset Screen Differences ..... 36~~35~~
4. Settings & Help -> Settings -> Remote Control Screen Differences ..... 38~~37~~
IX. Updates to Existing Genie OSDs ..... 39~~38~~
A. Video Bridge Connection Failed OSD ..... 39~~38~~
B. Wireless Connection Lost OSD ..... 39~~38~~
C. Internet Never Connected, Content Missing OSD ..... 39~~38~~
D. Program Requires Internet Connection OSD ..... 39~~38~~
E. WVB Not Found OSD ..... 39~~38~~
F. Connect to the Internet OSD ..... 39~~38~~
X. Feature Differences ..... 40~~39~~
A. Transcoding ..... 40~~39~~
B. Recording & Streaming Conflicts ..... 40~~39~~
XI. Troubleshooting ..... 42~~41~~
A. New OSD's ..... 42~~41~~
1. Tilt Error OSD ..... 42~~41~~
2. Thermal Warning OSD ..... 42~~41~~
3. Bad AV Chip OSD ..... 42~~41~~
B. System Test Diagnostic Codes ..... 43~~42~~
1. New Wireless IV Diagnostic Codes ..... 43~~42~~
2. Updates to MoCA Test Errors ..... 43~~42~~
C. Symptoms ..... 43~~42~~
1. 5GHz SSID's not listed ..... 43~~42~~
D. Change to Existing Troubleshooting on Client / Server ..... 43~~42~~
1. Checks at Server ..... 43~~42~~
2. No Servers Were Detected ..... 43~~42~~
3. Wireless Connection Lost ..... 45~~44~~
XII. LED Summary ..... 47~~46~~
A. Front Panel LEDs ..... 47~~46~~

功能變數代碼變更

1. Status LED Table ..... 47~~46~~
2. Wireless LED (*Internal WVB Status*) ..... 48~~47~~
B. Top Panel LED – Add Client ..... 48~~47~~
C. Back Panel LEDs ..... 48~~47~~
1. Power LED ..... 48~~47~~
2. MoCA LED ..... 49~~48~~
XIII. Appendix ..... 50~~49~~
A. Steps To Connect Mobile Installation App to the WVB: ..... 50~~49~~
B. Federal Communications Commission Interference Statement ..... 51~~50~~

功能變數代碼變更

FIGURES

Figure 1: Genie Air™ Front Panel ..... 7~~7~~
Figure 2: Genie Air™ Top Panel ..... 7~~7~~
Figure 3: Genie Air™ Rear Panel ..... 8~~8~~
Figure 4: Genie Air™ Side Panel ..... 9~~9~~
Figure 5: EPS17 Power Supply ..... 9~~9~~
Figure 6: SIM Card Front & Rear ..... 10~~10~~
Figure 7: Installation Satellite Setup Screen (*Subject to Change*) ..... 17~~16~~
Figure 8: Genie Air™ Activation Screen (*Subject to Change*) ..... 17~~16~~
Figure 9: Genie Air™ Installation Verification SCreen (*Subject to Change*) ..... 18~~17~~
Figure 10: Genie Air™ APG Guide Screen ..... 18~~17~~
Figure 11: Genie Air™ Data Feed Screens ..... 19~~18~~
Figure 12: Mobile Installation App - Installation Complete Screen (*Subject to Change*) ..... 19~~18~~
Figure 13: Connecting to WVB - Excellent Signal Strength Screen ..... 20~~19~~
Figure 14: Full Client Tracking - Add a Client Screen ..... 21~~20~~
Figure 15: Activate your new Location Screen (Subject to Change) ..... 22~~21~~
Figure 16: Full Client Tracking - Guided Setup Complete Screen (*Subject to Change*) ..... 22~~21~~
Figure 17: Manage Clients - Stop Looking Screen (*Subject to Change*) ..... 23~~22~~
Figure 18: Wireless Video Bridge Status Screen ..... 24~~23~~
Figure 19: Remove Video Bridges Screen ..... 26~~25~~
Figure 20: Plug in Ethernet Cable Screen ..... 27~~26~~
Figure 21: Checking Connection Status Screen ..... 27~~26~~
Figure 22: Internet Setup Complete Screen ..... 28~~27~~
Figure 23: Wireless Internet Confirmation Screen ..... 28~~27~~
Figure 24: Select Wireless Network Screen ..... 28~~27~~
Figure 25: Genie Air™ Menu SCreen ..... 30~~29~~
Figure 26: Genie Server & Clients connected to a Genie Settings Screen ..... 31~~30~~
Figure 27: Genie Air™ Client Settings Screen (*Subject to Change*) ..... 31~~30~~
Figure 28: Genie & Clients Connected to Genie - Info & Test Screen ..... 32~~31~~
Figure 29: Genie Air™ Info & Test Screen ..... 32~~31~~
Figure 30: Genie Air™ Info Screen ..... 33~~32~~
Figure 31: Manage Clients - Genie Client & Genie Server ..... 34~~33~~
Figure 32: Genie Air™ Manage Clients Screen ..... 34~~33~~
Figure 33: Genie Air™ Manage Clients - Add Clients Screen ..... 35~~34~~
Figure 34: Genie Air™ Manage Clients - Add Clients Instructions Screen ..... 35~~34~~
Figure 35: Receiver Reset - Genie Client & Server ..... 36~~35~~
Figure 36: Genie Air™ - Reset Client Screen ..... 36~~35~~
Figure 37: Genie Air™ - Reset Client Confirmation SCreen ..... 37~~36~~
Figure 38: Genie Air™ - Reset Client to Default Screen ..... 37~~36~~
Figure 39: Genie Air™ - Reboot Everywhere Screen ..... 38~~37~~
Figure 40: Genie Air™ - Everywhere to Default Screen ..... 38~~37~~
Figure 41: Resource Conflict - First Run Screen (*Subject to Change*) ..... 40~~39~~
Figure 42: Resource Conflict - No Option or Cancel Recording Screen ..... 41~~40~~
Figure 43: Resource Conflict during Double-Play ..... 41~~40~~
Figure 44: Tilt Error OSD Screen ..... 42~~41~~
Figure 45: Android Settings Screen ..... 50~~49~~
Figure 46: iOS Settings Screen ..... 51~~50~~

功能變數代碼變更

TERMINOLOGY

Term	Description
Client (RVU)	Any RVU certified and DIRECTV approved device that can be connected to the DIRECTV Genie Server (e.g. TV's, Blu-ray Players, etc.)
DIRECTV RVU clients	C31, C41, C41W, C51, C61K, C61W client
non-DIRECTV RVU clients	Samsung RVU TV, Sony RVU TV, PS3 etc.
DECA (CCK)	DIRECTV Ethernet to Coaxial Adapter, also known as CCK, facilitates an easy connection of a DIRECTV receiver with the customer provided internet, using a single coaxial cable.
DECA (CCK) BB	Broadband Ethernet to Coaxial Adapter
HDD	Hard Disk Drive
LUI	Local User Interface, Samsung RVU TV's user interface, such as "Picture", "Dolby Digital", "Captioning", etc., independent of, but accessed through the DIRECTV RUI.
MoCA	Multimedia over Coax Alliance.
Protocol (RVU)	A set of instructions defined to do a specific task. In case of RVU, the instructions will allow non-DIRECTV clients (TV's) to display and interact with DIRECTV content without having a physical DIRECTV receiver in every room.
RUI	Remote User Interface, the DIRECTV UI which is accessed and manipulated directly thru an RVU client.
RVU	Standard used by manufacturers of consumer electronics to allow entertainment devices within the home to share their content with each other across a home network.
Server (RVU)	The DIRECTV HR34, HR44, H44 (with HDD), HR54 HD DVR.
STB	Set-top box or receiver.
WVB	Wireless Video Bridge
RF4CE	RF Remote control technology based on the ZigBee standard for consumer electronics devices.

I. OVERVIEW

Welcome to AT&T's DIRECTV video service. Genie Air™ is the next generation Genie Server, satellite receiver that provides breakthrough features, sophisticated integration and enhanced customer experience.

Genie Air™ is a Headless Server. A Headless Server is a satellite receiver that has no local display (*no TV connection*) on its own and is dedicated to providing services to its Genie clients and RVU TV Clients.

Genie Air™ integrates Wireless Video Bridge (*Gen 2*) and transcoding (*Mobile DVR*) capabilities. Genie Air™ will use eleven tuners (*plus one Network Tuner*), is capable of Transponder Bonding and can support up-to Seven RVU clients simultaneously (*two of which can be 4K streams*). Genie Air™ has built-in SWiM power and storage of 2TB. Genie Air™ is compatible with all Genie clients and Wireless Video Bridge.

功能變數代碼變更

II. HARDWARE INFORMATION

A. FRONT PANEL

- No Front-Panel Buttons.
- ”Status”: Multi-Color Status Indicator LED
- ”Wireless”: Multi-Color Wi-Fi Status Indicator LED (*Internal WVB Status*)

FIGURE 1: GENIE AIR™ FRONT PANEL

B. TOP PANEL

- ”Add Client”: Add Client Button with Green LED (*At the Top)*

FIGURE 2: GENIE AIR™ TOP PANEL

功能變數代碼變更

C. Rear Panel

- "DC IN – 25.2V": DC power connector with power indicator LED
- "SAT IN - SWM": One satellite input coax connector (*SWiM*)
- "MoCA": One MoCA status indicator LED
- "USB": One USB 3.0 port
- "Ethernet": One Ethernet port
- "eSATA": One eSATA port
- "SIM CARD" with instruction to "PUSH TO EJECT": One Conditional Access SIM card slot - **Do not access unless instructed by AT&T agent**

FIGURE 3: GENIE AIR™ REAR PANEL

功能變數代碼變更

D. SIDE PANEL

- "RESET": One red reset button - To be used only when instructed by AT&T agent during troubleshooting

FIGURE 4: GENIE AIR™ **SIDE PANEL**

E. REMOTE

There is no remote with the Genie Air™. However Genie Air™ has RF4CE. It will serve to program remotes (*RC71/RC72/RC73*) for RVU TV clients

F. POWER SUPPLY

The Genie Air™ requires the EPS17 (*DC 25.2V*) External Power Supply.

FIGURE 5: EPS17 POWER SUPPLY

功能變數代碼變更

G. SIM Card and SIM Card Interface

Genie Air™ has a SIM card in the Rear Panel (*Ref: Figure 3*). The SIM card replaces the Access Card. The SIM card will be pre-installed in the Genie Air™. Similar to the Access card, the SIM card is paired to the Genie Air™ (*with a Receiver ID*) and can be swapped out with a new SIM card if necessary. The Card Number will be located on the back side of the SIM. The way to insert the card is explained with an illustration near the SIM card slot.

FIGURE 6: SIM CARD FRONT & REAR

H. Specifications

- Memory : 3 GB DDR4, 8MB SNOR / 256MB NAND Flash
- Processor : BCM7366
- Storage : 2 TB SATA HDD
- Dimensions
    - Height: 266 mm (*10.47 inches*);
    - Width: 154 mm (*6.06 inches*);
    - Depth: 142 mm (*5.59 inches*)
- **Video & Audio Formats**
    - N/A
- **Environmental Requirements**
    - Operating temperature: 32 to 122 ℉ (*0℃ to 50℃*)
    - Storage temperature (*No Damage*): -40 to 150 ℉ (*-40℃ to 66℃*)
    - Relative humidity: 5-85% non-condensing

功能變數代碼變更

- **Mechanical Housing Design**
    - Genie Air™ needs to be placed in a Vertical position. Sensors will detect when the orientation is not vertical. The Wireless LED will display Flashing Yellow, and the clients will display a Tilt Error OSD.

功能變數代碼變更

III. FEATURES

- Genie Air™ is a Headless Server satellite receiver that has no output to a TV.
- Supports Wired, Wireless, 4K and RVU Clients
- Has built-in capability to connect to an internet Wi-Fi access point.
- Has Built-In Wireless Video Bridge Gen 2.
- Has Built-In Genie GO functionality.
- Capable of Transponder Bonding.
- Uses Eleven (*11*) Satellite Tuners (+ *1 Network Tuner*).
- Support up-to Seven (*7*) RVU sessions simultaneously (*two of which can be 4K streams).*
- Has built-in SWiM Power.
- Has internal storage of 2TB with expansion capability.
- Supports RF4CE Interface.

A. HARDWARE FEATURE COMPARISON

Feature	**HR54**	**Genie Air™**
Built in SWM Power (*similar to PI21*)	Yes	Yes
Tuners Used (*Video* + *Network*)	7+1	11 + 1
Audio / Video Output	Yes	No
Transponder Bonding	Yes	Yes
Built in WVB	No	Yes
Add Client Button (*for Wireless Video*)	No	Yes (*At the Top*)
Supports MoCA 1.1	Yes	Yes
Supports MoCA 2.0	No	Yes
Hard drive (*Internal*)	1TB	2TB
Hard drive expansion capable (*eSATA*)	Yes	Yes
Remote control compatible	Yes	No
Power Button	Yes	No
Recording LED	Yes	No
Menu/Guide/Arrows/Select/Res buttons	No	No
Resolution LED	No	No
Reset Button	Side	Side
Access Card	Yes	No

功能變數代碼變更

SIM Card	No	Yes
Receiver ID	Yes	Yes
USB	1 (*USB 2.0*)	1 (*USB 3.0*)
Power Supply	EPS44 (*12V*)	EPS17 (*25.2V*)
AM21 Support	Yes	No

B. SOFTWARE FEATURE COMPARISON

Feature	**HR54**	**Genie Air™**
4K ready (*Receive, Record and Distribute 4K content*)	Yes	Yes
Display 4K content (*local decode*)	No (*distribute to 4K client*)	No (*distribute to 4K client*)
Linear 4K	Yes	Yes
Push 4K	Yes	Yes
4K VOD	Yes	Yes
Number of 4K Linear/Recordings at once	1	2
Total Number of recordings at once	5	7
Total number of registered RVU clients	8	8
Total number of active sessions *(RVU, MRV or Transcode Currently Streaming)*	3	7
Number of active 4K clients within total number of clients	1	2
MRV	Yes	Yes
External WVB Compatible	Yes	Yes
AM21 Compatible	Yes	No
Built in Wi-Fi connection capability	Yes	Yes
2.4 GHz Wi-Fi Internet Interface	Yes	Yes
5 GHz Wi-Fi Internet Interface	Yes	No
Transcoding Support	Yes	Yes
Simultaneous SD Transcode	1	1
Simultaneous HD / 4K Transcode	0	0
Built in Transcoding Sync and Go	Yes	Yes
Built in Transcoding In Home / Out of Home Streaming	Yes	Yes

功能變數代碼變更

IV. MINIMUM REQUIREMENTS

All Minimum Requirements of Genie are applicable to Genie Air™ *EXCEPT the* Genie Air™ requires:

- DSWiM (*DSWiM 13 module, SL3DS LNB, 3D2 LNB, 3D2RB LNB or 5D2RB LNB*)
- Minimum of 11 available SWiM channels
- Minimum of 1 registered Client.

功能變數代碼變更

V. INSTALLATION

A. GENIE AIR™ INITIAL INSTALLATION

The following steps are to be followed by an Installer for new installations (*not replacement*).

1. Physical Installation

Genie Air™ needs to be placed in a vertical position. Since Genie Air™ is a Headless Server, a TV cannot be attached to it, and this provides placement flexibility.

Steps To Install Genie Air™:

1) Install the ODU with a Digital SWiM LNB.
   - Refer D-114 H44 Tech Comm for detailed information regarding installation using the built-in SWiM power inserter.
2) If Internet is available (*or will be available soon if known*), place the Genie Air™ near the customer's router and connect the Ethernet cable from the customer's router to the Genie Air™. Genie Air™ will automatically connect to the Internet. This is the preferred method. The minimum distance from other Wireless devices is 4 feet (*similar to present day wireless video and Wi-Fi guidance*).
   - Alternate Internet Connection – The Genie Air™ can also be Internet connected using BB-DECA or Internal Wi-Fi (*similar to HR44/54*).
   - Alternate Genie Air™ Location: Place the Genie Air™ in a location for optimal signal between the built-in WVB and Wireless Client (*per current WVB placement guidance*). Refer D-040 WVB Tech Comm for detailed information.
3) Connect the coax cable from the wall plate to the Genie Air™.
4) Connect the power cable to the Genie Air™.

2. Genie Air™ Boot-Up & Activation

Once the Genie Air™ has Power, the Status LED on the front of the Genie Air™ goes through various color state changes.

1) The Status LED remains OFF during boot-up (*about 10 seconds)*. Note: *This initial LED Off state is subject to change before launch*.
2) Once the Status LED turns Solid White (*approx. 5 seconds*), the Installer needs to press the Add Client button located at the top of the Genie Air™ to force a SWDL to the Genie Air™ (*if necessary*).
   - SWDL over Broadband takes priority over SWDL over Satellite.
   - The Status LED will change to Flashing White while the download occurs.
   - Do not unplug or reset the Genie Air™ while it is in the Flashing White LED state.

功能變數代碼變更

- The SWDL duration via Satellite will be approx. the same as today while the broadband download will be faster.
- Once the download completes, the Genie Air™ will reboot itself, and LED sequence will go back to step 1 (*Status LED Off for approx. 10 seconds, Solid White for approx. 5 seconds*)
- SWDL failure: In case of any issues during SWDL, the Status LED will start Flashing Red. At this point the Genie Air™ will reboot itself and attempt to download the software again.

3) The Status LED will turn Flashing Green (*approx. 3-4 minutes*), and the Add Client button will begin Flashing Green (*this indicates that the Installer's Mobile App and Wireless Clients can connect to the* Genie Air™).
4) The Installer can see the Initial setup screens by one of the following:
   - On the Installer's mobile device with the Mobile Installation App (*that has been previously configured*), turn the Wi-Fi On. Then connect the Installer's mobile device to the Genie Air™ internal WVB wireless network and launch the App. The role of the App is to allow the technician to setup the Genie Air™ without a TV connected to it.
     - If the Installer's Mobile Device is unable to detect the WVB Wireless Network, press the "Add Client" Button on the Genie Air™.
     - This connection does not need Internet or cellular service.
     - The steps for the one-time configuration of the Mobile Installation App is explained in the Appendix.
   - Connect a Wireless client to a TV to see the same installation screens that will be displayed on the Mobile Installation App. If the screens don't appear, press the "Add Client" Button on the Genie Air™
   - Connect a Wired Client to a TV and the Genie Air™ MoCA network to see the same installation screens that will be displayed on the Mobile Installation App.
5) The following Satellite Dish Setup (*Verifying configuration*) screen will be displayed on the Mobile Installation App (*or clients*).

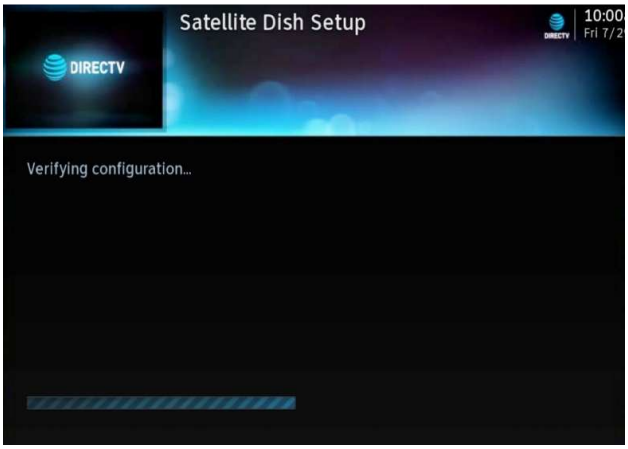

FIGURE 7: INSTALLATION SATELLITE SETUP SCREEN (*SUBJECT TO CHANGE*)

- If the Genie Air™ is unable to detect the dish or auto-configure, the Status LED will change to solid Yellow and the Satellite Dish Setup (*Dish configuration settings*) screen will be displayed. The user needs to manually configure Dish/Switch type before they can continue further.

6) The Status LED then displays Solid Blue and Genie Air™ is ready for Activation. Since Genie Air™ does not have any display on its own, there is no option to switch language to Spanish.

FIGURE 8: GENIE AIR™ ACTIVATION SCREEN (*SUBJECT TO CHANGE*)

7) After Activation, the Satellite IV screen is displayed. The Status LED displays Flashing Green.

功能變數代碼變更

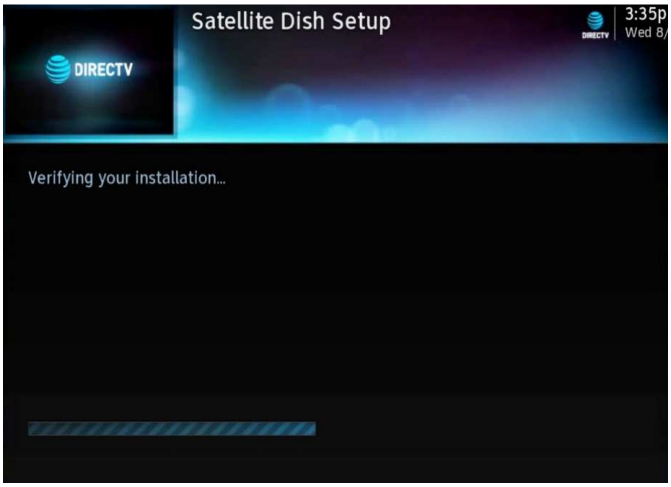

FIGURE 9: GENIE AIR™ INSTALLATION VERIFICATION SCREEN (*SUBJECT TO CHANGE*)

- If Satellite IV fails, the Status LED turns Solid Yellow. Troubleshooting remains the same as present day install.

8) The Status LED continues to display Flashing Green as the Genie Air™ acquires the Advanced Program Guide with the download status as shown on screen. Unlike the Genie's, There is no option to "Continue" in the APG screen.

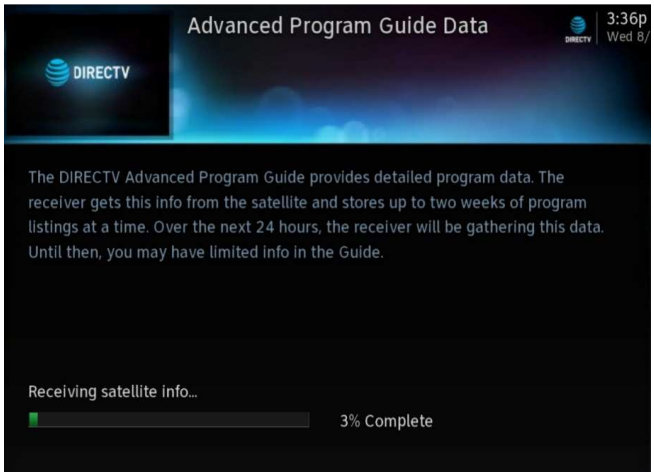

FIGURE 10: GENIE AIR™ APG GUIDE SCREEN

9) Once the APG data is 100% complete, the Genie Air™ runs the Data & Guide Feed Tests. The Status LED remains Flashing Green.

功能變數代碼變更

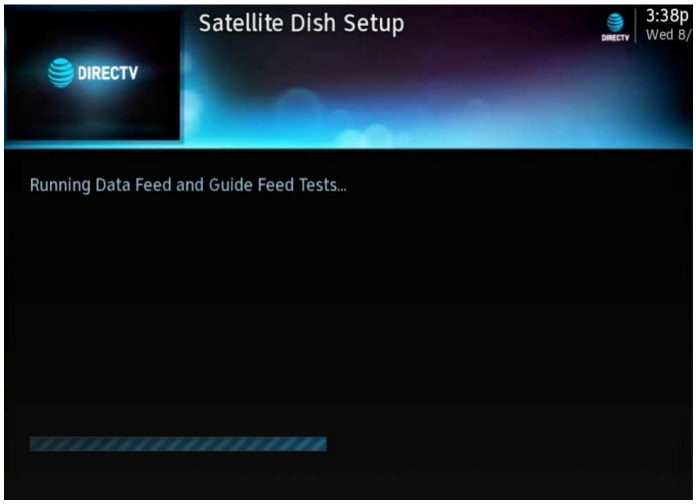

FIGURE 11: GENIE AIR™ DATA FEED SCREENS

- If there is an error found during the Data / Guide feed tests, the LED turns Solid Yellow. Troubleshooting remains the same as present day install.

10) Once Initial Setup is complete, Status LED displays Solid Blue and Genie Air™ is ready to Add Client. The following screen is displayed **only** in the Mobile Installation App. The Genie Mini clients and RVU TVs will display, the Add Client screen (*Refer – Add A Client section*).

FIGURE 12: MOBILE INSTALLATION APP - INSTALLATION COMPLETE SCREEN (*SUBJECT TO CHANGE*)

功能變數代碼變更

B. Client Installation

The Genie Air™ must be Setup and Functioning before any RVU Clients can complete installation. The following steps are to be followed at Initial Installation or when adding clients post installation.

1. Genie Wired Client

   The following are the Steps to Install the Genie Wired Client.

   1) Connect the Genie Wired Client to the SWiM/MoCA network via coax.
   2) Connect the Genie Client to a TV.
   3) Plug the Genie client power cable into a power source and power on the Wired Client.
   4) Follow the Add A Client Process section below to add clients.

2. Genie Wireless Client

   Since Genie Air™ has an in-built WVB no Site Survey will be performed.

   The following are the Steps to Install Wireless Clients

   1) Connect the Genie Wireless Client to a TV.
   2) Plug the Genie client power cable into a power source and power on the Wireless Client.
   3) The Wireless client will try to connect to the server and the "Connecting to Video Bridge" screen will be displayed.
      - If Wireless Signal Strength is Green / Signal Quality is Excellent or Good, the following screen is displayed, and the user can select "Connect Now".

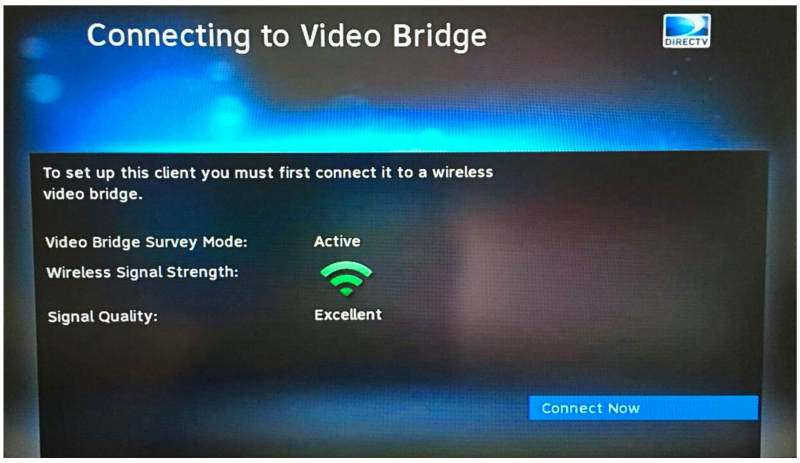

FIGURE 13: CONNECTING TO WVB - EXCELLENT SIGNAL STRENGTH SCREEN

- If Signal Strength/Quality is Yellow/Fair or Red/Poor, the Genie Air™ or Wireless Client should be moved, or an External WVB should be added to the install (*follow normal guidance for WVB and Wireless Client placement and troubleshooting*).

- If Video Bridge Survey Mode is “Inactive” and the Signal Quality is “Waiting”, the user must press the Add Client button on the top of Genie Air™ or on a previously connected client navigate to Menu -> Settings -> Whole-Home -> Manage Clients -> Add Clients. The Add Client (*Discovery*) mode is enabled for a maximum of 20 minutes (*each time the Add Client button is pressed*), and it will time out. Once Signal Strength becomes Excellent or Good, the user can select “Connect Now”.

4) The Wireless Client will connect to the Genie Air™. Follow the Add A Client Process section below to add clients.

3. RVU TV / 4K RVU TV

The following are the steps to install the RVU / 4K RVU TV client.

1) Connect the RVU / 4K RVU TV to the SWiM/MoCA network (*Normal install using the DECA or USB DECA*)
2) Connect the power cable and turn on the TV.
3) Get to the DIRECTV Ready input.
4) Follow the Add A Client Process section below to add RVU / 4K RVU TV.

C. Add a Client Process

The Add Client process will be different than current Genie process.

Full Client Tracking process will be used to Add Clients (Genie Air™ *does not use Lenient Mode*). Full Client Tracking is documented in detail in the D-088 Goliath-Flower SWDL Tech Comm (*Refer the Appendix*).

In Full Client Tracking, the users do not need the Server Pin to Add or Replace clients.

1) Once the clients are connected, the following screen is displayed in the client.

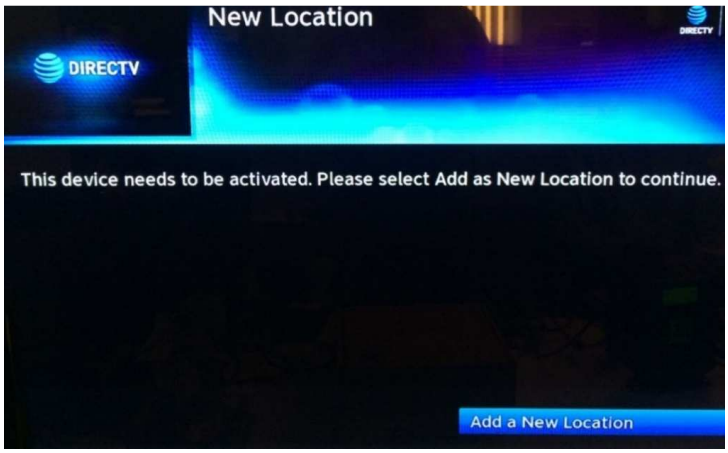

FIGURE 14: FULL CLIENT TRACKING - ADD A CLIENT SCREEN

2) The user needs to follow on-screen instructions to Add the client. Refer D-088 Goliath-Flower Tech Comm (*Refer the Appendix*). See “Add a Client when in Lenient Mode or when in FCT mode” section III.B.3.b

功能變數代碼變更

3) The “Activate Location” screen has been modified to include a new “Activation Number”/“Deactivation Number” that will be used for future automated activation process (*This feature will not be available during pilot/product launch*).

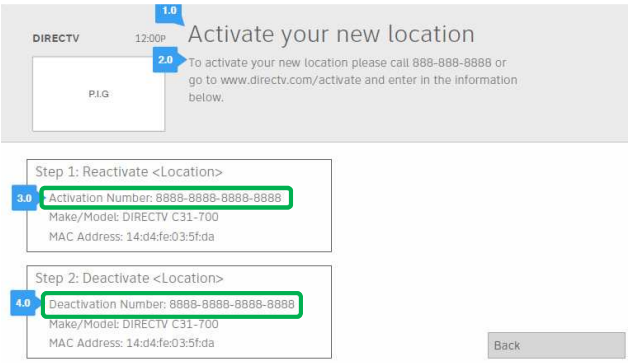

FIGURE 15: ACTIVATE YOUR NEW LOCATION SCREEN (SUBJECT TO CHANGE)

4) After the location has been added, the following “Guided Setup Complete” screen is displayed at the client. The “Completion Code” is displayed in the screen.

FIGURE 161615: FULL CLIENT TRACKING - GUIDED SETUP COMPLETE SCREEN (*SUBJECT TO CHANGE*)

5) After the first Client has been added the Status LED on the Genie Air™ turns Solid Green.

6) After all the clients have been added, the Add Client mode must be turned Off by selecting Menu -> Settings -> Whole Home -> Manage Clients -> Stop Looking.

功能變數代碼變更

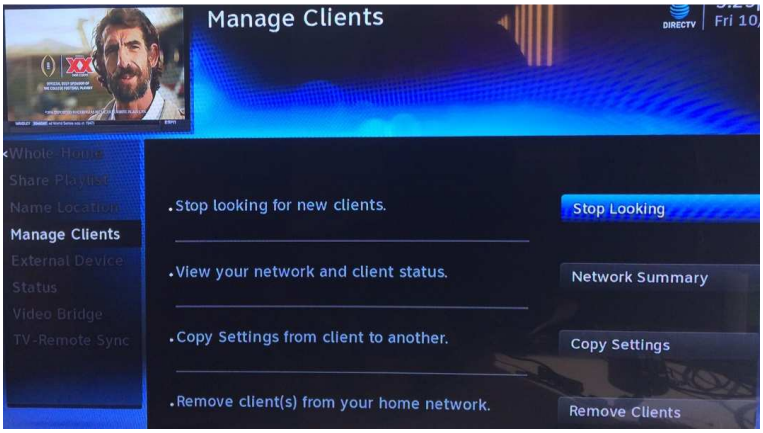

FIGURE 171716: MANAGE CLIENTS - STOP LOOKING SCREEN (*SUBJECT TO CHANGE*)

- If the user skips the Stop Looking step, the Add Client mode will automatically timeout within 1 hour (*during initial install*) or 20 minutes (*if Add Client button was pressed*).

D. ADD EXTERNAL WVB

Genie Air™ supports the configuration of an External WVB as a Wireless Extender to the Internal WVB.

The following are the steps to install an External WVB.

1) Install the WVB in an optimal location as per current WVB placement guidance.
2) Ensure the Genie Air™ server is Turned On.
3) Ensure all the Wireless clients are turned Off (*in standby*).
4) Connect the power and coax cables to the external Wireless Video Bridge.
5) After the WVB boots up (*WVB LED turns Solid Green / Blue*), turn On the Wireless clients.
6) The clients will display “A wireless video bridge has been found and configured successfully”.
7) The client will automatically connect to the new WVB if it has a better signal than to the Genie Air™.
8) Ensure the Wireless clients have a Green LED and show video.
9) When the user selects Menu -> Settings -> Whole-Home -> Video Bridge -> Video Bridge Status, the external WVB will be listed in addition to the internal WVB.

功能變數代碼變更

FIGURE 18: WIRELESS VIDEO BRIDGE STATUS SCREEN

E. PROGRAM REMOTE TO GENIE MINI CLIENTS

The procedure to program the Remote to Genie Mini remains the same as present day install.

F. PROGRAM REMOTE TO RVU TV USING RF4CE TO SERVER

The procedure to program the Remote to the DIRECTV Ready RVU TVs is the same as the present day (*see D-137 Mimic SWDL Tech Comm for detailed programming steps*). See "DIRECTV Ready RVU TV Client Remote Control Programming" section III.A.2 in the Mimic tech comm.

However since the Genie Air™ is Headless, during the steps to "Programming the Genie Remote at the Genie Server" the user will be instructed to program the Remote using the TV-Remote Sync option (*Menu -> Settings -> Whole Home -> TV-Remote Sync*). ~~cannot be used.~~

功能變數代碼變更

VI. MANAGE (REPLACE & REMOVE)

A. REPLACE GENIE AIR™

The following are steps to be followed when the user needs to replace an old Genie Air™ with a new one.

1) Swap the old Genie Air™ with the new Genie Air™.
2) Follow normal steps to Reset Connection (*Reset to Default*) on the Wireless Client (*if any*).
3) Activate the new Genie Air™ as described in the Installation (Genie Air™ *Boot-Up & Activation*) section V.A.2 above.
4) Follow the steps to add a client as described in the Installation (Add A Client) section V.C above and pair all the clients to the new Genie Air™.

B. REPLACE CLIENT

Full Client Tracking process is used to Add / Replace clients.

1) To replace a client, Follow the steps in the Installation (*Client Installation*) section V.B above to swap the old client with the new client.
2) If using a Wireless Client, press the Add Client button at the top of the Genie Air™ and select Connect Now on the wireless client.
3) Select Replace a Location.
4) Follow the Full Client Tracking steps to replace the Client. Refer D-088 Goliath-Flower Tech Comm for detailed information (*Refer the Appendix*). See “Replace an RVU Client when in Lenient Mode or when in FCT mode” section III.B.3.c

C. REMOVE CLIENT

The Genie Air™ should always have at-least one client connected to it. These steps are to be followed only to remove the 2nd through 8th clients and not when replacing a client.

1) Physically remove the specific client.
2) From another client location select Menu -> Settings -> Whole-Home -> Manage Clients -> Remove Locations.
3) Follow the Full Client Tracking steps to remove the client. Refer D-088 Goliath-Flower Tech Comm for detailed information (*Refer the Appendix*). See “Delete or Remove a Client when in Lenient Mode or when in FCT mode” section III.B.4

D. REPLACE EXTERNAL WVB

The Internal Video Bridge cannot be removed as it is built-into the Genie Air™. If an External WVB is configured to the network, the “Remove Video Bridges” option will be enabled.

The following are the steps to be followed when removing an External WVB.

1) Ensure the Genie Air™ server ~~is~~ has powered~~ On~~.
2) Ensure all the Wireless clients are turned Off (*in standby*).
3) Physically remove the old WVB.

功能變數代碼變更

4) Plug in the new WVB.
5) Power on all the Wireless clients.
6) Ensure the Wireless clients connected to the new WVB have a Green LED and show video. Else troubleshoot Wireless clients as present day troubleshooting.
7) At any client (*wired or wireless*), select Menu -> Settings -> Whole-Home -> Video Bridge -> Remove Video Bridges

FIGURE 19: REMOVE VIDEO BRIDGES SCREEN

8) Select the Checkbox for Wireless Video Bridge with "Not Found" after the number, click Continue.
9) Press the Dash key. The OSD “You have successfully removed one Wireless Video Bridge from your Whole-Home network” will be displayed.

功能變數代碼變更

VII. INTERNET CONFIGURATION

Genie Air™ connects to the Internet by leveraging the existing "Get Connected" process flow. Genie Air™ performs better when connected in a Wired Broadband Connection. Once the physical connection is made (*Ethernet or BB DECA*), the Genie Air™ should automatically connect to the internet. If it does not get connected, the following steps need to be followed.

A. NEVER CONNECTED FLOW

The following are the steps to be followed when connecting a Genie Air™ to the Internet.

1) Connect the Ethernet cable to the Genie Air™. The server will automatically connect to the Internet. At the client press the Menu button and check if the Genie Air™ is "Connected". If it's not Internet connected proceed to the next step.
2) Select "Connect Now" at the client.
3) Once the user selects "Connect Now" the following "Plug in Ethernet Cable" screen will be displayed. This screen is to promote the Wired broadband connection. A graphic will be displayed to show the way to connect via Ethernet cable.

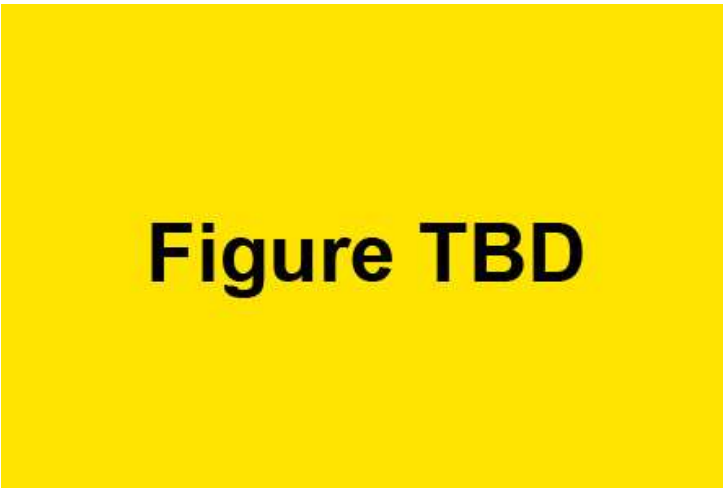

FIGURE 20: PLUG IN ETHERNET CABLE SCREEN

4) When the user plugs the Ethernet cable and selects "Check Connection", the following "Checking Connection Status" screen will be displayed.

FIGURE 21: CHECKING CONNECTION STATUS SCREEN

功能變數代碼變更

5) The Genie Air™ will check if its Internet connected. If it connects, the Internet Setup Complete screen will be displayed else the “Checking Connection Status” screen will continue to be displayed.

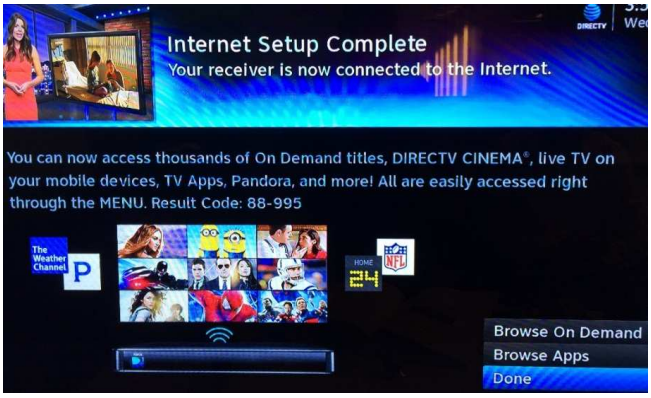

FIGURE 22: INTERNET SETUP COMPLETE SCREEN

6) If the user selects “Go Wireless Instead” at Figure 20, another Wireless Warning confirmation screen will be displayed. This screen is used to re-confirm Wireless broadband connection since Genie Air™ performs better in Wired broadband.

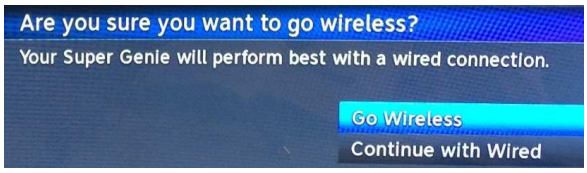

FIGURE 23: WIRELESS INTERNET CONFIRMATION SCREEN

7) If the user selects “Continue with Wired”, the previous “Plug in Ethernet Cable” screen will be displayed (*Ref: Figure 20*). If the user selects “Go Wireless”, the following “Select Wireless Network” screen is displayed.

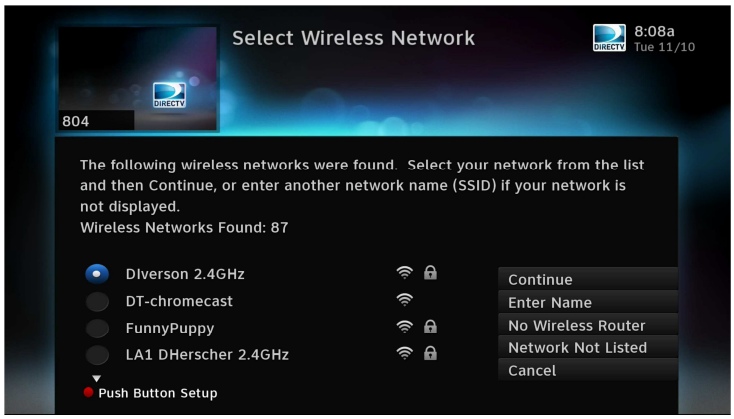

FIGURE 24: SELECT WIRELESS NETWORK SCREEN

功能變數代碼變更

8) The user can select the desired Wireless Network to join and proceed with the exiting Get Connected Flow. For detailed information refer D-140 Neo SWDL Tech Comm.

B. PREVIOUSLY CONNECTED FLOW

1) If the Genie Air™ was previously Internet connected, the “Reconnect Now” screen will be displayed.
2) When the user selects “Reconnect Now”, the “Is your Internet connection working” screen will be displayed (*current existing Get Connected Flow*).
3) When the user selects Yes, the Plug in Ethernet Cable screen will be displayed (*Ref: Figure 20*). The purpose is to redirect the user to prefer Wired Internet over Wireless connection.
4) Follow the same steps as in Never Connected flow to connect the Genie Air™ to the Internet.

功能變數代碼變更

VIII. MENU AND UI DIFFERENCES

Genie Air™ is a headless server and has no local display on its own. All the Server information will be displayed on each RVU Clients. The screens that are displayed on a client connected to Genie Air™ are different from the present screens in the Genie server and clients connected to a Genie.

A. MAIN MENU

When the user selects the Menu button, the same Menu screen is displayed on the Genie, clients connected to the Genie and clients connected to the Genie Air™. The Menu options like “My DIRECTV”, “Search & Browse”, “Recordings”, “Extras”, and “Connected” remain the same.

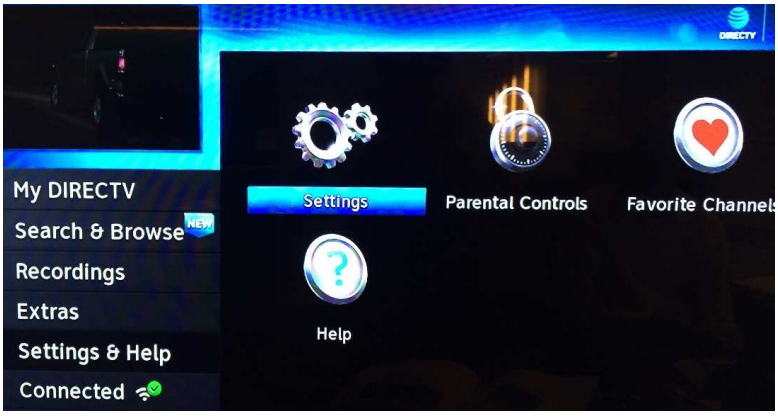

FIGURE 25: GENIE AIR™ MENU SCREEN

B. MY DIRECTV

All Menu Options under the My DIRECTV option will remain the same.

C. SEARCH & BROWSE

All Menu Options and screens under the Search & Browse option will remain the same.

D. RECORDINGS

All Menu Options and screens under the Recordings option will remain the same.

E. EXTRAS

All Menu Options and screens under the Extras option will remain the same.

F. SETTINGS & HELP -> SETTINGS

Menu -> Settings & Help -> Settings screens will change and have some differences from present Genie and Clients.

All Left Menu Options in the Setting Screen seen on a Client connected to an Genie Air™ will remain the same.

功能變數代碼變更

The following screens from the Settings left menu are no different than what is normally seen on a Client, whether the client is connected to a Genie or Genie Air™.

- Display
- Audio
- Internet Setup
-
- Power Saving
- Satellite

These are the Settings screen on the Genie and Client Connected to a Genie today:

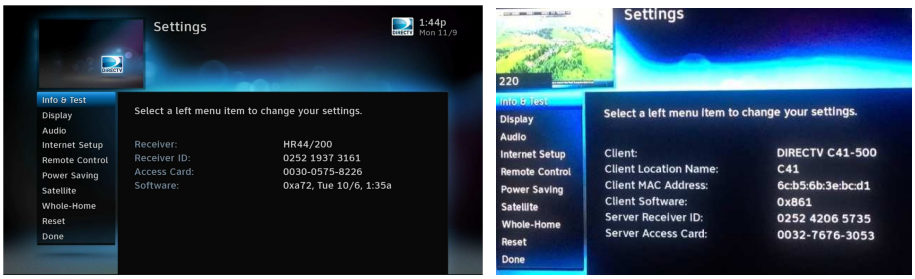

FIGURE 26: GENIE SERVER & CLIENTS CONNECTED TO A GENIE SETTINGS SCREEN

This is the Settings screen on a Client connected to an Genie Air™:

- Genie Air™ client will display the Server Info and the Client Info.
- Client information will be displayed above the Server information.
- Client information will be specific to the client.
- Server information will be displayed on all clients.

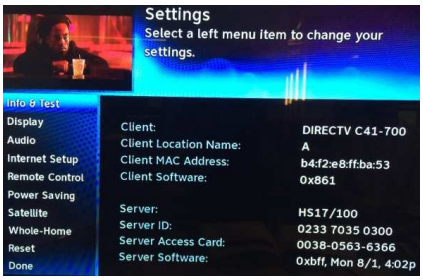

FIGURE 27: GENIE AIR™ CLIENT SETTINGS SCREEN (*SUBJECT TO CHANGE*)

1. Settings & Help -> Settings -> Info & Test Screen Differences

   Menu -> Settings & Help -> Settings -> Info & Test screens will change and have some differences from present Genie and Clients.

   These are the Info & Test screen on the Genie and Client connected to a Genie today:

功能變數代碼變更

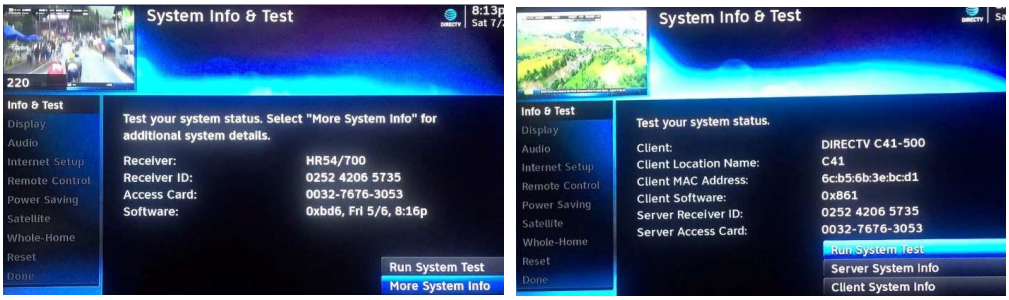

FIGURE 28: GENIE & CLIENTS CONNECTED TO GENIE - INFO & TEST SCREEN

This is the Setting screen on a Client connected to an Genie Air™:

- Genie Air™ client will display the Run System Test, <Client Location Name> Info and Super Genie Info.
- Run System Test is used to run system test on the Genie Air™ server.
- <Client Location Name> Info will display details about the specific client. It is the same as the present Client System Info screen.

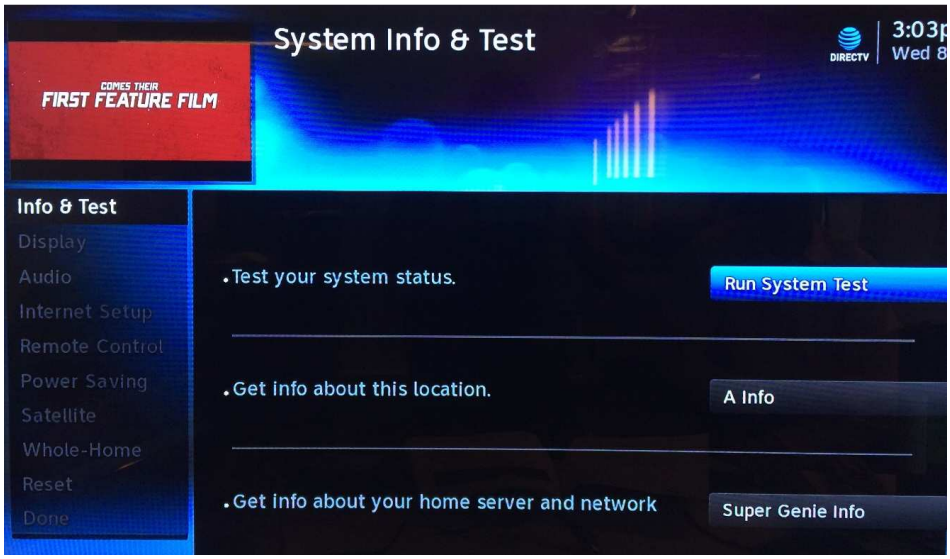

FIGURE 29: GENIE AIR™ INFO & TEST SCREEN

- Selecting the Super Genie Info option will display all server information. It will ***NOT*** display any details regarding Display, Audio, Remote Control, Captioning, HDTV, Favorites, Parental Controls and Caller ID. These details are maintained only at specific client locations.

功能變數代碼變更

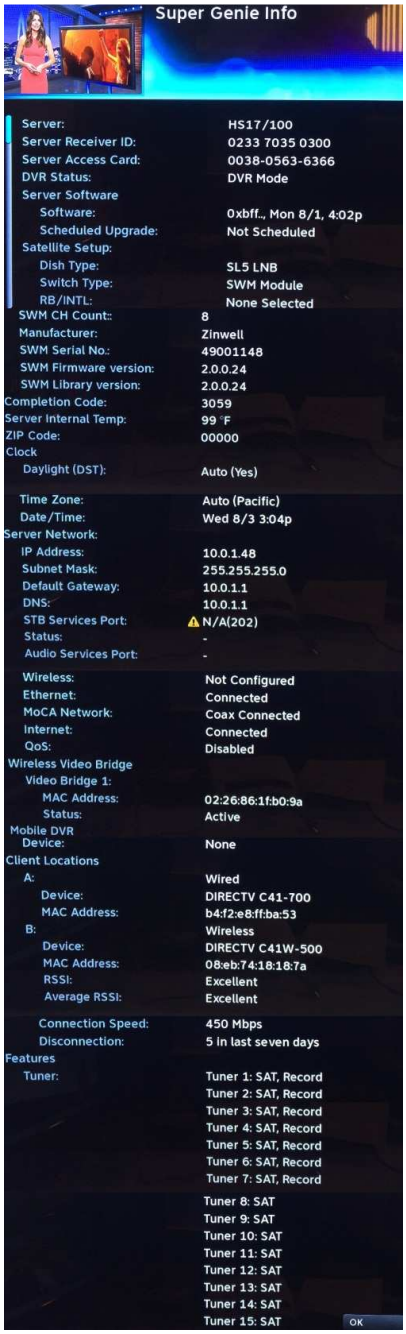

FIGURE 30: GENIE AIR™ INFO SCREEN

功能變數代碼變更

2. Settings & Help -> Settings -> Whole-Home Screen Differences

   Menu -> Settings & Help -> Settings -> Whole-Home -> Manage Clients screens will have some differences from present Genie and Clients.

   These are the Manage Client screens on the Genie and Client connected to a Genie today:

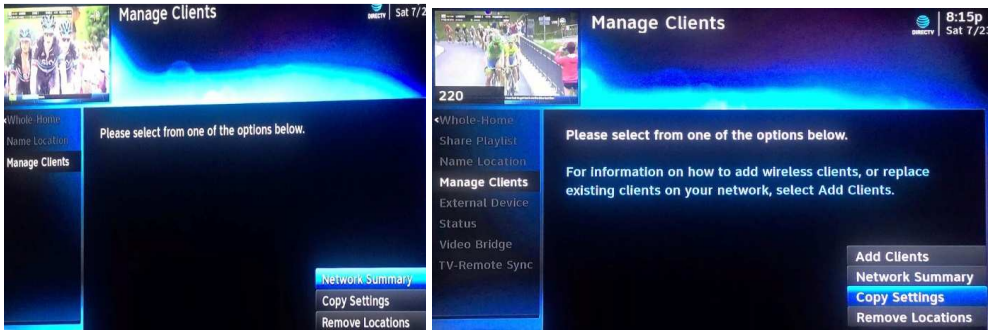

FIGURE 31: MANAGE CLIENTS - GENIE CLIENT & GENIE SERVER

This is the Manage Client screen on a Client connected to an Genie Air™:

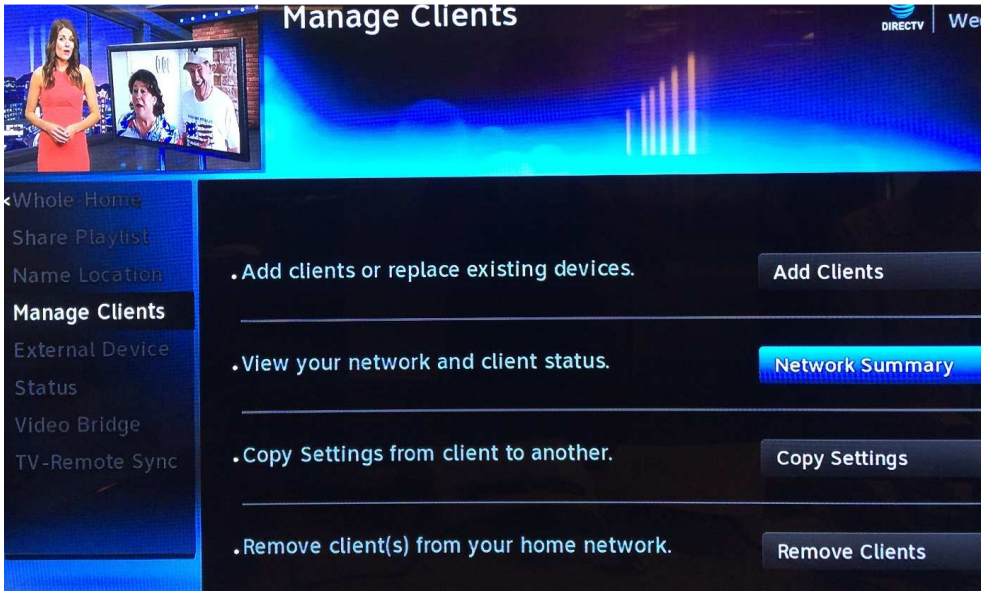

FIGURE 32: GENIE AIR™ MANAGE CLIENTS SCREEN

功能變數代碼變更

The following are the differences in Manage Clients for a Client connect to a Genie server versus a Client Connected to an Genie Air™.

1) When the user selects the “Add Clients” button, the following screen is displayed.

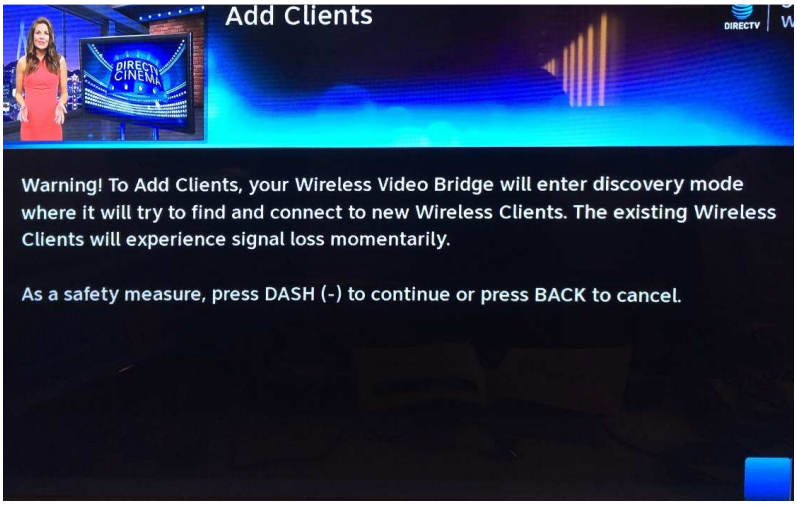

FIGURE 33: GENIE AIR™ MANAGE CLIENTS - ADD CLIENTS SCREEN

2) When the user presses the “Dash” key the following screen is displayed with on-screen instructions to Add the client.

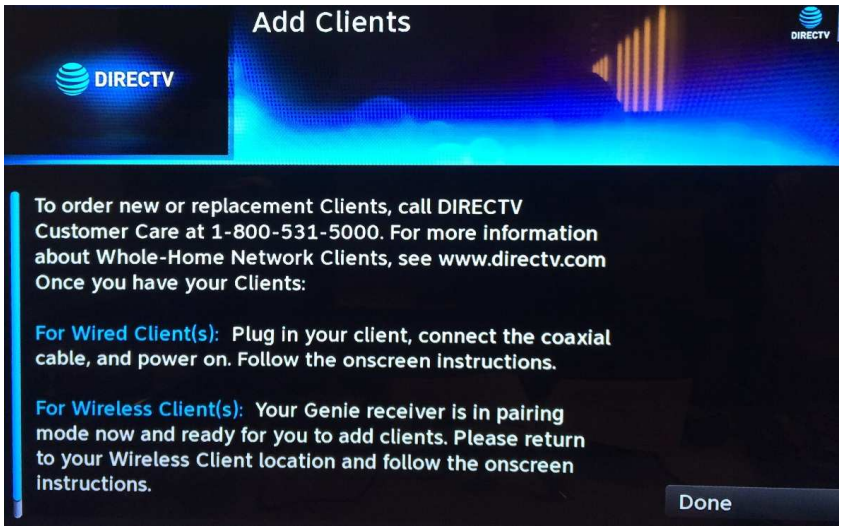

FIGURE 34: GENIE AIR™ MANAGE CLIENTS - ADD CLIENTS INSTRUCTIONS SCREEN

功能變數代碼變更

3. Settings & Help -> Settings -> Reset Screen Differences

   Menu -> Settings & Help -> Settings -> Reset screen will have some differences from present Genie and Clients.

   This is the Reset screen on the Genie and Client connected to a Genie today:

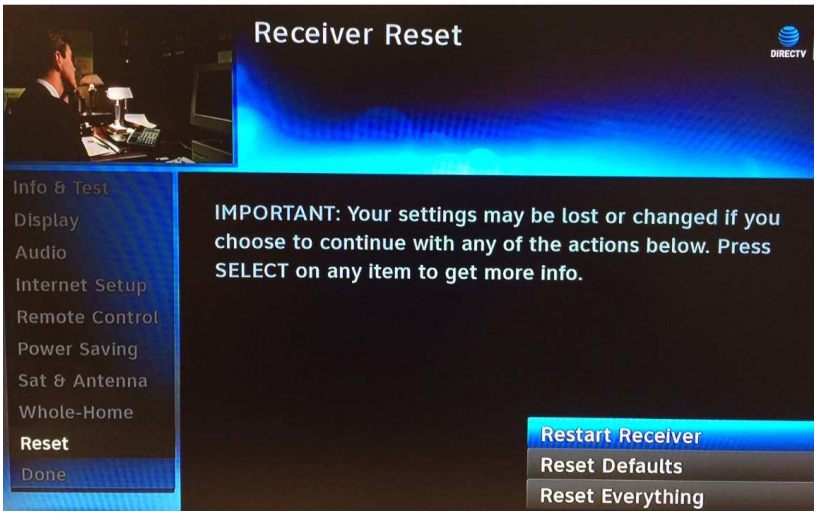

FIGURE 35: RECEIVER RESET - GENIE CLIENT & SERVER

This is the Reset screen on a Client connected to an Genie Air™:

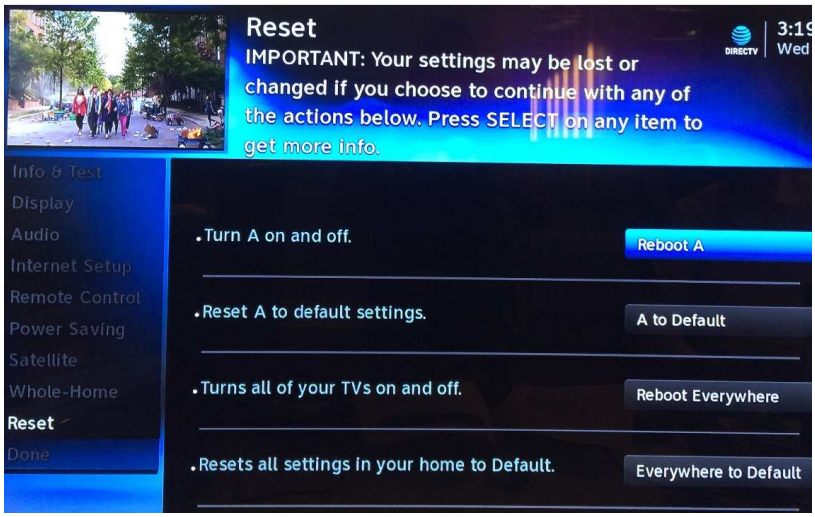

FIGURE 363634: GENIE AIR™ - RESET CLIENT SCREEN

功能變數代碼變更

When the user selects “Reboot <Client Location Name>”, the following confirmation screen is displayed and when the user presses the Dash key, the client will reboot.

FIGURE 37: GENIE AIR™ - RESET CLIENT CONFIRMATION SCREEN

When the user selects “Reboot <Client Location Name> to Default”, a confirmation screen is displayed and when the user press the Dash key, the specific client will reset to defaults.

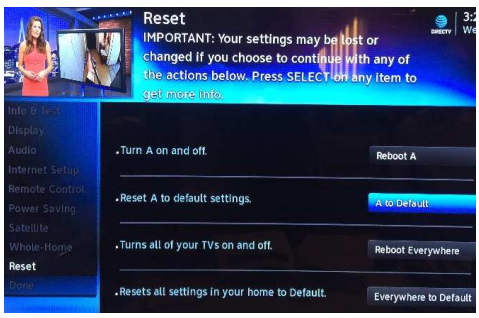

FIGURE 38: GENIE AIR™ - RESET CLIENT TO DEFAULT SCREEN

When the user selects “Reboot Everywhere”, the following confirmation screen is displayed and when the user presses the Dash key, all the client locations will reboot. This functionality is similar to “Reset Everything” on the Genie server and clients.

功能變數代碼變更

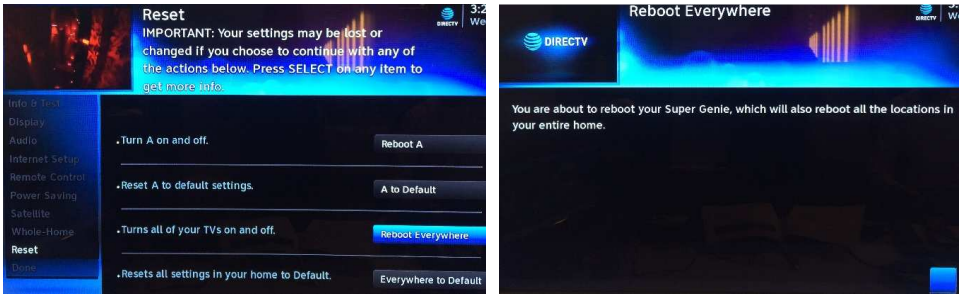

FIGURE 39: GENIE AIR™ - REBOOT EVERYWHERE SCREEN

When the user selects “Everywhere to Default”, the following confirmation screen is displayed and when the user presses the Dash key the server and all the client locations are reset to default. This functionality is similar to the Reset Defaults on the Genie server and clients.

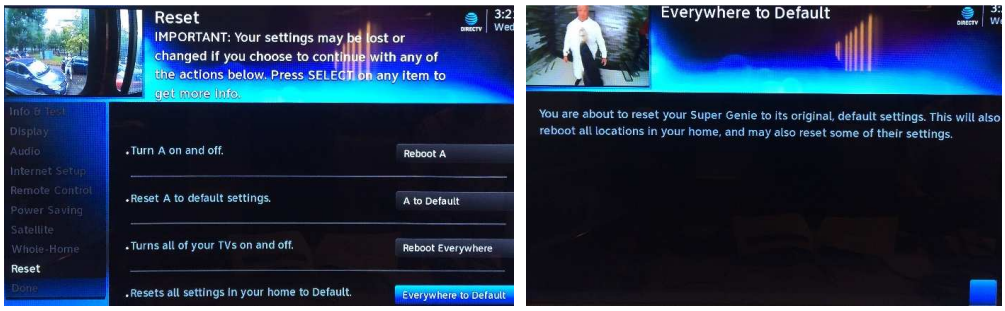

FIGURE 40: GENIE AIR™ - EVERYWHERE TO DEFAULT SCREEN

4. Settings & Help -> Settings -> Remote Control Screen Differences

   All the remote screens and functions are the same as when a Client is connected to a Genie, except the texts have been modified such that the word “receiver” has been replaced with “location”.

功能變數代碼變更

IX. UPDATES TO EXISTING GENIE OSDS

The following OSDs have been included / updated for Genie Air™. Troubleshooting remains the same as today.

A. VIDEO BRIDGE CONNECTION FAILED OSD

Genie Text: "Unable to connect to Wireless Video Bridge. Make sure that the WVB is in Add Client Mode and this client is within range of your video bridge signal. "

Genie Air™ client Text: "Regretfully, we can't connect your client. Make sure you are in Add Client Mode from an existing location and the client is within range of the Super Genie's wireless video signal."

B. WIRELESS CONNECTION LOST OSD

Genie Text: "The connection to your Wireless Video Bridge (WVB) has been lost. Please make sure the WVB and Genie server are properly connected and that they have not been moved."

Genie Air™ client Text: "Oh no! Your wireless video connection was lost."

C. INTERNET NEVER CONNECTED, CONTENT MISSING OSD

Genie Text: "Connect your Receiver to the Internet to access DIRECTV's massive On Demand library, including thousands of free & premium shows and movies! Select Learn More for details."

Genie Air™ client Text: "Connect your receiver to the Internet and get access to DIRECTV's huge On Demand library of free & paid movies and shows! Select Learn More for details"

D. PROGRAM REQUIRES INTERNET CONNECTION OSD

Genie Text: "Connect your Receiver to the Internet to watch this program and access DIRECTV's huge On Demand library! Select Connect Now for details."

Genie Air™ client Text: "Connect your Receiver to the Internet to watch this program and access DIRECTV's huge On Demand library! Select Connect Now and follow the onscreen steps."

E. WVB NOT FOUND OSD

If WVB is not found, this OSD is displayed at the client locations. Text remains the same as Genie.

F. CONNECT TO THE INTERNET OSD

This OSD is displayed over Live TV to encourage users to connect to the internet both in Never Connected and Previously Connected state. Text remains the same as Genie.

功能變數代碼變更

X. Feature Differences

A. Transcoding

Genie Air™ has Two Built-In Transcoders. It supports Transcoding of One SD stream (*at-launch*). Transcoding of HD / 4K streams will be supported in future.

B. Recording & Streaming Conflicts

In the current Genie products, when a user exceeds streaming limits, a Streaming Conflict OSD is displayed, and when a user tries to record on too many tuners, a Recording Conflict warning is displayed. On a Client connected to an Genie Air™, these two limitations will be combined into one screen.

When the user tries to watch or ~~/~~ record an eighth program, a conflict occurs, the following Resource Conflict OSD is displayed.

Draft Text:

"Please cancel a recording below so <New Conflict> can be recorded. Otherwise press EXIT."

(*Or*)

"Please cancel an option below so <New Conflict> can be watched. Otherwise press EXIT."

To help provide users with better information to choose their cancellation, a new tag (*First Run*) has been added to indicate First Running of a particular program.

FIGURE 41: RESOURCE CONFLICT - FIRST RUN SCREEN (*SUBJECT TO CHANGE*)

Each title listed corresponds to a streaming session on a client, a recording and/or a Double-Play occurrence. The user will have the following options to resolve the conflict.

- "Cancel Recording"
  - This will cancel the recoding so the tuner can be used to record/watch another channel/title.
- No Option Available
  - There will be no option if a client is currently tuned to the channel/title that is listed, even if the title is being recorded

功能變數代碼變更

- Clients could be either a Genie Client or a MRV Client
- If the user does not wish to cancel and there is a title with no option, they should find the Genie Client that is watching the blocking title and put it in Standby to release the session; or find a MRV client and stop the playback of the recording from the Genie Air™. Once this is done the other client can start streaming a session.

FIGURE 42: RESOURCE CONFLICT - NO OPTION OR CANCEL RECORDING SCREEN

- "Take This Session"
  - The "Take this session" button will be displayed if a session can be taken during Double-Play. Selecting this will disable Double-Play at the location the Double-Play was enabled.

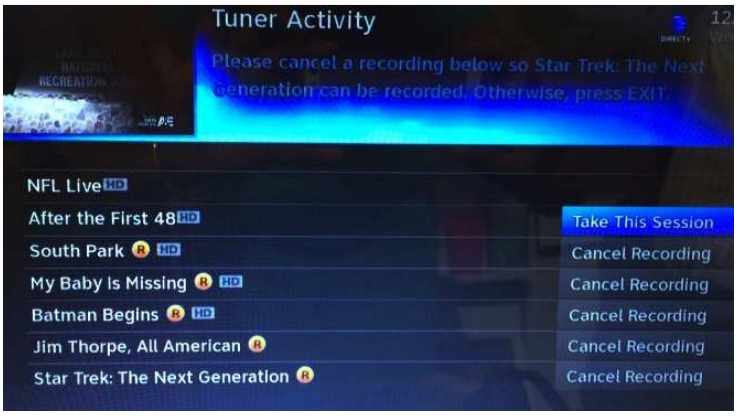

FIGURE 43: RESOURCE CONFLICT DURING DOUBLE-PLAY

- Press Exit
  - During conflict, if the user presses "Exit" while trying to record, the recording will not take place. If the user presses Exit while trying to stream a channel, it will go back to the channel the user was watching previously before the conflict.

功能變數代碼變更

XI. TROUBLESHOOTING

A. NEW OSD'S

1. Tilt Error OSD

Draft Text: "Help, Your Super Genie has fallen down …"

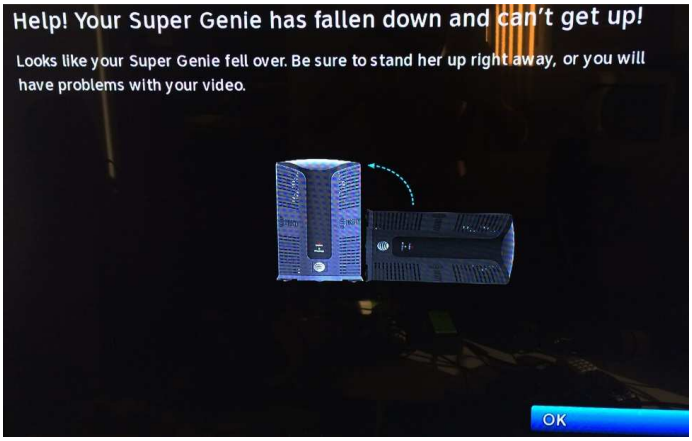

FIGURE 444440: TILT ERROR OSD SCREEN

Cause: If the Genie Air™ has Tilted or fallen over this OSD will be displayed.

Troubleshooting: The user needs to set the Genie Air™ upright vertically. The graphic in the OSD will inform the user the appropriate state / position the Genie Air™ should be in. Set the Genie Air™ straight and select OK to dismiss the OSD.

2. Overheating Warning OSD

Draft Text: "Is it hot in here, or is it just me…."

Cause: If there is something blocking the Genie Air™, it will restrict the airflow and cause the Genie Air™ to overheat. Hence this OSD is displayed.

Troubleshooting: Check and make sure that nothing is blocking airflow to the Genie Air™. The graphic in the OSD will inform the user the state / position the Genie Air™ should be placed in. Select OK to restart the Genie.

3. Bad AV Chip OSD

Draft Text: "Oops, Something Went Wrong"

Cause: There is a display issue with the Genie Air™ which prevents it from displaying video as soon as one client is connected to it.

Troubleshooting: Select Reboot Now to reboot the Genie Air™. If problem persists, the Genie Air™ needs to be replaced.

功能變數代碼變更

B. System Test Diagnostic Codes

1. New Wireless IV Diagnostic Codes

   TBD

2. Updates to MoCA Test Errors

   All Genie MoCA test errors apply to Genie Air™ also. The following Error text strings have been updated.

a. System Test Error Code 47 or 48

Genie Text: "Home Network Distribution Problem. The %s receiver has a poor network connection. If you are having a problem viewing recordings from this receiver, please call Customer Service at 1-800-531-5000 and report the diagnostic code displayed above."

Genie Air™ Text: "Home Network Distribution Problem. Locations below have reduced network performance. If you are having a problem viewing recordings from these receivers, please call Customer Service at 1-800-531-5000 and report the diagnostic code displayed above."

C. Symptoms

1. 5GHz SSID's not listed

   Clients connected to a Genie Air™ will not list any 5GHz SSID's while connecting to the customer's router.

   Troubleshooting: Customer Education. Genie Air™ only uses the 2.4 GHz Wi-Fi band to connect to the customer's router. Hence it won't list any 5GHz SSID's in the network.

D. Change to Existing Troubleshooting on Client / Server

Since there is no Genie Server to help troubleshoot, there will be some changes to troubleshooting steps. The following are changes to troubleshooting for existing client and server scenarios.

1. Checks at Server

   For all troubleshooting that has the user troubleshoot at the Genie server location, troubleshoot as follows. The only exception is when troubleshooting "No Servers Were Detected" and "Wireless Connection Lost".

   - If the issue occurs only on one client, troubleshoot at the specific client using another client as a reference of the Genie server.
   - If the issue occurs on all clients or there is only one client in the home, reboot the Genie server.

2. No Servers Were Detected

   Symptoms: OSD displays: "No Servers were detected, Check your network connections".

   Cause:

   - Genie Air™ may not be plugged in.

功能變數代碼變更

- One of the clients may be on a screen such as:
  - System Test
  - Signal Strength
  - Satellite Setup
- There may be a connection issue between the Genie Air™ and the wired client.
- There may be a connection issue between the Genie Air™ and the Wireless Video Bridge.
- The Genie Air™ was replaced and the Add Client steps were not completed.

Troubleshooting:

Scenario	**Genie Mini Client**	**Wireless Genie Mini Client**
If other Clients do not have this OSD;	1) Check for loose connections at the Genie Mini clients that have this OSD. • Ensure there are no Band-Stop Filters connected to the Genie Mini Clients 2) Reset the Genie Mini client. 3) Reset the Genie Air™. 4) Schedule service call.	1) Ensure the Network LED on the client is Solid Green 2) If not solid green, troubleshoot Wireless Client using existing troubleshooting steps. 3) Reset Wireless Genie Mini client. 4) Reset the Genie Air™. 5) Schedule service call.
If all Clients have the same OSD; **Or if there are no other Clients in the home:**	1) Is this the first time using the Genie Mini clients after a Genie Air™ server replacement? • If No, continue. • If Yes: Follow the Add Client process and add the Genie Mini clients. 2) Check if the following services are active on the user's account. • Advanced Receiver Service • Whole Home DVR Service • DVR Service • HD Access 3) Go to the Genie Air™ and check if the Status LED is Solid Green. • If not solid green, troubleshoot as per the Status LED table. 4) Check if the MoCA LED at the back panel of the Genie Air™ is Solid Green. • If not solid green, troubleshoot as per the MoCA LED table. 5) If there are no other clients in the home (*Single client home*), first reset the Genie Mini client. If OSD is still present reset the Genie Air™. 6) In case of multiple client household, reset the Genie Air™. 7) Is the OSD still present on all clients? • Yes: Schedule service call. • No: Check the other Clients and if the OSD is still present then	1) Is this the first time using the Wireless Genie Mini after a Genie Air™ server replacement? • If No, continue. • If Yes: Reset the Wireless Connection as with a Genie then follow the Add Client process 2) Check if the following services are active on the user's account. • Advanced Receiver Service • Whole Home DVR Service • DVR Service • HD Access 3) Go to the Genie Air™ and check if the Status LED is Solid Green. • If not solid green, troubleshoot as per the Status LED table. 4) Check if the Wireless LED is Solid Green. • If not solid green, troubleshoot as per the Wireless LED table. 5) If there are no other clients in the home (*Single client home*), first reset the Wireless Genie Mini client. If OSD is still present reset the Genie Air™. 6) In case of multiple client household, reset the Genie Air™. 7) Is the OSD still present on all clients? • Yes: Schedule service call. • No: Check the other Clients and if the OSD is still present then troubleshoot as per "Other clients do

	troubleshoot as per "Other clients do not have this OSD" script above.	not have this OSD" script above.

3. Wireless Connection Lost

Symptoms: OSD displays: "Wireless Connection Lost. The connection to wireless video bridge has been lost. Please make sure all wireless video bridges and server are properly connected and that this client is within range of the wireless video bridge".

Cause:

- The internal Wireless Video Bridge lost power or is rebooting.
- The Wireless client is not in range of the Wireless Video Bridge or Genie Air™.
- The Genie Air™ was replaced.

Troubleshooting:

Initial troubleshooting steps remain the same as present Wireless Genie Mini client.

Scenario	**Wireless Genie Mini Client**
If other Clients do not have this OSD;	1) Check if the Network LED on the wireless client is Solid Green • If not solid green, troubleshoot using existing troubleshooting steps for Wireless Client LEDs. 2) Reset Wireless Genie Mini client. 3) At the Genie Air™ check if the Status LED is Solid Green. • If not solid green, troubleshoot as per the Genie Air™ Status LED table. 4) Check if the Wireless LED is Solid Green. • If not solid green, troubleshoot as per the Genie Air™ Wireless LED table. 5) Reset the Genie Air™. • If the Wireless Genie Mini client still has the OSD, schedule service call.
If all Clients have the same OSD; **Or if there are no other Clients in the home:**	1) Is this the first time using the Wireless Genie Mini after a Genie Air™ server replacement? • If No, continue. • If Yes: Reset the Wireless Connection as with a Genie then follow the Add Client process 2) Check if the following services are active on the user's account. • Advanced Receiver Service • Whole Home DVR Service • DVR Service • HD Access 3) At the Genie Air™ check if the Status LED is Solid Green. • If not solid green, troubleshoot as per the Genie Air™ Status LED table. 4) Check if the Genie Air™ Wireless LED is Solid Green. • If not solid green, troubleshoot as per the

功能變數代碼變更

	Genie Air™ Wireless LED table. 5) Reset the Genie Air™. • If the Wireless Genie Mini clients still have the OSD, schedule service call.

功能變數代碼變更

XII. LED SUMMARY

A. FRONT PANEL LEDS

1. Status LED Table

Color	Interpretation	Troubleshooting
Off/No Color	No Power	Check if the Power LED at the back panel is Green and wait for 10 seconds. If LED continues to remain Off, reboot server.
Flashing Green	Booting (*Also IV Active, Data Feed Tests*)	Normal Behavior during boot-up
Solid Blue	Activation / Client Add Ready (*Internal WVB has a good Connection to the Server but No Clients paired with Wireless Video Bridge*)	Normal Behavior during guided setup.
Solid Yellow	Dish Not Detected (*or*) IV / Data Feed Failed	This state occurs during guided setup. Check the Mobile Installation App or RVU client to see the error screen and troubleshoot accordingly.
Solid Green	System Ready / Config Complete (*Wireless Clients should have a connection to the server)* (*normal operating color*)	Normal Behavior on boot-up complete. (*Normal operating state*).
Solid Red	System Error	Restart the Genie Air™. If LED continues to display Solid Red, replace the Genie Air™.
Flashing Red	System Error, trying to self-repair	Wait for TBD minutes to check if the LED changes to another state. Else restart the Genie Air™. If the LED continues to display Flashing Red, replace the Genie Air™.
Flashing White	Downloading Software	Normal Behavior during SWDL.

功能變數代碼變更

Solid White	Power On, Booting up	Normal Behavior during boot-up

2. Wireless LED (*Internal WVB Status*)

Color	Interpretation	Troubleshooting
Off	Wireless Video Not Transmitting (*Can't detect WVB*) (*Device Error*)	Wait for TBD minutes to check if the LED changes to another state. Else restart the Genie Air™. If LED continues to remain Off, replace the Genie Air™.
Solid Green	Wireless Video Ready (*Wireless Clients should have a connection to the server*)	Normal operating state.
Flash Yellow	Degraded Wireless Video due to Tilt (*The Wireless Video Bridge has a good connection to the Genie server; however there is a Poor Wireless connection to one or more C41W clients*)	Set the Genie Air™ is in a Vertical upright position.

B. TOP PANEL LED – ADD CLIENT

Color	Interpretation
Off	WCA Off
Flash Green	WCA Active (*WVB in Beacon Mode. Coax Network connected*)

C. BACK PANEL LEDS

1. Power LED

Color	Interpretation	Troubleshooting
Off/No color	Genie Air™ has no power	Connect the power cord and ensure there is Power at the outlet. If no Power replace Power Supply. If issue persists replace Genie Air™.
Green	Genie Air™ has power	Normal operating state.

功能變數代碼變更

2. MoCA LED

Color	Interpretation	Troubleshooting
Off/no color	No link	When there is a wired client or external WVB in the network, the MoCA LED will turn On or change states. It will remain Off when there are **Only** wireless clients in the network. In case of wired clients, check connections at all wired locations. If issue persists, reboot server.
Solid Green	Good MoCA link	Normal operating state.
Solid Yellow	Poor MoCA link	Check connections at all wired locations. If issue persists, schedule service call.

功能變數代碼變更

XIII. APPENDIX

A. STEPS TO CONNECT MOBILE INSTALLATION APP TO THE WVB:

Follow the below steps to configure the Installer's mobile device so that it can connect to the WVB. The Mobile Installation App is a One-time setup. Once these steps are completed the Installer's mobile device should automatically connect to any WVB and Genie Air™ that is in Add Client mode.

Android Devices

1. Enter Wi-Fi settings on the Android Device.
2. Find and select network titled **DIRECTV WVB**
3. Enter password S!te $urvey Mod3 0nly
4. Select "Show advanced options"
5. Under IP settings, change setting from DHCP to Static
6. Manually enter IP address below as 169.254.9.99 (*double check that Gateway address below automatically updates to 169.254.9*)
7. Change Network prefix length to 16
8. Select Connect

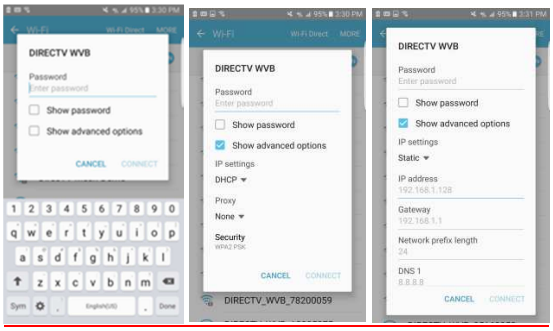

FIGURE 45: ANDROID SETTINGS SCREEN

iOS Devices

1. Enter Wi-Fi settings on the iOS device.
2. Find network titled **DIRECTV WVB** and select the info button
3. Under IP Address, change setting from DHCP to Static
4. Manually enter IP address below as 169.254.9.99
5. Select Join Network
6. Enter password S!te $urvey Mod3 0nly
7. Select Subnet Mask
8. Enter 255.255.0.0
9. Select Join

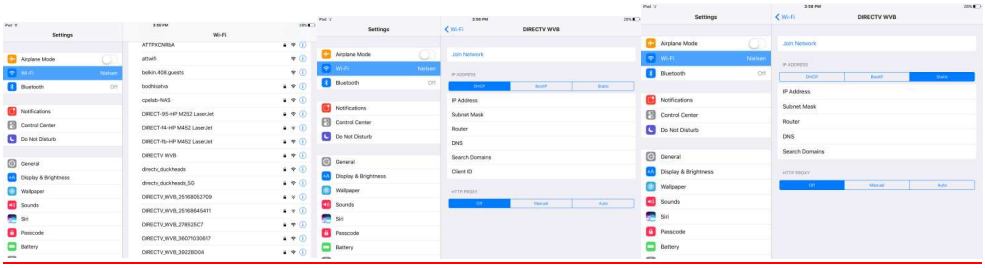

FIGURE 46: IOS SETTINGS SCREEN

B. Federal Communications Commission Interference Statement

Federal Communication Commission Interference 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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 device is restricted for indoor use.

功能變數代碼變更

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FCC 警語.doc

FE TC_D-088_HR34-44_(

功能變數代碼變更

功能變數代碼變更

功能變數代碼變更