

User's Guide

	Second and the second							
Update ZipFile:	C:\Users\Dennis K S	Smith\Deskt	op\G2\AgileMes	h_G2_	R3_00.zip			
Update:	Kernel & Root FS				Channel M	1ap 🔲 Fe	ature File	
Channel Map:								
Feature File Dir:	C:\Users\Dennis K	Smith\Deskt	ор					*
User:	admin	Password:	admin	T				
Node:	Node 2 👻	Subnet:	192.168.119.7	•	192.168.119	.12 Add	iress	
Status emperature: 49 lumber of Valid (Channels: '25'							
Status emperature: 49							7.555	
Status remperature: 49 Number of Valid (/alid Channels: '0	Channels: '25' , 1, 2, 3, 4, 5, 6, 7, 8, 9,	10, 22, 23, 24	4, 25, 30, 31,					
Status emperature: 49 Jumber of Valid ('alid Channels: '0, 32 Request file transf	Channels: '25' , 1, 2, 3, 4, 5, 6, 7, 8, 9, , 33, 34, 50, 51, 97, 98, er mode from node.	10, 22, 23, 24 99'	4, 25, 30, 31,		,			
Status emperature: 49 Vumber of Valid (/alid Channels: '0 32 Request file transfe Beginning transfe Jodate file: CAUs	Channels: '25' , 1, 2, 3, 4, 5, 6, 7, 8, 9, , 33, 34, 50, 51, 97, 98, er mode from node. rof 'Kernel' file. ers\DENNIS_1\AppDa	10, 22, 23, 24 99'	4, 25, 30, 31,					
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Status Periperature: 49 Vumber of Valid (/alid Channels: '0, 32 Request file transf Beginning transfe Jpdate file: C:\Us Jpdate file size: Fransfered size is: Gernel Transfer	Channels: '25' , 1, 2, 3, 4, 5, 6, 7, 8, 9, , 33, 34, 50, 51, 97, 98, er mode from node. r of 'Kernel' file. ers\DENNIS~1\AppDa 2305000 bytes, 2.251 2305000	10, 22, 23, 24 99' ata\Local\Te megabytes	4, 25, 30, 31, mp\uImage					
Status remperature: 49 Vumber of Valid (/alid Channels: '0 32 Request file transf Beginning transfe Update file: C:\Us Update file size: Fransfered size is: Cernel Transfer (Beginning transfe	Channels: '25' , 1, 2, 3, 4, 5, 6, 7, 8, 9, , 33, 34, 50, 51, 97, 98, er mode from node. rof 'Kernel' file. ers\DENNIS~1\AppDa 2305000 bytes, 2.251 2305000 completed r of 'RootFS' file.	10, 22, 23, 24 99' sta\Local\Te megabytes	4, 25, 30, 31, mp\uImage					
Status emperature: 49 Vumber of Valid (/alid Channels: '0 32 Request file transfe Jpdate file: C:\Us Jpdate file size: Transfered size is: Cernel Transfer Jpdate file: C:\Us Jpdate file size:	Channels: '25' , 1, 2, 3, 4, 5, 6, 7, 8, 9, , 33, 34, 50, 51, 97, 98, er mode from node. r of 'Kernel' file. ers\DENNIS~1\AppDa 2305000 completed r of 'RootFS' file. ers\DENNIS~1\AppDa 15435897 bytes. 15.07	10, 22, 23, 24 99' ata\Local\Te megabytes ata\Local\Te 44 megabyte	4, 25, 30, 31, mp\uImage mp\agilefs.gz					

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Introduction

The AgileMesh Update Utility is used to:

- Update the software on an AgileMesh node
- Add or update the Channel Map
- Enable newly purchased features on an AgileMesh node
- Query a node for current software version
- Get the MAC address of a node
- Remotely reset a node

Channel Maps, Node Feature files and Node Software files are used when an Update is required. Example file names are listed below.

File Type	Example file name
Channel Map	DEFAULT Channel Map.cmf
Node Feature File	NodeFeatureFile_000060.nff
Node Software	3.1.zip

A Channel Map file is used to set the radio transmit and receive frequency, the Mesh ID and the Mesh Password (encryption key) for each AgileMesh channel. There are 97 channels (0 to 96) that are user defined. All AgileMesh nodes are shipped with a default channel map file.

A Node Feature File is used to enable software features on a node that has been shipped to a customer. **IF** the underlying hardware supports the feature to be added, the feature can be enabled remotely by updating the Feature File. As an example, audio can be added to a node if the hardware shipped supports audio.

Node Software is a zip file that is given the name of the upgrade version (i.e. 3.1.zip). It is not necessary to un-zip the Node Software file.

The AgileMesh Update utility runs on Windows XP and Windows 7 operating systems.

Note: The AgileMesh Update utility must be run on the same subnet as AgileMesh nodes and will not operate through an AV3000 Network Bridge.



Software Installation

Fact:

Use "Add/Remove Programs" in the Windows Control Panel to remove a previously installed version of the AgileMesh Update Utility before installing a newer version.



Use the AgileMesh Master Installer CD or download the AgileMesh G2 Installer from the AgileMesh website (Products \rightarrow Software \rightarrow login. (Contact AgileMesh to get a unique login and password.)

Double-click on the "AgileMesh G2 Installer 3.X ISO image " link to burn the image to a CD or double-click on the "AgileMesh G2 Installer 3.X" link to download a ZIP file.

Select "AgileMesh G2 Update 3.X" and click the "Next" button to start the install of the G2 Update application.

🗗 Setup - AgileMesh G2 Update	
Select Destination Location Where should AgileMesh G2 Update be installed?	
Setup will install AgileMesh G2 Update into the following folder.	
To continue, click Next. If you would like to select a different folder, click Bro	wse.
	owse
At least 5.4 MB of free disk space is required.	
< <u>B</u> ack Next >	Cancel

Click the "Next" button to install the AgileMesh Update Utility in the default location (RECOMMENDED).

Click "Next" button

[Optionally, click on "Browse" to select the location to install the Viewer.]

Note: The default directory is recommended.



Folder I	Exists 🛛 🕅
?	The folder: C:\Program Files\AgileMesh already exists. Would you like to install to that folder anyway?

If other AgileMesh products were previously installed on this PC, this message may appear. Click the "Yes" button and proceed with the installation.

🖥 Setup - AgileMesh G2 Update	
Select Start Menu Folder Where should Setup place the program's shortcuts?	
Setup will create the program's shortcuts in th	ne following Start Menu folder.
To continue, click Next. If you would like to select a dif	ferent folder, click Browse.
Netros de la competencia.	DLowse
<u>B</u> ac	k Next > Cancel

Select the Start Menu Folder.

Note: The default folder is recommended

Click "Next >" button.

.



If the "Destination Location" and "Start Menu folder" are correct:

Click "Install"



Installing					Ē
Please wait whi	e Setup installs Ag	ileMesh G2 Upda	ate on your comput	er.	C
Creating shortc	uts				
C:\Documents a	and Settings\All Us	ers\Desktop\Agi	leMesh G2 Update	1.4.lnk	
					n
(-

Wait until the progress bar is completely filled (installation complete).

To cancel it, click "Cancel" button.

🕼 Setup - AgileMesh G2 U	pdate 📮 🗖 💹
AgileMesh G2 Update	Completing the AgileMesh G2 Update Setup Wizard Setup has finished installing AgileMesh G2 Update on your computer. The application may be launched by selecting the installed icons. Click Finish to exit Setup.
	Einish

Installation is complete. Click the "Finish" button.



Update Utility Overview

Descriptions of the check boxes and fields on the update application are listed below.

	Select the location of the
Update ZipFile:	node software file used to
	update an AgileMesh node
Update: Kernel & Root FS Channel Map	eature File Check the appropriate box
	to update a node.
	The default User name is
User: admin Password: admin	"admin", the default
	password is "admin".
Nede 2	Select the node number of
Node: Node2	the unit to be updated.
	Select the subnet on the
	PC connected to the unit to
Subnet: 192.168.119.7 💌	be updated. The default
	subnet of an AgileMesh
	node is 192.168.119.XX
103 150 113 13	The default node
192.106.119.12 Address	addresses are listed in
	Appendix 1.
	The progress bar indicates
	the portion of the update
	completed.
Update	Click this button to start the
	update.
	Click this button to display
Query Node	the current Software and
	Firmware versions.
Reset Node	Click this button to reset the
	node.
Abort	Click this button to stop the
	update.
Close	Close this application.



G2 Undate

Update Node Software

Locate and double-click on the desktop icon for the AgileMesh Update Utility to bring up the application. No login or password is required.

Update ZipFile: C:\Users\Dennis K Smith\Desktop\G2\AgileMesh_G2_R3_00.zip Update: Kernel & Root FS Channel Map: Channel Map Feature File Dir: C:\Users\Dennis K Smith\Desktop User: admin Node: Node 2 Update Query Node Reset Node Abo Status Status	Update Options								
Update: Channel & Root FS Channel Map Feature File Channel Map: Feature File Dir: C:\Users\Dennis K Smith\Desktop User: admin Password: admin Node: Node 2 V Subnet: 192.168.119.7 192.168.119.12 Address Update Query Node Reset Node Abo Status	Update ZipFile:	C:\Users\Dennis K Sr	mith\Deskt	top\G2\AgileMes	h_G2_	R3_00.zip			
Channel Map: Feature File Dir: C:\Users\Dennis K Smith\Desktop User: admin Password: admin Node: Node 2 Subnet: 192.168.119.7 192.168.119.12 Address Update Query Node Reset Node Abo Status	Update:	🕅 Kernel & Root FS			[Channel N	/lap 📗	Featur	e File
Feature File Dir: C:\Users\Dennis K Smith\Desktop User: admin Node: Node 2 Subnet: 192.168.119.7 Update Query Node Reset Node Abo Status Status	Channel Map:								
User: admin Password: admin Node: Node 2 Subnet: 192.168.119.7 192.168.119.12 Address Update Query Node Reset Node Abo	Feature File Dir:	C:\Users\Dennis K Si	mith\Desk	top					
Node: Node 2 Subnet: 192.168.119.7 192.168.119.12 Address Update Query Node Reset Node Abo Status Status Status Status	User:	admin	Password:	admin	-				
Vode: (Node: Address Update Query Node Reset Node Abo	N-J-	Node 2	C. L. a	192 168 119 7	-	192,168,119	.12		
	Status					2002			
	Status					2000			
	Status							21172	
Start here	Status	tart here							
Start here	Status	tart here						202	
Start here	Status	tart here							

Connect a PC with the Update software application installed to the node that is to be updated. The PC should be on the same subnet as the AgileMesh node. The default subnet is 192.168.119.



From the drop down menu, select the node number of the unit to be updated. Node: Node 2 -

Select the subnet on the attached PC that matches the subnet of the AgileMesh node to be updated. Appendix 1 list the default IP address for AgileMesh nodes. <u>Subnet:</u> 192.168.119.7

Note:

The AgileMesh node must have bridging enabled (default from the factory) to update. Browse to the Node IP address, login and select the "Network Settings" web page.



The default address of the node will be displayed for the selected node. 192.168.119.12 Address
On the "Update ZipFile:" line, click on the browse solution to select the location of the file to update on the AgileMesh node. Check the "Kernel and Root FS" to update the node software.

Update:	🔲 Kernel & Root FS	📃 Channel Map 🛽	Feature File
---------	--------------------	-----------------	--------------

Click on "Query Node" to read the current node Software version, Board Type, Channel Map Filename and Firmware version. See below.

opdate Options						
Update ZipFile:	C:\Users\Dennis K S	Smith\Deskt	op\G2\AgileMesh_G2	_R3_00.zip		
Update:	📝 Kernel & Root FS			🔳 Cha	nnel Map 🛛 🕅 Feat	ure File
Channel Map:						*
Feature File Dir:	C:\Users\Dennis K	Smith\Deskt	top			*
User:	admin	Password:	admin			
Node:	Node 2 👻	Subnet:	192.168.119.7 -	192.168.119.12	Address	
Status			L.1 TVL			
- ET - 57.5.						
Status	JUC2 UCH UUUNC33 1.	72,100,113,11	L.1 TVL			
Status Connected	JUC 2 0011 0001C33 1.	92.100.119.11	217702			*
Status Connected Login complete Node version 2.5 t	o old, some informat	ion will not l	be shown.			
Status Connected Login complete Node version 2.5 t You need to upda	o old, some informat te node to latest versi	ion will not l	be shown.			-
Status Connected Login complete Node version 2.5 t You need to upda Software version: Firmware version:	out 2 un auarts 2. o old, some informat te node to latest versi " 'a3'	ion will not l	be shown.			-
Status Connected Login complete Node version 2.5 t You need to upda Software version: Firmware version: Main Board Type:	oue z ar a auaress z. o old, some informat te node to latest versi " 'a3' 'Wearable'	ion will not l	be shown.			-
Status Connected Login complete Node version 2.5 t You need to upda Software version: Firmware version: Main Board Type: Daughter Board T	oue 2 or a outress 1. o old, some informat te node to latest versi " 'a3' 'Wearable' ype: 'Wearable Rev 1'	ion will not l	be shown.			
Status Connected Login complete Node version 2.5 t You need to upda Software version: Firmware version: Main Board Type: Daughter Board Ty Number of Video	oue 2 or a outress 1. o old, some informat te node to latest versi " "a3" "Wearable" ype: 'Wearable Rev 1' Inputs: '1' co' 'ye0000140'	ion will not l	be shown.			E
Status Connected Login complete Node version 2.5 t You need to upda Software version: Firmware version: Main Board Type: Daughter Board Ty Number of Video Node MAC Addre Channel Map File	oue 2 arm address 1. to old, some informat te node to latest versi " "a3" "Wearable" ype: 'Wearable Rev 1' Inputs: '1' ss: ':c0:00:01:49' name: 'Channel Map	ion will not l	be shown.			E
Status Connected Login complete Node version 2.5 t You need to upda Software version: Main Board Type: Daughter Board Ty Number of Video Node MAC Addree Channel Map Filer Voltage: '13.651'	oue z - ue a - uouress - z. to old, some informat te node to latest versi " "a3" "Wearable" ype: 'Wearable Rev 1' Inputs: '1' ss: ':c0:00:01:49' name: ' Channel Map	ion will not l	be shown.			E
Status Connected Login complete Node version 2.5 t You need to upda Software version: Firmware version: Main Board Type: Daughter Board Ty Number of Video Node MAC Addree Channel Map File Voltage: '13.651' Temperature: '50'	oue 2 act a aduress 1. to old, some informat te node to latest versi " 'a3' 'Wearable' ype: 'Wearable Rev 1' Inputs: '1' ss: ':c0:00:01:49' name: ' Channel Map	ion will not l	be shown.			E
Status Connected Login complete Node version 2.5 t You need to upda Software version: Main Board Type: Daughter Board Ty Number of Video Node MAC Addree Channel Map Filee Voltage: '13.651' Temperature: '50' Number of Valid (Valid Channels: '7,	oue 2 - un - ouuness 1. to old, some informat te node to latest versi " "a3" "Wearable" ype: 'Wearable Rev 1' Inputs: '1' ss: ':c0:00:01:49' name: ' Channel Map Channels: '6' .8, 9, 10, 22, 23'	ion will not l	be shown.			E

Notice the "Software version" is 2.5 before the update to 3.00 (see "Update ZipFile" above).

Select "Kernel & Root FS" and click the

button to begin the update process.

Note: DO NOT disconnect the node from the PC or remove power or turn off the node until the update process is complete.

Update



Two files will be downloaded. The kernel is a 2 MB+ file and the Root File System is a 15 MB+ file. An in-progress update is shown below.

Update Options							
Update ZipFile:	C:\Users\Dennis K S	Smith\Deskto	op\G2\AgileMesh	_G2_	R3_00.zip		
Update:	Kernel & Root FS			🥅 Channel Map 🛛 Feature File			
Channel Map:							
Feature File Dir:	C:\Users\Dennis K	Smith\Deskt	ор				*
User:	admin	Password:	admin	T			
Node:	Node 2 👻	Subnet:	192.168.119.7	•	192.168.119.12	Address	
32	33, 34, 50, 51, 97, 98, er mode from node.	99.					
Request file transf Beginning transfe Jpdate file: C:\Usi Jpdate file size:	r of 'Kernel' file. ers\DENNIS~1\AppDa 2305000 bytes, 2.251	ita\Local\Te megabytes	mp\uImage				
Request file transfe Beginning transfe Jpdate file: C:\Usi Jpdate file size: Transfered size is: Cernel Transfer Beginning transfe Jpdate file: C:\Usi Jpdate file size:	r of 'Kernel' file. ers\DENNIS~1\AppDa 2305000 bytes, 2.251 2305000 ompleted of 'RootFS' file. ers\DENNIS~1\AppDa 15435897 bytes, 15.07	ita\Local\Tei megabytes ita\Local\Tei 74 megabyte	mp\uImage mp\agilefs.gz is				H H

Because the "Kernel & Root FS" check box was selected, both files will be downloaded to the node. The node will reboot and be ready for use within two minutes.

Notice:

The zip file from AgileMesh contains a matched Kernel and Root File System for the update. The filename will indicate the version number. Do not un-Zip the file.

Information:

A node (or nodes) can be updated "over the air" as long as the wireless connection can be maintained and the remote node is continuously powered up.



Update Node Channel Map

Locate and double-click on the desktop icon for the AgileMesh Update Utility to bring up the application. No login or password is required.



Update ZipFile:	C:\Users\Dennis K	Smith\Deskt	op\G2\AaileMest	h G2 F	3 00.zip	
Update:	Kernel & Root FS	Kernel & Root FS				
Channel Map:						
Feature File Dir:	C:\Users\Dennis K	Smith\Deskt	ор			
User:	admin	Password:	admin	1		
Node:	Node 2 👻	Subnet:	192.168.119.7	•	192.168.119.12	Address
sı	tart here					

Connect a PC with the Update software application installed to the node that is to be updated. The PC should be on the same subnet as the AgileMesh node. The default subnet is 192.168.119.

fras. C	Node 2
-	-100 CT -1
-	2
192.168.119.7	

From the drop down menu, select the node number of the unit to be updated.

Select the subnet on the attached PC that matches the subnet of the AgileMesh node to be updated. Appendix 1 list the default IP address for AgileMesh nodes.

Note:

The AgileMesh node must have bridging enabled (default from the factory) to update. Browse to the Node IP address, login and select the "Network Settings" web page.



The default address of the node will be displayed for the selected node.	192.168.119.12	Address
On the "Channel Map:" line, click on the browse solution to select the	location of th	e channel
map to update on the AgileMesh node. Check the "Channel Map" box	and then [Update
to install a new Channel Map. The new Channel Map will take effect when	the node is r	ebooted.

Click on "Query Node" to verify that the new channel map has been installed.

Note:

After a channel map is installed and the node has rebooted, the node will be on Channel 99.



Update Node Features

Locate and double-click on the desktop icon for the AgileMesh Update Utility to bring up the application. No login or password is required.



	C111 10 11	6 NO. 11	10014 311		P3 00 :	
Update ZipFile:	C:\Users\Dennis K	Smith\Deskt -	top\G2\AgileMes	h_G2_	R3_00.zip	
Update:	Kernel & Root F	5		3	Channel Map	E Feature Fil
Channel Map:						
Feature File Dir:	C:\Users\Dennis K	(Smith\Desk	top			
User:	admin	Password:	admin			
Node:	Node 2 👻	Subnet:	192.168.119.7	-	192.168.119.12	Address
Update				Qu	ery Node Rese	t Node
Update				Qu	ery Node Rese	tt Node
Update Status				Qu	ery Node Rese	t Node A
Update				Qu	ery Node Rese	t Node
Update Status Status	tart here			Qu	ery Node) (Rese	tt Node
Update	tart here			Qu	rery Node) (Rese	tt Node
Update	tart here			Qu	ery Node Rese	tt Node) 🗌 A

Connect a PC with the Update software application installed to the node that is to be updated. The PC should be on the same subnet as the AgileMesh node. The default subnet is 192.168.119.



From the drop down menu, select the node number of the unit to be updated.

Select the subnet on the attached PC that matches the subnet of the AgileMesh node to be updated. Appendix 1 list the default IP address for AgileMesh nodes.

Note:

The AgileMesh node must have bridging enabled (default from the factory) to update. Browse to the Node IP address, login and select the "Network Settings" web page.



The default address of the node will be displayed for the selected node. 192.168.119.12 Address
On the "Feature File Dir:" line, click on the browse substitution to select the location of the Feature
File to update on the AgileMesh node. Check the "Feature File" box and then click Update
to install a new Feature File. The node must be rebooted to add the new feature.

A list of enable features for a node can be seen on the node's web pages under the "General" tab. All possible features are shown in the screen shot below.

Video Setings	Network Settings MESH Se	etings General Info	Admin Settings
Audio Input	Audio Listen Video I	Video Output	
	MAC Address : 80 Temperature : 40	91 c0 00 01 d1 C (104 0" F)	
	Voltage : 13 Channel Map Name : DE	919 V FAULT Channel Man'	
	2-Way Audio Group : 0.		
Main Board	Daughter Card	Software Build Info	FPGA Build Info
esktop Revision 3 ierial # A000769	2 Video + Audio + Vid Out Senal # A000615	Version: 4.5 Date: 2014-12-01 Time: 08:36:04 Rev: 1406	Version: 0x92
	ENABLED F	eatures	
	2 Video Inputs		
	900 MHz Chan Celtular BackH	inets aul	
	Cellular BackH One-Way Audi Two-Way Audi	inul o o	
	Two-Way Audi Local Record Data Stream F	0	

Note:

If a new feature is purchased for an existing customer node (ie Cellular Backhaul), AgileMesh will e-mail a node Feature File to add the new feature to that specific node.

The Feature Files are node locked to a specific node by the MAC address.



Appendix 1 – AgileMesh Default IP Addresses

The table below lists the node number, the default IP address and the port numbers for the video and audio codecs as well as the control channel.

		Video 1	Video 2	Control	Audio	Internal
Node #	Node IP	Codec	Codec	Channel	Codec	Video Codec
0	192.168.119.10	7000	7200	7400	7600	7900
1	192.168.119.11	7001	7201	7401	7601	7901
2	192.168.119.12	7002	7202	7402	7602	7902
3	192.168.119.13	7003	7203	7403	7603	7903
4	192.168.119.14	7004	7204	7404	7604	7904
5	192.168.119.15	7005	7205	7405	7605	7905
6	192.168.119.16	7006	7206	7406	7606	7906
7	192.168.119.17	7007	7207	7407	7607	7907
8	192.168.119.18	7008	7208	7408	7608	7908
9	192.168.119.19	7009	7209	7409	7609	7909
10	192.168.119.20	7010	7210	7410	7610	7910
11	192.168.119.21	7011	7211	7411	7611	7911
12	192.168.119.22	7012	7212	7412	7612	7912
13	192.168.119.23	7013	7213	7413	7613	7913
14	192.168.119.24	7014	7214	7414	7614	7914
15	192.168.119.25	7015	7215	7415	7615	7915
16	192.168.119.26	7016	7216	7416	7616	7916
17	192.168.119.27	7017	7217	7417	7617	7917
18	192.168.119.28	7018	7218	7418	7618	7918
19	192.168.119.29	7019	7219	7419	7619	7919
20	192.168.119.30	7020	7220	7420	7620	7920
21	192.168.119.31	7021	7221	7421	7621	7921
22	192.168.119.32	7022	7222	7422	7622	7922
23	192.168.119.33	7023	7223	7423	7623	7923
24	192.168.119.34	7024	7224	7424	7624	7924
25	192.168.119.35	7025	7225	7425	7625	7925
26	192.168.119.36	7026	7226	7426	7626	7926
27	192.168.119.37	7027	7227	7427	7627	7927



		Video 1	Video 2	Control	Audio	Internal
Node #	Node IP	Codec	Codec	Channel	Codec	Video Codec
28	192.168.119.38	7028	7228	7428	7628	7928
29	192.168.119.39	7029	7229	7429	7629	7929
30	192.168.119.40	7030	7230	7430	7630	7930
31	192.168.119.41	7031	7231	7431	7631	7931
32	192.168.119.42	7032	7232	7432	7632	7932
33	192.168.119.43	7033	7233	7433	7633	7933
34	192.168.119.44	7034	7234	7434	7634	7934
35	192.168.119.45	7035	7235	7435	7635	7935
36	192.168.119.46	7036	7236	7436	7636	7936
37	192.168.119.47	7037	7237	7437	7637	7937
38	192.168.119.48	7038	7238	7438	7638	7938
39	192.168.119.49	7039	7239	7439	7639	7939
40	192.168.119.50	7040	7240	7440	7640	7940
41	192.168.119.51	7041	7241	7441	7641	7941
42	192.168.119.52	7042	7242	7442	7642	7942
43	192.168.119.53	7043	7243	7443	7643	7943
44	192.168.119.54	7044	7244	7444	7644	7944
45	192.168.119.55	7045	7245	7445	7645	7945
46	192.168.119.56	7046	7246	7446	7646	7946
47	192.168.119.57	7047	7247	7447	7647	7947
48	192.168.119.58	7048	7248	7448	7648	7948
49	192.168.119.59	7049	7249	7449	7649	7949
50	192.168.119.60	7050	7250	7450	7650	7950
51	192.168.119.61	7051	7251	7451	7651	7951
52	192.168.119.62	7052	7252	7452	7652	7952
53	192.168.119.63	7053	7253	7453	7653	7953
54	192.168.119.64	7054	7254	7454	7654	7954
55	192.168.119.65	7055	7255	7455	7655	7955
56	192.168.119.66	7056	7256	7456	7656	7956
57	192.168.119.67	7057	7257	7457	7657	7957
58	192.168.119.68	7058	7258	7458	7658	7958
59	192.168.119.69	7059	7259	7459	7659	7959
60	192.168.119.70	7060	7260	7460	7660	7960
61	192.168.119.71	7061	7261	7461	7661	7961



		Video 1	Video 2	Control	Audio	Internal
Node #	Node IP	Codec	Codec	Channel	Codec	Video Codec
62	192.168.119.72	7062	7262	7462	7662	7962
63	192.168.119.73	7063	7263	7463	7663	7963
64	192.168.119.74	7064	7264	7464	7664	7964
65	192.168.119.75	7065	7265	7465	7665	7965
66	192.168.119.76	7066	7266	7466	7666	7966
67	192.168.119.77	7067	7267	7467	7667	7967
68	192.168.119.78	7068	7268	7468	7668	7968
69	192.168.119.79	7069	7269	7469	7669	7969
70	192.168.119.80	7070	7270	7470	7670	7970
71	192.168.119.81	7071	7271	7471	7671	7971
72	192.168.119.82	7072	7272	7472	7672	7972
73	192.168.119.83	7073	7273	7473	7673	7973
74	192.168.119.84	7074	7274	7474	7674	7974
75	192.168.119.85	7075	7275	7475	7675	7975
76	192.168.119.86	7076	7276	7476	7676	7976
77	192.168.119.87	7077	7277	7477	7677	7977
78	192.168.119.88	7078	7278	7478	7678	7978
79	192.168.119.89	7079	7279	7479	7679	7979
80	192.168.119.90	7080	7280	7480	7680	7980
81	192.168.119.91	7081	7281	7481	7681	7981
82	192.168.119.92	7082	7282	7482	7682	7982
83	192.168.119.93	7083	7283	7483	7683	7983
84	192.168.119.94	7084	7284	7484	7684	7984
85	192.168.119.95	7085	7285	7485	7685	7985
86	192.168.119.96	7086	7286	7486	7686	7986
87	192.168.119.97	7087	7287	7487	7687	7987
88	192.168.119.98	7088	7288	7488	7688	7988
89	192.168.119.99	7089	7289	7489	7689	7989
90	192.168.119.100	7090	7290	7490	7690	7990
91	192.168.119.101	7091	7291	7491	7691	7991
92	192.168.119.102	7092	7292	7492	7692	7992
93	192.168.119.103	7093	7293	7493	7693	7993
94	192.168.119.104	7094	7294	7494	7694	7994
95	192.168.119.105	7095	7295	7495	7695	7995



		Video 1	Video 2	Control	Audio	Internal
Node #	Node IP	Codec	Codec	Channel	Codec	Video Codec
96	192.168.119.106	7096	7296	7496	7696	7996
97	192.168.119.107	7097	7297	7497	7697	7997
98	192.168.119.108	7098	7298	7498	7698	7998
99	192.168.119.199	7099	7299	7499	7699	7999

To calculate the last octet value of the IP address of a node use the following formula 10 + the Node number = node IP address

To calculate the video codec1 use the following formula:	7000 + the Node number
To calculate the video codec 2 use the following formula:	7200 + the Node number
To calculate the control port use the following formula:	7400 + the Node number
To calculate the audio port use the following formula:	7600 + the Node number
To calculate the internal video codec port:	7900 + the Node number

Node 99 is a failsafe node number with a permanent IP address. It allows the user to regain control of the node if the node has been configured for a custom IP address.

Notes:

- 1. Video Codec 1 and Video Codec 2 are used by the AgileMesh Viewer and can be the source for Tip of the Spear (ToS) video to ToS equipped nodes.
- 2. The internal video codec is used for local record and node-to-node video. This codec cannot be displayed on the AgileMesh Viewer



Appendix 2 – AgileMesh Default Channel Map

<mark></mark> AgileMesh

Channel	Internal Mapping	Center Freq (GHz)	Freq. Band
00	1	2.4120	
01	2	2.4170	
02	3	2.4220	
03	4	2.4270	
04	5	2.4320	2404-
05	6	2.4370	
06	7	2.4420	OFDM
07	8	2.4470	
08	9	2.4520	
09	10	2.4570	
10	11	2.4620	

Channel	Internal Mapping	Center Freq (GHz)	Freq. Band
22	36	5.1800	
23	40	5.2000	
24	44	5.2200	
25	48	5.2400	5.X
30	149	5.7450	GHz
31	153	5.7650	OFDM
32	157	5.7850	
33	161	5.8050	
34	165	5.8250	

Default Panel Channel Map

1			
		Center	
	Internal	Freq	Freq.
Channel	Mapping	(GHz)	Band
50	16	4.9600	4.9GHz
51	17	4.9800	OFDM

96	N/A	N/A	N/A
97	6	2.4370	2.4 GHz
98	16	4.9600	4.9GHz
99	149	5.7450	5.X GHz

adio	OFF	

R Same as default channel 5 Same as default channel 50 Same as default channel 30

"Failsafe" channels with no encryption