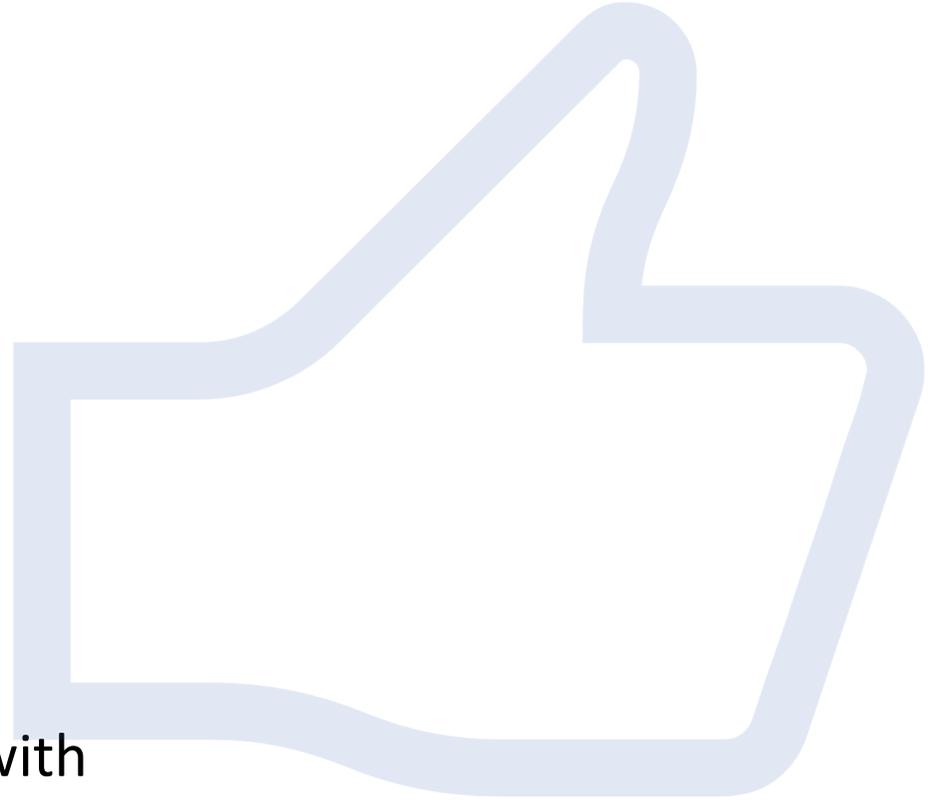
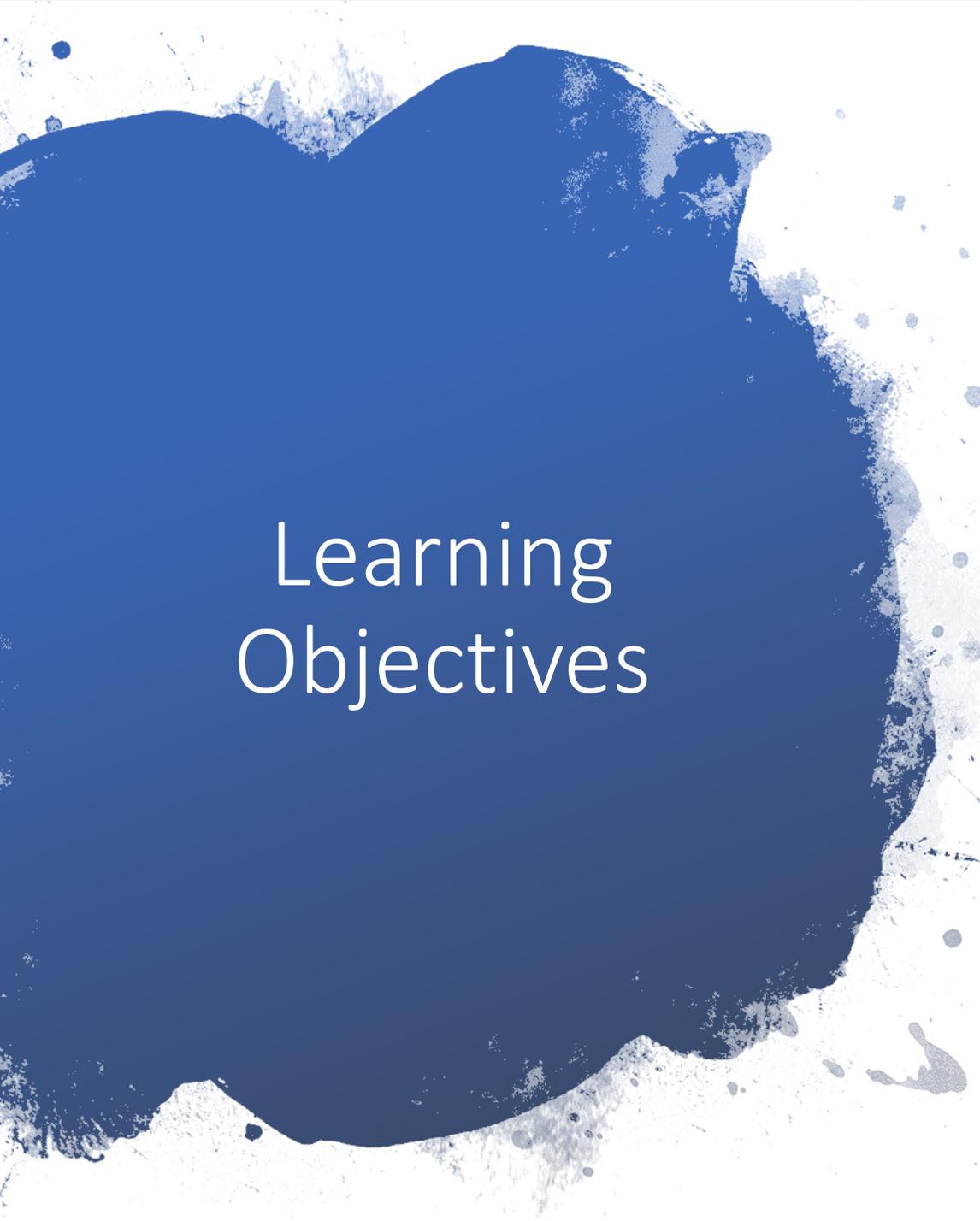


# Comm3000 NTSC-8



Training on the NTSC-8 and its use with  
the Comm3000 system



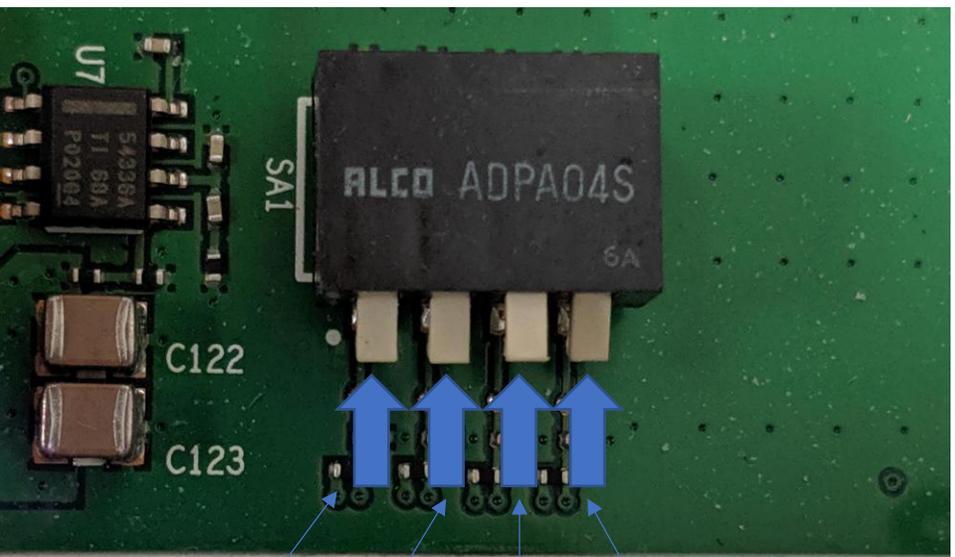
# Learning Objectives

- Understand what the NTSC-8 does
- Know how to set the chassis numbers on the NTSC-8
- Learn to update
- Learn to set the alternate IP addresses
- Learn to set the channels
- Learn to attenuate channels
- Learn to configure Comm channels to IP to stream to the NTSC-8
- Change the advanced tune user config to stream to NTSC-8 devices.

# The NTSC-8

- The NTSC-8 is a device made by Technicolor for use with the Comm system. It can take Pro:idiom IP streams and convert them to SD analog for use with TV's that are not Pro:idiom capable or lack a digital tuner.
- Around the edge of the NTSC-8 are T-10 torque screw that will need to be removed in order to access the internal DIP switch for setting chassis numbers.





# NTSC-8 Chassis Number

- When installing the NTSC-8's you will need to verify that the chassis numbers have been set so that they are no duplicates.
- The NTSC-8's are able to be numbered from 0-14 allowing a total of 15 units to be used together.
- In order to change the chassis numbers on each NTSC-8 you will need to take the top plate off each unit and set the internal DIP switch to indicate which chassis number you would like each unit to be.
- A best practice would be to label the outside of each unit to which chassis number it has been set to.

Chassis ID	Switch 1	Switch 2	Switch 3	Switch 4	Default IP MOD 1
0	DOWN	DOWN	DOWN	DOWN	192.168.5.1/8
1	UP	DOWN	DOWN	DOWN	192.168.5.9/16
2	DOWN	UP	DOWN	DOWN	192.168.5.17/24
3	UP	UP	DOWN	DOWN	192.168.5.25/32
4	DOWN	DOWN	UP	DOWN	192.168.5.33/40
5	UP	DOWN	UP	DOWN	192.168.5.41/48
6	DOWN	UP	UP	DOWN	192.168.5.49/56
7	UP	UP	UP	DOWN	192.168.5.57/64
8	DOWN	DOWN	DOWN	UP	192.168.5.65/72
9	UP	DOWN	DOWN	UP	192.168.5.73/80
10	DOWN	UP	DOWN	UP	192.168.5.81/88
11	UP	UP	DOWN	UP	192.168.5.89/96
12	DOWN	DOWN	UP	UP	192.168.5.97/104
13	UP	DOWN	UP	UP	192.168.5.105/112
14	DOWN	UP	UP	UP	192.168.5.113/120

# Checking each unit on the Comm system

- After each NTSC-8 has had its chassis number set you should connect each unit in order 1 at a time to verify that they are showing up correctly. If any are not you will need to make corrections to the internal DIP switch.
- You can check the NTSC-8's from the NTSC tab on the Comm system. Using the switch configuration you can see that switch 0 should begin at 192.168.5.1 – 5.8 and goes up incrementally from there.
- Note: you may need an unmanaged switch in order to connect all of the NTSC-8's to the Comm2000 as only 2 ethernet ports are available. On the Comm3000 4 ethernet ports are available.

Commands: [Overview](#), [Discover](#), [PairingInfo](#), [TuneAll](#), [Help](#)  
[Display](#), [SysInfo](#), [HealthInfo](#), [EPG](#), [Syslog](#), [Lock](#), [ATSC](#), [NTSC](#), [401](#), [QAM](#)

## NTSC8 Modulator

Which NTSC8 (192.168.5.0+chassis\*8+modId):

## Status

ip	chassisId	modId	hwVersion	swVersion	bytesReceived	channel	atten	carrierOn	altIp	audioLevel	aspectRatio
<a href="#">192.168.5.1</a>	0	1	3	1.1.33	130594466	2	0	1	<a href="#">192.168.11.1</a>	5	1
<a href="#">192.168.5.2</a>	0	2	3	1.1.33	59920982	3	0	1	<a href="#">192.168.11.2</a>	5	1
<a href="#">192.168.5.3</a>	0	3	3	1.1.33	166481378	4	0	1	<a href="#">192.168.11.3</a>	5	1
<a href="#">192.168.5.4</a>	0	4	3	1.1.33	181479822	5	0	1	<a href="#">192.168.11.4</a>	5	1
<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132534866	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1



# RF Output and Signal

- The NTSC-8 is capable of outputting Rf channel starting at channel 2 and going as high as channel 108. Using these channels the frequency can be anywhere from 54MHz – 696MHz.
- The signal output from the NTSC-8 is +25dBmV +/- 3dBmV.
- This output signal for any given channel can be attenuated by up to 10 dBmV

## NTSC8 Modulator

Which NTSC8 (192.168.5.0+chassis\*8+modId):  

### Status



ip	chassisId	modId	hwVersion	swVersion	bytesReceived	channel	atten	carrierOn	altIp	audioLevel	aspectRatio
<a href="#">192.168.5.1</a>	0	1	3	1.1.33	130594466	2	0	1	<a href="#">192.168.11.1</a>	5	1
<a href="#">192.168.5.2</a>	0	2	3	1.1.33	59920982	3	0	1	<a href="#">192.168.11.2</a>	5	1
<a href="#">192.168.5.3</a>	0	3	3	1.1.33	166481378	4	0	1	<a href="#">192.168.11.3</a>	5	1
<a href="#">192.168.5.4</a>	0	4	3	1.1.33	181479822	5	0	1	<a href="#">192.168.11.4</a>	5	1
<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132534866	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

# NTSC Tab

- On the NTSC tab of the Comm we will be able to see all NTSC-8's that are connected.
- On the NTSC tab you will first see the Which NTSC8 field. Starting with chassis 0 your primary IP addresses will be 192.168.5.1 and go up incrementally from there by 8 values per NTSC-8
- If you are unable to see all the NTSC-8 units that are connected to the system, then you will need to check that none of the NTSC-8 chassis numbers have been duplicated.
- In order to start changes at a certain tuner or to change only 1 tuner you will need to change the "Which NTSC8" field to the Primary or Alternate IP address of the tuner you wish to change or in which you wish your changes to start at.

## NTSC Tab Cont.

- Looking further into the NTSC tab you can see the “ChassisId” field. This shows you the chassis number of the NTSC-8
- Next we have the “modId” field. This represents each of the 8 channels that each NTSC-8 is capable of. When setting channels to IP on the Overview tab you will use the “modId” as the port number.
- In the “hwVersion” column you can see which hardware version the NTSC-8 is using.
- The “swVersion” indicates the current software on the NTSC-8. Each tuner in the NTSC-8 requires software and you should check that all tuners in all NTSC-8 units are updated with the latest software.
- In the “bytesReceived” column you can see if each tuner of the NTSC-8 is receiving data which would indicate if the channel is streaming. Each time you refresh the page the value in this field should go up rapidly.

Commands: [Overview](#), [Discover](#), [PairingInfo](#), [TuneAll](#), [Help](#)  
[Display](#), [SysInfo](#), [HealthInfo](#), [EPG](#), [Syslog](#), [Lock](#), [ATSC](#), [NTSC](#), [401](#), [QAM](#)

### NTSC8 Modulator

Which NTSC8 (192.168.5.0+chassis\*8+modId):

### Status



ip	chassisId	modId	hwVersion	swVersion	bytesReceived	channel	atten	carrierOn	altIp	audioLevel	aspectRatio
<a href="#">192.168.5.1</a>	0	1	3	1.1.33	130594466	2	0	1	<a href="#">192.168.11.1</a>	5	1
<a href="#">192.168.5.2</a>	0	2	3	1.1.33	59920982	3	0	1	<a href="#">192.168.11.2</a>	5	1
<a href="#">192.168.5.3</a>	0	3	3	1.1.33	166481378	4	0	1	<a href="#">192.168.11.3</a>	5	1
<a href="#">192.168.5.4</a>	0	4	3	1.1.33	181479822	5	0	1	<a href="#">192.168.11.4</a>	5	1
<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132534866	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

## NTSC Tab Cont.

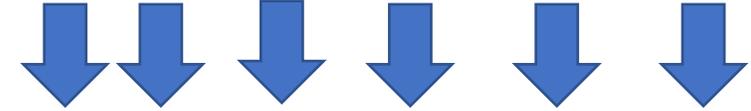
- On the “channel” column you can see the analog channel that each tuner of the NTSC-8’s are outputting. These channels can be set from 2-108.
- In the “atten” column you can see the attenuation value of each tuner. You can attenuate the signal of each channel in a range of 0-10 dB.
- The “carrierOn” column simply indicates if the tuner is on or off. A value of “1” indicates the tuner is on and is broadcasting. A value of “0” would indicate that the tuner is off. This should be checked if any single channel is missing.
- The “altIp” field is an alternate and changeable IP address in which channels may be sent to if so desired. The “altIp” should be used primarily for streaming to NTSC-8’s
- The “audioLevel” indicates the level of the audio for each tuner. You may change this value to decrease the audio for any given channel.
- The “aspectRatio” field indicated weather the channel is set to 4:3 or 16:9

Commands: [Overview](#), [Discover](#), [PairingInfo](#), [TuneAll](#), [Help](#)  
[Display](#), [SysInfo](#), [HealthInfo](#), [EPG](#), [Syslog](#), [Lock](#), [ATSC](#), [NTSC](#), [401](#), [QAM](#)

## NTSC8 Modulator

Which NTSC8 (192.168.5.0+chassis\*8+modId):

## Status



ip	chassisId	modId	hwVersion	swVersion	bytesReceived	channel	atten	carrierOn	altIp	audioLevel	aspectRatio
<a href="#">192.168.5.1</a>	0	1	3	1.1.33	130594466	2	0	1	<a href="#">192.168.11.1</a>	5	1
<a href="#">192.168.5.2</a>	0	2	3	1.1.33	59920982	3	0	1	<a href="#">192.168.11.2</a>	5	1
<a href="#">192.168.5.3</a>	0	3	3	1.1.33	166481378	4	0	1	<a href="#">192.168.11.3</a>	5	1
<a href="#">192.168.5.4</a>	0	4	3	1.1.33	181479822	5	0	1	<a href="#">192.168.11.4</a>	5	1
<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132534866	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

## NTSC Tab Control Fields

- If we scroll down from the basic information on the NTSC tab, we will have a series of fields that are used to control the setting of the NTSC-8 units.
- From here we can make several changes. The “channel” field allows us to set the channel that each tuner is broadcasting on. It can be any value between 2-108. If you wish to start at one channel and then just go in order incrementally you can check the box to the right of the field and every channel after the one you are working on will change incrementally.

<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132554880	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

Control (check to change all 8 slots)

//2-107  
 //0-10dB  
 //0=off;1=on  
 //1=reset  
 //range=[1:10], requires reset  
 //0=4x3, 1=16x9 (recommended), requires reset

channel:    
 attenuation:   
 carrierOn:   
 reset:   
 audioLevel:   
 aspectRatio:   
 alternateIp:   
 tftpIp:   
 tftpFilename:

## NTSC Tab Control Fields Cont.

- The “attenuation” field will allow you to attenuate each channel by 0-10dB. Once again if you select the check box to the right of the field that all channels will be attenuated by the set value. Once the desired attenuation is entered click submit to make the changes.
- The “carrierOn” field will turn each tuner on or off by setting a value of “1” for on and “0” for off. You can also turn on or off all channels by selecting the check box to the right and clicking submit.
- The “reset” field can be used to reset tuners individually or to reset all tuners by using the check box and entering a value of “1” and clicking submit.

<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132554880	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

### Control (check to change all 8 slots)

channel:	<input type="text" value="2"/>	<input type="checkbox"/>	//2-107
attenuation:	<input type="text" value="0"/> 	<input type="checkbox"/>	//0-10dB
carrierOn:	<input type="text" value="1"/> 	<input type="checkbox"/>	//0=off;1=on
reset:	<input type="text" value="0"/> 	<input type="checkbox"/>	//1=reset
audioLevel:	<input type="text" value="5"/>	<input type="checkbox"/>	//range=[1:10], requires reset
aspectRatio:	<input type="text" value="1"/>	<input type="checkbox"/>	//0=4x3, 1=16x9 (recommended), requires reset
alternateIp:	<input type="text" value="192.168.11.1"/>	<input type="checkbox"/>	
tftpIp:	<input type="text" value="192.168.3.18"/>	<input type="checkbox"/>	
tftpFilename:	<input type="text"/>		
<input type="button" value="Submit"/>			

## NTSC Tab Control Fields Cont.

- The “audioLevel” will control the audio for 1 or all of the tuners when using the check box to the right. You can set the value from 1-10 and clicking submit. You will also need to reset the changed tuners for it to take effect.
- The “aspectRatio” field will allow you to set the aspect ratio to 4:3 by entering a value of “0” or 16:9 by entering a value of “1” and clicking submit. This can be set to all tuners by selecting the check box to the right before clicking submit.
- The “alternateIP” field is where you can set the alternate IP for each tuner to the desired IP addresses to be used for broadcast. You can set the IP incrementally by using the check box to the right before clicking submit.

<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132554880	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

### Control (check to change all 8 slots)

channel:	<input type="text" value="2"/>	<input type="checkbox"/>	//2-107
attenuation:	<input type="text" value="0"/>	<input type="checkbox"/>	//0-10dB
carrierOn:	<input type="text" value="1"/>	<input type="checkbox"/>	//0=off;1=on
reset:	<input type="text" value="0"/>	<input type="checkbox"/>	//1=reset
audioLevel:	<input type="text" value="5"/> 	<input type="checkbox"/>	//range=[1:10], requires reset
aspectRatio:	<input type="text" value="1"/> 	<input type="checkbox"/>	//0=4x3, 1=16x9 (recommended), requires reset
alternateIp:	<input type="text" value="192.168.11.1"/> 	<input type="checkbox"/>	
tftpIp:	<input type="text" value="192.168.3.18"/>	<input type="checkbox"/>	
tftpFilename:	<input type="text"/>		
<input type="button" value="Submit"/>			

## NTSC Tab Control Fields Cont

- The "tftpIp" field is used to indicate where the tftp server is located. If updating the NTSC-8's you can use the check box to the right to indicate that you would like all tuners to download the indicated file below.
- The "tftpFilename" field is used to indicate the name of the file located in the tftp server that NTSC-8 should download. You will need to copy and paste the name of the file to this field in order to successfully transfer the file. Once the filename has been entered you can click submit to begin the transfer to the selected tuners.

<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132554880	6	0	1	<a href="#">192.168.11.5</a>	5	1
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206	7	0	1	<a href="#">192.168.11.6</a>	5	1
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842	9	0	1	<a href="#">192.168.11.8</a>	5	1

### Control (check to change all 8 slots)

channel:   //2-107

attenuation:   //0-10dB

carrierOn:   //0=off;1=on

reset:   //1=reset

audioLevel:   //range=[1:10], requires reset

aspectRatio:   //0=4x3, 1=16x9 (recommended), requires reset

alternateIp:

tftpIp:   

tftpFilename:  

# Setting Channels for NTSC-8 on the Overview Page

- On the overview page you can set the channels to stream out the NTSC-8 by setting them to IP mode
- Now enter the chosen alternate IP selected for the tuners during setup. In this case we are using the alternate IP address of 192.168.11.1 and up.
- Like discussed before the “port” field should be set to match the “modId” column on the NTSC tab.
- Its important to remember that when channels are set to IP the “Bitrate” column on the Overview page will highlight red and show a 0.0 Mbps value. This does not mean that the channel is not streaming.

Submit

Display Mode  QAM  IP

SD Duplicates  Show  Hide

Chassis	Slot	Tuner	Security	Channel	Mode	IP:Port	Bitrate	SNR	Strength	Status
		<a href="#">1</a>	Pro:Idiom	202 CNNHD	IP	192 . 168 . 11 . 1 : 1	0.0 Mbps	12	-22	OK
		<a href="#">2</a>	Pro:Idiom	350 CSP1	IP	192 . 168 . 11 . 2 : 2	0.0 Mbps	15	-24	
		<a href="#">3</a>	Pro:Idiom	229 HGTVHD	IP	192 . 168 . 11 . 3 : 3	0.0 Mbps	12	-22	
		<a href="#">4</a>	Pro:Idiom	230 DIYHD	IP	192 . 168 . 11 . 4 : 4	0.0 Mbps	12	-22	
		<a href="#">5</a>	Pro:Idiom	269 HISTHD	IP	192 . 168 . 11 . 5 : 5	0.0 Mbps	11	-22	
		<a href="#">6</a>	Pro:Idiom	278 DSCHD	IP	192 . 168 . 11 . 6 : 6	0.0 Mbps	11	-22	
		<a href="#">7</a>	Pro:Idiom	331 MTVHD	IP	192 . 168 . 11 . 7 : 7	0.0 Mbps	11	-22	
		<a href="#">8</a>	Pro:Idiom	327 CMTHD	IP	192 . 168 . 11 . 8 : 8	0.0 Mbps	11	-22	

# Advanced Tune Settings

- In addition to setting the channels to stream on the proper IP address and port numbers you will need to make some changes in the advanced tune page for each card.
- To do this navigate to the advanced tune of the first tuner for each card.
- Once on the advanced edit page scroll down to the User Config section.

← → ↻ ⓘ Not secure | 192.168.3.18/cgi-bin/webcmd?screen=CardEdit?tune=0

Technician Calander Concur Meraki Dashboard... UniFi DIRECTV Monitorin... Portal | WAV Support Quiz Maker Online... Mitel Login

## User Config

**WARNING:** Changing the settings in this section may cause the card to be unable to communicate. Please record all settings for future reference.

IP_Config:	0 = Default	
Base_IP:		
Subnet:		Recommended: 255.255.0.0. Warning: You may lose communication with the card.
Gateway:	192.168.3.1	
DNS_IP:		
Time_To_Live:	3	
Log_IP:		
Log_Level:		a# (app; guide; hw; publish; verifier; 0 - debug; 1- verbose; 2 - info; 3 - warn; 4 - error)
NTSC8_IP:		
NTSC8_TunerCount:	8	
UtilConfig:		

Submit

# User Config

**WARNING:** Changing the settings in this section may cause the card to be unable to communicate. Please record all settings for future reference.

IP_Config:	0 = Default ▾	
Base_IP:		
Subnet:		Recommended: 255.255.0.0. Warning: You may lose communication with the card.
Gateway:		
DNS_IP:		
Time_To_Live:	3	
Log_IP:		
Log_Level:		a# (app; guide; hw; publish; verifier; 0 - debug; 1- verbose; 2 - info; 3 - warn; 4 - error)
NTSC8_IP:	192.168.11.1	←
NTSC8_TunerCount:	8	←
UtilConfig:		
<input type="button" value="Submit"/>		

## Advanced Tune User Config Settings

- On the User Config section you will need to change the values for the NTSC8\_IP field and the NTSC8\_TunerCount field.
- In the NTSC8\_IP field enter the chosen alternate IP that you have set for the NTSC-8 devices.
- In the NTSC8\_TunerCount field enter the number of channels that this blade will be sending to the NTSC-8.
- When you move to a new blade the NTSC8\_IP field will use the IP address 192.168.11.9 which is the next IP address after the 8 addresses being used by the first card. Likewise a 3<sup>rd</sup> card sending 8 channels would start on the address of 192.168.11.17. When installing on a Comm3000 each card can only provide up to 16 channels each to NTSC-8 units.

# Verifying NTSC-8 Streams

- There are 3 ways that you can verify that your channels are streaming to the NTSC-8 properly.
- 1<sup>st</sup> you can check the lights on the front of the NTSC-8. If they are green, then a channel is being streamed. If they are Orange, then the channel is not coming in properly.
- 2<sup>nd</sup> You can verify that the “bytesReceived” column on the NTSC tab is showing data is going to each tuner.
- 3<sup>rd</sup> You will want to use a test TV to verify that the channel is being picked up properly.



## Status



ip	chassisId	modId	hwVersion	swVersion	bytesReceived
<a href="#">192.168.5.1</a>	0	1	3	1.1.33	130594466
<a href="#">192.168.5.2</a>	0	2	3	1.1.33	59920982
<a href="#">192.168.5.3</a>	0	3	3	1.1.33	166481378
<a href="#">192.168.5.4</a>	0	4	3	1.1.33	181479822
<a href="#">192.168.5.5</a>	0	5	3	1.1.33	132534866
<a href="#">192.168.5.6</a>	0	6	3	1.1.33	138553206
<a href="#">192.168.5.7</a>	0	7	3	1.1.33	165096050
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	160736842



# DIRECTV COM2000

technicolor



Commands: [Overview](#), [Discover](#), [PairingInfo](#), [TuneAll](#), [Help](#)  
[Display](#), [SysInfo](#), [HealthInfo](#), [EPG](#), [Syslog](#), [Lock](#), [ATSC](#), [NTSC](#), [401](#), [QAM](#)

Chassis	Slot	CardIP	RID	CAM_ID	Serial_Number	Authorized	Paired	SW_Version
2	1	<a href="#">192.168.3.34</a>	036625544642	<a href="#">003805662172</a>	2097351224	1	1	ST03.03.91
	3	<a href="#">192.168.3.36</a>	036625548627	<a href="#">003805107798</a>	2097350859	1	1	ST03.03.91
	4	<a href="#">192.168.3.37</a>	036625343672	<a href="#">003805302803</a>	2097329334	1	1	ST03.03.91
	5	<a href="#">192.168.3.38</a>	036625357698	<a href="#">003805305590</a>	2097329586	1	1	ST03.03.91
	6	<a href="#">192.168.3.39</a>	036625360973	<a href="#">003805301755</a>	2097329305	1	1	ST03.03.91

Software Upgrade:

Usage:

Server\_IP\_Address:

Filename:

Mode:

2 = SW\_Upgrade ▾

192.168.1.254

NTSC8\_ST01.01.33.bin

0 = TFTP ▾



- Using the TFTP server on the PairingInfo tab you can upload the latest software to the NTSC-8's to upgrade them.
- Once the desired update file has been loaded copy the file name and navigate to the NTSC tab.

Using the TFTP server to  
update the NTSC-8

<a href="#">192.168.5.7</a>	0	7	3	1.1.33	3320394859	8	0	1	<a href="#">192.168.11.7</a>	5	1
<a href="#">192.168.5.8</a>	0	8	3	1.1.33	549560663	9	0	1	<a href="#">192.168.11.8</a>	5	1



Control (check to change all 8 slots)

channel:   //2-107

attenuation:   //0-10dB

carrierOn:   //0=off;1=on

reset:   //1=reset

audioLevel:   //range=[1:10], requires reset

aspectRatio:   //0=4x3, 1=16x9 (recommended), requires reset

alternateIp:

tftpIp:

tftpFilename:

# Updating the NTSC-8

- Once the update file has been loaded to the TFTP server and you have copied the file name we are ready to update.
- Navigate to the NTSC tab and in the “tftpIp” field enter the IP address of the TFTP server you are using.
- Then in the “tftpFilename” field paste the file name that you copied.
- If you wish to update all tuners at the same time, click on the checkbox to the right of the “tftpIp” field and then click submit.
- Once the update begins the lights on the front of the NTSC-8 should begin to blink indicating that they are performing an update.
- After the update has completed the “swVersion” column will reflect the new software.

# NTSC-8 Configuration Activity

- Remove the top plate of the NTSC-8 and set it to chassis 0-3 depending on what its currently configured for.
- Power and connect the NTSC-8 to the Comm system.
- Verify that the correct chassis number has been set by using the NTSC tab.
- Change the channel output for tuners 1-3 as 2,3,4. Change the channel output of tuners 4-8 as 7-10.
- Change the out put of all 8 tuners to start at 30 and end at 38.
- Change the attenuation of channel 36 to 4dB
- Set the Alternate IP of all 8 tuners to start at 192.168.11.1 or 192.168.11.30 depending on current settings.
- Turn tuner 8 off by setting its carrier signal setting to 0. Then turn it back on.
- On the Overview page set the first 8 channels to stream to the alternate IP you set on the NTSC-8.
- Navigate to the advanced tune page for the card streaming to the NTSC-8 and change the User Config setting to make sure that NTSC-8 is streaming properly. You will need to change the NTSC8IP field and the NTSC8\_tunerCount field.
- Verify that the lights on the front of the NTSC-8 have turned green. Check with an RF meter that your channels are streaming.
- Verify that the channels are working by using a test TV.
- Upload the latest NTSC-8 software to the TFTP server then apply it to the NTSC 8 using the NTSC tab.