



Niveo-KB21010

Video-over-IP Design Guide

These designs work for nearly all industry standard 1G Video-over-IP designs, including Crestron, Visionary Solutions, Key Digital, Wyrestorm, SVSI, Atлона Omnistream, Blustream and DigitalinxIP and many others.

Instructions on how to upload configuration files can be found in the guide:

[Niveo-KB21009 SWITCH ConfigFile Upload.pdf](#)

Single Switch Designs:



0-8 encoders/decoders:
Crestron NVX/VS1: NGSME8H(-AV)

Config Files:	NGSME8H(-AV)
Serial Number starts with: 99...:	All other Serial Numbers:
VOIP_NGSME8H_Config_lin	VOIP_NGSME8H_Config_ecos
Firmware Version Should be:	Firmware Version Should be:
v2.1.1	v1.0.1



9-16 encoders/decoders:

Crestron NVX/VS!: NGSME16T2H(-AV)

Config Files:	NGSME16T2H(-AV)
Serial Number starts with: 99...:	All other Serial Numbers:
VOIP_NGSME16T2H_Config_lin	VOIP_NGSME16T2H_Config_ecos
Firmware Version Should be:	Firmware Version Should be:
v2.1.1	v1.0.1

17-24 encoders/decoders:

Crestron NVX/VS!: NGSME24T2H(-AV)

DigilinxIP: NGSME24T2H(-AV)

Config Files:	NGSME24T2H(-AV)
Serial Number starts with: 99...:	All other Serial Numbers:
VOIP_NGSME24T2H_Config_lin	VOIP_NGSME24T2H_Config_ecos
Firmware Version Should be:	Firmware Version Should be:
v2.1.1	v1.0.1

24-48 encoders/decoders:

Crestron NVX/VS!: NGSME48T2H/ NGSME48T4H

DigilinxIP: NGSME48T2H/ NGSME48T4H

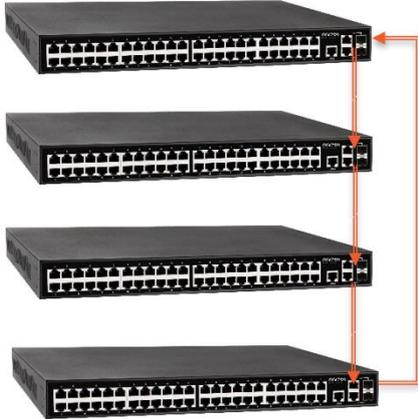
Config Files:	NGSME48T2H
Serial Number starts with: 99...:	All other Serial Numbers:
VOIP_NGSME48T2H_SW1_lin	VOIP_NGSME48T2H_SW1_ecos
Firmware Version Should be:	Firmware Version Should be:
v2.1.1	v1.0.1
Config Files:	NGSME48T4H
All Serial Numbers	-
VOIP_NGSME48T4H_SW1_Config_lin	
Firmware Version Should be:	
v2.1.1	

Our website: <https://www.niveoprofessional.com/>

Niveo Tech team: 855-40-NIVEO/855-406-4836



Stacked Switch Designs



49-96 encoders/decoders:

Crestron NVX/VS1: 2* NGSME48T2H or 2*NGSME48T4H + Virtual Stacking using 2/4 10G SFP+ per switch, N10GSM/N10GMM). **Balance the encoders over the switches.**
DigilinxIP: 2* NGSME48T2H or 2*NGSME48T4H + Virtual Stacking using 2/4 10G SFP+ per switch, N10GSM/N10GMM). **Balance the encoders over the switches.**

Config Files:	NGSME48T2H - Switch 1
Serial Number starts with: 99...:	All other Serial Numbers:
VOIP_NGSME48T2H_SW1_lin	VOIP_NGSME48T2H_SW1_ecos
Firmware Version Should be:	Firmware Version Should be:
v2.1.1	v1.0.1
Config Files:	NGSME48T2H - Switch 2
Serial Number starts with: 99...:	All other Serial Numbers:
VOIP_NGSME48T2H_SW2_lin	VOIP_NGSME48T2H_SW2_ecos
Firmware Version Should be:	Firmware Version Should be:
v2.1.1	v1.0.1

Config Files:	NGSME48T4H - Switch 1
All Serial Numbers	
VOIP_NGSME48T4H_SW1_Config_lin	
Firmware Version Should be:	
v2.1.1	
Config Files:	NGSME48T4H - Switch 2
All Serial Numbers	
VOIP_NGSME48T4H_SW2_Config_lin	
Firmware Version Should be:	
v2.1.1	

Notes:

- Please involve Niveo Tech team in your design phase. We will help you work through the needs of your endpoints, POE+ and share best practices.
- Niveo Tech team: 855-40-NIVEO/855-406-4836
- The switch, not the control box or encoders/decoders, is the single most critical part in the entire installation.
- Please only use NIVEO recommended firmware versions & settings
- Pre-stage, before going live! If it does not work, call us. In most cases, the issues are caused by incorrect configurations or wrong accessories. It is seldom the switch!
- Please use Niveo recommended fiber modules: N10GMM/N10GSM.



Stacked Switch Designs

97-240 encoders/decoders:

Crestron NVX/VS1: 3/4/5 * NGSME48T4H + Virtual Stacking using 4 10G SFP+ per switch, N10GSM/N10GMM. **Balance the encoders over the switches.**

DigilinxIP: 3/4/5 * NGSME48T4H + Virtual Stacking using 4 10G SFP+ per switch, N10GSM/N10GMM. **Balance the encoders over the switches.**

Config Files:	NGSME48T4H - Switch 1	
All Serial Numbers		
VOIP_NGSME48T4H_SW1_Config_lin		
Firmware Version Should be:		
v2.1.1		
Config Files:	NGSME48T4H - Switch 2	
All Serial Numbers		
VOIP_NGSME48T4H_SW2_Config_lin		
Firmware Version Should be:		
v2.1.1		
Config Files:	NGSME48T4H - Switch 3	
All Serial Numbers		
VOIP_NGSME48T4H_SW2_Config_lin		
Firmware Version Should be:		
v2.1.1		
Before activating config, change IP-address to 192.168.2.3		
Config Files:	NGSME48T4H - Switch 4	
All Serial Numbers		
VOIP_NGSME48T4H_SW2_Config_lin		
Firmware Version Should be:		
v2.1.1		
Before activating config, change IP-address to 192.168.2.4		
Config Files:	NGSME48T4H - Switch 5	
All Serial Numbers		
VOIP_NGSME48T4H_SW2_Config_lin		
Firmware Version Should be:		
v2.1.1		
Before activating config, change IP-address to 192.168.2.5		

How to change IP Address of switch:

>Go to Configuration/System/IP

>Change Address under Ipv4

>Save

IP Configuration

Mode: Host

DNS Server: No DNS server

DNS Proxy:

IP Interfaces

Delete	VLAN	Enable	Fallback	Current Lease	IPv4 Address	Ma
<input type="checkbox"/>	1	<input type="checkbox"/>	0		192.168.2.1	

Add Interface

IP Routes

Delete	Network	Mask Length	Gateway	Next Hop VLAN
<input type="checkbox"/>				

Add Route

Save Reset

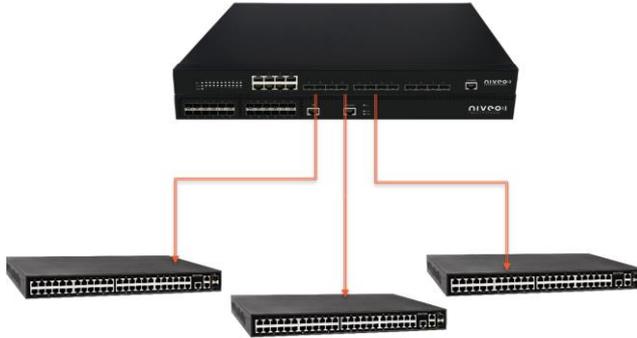
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Tree/Leaf Design

(Contact Niveo Tech Team for Configurations)



241-384 encoders/decoders:

Crestron NVX/VS! 6 – 8 * NGSME48T2H + 1 Core switch N10GSM16 + 2 10G SFP+ per switch, N10GSM/N10GMM. **Balance the encoders over the switches.**

385-768 encoders/decoders:

Crestron NVX/VS! 9 – 16 * NGSME48T2H +1 Core switch N10GSM32 + 2 10G SFP+ per switch, N10GSM/N10GMM. **Balance the encoders over the switches.**

769-1152 encoders/decoders:

Crestron NVX/VS! 17 – 24 * NGSME48T2H+ 1 Core switch N10GSM6QF48 + 2 10G SFP+ per switch, N10GSM/N10GMM. **Balance the encoders over the switches.**

1153-2306 encoders/decoders:

Crestron NVX/VS! 25 – 48 * NGSME48T2H +2 aggregated (6*40G QSFP+ link) Core switches N10GSM6QF48 + 2 10G SFP+ per switch, N10GSM/N10GMM. **Balance the encoders over the switches.**

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