



# Networking for Easy and Profitable Installations

*By Arthur de Jager, Co-founder & CEO of Niveo Professional*

# INTRODUCTION



# IN THIS WEBINAR:

- » Optimizing a Wi-Fi from a home office and outdoor applications.
- » Wi-Fi remote management
- » AV-designed switches vs standard IT gear.
- » Configuring switches for Video-over-IP from NVX to DigitaLinux IP: Quick, easy and rock solid.
- » Network tech support and how it can change the way you work for good.
- » 10 year warranty and why it matters.

# WIRELESS OPTIMIZED



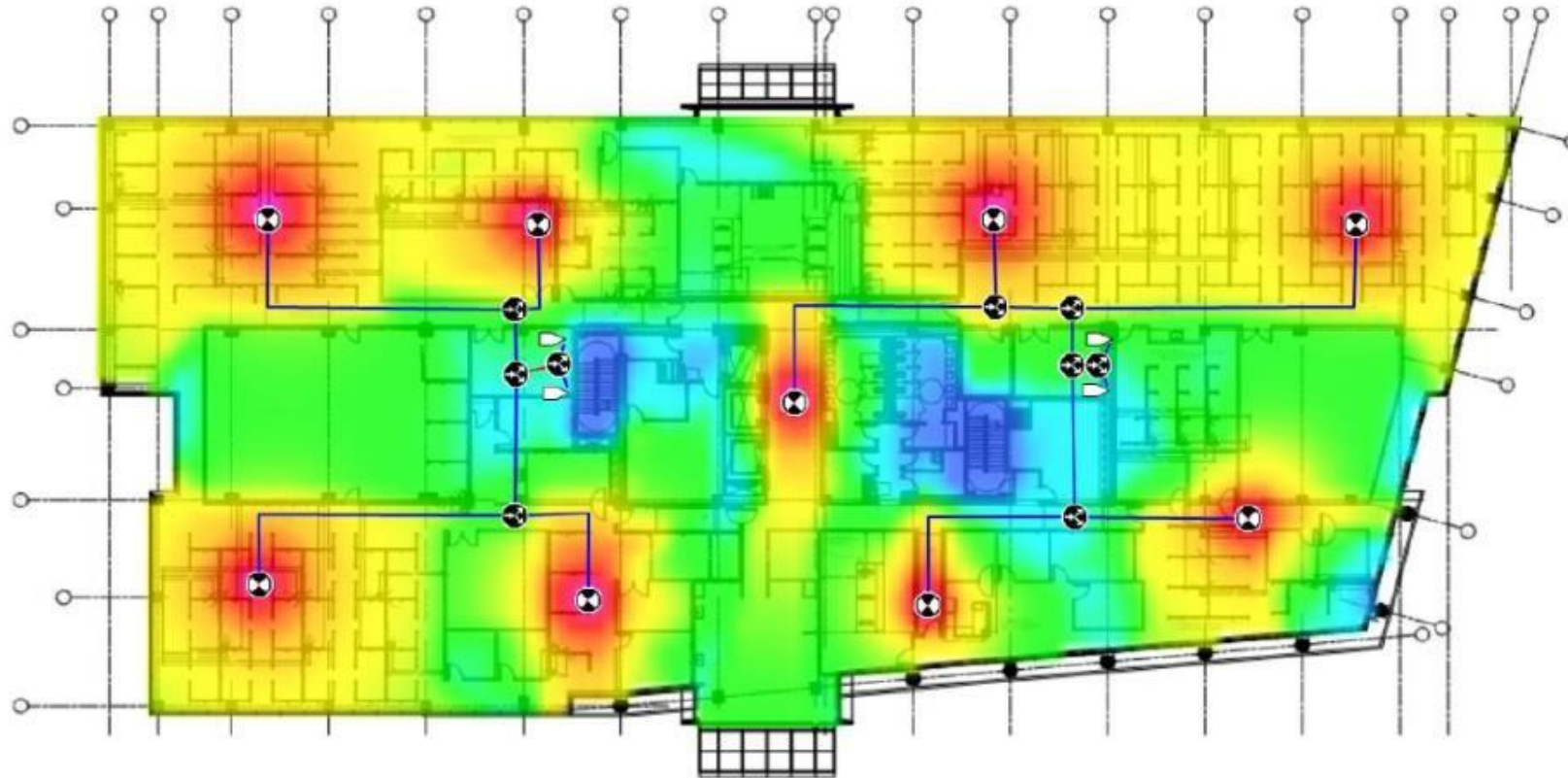
# STEP 1: UNDERSTAND HOW THE WI-FI IS GOING TO BE USED

- » SOHO vs CORPORATE vs HIGH DENSITY
- » Relatively stable nodes vs constant changing subscribers?
- » Do we need to prioritize certain streams of nodes?
- » Plain Data, Audio, video streaming?
- » What Area do I need to cover?
- » Do I need a controller?

## Step 2: Designing the network: The (non-)sense of heat maps

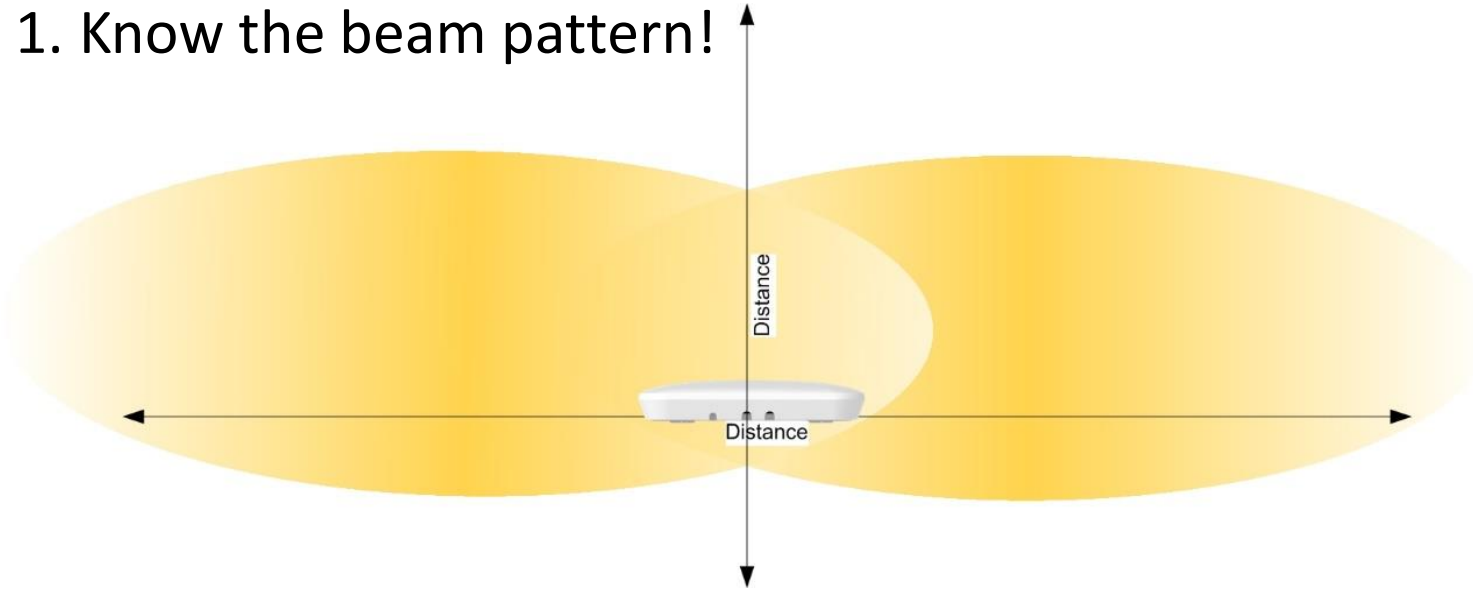
### Heat maps (Without site survey):

- ]] Only as a very rough indicator
- ]] Does not show effects of interference
- ]] Does not measure effects of: user clustering, other networks, building cabling, moisture in the air etc.

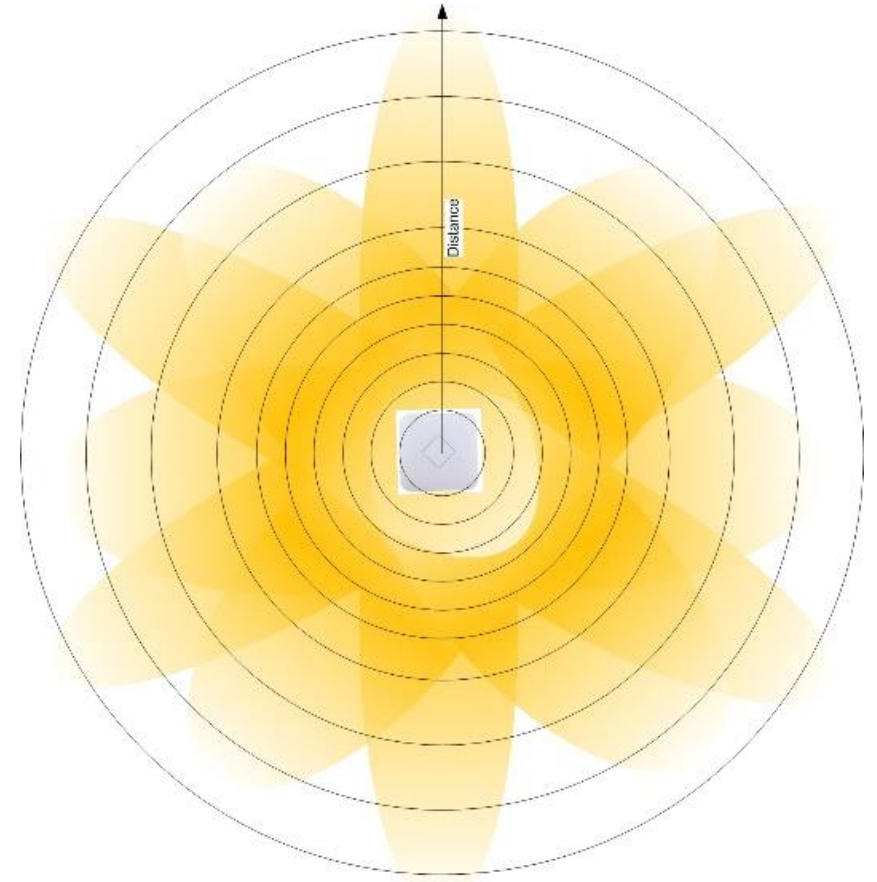


## Step 3: Placing the AP's

1. Know the beam pattern!



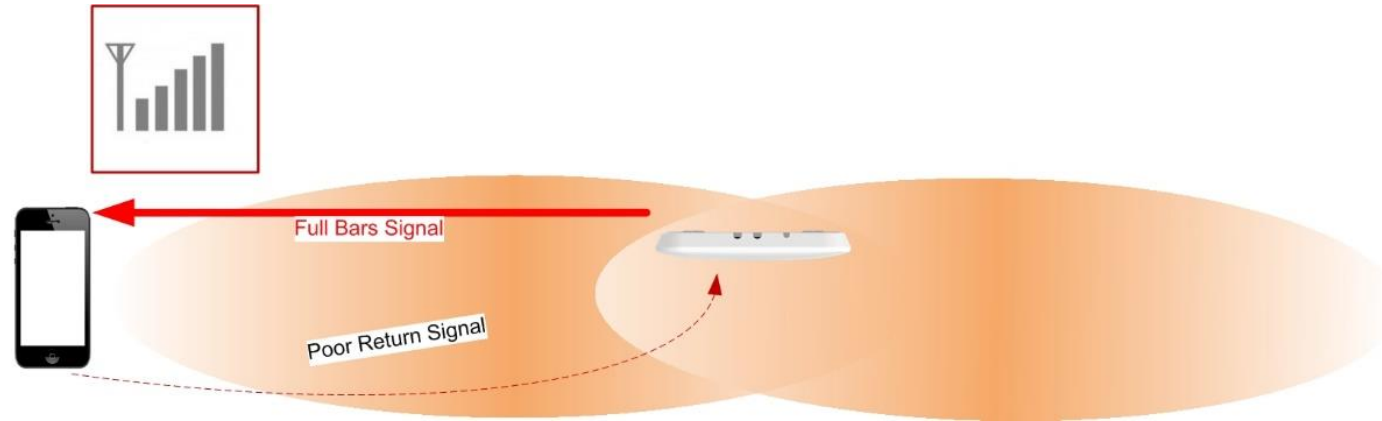
2. The further you are removed from an AP, the slower the transmission will be:



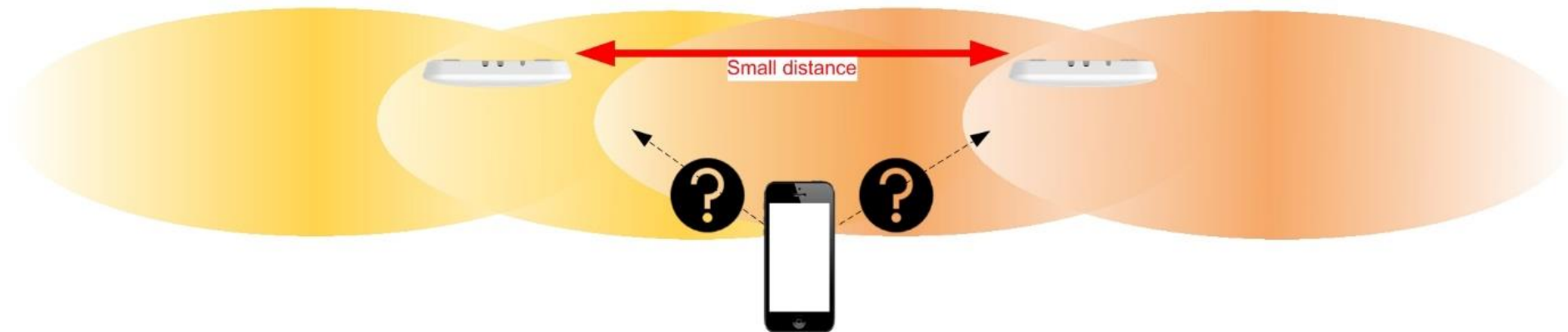


## Step 3: Placing the AP's cont.

3. Don't put too much distance between AP's.



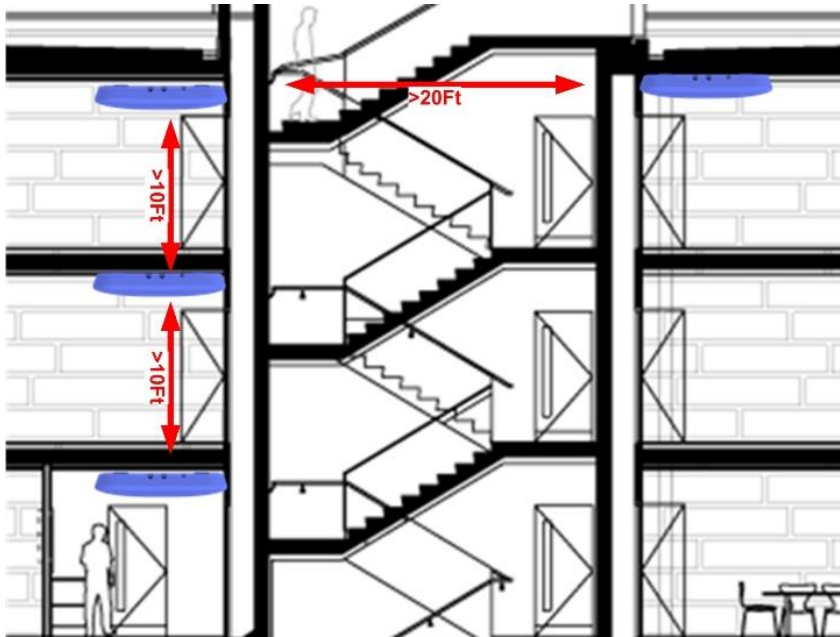
4. Don't put the AP's too close.





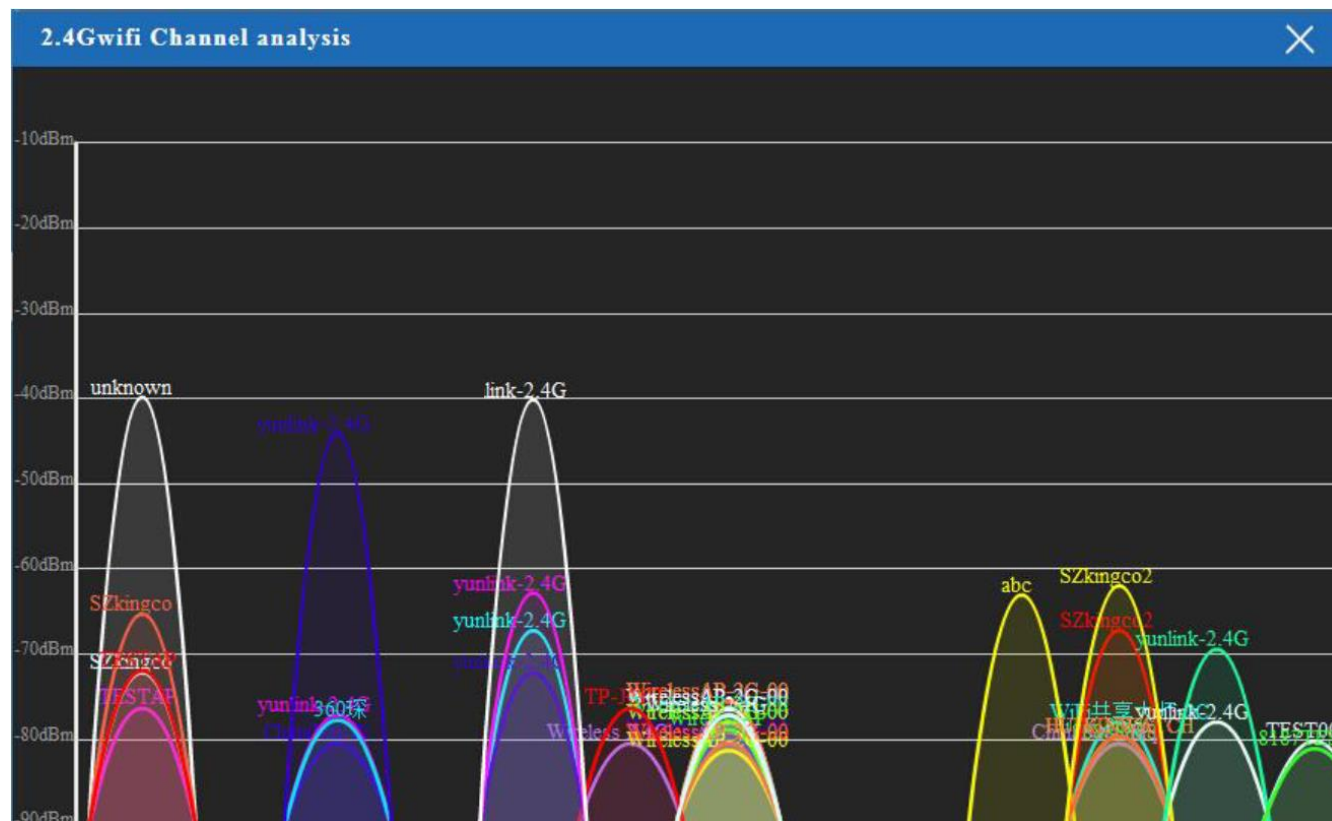
## Step 3: Placing the AP's cont.

5. Don't put the AP's too close! The floor to floor distance is often overlooked and AP's are often placed 10ft apart:

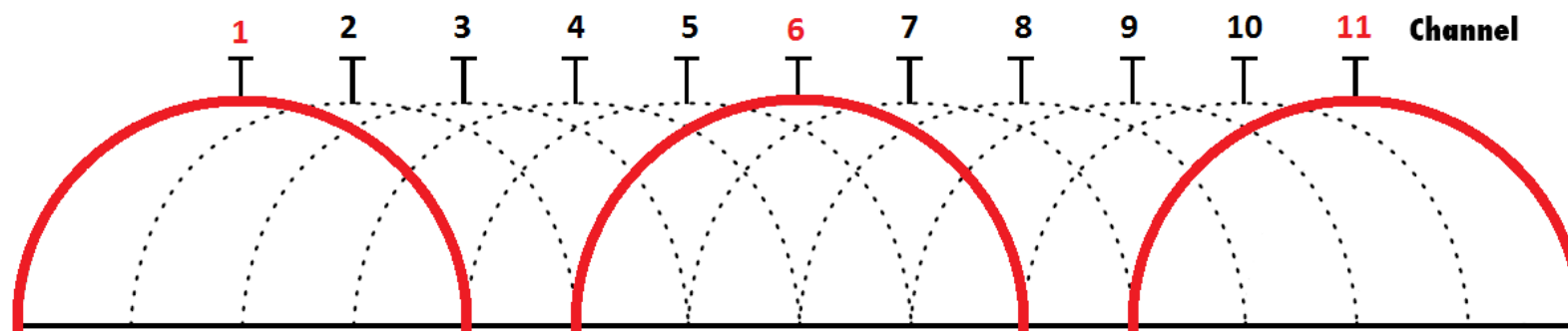


6. In case AP's are mounted too close, simply turn down the transmission (Tx) power in the web interface.

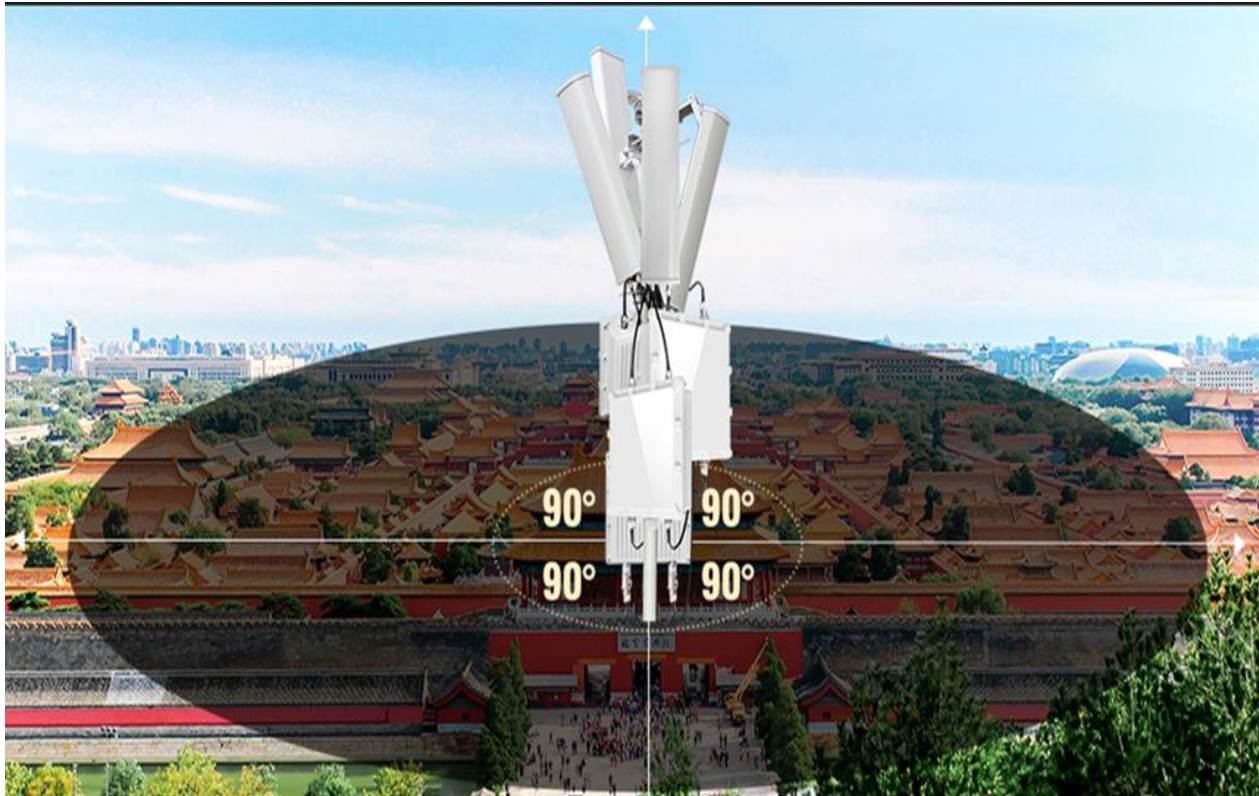
## Step 4: Dealing with Interference



- » Built-in Channel Analyzer
- » Non-overlapping Channels
- » Less is More!



## Step 5: Outdoor placement



- » Check the radius!
- » Check Distance (Up to 600Ft)
- » Check for Interference:



## Step 6: Dealing with Bandwidth issues

- )) Prioritize users!
- )) Simple QOS setting:

**niveo**  
PROFESSIONAL

← AP Management

Help

Status

Network Firewall

Management

**Smart QoS**

**Qos Basic Settings**

Status ☐ Enable ☒ Disable

Upload 50000

Download 50000

Apply

**Qos rule setting**

☒ IP Address Range 192.168.10.~192.168.10.

☐ MAC Address : : : : : Scan MAC

Mode ☒ Shared ☐ Exclusive

Max bandwidth(Decimal point is not allowed)

Upload 0 Kbps

Download 0 Kbps

Mark

(Double-click the selected items to modify the settings, QoS allows you to add up to 8 rules)

Add Delete Modify Cancel

Function

System

DDNS

Smart QoS

User

Logs


Upgrade Firmware

System Time



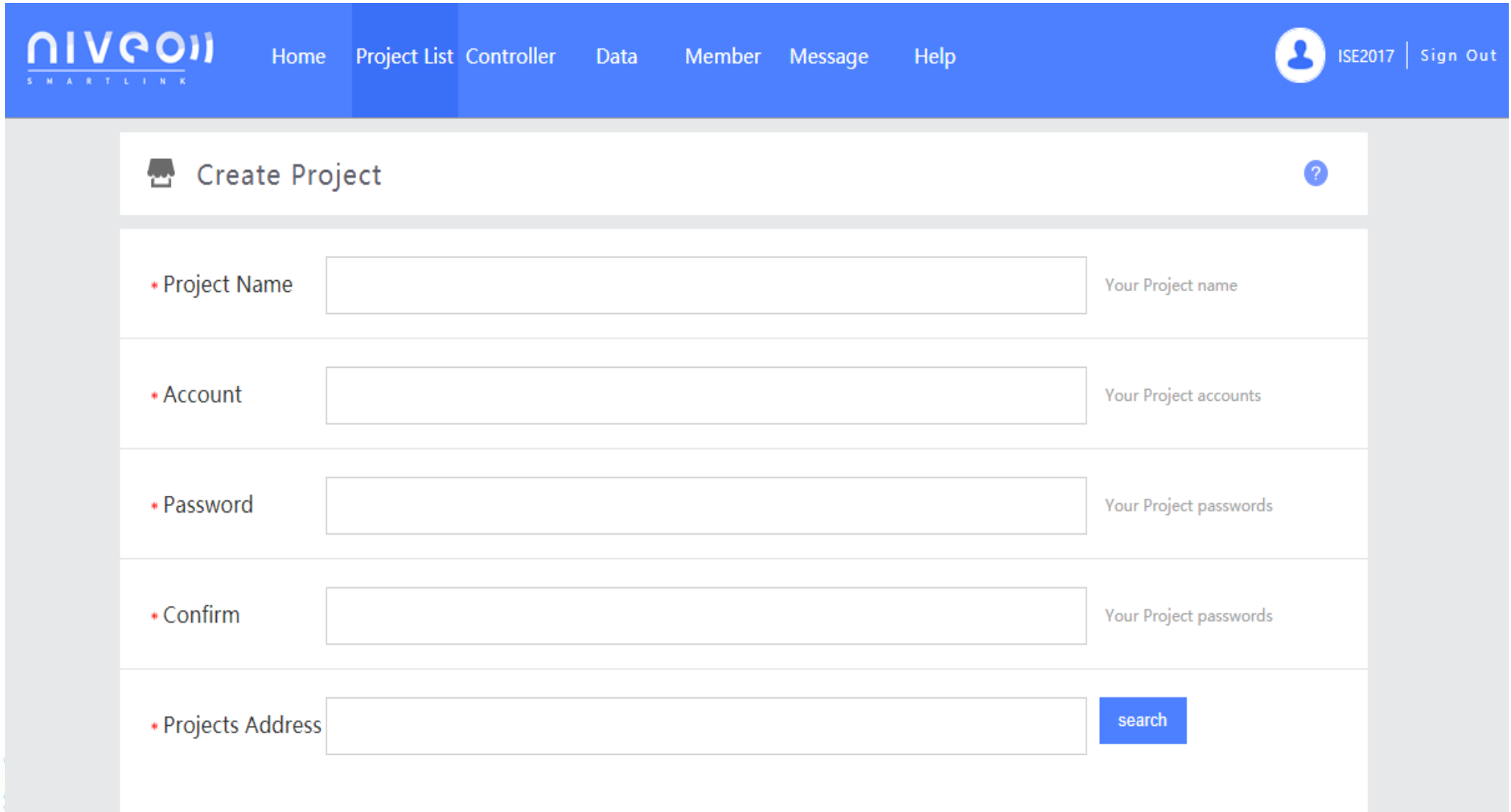
## Step 7: Cloud management

» Log-on Smartlink

The image shows the Niveon Smartlink login interface. The background is a high-angle view of a city skyline from a window. The Niveon logo is at the top center, with 'SMARTLINK' in smaller letters below it. The text 'YOUR GATEWAY TO REMOTE MANAGEMENT' is centered below the logo. A white login form is overlaid on the right side. It has a 'Sign in' header, followed by input fields for 'ISE' (containing '8577'), 'Password', and a CAPTCHA image. A blue 'Login' button is below the fields. At the bottom of the form, there is a link 'Forgot the password? Click here!' and a blue link 'Register immediately!'.

# Step 7: Cloud management

## » Register your project





The screenshot displays the Niveon SmartLink web application interface. The top navigation bar is blue and contains the Niveon logo, a menu with links to Home, Project List, Controller, Data, Member, Message, and Help, and a user profile section for 'ISE2017' with a 'Sign Out' link. The main content area is titled 'Create Project' and features a form with five input fields: 'Project Name', 'Account', 'Password', 'Confirm', and 'Projects Address'. Each field is preceded by a red asterisk indicating it is required. To the right of each input field is a placeholder text: 'Your Project name', 'Your Project accounts', 'Your Project passwords', 'Your Project passwords', and 'Your Project passwords'. A blue 'search' button is located to the right of the 'Projects Address' field. A help icon (question mark) is visible in the top right corner of the form area.

**niveon**  
SMARTLINK

Home Project List Controller Data Member Message Help

ISE2017 | Sign Out

 Create Project 

\* Project Name  Your Project name

\* Account  Your Project accounts

\* Password  Your Project passwords


\* Confirm  Your Project passwords

\* Projects Address

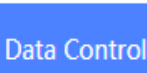
# Step 7: Cloud management

» Done! You are ready to go!


Welcome2020-05-07



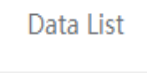
Data List



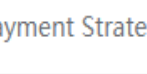
Data Control




Data Statistics




Data List




Payment Strategy




Data Control






Total time

0Hour



Total users

1



All Data

0G

Enable time

☒

Enable: 0

Disable: 1

Enable auth

☒

Enable: 0

Disable: 1

Enable calculate

☐

Enable: 0

Disable: 1

Time/Data statistics

Statistics time

Time(hour)

1			
0.8			
0.6			

Statistics Data

Data(G)

1			
0.8			
0.6			



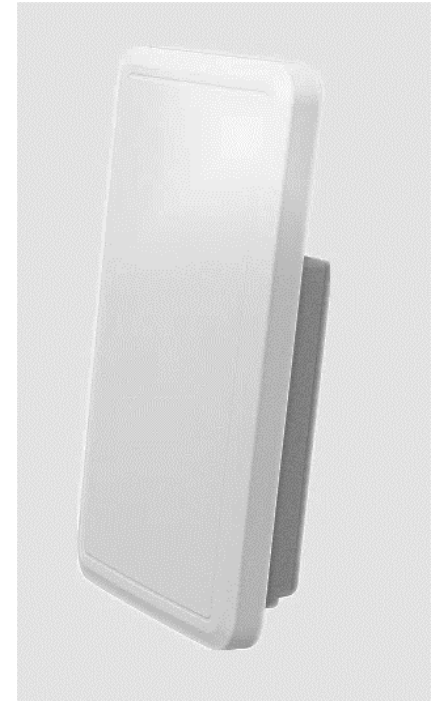
# Niveo Professional Wireless:

## **NWA300/350 Ceiling mount Access Point/ NWA220 Outdoor Access Point**

- 1) Anything you really want/need in an Access Point
- 1) Dual Band, Dual Radio
- 1) High transmission speeds, up to 6 times that of most Access Point's
- 1) Very wide coverage
- 1) Roaming
- 1) Very competitive

## **NWAC7000 Access Controller**

- 1) Rack mounted
- 1) Controller for managing, controlling and monitoring Wireless APs simultaneously
- 1) Ideal for installations with multiple Wireless APs
- 1) Bi-directional bandwidth control based on IP and MAC
- 1) Web remote managed
- 1) Very competitively priced



# AV-SWITCHES

## Making life a lot easier



# Niveo Professional Switches

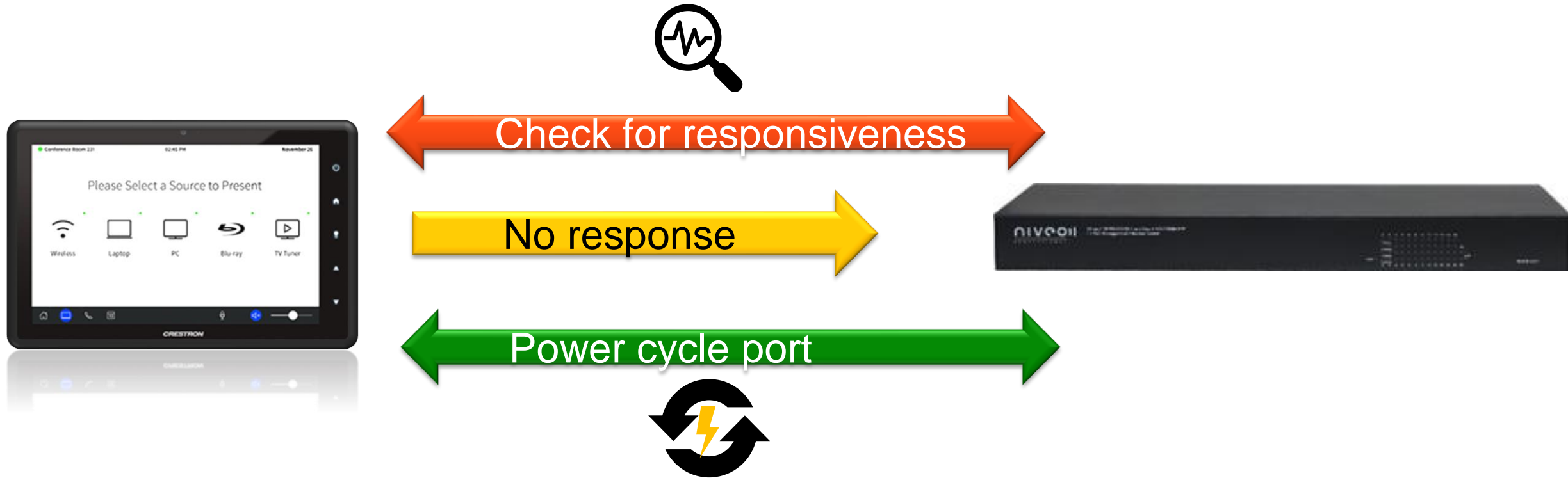
- » MARGIN!
- » SUPPPORT!
- » 10 Yr WARRANTY
- » Rear Ports
- » Special Features
- » AV Protocols:

» Video-over-IP:



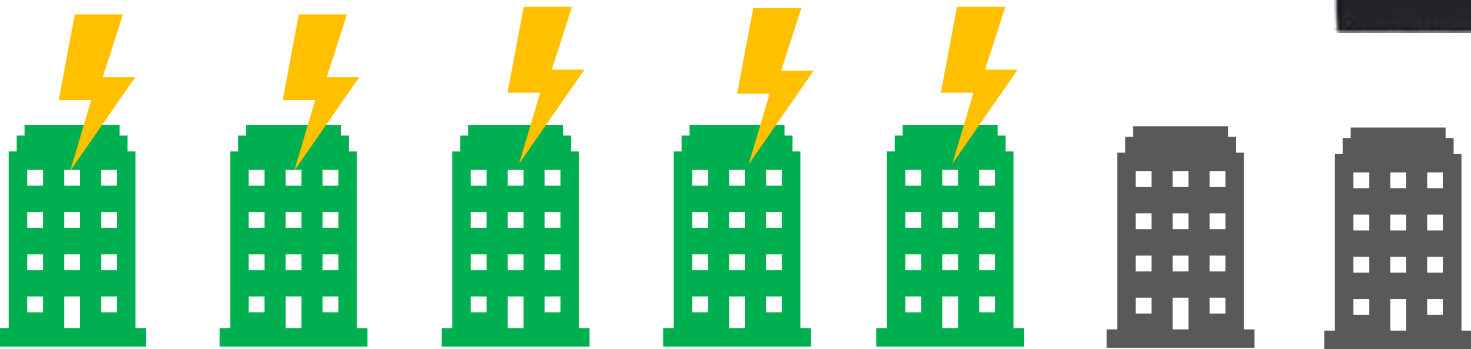
# Power Monitoring & Scheduling:

**Power Monitoring:** Auto resolve issues before you notice them



# Power Monitoring & Scheduling:

**Power Scheduling:** Save systems and energy



Schedule Scheme Configuration

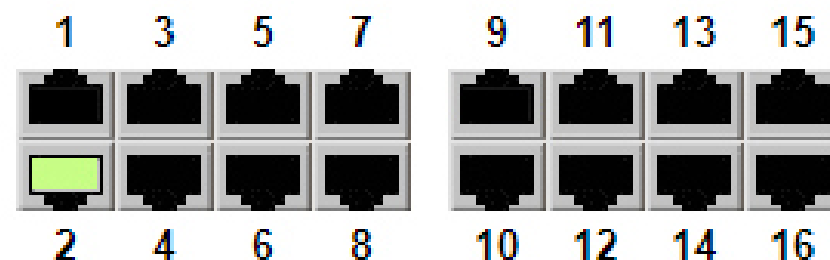
Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start Time		End Time	
								Hour	Minute	Hour	Minute
Weekdays	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	09 ▾	00 ▾	18 ▾	00 ▾
Holidays	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	00 ▾	00 ▾	23 ▾	59 ▾
User Defined 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00 ▾	00 ▾	23 ▾	59 ▾
User Defined 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00 ▾	00 ▾	23 ▾	59 ▾
User Defined 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00 ▾	00 ▾	23 ▾	59 ▾

Save Reset

# SUPER EASY 1-click VIDEO OVER IP CONFIGURATION:



P R O F E S S I O N A L



## Configuration

- ▶ System
- ▶ Green Ethernet
- Ports
- ▶ DHCPv4
- ▶ DHCPv6
- ▶ Security
- ▶ Aggregation
- Loop Protection

## Media over IP Configuration

### Configuration

- ☐ Enable
- ☒ Disable

Save

Reset



THE BRAND NEW NGS-IPV24:

# ZERO-CONFIG VIDEO-OVER-IP SWITCH



Unique to Niveo!  
Single switch IPV-setups

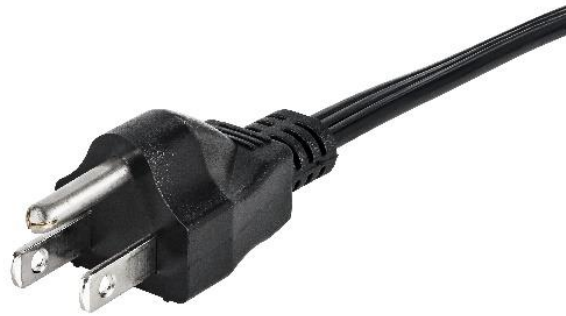




# THE BRAND NEW NGS-IPV24:



UNPACK



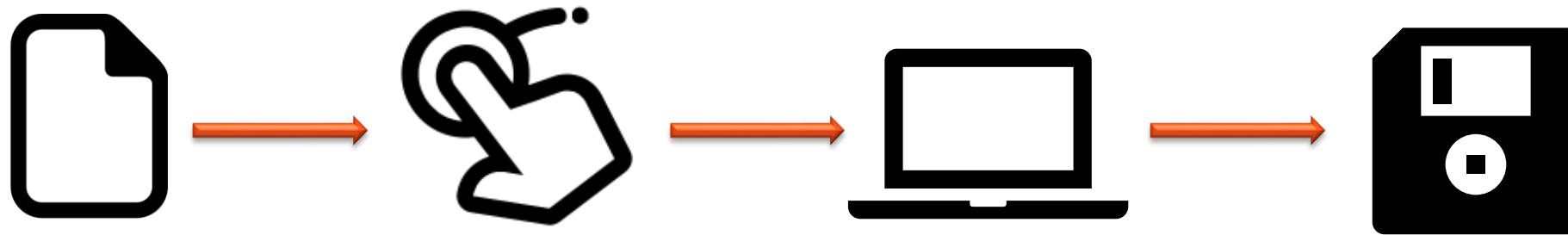
PLUG IN



DONE

## Tech Support: Pre-configuration files:

- )) 855-40-NIVEO
- )) Ideal for repetitive designs/configurations
- )) As easy as Drag-n-Drop
- )) Save time
- )) Avoid mistakes



# THANKS!

For more information visit:  
[www.niveoprofessional.com](http://www.niveoprofessional.com)

or ask your Liberty AV Solutions representative

