



# IP Desktop Video Station with Touchscreen Display

TECHNICAL MANUAL

A100K11664

when communication is critical

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## **1** General Information

### 1.1 Document Scope

This document describes the configuration of the Vingtor-Stentofon IP Desktop Video station with a 3.5" LCD touchscreen display.

Product	Item Number
IP Desktop Video Station with Touchscreen Display & Handset	1408001635

### 1.2 Document Log

Version	Date	Author	Status/Comments
1.0	16.12.2013	Sc	Final draft
1.3	08.04.2014	PI	Update IP Desktop Video Station user interface
1.4	04.09.2014	PI	Update for Fw 1.10
1.5	17.12.2014	Eb	MTBF and response time of display added
1.6	09.05.2016	PI	Update
2.0	22.06.2016	HKL	Revised with Turbine Video

### 1.3 Firmware Versions

Date	SubstationKit	VideoKit	Description / Function Expansion
05.07.2013	02.02.3.1	V1.3	First Prototype release
12.12.2013	02.04.1.12	V1.5	First Series release
04.05.2016	02.05.1.7	V2.2	Current version

### 1.4 Hardware Versions

Date	HW	Expansion
22.02.2013	0.1 A	First Prototypes
11.06.2013	1.0 B	Pre - Series
01.08.2013	1.1 C	Series

### 1.5 Related Documentation

Document no.	Title
A100K10788	IP Master Installation & Configuration Manual
A100K11559	Turbine Video Configuration Manual
A100K11377	IP Video Station Configuration Manual

## 2 **Product Description**

### 2.1 Overview

The Vingtor-Stentofon IP Desktop Video station is an intercom unit designed to be used in a control room or similar type of environment. The station comes with a 3.5" LCD touchscreen display and the capability of streaming video from an IP video camera using AlphaCom, Pulse, or SIP station modes.

The desktop station can stream video from the following Vingtor-Stentofon Video stations:

Product Name	Item Number
Turbine Compact TCIV-2 IP Video Station	1008115020
Turbine Compact TCIV-3 IP Video Station	1008115030
Turbine Compact TCIV-6 IP Video Station	1008115060
Vandal Resistant IP Video Station	1401110100
Vandal Resistant IP Video Station	1401110200



It features a large high-contrast touchscreen with backlight which allows critical information about connections to be shown clearly. The handset allows the user to switch from private to open conversation in hands-free mode. Four touchscreen navigation keys and ten Direct Access Keys (DAK) provide single-touch access to stations, group calls, audio monitoring, public address zones, radio channels and/or the opening of doors and gates.

The station connects directly to the IP network, making it easy to deploy anywhere at any distance. The built-in web server allows monitoring, configuration and software updates over the IP network, hence maintaining a remotely located station is almost effortless. Designed for CCoIP<sup>®</sup>, the station offers a set of critical communication features such as group call, call priority, and speaker volume override. This enables the delivery of instant, efficient, and secure voice and data services in an IP environment.

### 2.2 Features

#### General

- Designed to deliver CCoIP<sup>®</sup> Critical Communication over IP
- Call queue according to priority and time of call, 256 priority levels
- Ten DAKs provide single-touch access to stations, group calls, audio monitoring, public address zones, radio channels and phone lines.
- Comes with handset for private conversations
- Superb audio quality high bandwidth codec, active noise cancellation, acoustic echo cancellation and high output power amplifier
- Remote software upgrade, configuration and monitoring

#### Video Touchscreen Hardware

- 3.5" TFT Touchscreen (embedded video, CCTV matrix not required)
- High Contrast touchscreen with backlight for excellent readability
- 2-Level screen saver: High/Low lighted, Touchscreen off

#### Video Touchscreen Firmware (VideoKit)

- Internal communication with IP desktop station via DIP protocol
- 1:1 Text display of the original desktop station LCD.
- No special programming in AlphaCom required (special event handler scripts not required)
- Up to 80 IP cameras assignable to internal camera database in the video kit accessible by web interface.
- One camera is assignable to more than one station
- One door station could be assigned to more IP cameras, switching through videos
- Manual access to 80 IP cameras by touch screen to show videos at any time
- Video display for all call events:
  - During incoming call
  - During outgoing call
  - During conversation
- Text overlay with camera name or IP address, configurable position, color and font while video is active
- 4 DAK key buttons on the touch screen as replacement for 4 DAK keys on IP Desk Station

## **3 Operation & Configuration**

### 3.1 Connecting the IP Desktop Video Station

There is a RJ45 port at the rear of the IP Desktop Video station for connecting via a network switch to the LAN network.



To connect the IP Desktop Video station to the network:

 Connect the LAN port of the IP Desktop Video station to a PoE network switch using a network cable.



### 3.2 Video Touchscreen Interface

### 3.2.1 General Workflow

During startup the 3.5" LCD touchscreen displays the following splash screen information:

- The IP connection type (DHCP, DHCP with fallback or Static)
- The IP address of the video screen
- The Netmask of the video screen
- The Software version of the video screen
- The Hardware version of the video screen

	)R )FON	<sup>by</sup> BAUDISCH
Video-IP-Type: Video-IP: Video-Netmask: SW rev.: HW rev.:	Static 192.16 255.25 2.2 1.1	38.45.45 55.0.0

Splash Screen

After startup the home screen is displayed.

	2
24/02-2014 10:51	
112 Einkauf	

Home Screen

The bar color on the display indicates the connection status:

- Red indicates that no network connection can be established. If an Ethernet cable is connected, the video screen should connect automatically during startup.
- Yellow-Red flashing indicates that no connection to the server can be established. If the server and the video screen are configured correctly, the connection will be established automatically during startup. (This may take some time.)
- Yellow indicates that the video screen is connected to the server.
- Green indicates an active, incoming or outgoing call.

The three icons in the upper-right corner indicate:

- **Private Mode:** The leftmost icon indicates that the station is in private mode. If the station is not in private mode this icon is not visible.
- Handset State: The icon in the middle indicates whether the handset is on-hook or off-hook.
- Volume: The rightmost icon indicates the current volume.

The volume of the ringtone can be adjusted by pressing the volume key located above the touchscreen.

		2
24/0 112	2-2014 11·16	

At the bottom of the touchscreen, there are four menu selection buttons. The menu options available are dependent on how these buttons are configured on the AlphaCom server.

• Tap anywhere on the screen and the Option Screen will be displayed for 10 seconds.



On the Option Screen there are four touch icons for executing the following functions:



### Camera Select

The IP Desktop Video Station can allocate up to 80 cameras. They are listed in the Camera Select screen with their labels, e.g. Main Entry, etc.

Main Entry	
Side Entry	
Rear Entry	
	•

Camera Selection Screen

- Tap a label on the screen to show the camera stream for 60 seconds.
- Tap the screen during this 60 seconds to stop the stream and revert back to the Camera Select screen.
- There are three navigation buttons on the right of the screen for scrolling up/down or returning to the Option Screen

If access to the cameras have been configured to require passcode authentication (see section 3.3.4), the following passcode entry screen will be displayed:



Passcode Entry Screen



#### Enable/Disable Camera Switching

If more than one camera has been allocated to a remote station the touchscreen will switch between the allocated cameras every 5 seconds. This feature can be enabled/disabled here.



#### Enable/Disable Screensaver to avoid total switch-off

If this function is enabled, the screensaver does not switch off the display after a period of inactivity. Only the backlight is dimmed.



### Back to Home Screen

Tap this icon to revert back to the home screen.

### 3.2.2 Touchscreen Calibration

The touchscreen calibration display is activated by pressing and holding the screen during startup when the splash screen is displayed or via the web interface under menu option **System** (see section 3.3.6.).

Tou	ch Scre	en Calibr	ation
	+		
Plea when	ise pres they a	ss the cr ppear on	osses, screen

Touch Calibration Screen

When the calibration screen is shown, tap the displayed cross and another cross will be displayed. After tapping the second cross, the calibration process will be completed.

### 3.2.3 Factory Reset

A factory reset via touchscreen can be initiated by pressing and holding the options screen until a confirmation dialog is displayed.



Factory Reset Confirmation Screen

- Tap the **checkmark icon** to initiate a factory reset.
- Tap the **cross-mark icon** to abort the factory reset.

### 3.3 Video Screen Web Interface

#### 3.3.1 Login Procedure

The video screen on the station has an integrated web interface which allows users to log in via a standard web browser. In order to log into the video screen for the first time with its default settings, proceed as follows:

- 1. Connect your PC to the network switch
- 2. Connect the LAN port of the IP Desktop to the network switch
- 3. Make sure your PC is set in the same IP address range as the video screen on the station. The default IP address range is **169.254.1.xxx**. Assign your PC an IP address (e.g. 169.254.1.90 with net mask 255.255.255.0).

① Note that the video screen has the default IP address 169.254.1.101 on delivery.

- 4. Open a web browser on your PC
- 5. Enter the default IP address 169.254.1.101 in the address bar.
- 6. Enter the username: admin
- 7. Enter the password: alphaadmin

	VINGT STENT	or Ofon	IP Desktop Video <sup>by</sup> BAUDISCH
Firmware-Version: MAC-Address:	v2.2 12-34-56-78-90-FF	<ul> <li>▶ User</li> <li>▶ User Interface</li> <li>▶ Cameras</li> <li>▶ Network</li> <li>▶ System</li> </ul>	
Requirements:	JavaScript		

The available menus options and relevant parameters are described in the following sections.

### 3.3.2 User Settings

Here you can change the username and password for access to the web interface.

Click User

	TOR   IP D TOFON   BAUE	esktop Video DISCH	
<- back	User Settings		
	User		
	User name	admin	
	Password		
	Repeat password		
			Send settings

User name : Enter a user name Password : Enter a password Repeat password : Type in the password again

- Click Send settings
- Click **Submit settings** to apply the settings.

#### 3.3.3 User Interface

Here you can change the behavior of the user interface on the LCD screen.

Click User Interface

		sktop Video всн	
«- back	User Interface		
	Screensaver		
	Time until activation	30 T seconds	
	Time until shutdown	180 V seconds	
	Maximum brightness	100 • %	
	Minimum brightness	1 . %	
	Text overlay during video		
	Background	Coordinate x	30 [0288]
		Coordinate y	208 [0208]
		Width	260 [32320]
		Height	32 [32120]
		Color	000000 (Hex: RRGGBB)
	Text	(Coordinates relative to	background)
		Coordinate x	4 [0290]
		Coordinate y	090]
		Line spacing	2 Pixel
		Font	large V
		Color	F8FCF8 (Hex: RRGGBB)
	Text	(Coordinates relative to	background)
		Coordinate y	0 [090]
		Line spacing	2 Pixel
		Font	large 🔻
		Color	F8FCF8 (Hex: RRGGBB)
	Hide after	30 V seconds	
	Text on incoming call	INC	
	Text on connected call	CON	
			Submit settings

#### **Screensaver**

Time until activation : Time until the touchscreen backlight is dimmed down

**Time until shutdown** : Time from the touchscreen backlight is dimmed down until the touchscreen is switched off

**Maximum brightness** : Level of the maximum brightness of the touchscreen backlight in normal operation (before the backlight is dimmed down)

**Minimum brightness** : Level of the minimum brightness of the touchscreen backlight after it is dimmed down

#### Text overlay during video

#### Background

Coordinate x : Starting position on the x axis for the Background image

Coordinate y : Starting position on the y axis for the Background image

Width : Width of the background image

Height : Height of the background image

**Color** : background color

#### Text

**Coordinate x :** Start position on the x axis for the text overlay (relative to Background image)

**Coordinate y :** Start position on the y axis for the text overlay (relative to Background image)

Line spacing : The vertical distance between two lines

Font : Size of the font

Color : Color of the text

Hide after : Time until the text overlay fades out

Text on incoming call : Text displayed for incoming calls

Text on connected call : Text displayed for connected calls

• Click **Submit settings** to apply the settings.

### 3.3.4 Camera Settings

Here you can configure the camera settings for up to 80 cameras.

Click Cameras

VINGTOR STENTOFON IP Desktop Video				
<- back	Camera Settings			
	Passcode			
	Passcode	(Numbers only)		
	Camera Types			
	Baudisch AXIS TCIV	:80/mjpg/video.mjpg :80/axis-cgi/mjpg/video.cgi :8090/mjpg/video.mjpg		
	Camera Allocation	< 1 / 80 > >>		
	Name AlphaCom Node Number AlphaCom Directory Number SIP ID Camera IP Camera Type Camera User Camera Password Passcode required Allocation active?	FrontDoor         3         2222         10.5.17.189         TCIV<         ▼         □         □         □         □         □         □         □         □		
		Submit settings		

#### Passcode

**Passcode:** Enter an up to 10 digit long numeric passcode to restrict access to the cameras via the Camera Select screen on the station.

#### Camera Types

① Camera Types *Baudisch* and *AXIS* are already predefined.

**Name:** The input fields on the left panel are for the camera names (e.g. *TCIV* for Turbine Video). The name entered here will be added to the **Camera Type** select box in the **Camera Allocation** section.

**Path:** The input fields on the right panel are for the path to the MJPG stream of the camera in the form of [:<Port>][Path].

For TCIV-x Turbine Video stations the path is :8090/mjpg/video.mjpg

#### Camera Allocation

**Name :** Enter the name for the allocated camera (optional). This camera name is displayed in the text overlay.

**AlphaCom Node Number :** Enter the Node Number of the Alphacom Server on which the IP Desktop is registered (AlphaCom mode). Enter the value '0' for both Pulse and SIP mode.

**AlphaCom Directory Number :** Enter the Directory Number of the IP station with the video camera (AlphaCom mode). Enter the value '0' for both Pulse and SIP mode.

**SIP ID :** Enter the Directory Number of the intercom unit which the camera is associated with. (SIP/Pulse mode)

**Camera IP** : Enter the IP address of the station with the video camera.

**Camera Type :** Select the camera type based on the available camera types from the dropdown box (e.g. TCIV, Baudisch, AXIS).

Camera User : Enter the username to access the camera stream (optional).

Camera Password : Enter the password to access the camera stream (optional).

**Passcode Required :** Check the box to enable or disable passcode authentication to access this camera via the Camera Select screen on the station.

Allocation active? : Check the box to enable or disable the camera. This must be enabled to be able to stream video from the camera.

Click Submit settings to apply the settings

#### 3.3.5 Network Settings

Here you can configure the network settings.

Click Network

	TOR   IP I TOFON   BAU	Desktop Video IDISCH
<- back	Network Settings	
	Connection type	DHCP DHCP with fallback Manual   IP address 192.168.45.45   Netmask   255.255.0.0   Gateway   192.168.0.9   DNS   192.168.0.2

#### IP settings

#### **Connection type**

**DHCP** : The IP Desktop Video Station automatically obtains its IP settings from a DHCP server

**DHCP with fallback** : The IP Desktop Video Station automatically obtains its IP settings from a DHCP server. If no DHCP server is available the IP Desktop Video Station falls back to the **IP address 10.10.10.10**.

Manual : IP settings are set manually

IP address : IP address of the IP Desktop

Netmask : Subnet mask of the IP Desktop

Gateway : IP address of the router

DNS : IP address of the Name Server

Click Send settings

### 3.3.6 System

Here you can calibrate the touchscreen, do a factory reset, update the Desktop Video Station with the latest firmware, etc.

Click System

	OR   IP Desk OFON   <sup>by</sup> BAUDISC	top Video жн
<- back	System	
	Camera Allocation	
	Download camera allocation list	Download
	Upload camera allocation list	Choose File No file chosen
	Settings	
	Download settings	Download
	Upload settings	Choose File No file chosen
	Calibrate Touch Screen	
	Calibrate Touch Screen	Start
	Factory Reset	
	Factory reset	Reset
	Firmware update	
	Firmware file	Choose File No file chosen
	Warning: Firmw The up	vare update must not be interrupted! date may take a few minutes.

### **Camera Allocation**

Upload or download the camera allocation list.

#### Settings

Upload or Download the settings (including the camera allocation).

#### Calibrate Touch Screen

Starts the touchscreen calibration.

#### Factory Reset

Resets the Desktop Video Station to factory settings.

#### Firmware Update

Updates the firmware.

### 3.4 Updating the Video Screen

#### 3.4.1 Updating the Firmware

- 1. Log into the web interface of the video screen
- 2. Click System (see section 3.3.6)
- 3. Under category Firmware update click the Choose File button
- Select the firmware file (The file has the extension .bin, e.g. 20160216PL\_v11\_FW\_v21\_StentofonIPDesktopVideo.bin)
- 5. Click the **Upload** button
- 6. When the upload is done the video screen will automatically reboot

	Firmware update	
Firmware file Choose File No file chosen Upload	Firmware file	Choose File No file chosen

#### 3.4.2 Updating the File System (User & Web Interface)

To update the file system to a newer version, use the PC application *IP Desktop Video – File System Updater* which comes with the software package:

- 1. Start the **IP Desktop Video –File System Updater** application by executing the file *IPDesktopVideoFSUpdater.exe*
- 2. Enter the IP address of the video screen to open the login page
- 3. Enter the username (admin) and password (alphaadmin)

- 4. Click on the ... button and navigate to the folder containing the new file system, e.g. 20160216PL\_FW\_v21\_RootFS\_StentofonIPDesktopVideo
- 5. Select the folder of the new file system and click Ok
- 6. Click on the Erase File System button and wait for the station to reboot
- 7. After the reboot, click on **Upload File System** and wait for the process to complete (this may take a few minutes)
- 8. When the update is completed, the station will reboot with the new file system.

10.5.101.123 admin alphaadmin		
10.5.101.123 admin alphaadmin		
admin alphaadmin		
alphaadmin		
Erase File System		
v110_RootFS_StentofonIPDesktopVideo		
Upload File System		

① Note that this feature is only available with firmware version 1.7 or later.

### 3.5 IP Desktop Station Configuration

For more detailed information on the configuration of the IP Desktop Station, see the manual *A100K10788 IP Master Stations Installation & Configuration*.

#### 3.5.1 Logging into the Web Interface

The IP Desktop has an integrated web interface which allows users to log in via a standard web browser.

In order to login on an IP Desktop for the first time with its default settings, proceed as follows:

- 1. Connect your PC with the network switch
- 2. Connect the LAN port of the IP Desktop to the network switch
- 3. Make sure your PC is set in the same IP address range as the IP Desktop. The default IP address is in the range 169.254.1.xxx. Assign your PC an IP address (e.g. 169.254.1.90, netmask 255.255.255.0).
- ① The IP Desktop has the default IP address 169.254.1.100 on delivery.

- 4. Open a web browser on your PC
- 5. Enter the IP address 169.254.1.100 in the address bar

🗅 StationWeb Login Page 🛛 🖌 🦲	
← → C 🗋 169.254.1.100/goform/zForm_login	☆ =
	Secure Login (HTTPS)
	Unsecure Login (HTTP)

- 6. Select whether an encoded connection (HTTPS) or a non-encoded connection (HTTP) is to be used
- 7. Enter username: admin
- 8. Enter password: alphaadmin

The **Station Information** will be displayed. The overview shows the IP configuration including the MAC Address as well as the current **Station Status**.

	nWeb			HD
Station Main Station Administration	Advanced Alphacom	Advanced Network		
✓ Station Information Station In	nformation			
Description	n		Information	
Station IP			169.254.1.100	
Main Settings Subnet Main	ask:		255.255.0.0	
Default Ga	iteway:		169.254.1.1	
DNS Serv	er 1:			
DNS Serv	er 2:			
Hardware	Type:		8024	
Hardware	Version:		2	
Software	version:		02.04.1.12	
MAC Addr	ess:		00:13:cb:00:92:31	
Station S	itatus			
Descriptio	on		Status	
Station Me	ode:		Alphacom	
Directory	Number:			
Physical	lumber:			
Display Te	ext:			

### 3.5.2 Station Mode and IP Settings

Select Station Main > Main Settings

STENTOFON IP-S	StationWeb	
Station Main Station Ad	ministration Advanced Alphacom	Advanced Network
Station Information     Main Sattings	Station Mode Use SIP Use Aphacom Use Pulse Use Pulse Server Registration Settings Aphacom P-address: Directory Number: IP Settings DHCP Static IP (6)	169 - 254 - 1 - 5 -
	P-address: Subnet-mask: Gateway: DNS Server 1: ONS Server 2: Hostname: Use Last IP On DHCP failure: IGMP Version	169       -       254       -       1       -       100         265       -       255       +       0       +       0         169       -       255       +       1       -       1         0       +       0       +       0       -       0         0       +       0       +       0       -       0         0       -       0       -       0       -       0         2ente0005231       -       0       -       0       -         Default         -       -       0

#### **Station Mode**

- Select AlphaCom, SIP or Pulse modes
- Use Alphacom (this mode requires registration settings)

#### **Registration Settings**

- AlphaCom IP-address
  - Enter the IP address of the AlphaCom server in which the IP station is to be registered as a subscriber in the field.
- Directory Number
  - · Enter the directory number of the station
  - · If a directory number is not entered, the station will register with its MAC address.
- Use SIP
- Use Pulse Server

#### IP Settings

- DHCP IP station receives IP settings from a DHCP server
- Static IP IP station uses a static IP address. Enter values for:
  - · IP-address
  - · Subnet-mask
  - · Gateway
  - DNS Server 1 (option for network administration)
  - DNS Server 2 (option for network administration)
  - Hostname (option for network administration)
- Click Save followed by Apply to apply the new configuration settings

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The WEEE Directive does not legislate that Zenitel, as a 'producer', shall collect 'end of life' WEEE.

# This 'end of life' WEEE should be recycled appropriately by the owner who should use proper treatment and recycling measures. It should not be disposed to landfill.

Many electrical items that we throw away can be repaired or recycled. Recycling items helps to save our natural finite resources and also reduces the environmental and health risks associated with sending electrical goods to landfill.



Under the WEEE Regulations, all new electrical goods should now be marked with the crossed-out wheeled bin symbol shown.

Goods are marked with this symbol to show that they were produced after 13th August 2005, and should be disposed of separately from normal household waste so that they can be recycled.

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