



Application Note 004en-2022

# Integrating Videx IPure series SIP Video Intercom with lares 4.0 IoT platform

Connections and configuration

Author Rita Petrongari

Auditor

Alfredo Montini

This document aims to provide detailed guidance for installers and developers to integrate a Videx IPure series Video Intercom with a Ksenia ergo-T pro keypad (as indoor monitor) present in the lares 4.0 IoT platform. The example configurations given are specific for a Videx mod. 4534X-1 outdoor station.







## INDEX

Introduction	3
Functions and Specifications	3
Scenario and connections	4
Installation instructions for wiring the outputs directly to the Videx Video Intercom	5
Videx device: outdoor station configuration	5
Outputs configuration	5
Direct SIP call to outdoor station configuration	6
Media Preview of direct SIP call from outdoor station configuration	7
lares 4.0: IP Video Intercom and Outputs configuration	8
Compatible versions	10
Quantity data	10







## **Introduction**

Ksenia Security lares 4.0 IoT platform implements a SIP client in the **ergo-T pro** touch-screen keypad, for standard audio-video communication, in order to integrate it with a standard SIP Video Intercom "door stations", in particular with the models of the Videx IPure series; in this way **ergo-T pro** touch-screen keypad will operate as "indoor monitor".

At the implementation level, when the call button on the door station is pressed, it makes a SIP one way audio call to the **ergo-T pro** (PREVIEW function); upon answering, a two-ways RTSP (audio/video) communication is established with the possibility to trigger up to two monostable outputs of the control panel (e.g. Gate and Light).

It is still necessary to use the Video Intercom App to answer the call and for remote management of the outputs.

The configuration of the monostable outputs is extremely flexible and open to different solutions; for example, it is possible to connect the outputs to the compatible door station and trigger them directly from the **ergo-T pro** and configure all data required by the Installer App (controlling the outputs connected to the lares 4.0 control panel, directly from the ergo-T pro answer screen, is not possible with first release of ergo-T App, version 2.18.17).

## **Functions and Specifications**

Upon the arrival of the call, the ergo-T pro screen shows: the stream video sent by the door station, two buttons to answer and stop the call and two more buttons to manage the outputs (e.g. Gate and Light).

The available functions are detailed in the following images.



PREVIEW function Incoming call with preview: the user can see who is calling and decide not to answer



Red button to close Green button to answer







ergo-T pro ANSWER



After pressing the green button to answer, an audio icon and a bar to adjust the volume replace the green icon

## Scenario and connections

The scenario described is about an outdoor station (Videx) and an indoor monitor (ergo-T pro).



The outdoor station of the Videx SIP Video Intercom is connected to the same LAN network as the lares 4.0 by means of a LAN switch.







#### Installation instructions for wiring the outputs directly to the Videx Video Intercom

The connection terminal blocks for outputs 1 and 2 are described in the following table:

Relay 1	NO1	Relay 1 normally open contact	MAX
	NC1	Relay 1 normally closed contact	12 – 24
	C1	Relay 1 common contact	Vac/dc
Relay 2	NO2	Relay 2 normally open contact	2A
	NC2	Relay 2 normally closed contact	
	C2	Relay 2 common contact	

#### Videx device: outdoor station configuration

Establish a connection via LAN from a PC and the Videx outdoor station by using Videx IPure WIZARD configuration software for Videx IP System, supplied with the product, and follow the instructions described below.

#### **Outputs configuration**

Open the outputs configuration page of the outdoor station.

Outdoor Panel Settings						
JTDOOR PANEL SETTINGS						
VICE MODEL: 4534X						Analy All Char
V VERSION: 1.3.0	HW VERSIC	W: 001				Apply All Cliat
VICE IP: 192.168.2.1	80					Undata Circu
IBNET MASK: 255.255.25	5.0					Update rinnv
192.168.2.1						
NS 1: 8.8.8.8						
IS 2: 8.8.4.4						
EVICE ID: 180						
VICE DESCRIPTION: Door Panel						
						_
GENERAL BUTTON	INPUTS	OUTPUTS	ACCESS CONTROL	SIP	RTSP HTTP	ADV.
RTSP SERVER SETTINGS						
Fnahle RTSP Server	RTSP List	ten Port: 554			RTP Video P	Port: 12000
and an able renor berrer		Enable PTER Knop Aliva				
	East	la DTCD Koop Aliv		DTCD #	aan Aliwa Timaawit	(a) 20
	📝 Enab	le RTSP Keep Alive	•	RTSP K	eep Alive Timeout	(s): <b>30</b>
	<b>.</b> Enab H264 Payloa	le RTSP Keep Alive	•	RTSP K	eep Alive Timeout	(s): <b>30</b>
	♥ Enabl H264 Payloa Stri	e RTSP Keep Alive	• •	RTSP K	'eep Alive Timeout	(s): 30
	<b>▼</b> Enabl H264 Payloa Stre	le RTSP Keep Alive ad Type: 102 eam Url: rtsp://1	₽ ▼ 92.168.2.180:55	RTSP K	'eep Alive Timeout	<i>(s):</i> 30
HTTP SERVER SETTINGS	<b>₹</b> Enab. H264 Payloa Stre	e RTSP Keep Alive	92. 168. 2. 180: 554	RTSP K	'eep Alive Timeout	(s): 30 Defaults
HTTP SERVER SETTINGS	<b>₹</b> Enable H264 Payloa Stra	le RTSP Keep Alive ad Type: 102 eam Url: rtsp://1 HTTP Listen Port	92.168.2.180:55 ; 80	RTSP K	'eep Alive Timeout	(s): 30 Defaults
HTTP SERVER SETTINGS	<b>₹</b> Enab. H264 Payloa Stra	le RTSP Keep Alive ad Type: 102 eam Url: rtsp://1 HTTP Listen Port	92. 168. 2. 180: 55 ; 80	RTSP K	'eep Alive Timeout	(s): 30 Defaults
HTTP SERVER SETTINGS	₹ Enab H264 Payloa Stra	le RTSP Keep Alive ad Type: 102 eam Url: rtsp://1 HTTP Listen Port	92. 168. 2. 180:55- 2. 80	RTSP K	'eep Alive Timeout	(s): 30 Defaults
HTTP SERVER SETTINGS  G Enable HTTP Server  Enable Authentication  Enable Outputs Control Page	₹ Enabi H264 Payloa Stro Re	le RTSP Keep Aliva ad Type: 102 eam Url: rtsp://1 HTTP Listen Port	e 92. 168. 2. 180: 55: ; 80 ; Disabled	RTSP k 4 ▼ http://19	eep Alive Timeout	(g): 30 Defaults
HTTP SERVER SETTINGS	₹ Enab H264 Payloa Stri Re [REL]	le RTSP Keep Aliva ad Type: 102 eam UH: rtsp://1 HTTP Listen Port efresh Timeout (s) AY/1/TRIG	<ul> <li>92.168.2.180:55:</li> <li>80</li> <li>Disabled</li> </ul>	RTSP k	eep Alive Timeout 2. 168. 2. 180/RELA 2. 168. 2. 180/RELA	(g): 30 Defaults WS.HTML W/L/TRIG
HTTP SERVER SETTINGS  G Enable HTTP Server Enable Authentication Enable Outputs Control Page Output 1 Trig URL Output 2 Trig URL Output 2 Trig URL	✓ Enable H264 Payloa Stri Re /REL1 /REL1	le RTSP Keep Aliva ad Type: 102 eam UH: rtsp://1 HTTP Listen Port efresh Timeout (s) AY/1/TRIG AY/2/TRIG	92. 168. 2. 180:55* 7 80 7 Disabled	RTSP k	eep Alive Timeout 2. 168.2. 180/RELA 2. 168.2. 180/RELA 2. 168.2. 180/RELA	(6): 30 Defaults WS.HTML W/L/TRIG W/2/TRIG
HTTP SERVER SETTINGS   Enable HTTP Server Enable Authentication  Enable Outputs Control Page  Output 1 Trig URL Output 2 Trig URL Output 1 Read Status URL	₹ Enab H264 Payloa Stri Re /REL/ /REL/ /REL/	le RTSP Keep Aliva ad Type: 102 eam Url: rtsp://1 HTTP Listen Port efresh Timeout (s) AY/1/TRIG AY/1/TRIG AY/1/GETSTATI	e 92.166.2.180:55 7 80 7 Disabled 15	RTSP k	eep Alive Timeout 2. 168. 2. 180, REL A 2. 168. 2. 180, REL A 2. 168. 2. 180, REL A 2. 168. 2. 180, REL A	(6): 30 Defaults IYS.HTML IY/1/TRIG IY/1/GETSTATUS
HTTP SERVER SETTINGS	₹ Enab H264 Payloo Stri Re /REL /REL /REL	le RTSP Keep Aliva ad Type: 102 eam Uri: rtsp://1 HTTP Listen Port efresh Timeout (s) AY/1/TRIG AY/2/TRIG AY/2/GETSTATL AY/2/GETSTATL	e 92. 168. 2. 180:55:	RTSP k	eep Alive Timeout 2. 168. 2. 180/RELA 2. 168. 2. 180/RELA 2. 168. 2. 180/RELA 2. 168. 2. 180/RELA 2. 168. 2. 180/RELA	(6): 30 Defaults WS.HTML W/1/TRIG W/1/REIG W/1/REITSTATUS W/1/REITSTATUS
HTTP SERVER SETTINGS  G Enable HTTP Server Enable Authentication G Enable Outputs Control Page  Output 1 Trig URL Output 2 Trig URL Output 1 Read Status URL Output 1 Read Status URL Output 2 Read Status URL Output 2 Read Status URL	Enable     H264 Payloa     Str      Re      ReL      /REL      /REL      /REL      //REL      //REL      //REL      //REL      //REL      //REL      //REL	ele RTSP Keep Alway ad Type: 102 eam Url: rtsp://1 HTTP Listen Port efresh Timeout (s) AY/1/TRIG AY/2/TRIG AY/2/TRIG AY/2/GETSTATL AY/2/GETSTATL	92. 168.2. 180:55 92. 168.2. 180:55 80 Disabled JS JS JS	RTSP k	eep Alive Timeout 2. 168. 2. 180/RELA 2. 168. 2. 180/RELA	(6): 30 Defaults V/S.HTML W/L/TRIG W/L/TRIG W/L/TRIG W/L/REISTATUS M/L/GETSTATUS







In the configuration page of the Videx IPure WIZARD software, the data shown in the fields, indicated in the following table, must match with the configuration of lares 4.0: from Installer web interface, IP Devices menu -> Video Intercom menu.

Matching configuration table Videx -> lares 4.0							
Videx IPure WIZARD	Installer -> IP Devices -> Video Intercom						
Device IP	IP Address						
HTTP port	HTTP port						
Enable Authentication not enabled (default)	Authentication type = None						
Enable Authentication enabled (Username and	Authentication type = Digest						
Password also required)	(+ Username and Password)						
Output 1 Trig URL	Output 1: Resource path						
Output 2 Trig URL	Output 2: Resource path						

**NOTE**: Videx mod.4534x-1 only use HTTP protocol for the outputs.

#### Direct SIP call to outdoor station configuration

1) Open BUTTON Tab., choose BUTTON INT.1 and click on <Sip Call Disabled>.

🔯 Outdoor Panel Set	ttings							? ×
OUTDOOR PANEL SE	TTINGS							
DEVICE MODEL;	4534X							Apply All Chappens
FW VERSION:	1.3.0	HW VERS.	ION: 001					Apply All Changes
DEVICE IP;	192.168.2.1	180						Undato Eiropuaro
SUBNET MASK:	255.255.25	5.0						opdate riniware
GATEWAY IP:	192.168.2.1							
DNS 1:	8.8.8.8							
DNS 2:	8.8.4.4							
DEVICE ID:	180							
DEVICE DESCRIPTION	Door Panel							
								1
GENERAL	BUTTON	INPUTS	OUTPUTS	CONTROL	SIP	HTTP	ADV.	
CALL MATCHING								
Choose Button:								
BUTTON INT.	1	•	Sip Call Di	sabled	-			
	C	ascade: 🛄	Call Intercoms:					
Available Interco	oms:							
		•						
	+							
106	entity Button							







 Enable direct call on the external button <Direct IP SIP Call> and enter IP Address and port of the device to call (ergo-T pro keypad) <e.g.: 192.168.1.56:5060>.

Outdoor Fane	settings			and the second second	-		-	
OUTDOOR PANE	LSETTINGS							
DEVICE MODEL:	4534X							
FW VERSION:	1.3.0	HW VERS	ION: 001				('	Apply All Changes
DEVICE IP:	192.168.2	2.180					_	
SUBNET MASK:	255.255.2	255.0						Update Firmware
GATEWAY IP:	192.168.2	2.1						
DNS 1:	8.8.8.8							
DNIS 2:	8.8.4.4							
DEVICE ID:	180							
DEVICE DESCRIPT	TON: Door Pan	el						
GENERAL	BOTTON	INPOTS	0012013	CONTROL	51P	HTTP	ADV.	
CALL MATCH	IING							
Choose But	ton:							
BUTTON I	NT. 1	-	Direct IP	SIP Call:	-			
			192.168.1	.56:5060				
		Cascade: 📃						
		0	all Intercoms;					
Available In	tercoms:							
		•						
	4							
	,							
	Identify Buttor							
	Identify Buttor	1						
	Identify Buttor	1						
	Identify Buttor	1						
	Identify Buttor	1						
	Identify Buttor	1						

Media Preview of direct SIP call from outdoor station configuration Open SIP Tab. and click on Media Preview check-box to enable it.

	rsettings								E .
JTDOOR PANE	L SETTINGS								
VICE MODEL:	4534X							100/	All Changes
V VERSION:	1.3.0	HW VERS	SION: 001					Арру	All Changes
VICE IP:	192.168.3.	160							
IBNET MASK:	255.255.25	55.0						Updat	erirmware
ATEWAY IP:	192.168.3.	1							
VS 1:	8.8.8.8								
VS 2:	8.8.4.4								
EVICE ID:	180								
EVICE DESCRIPT	TON: Door Pane	(							
GENERAL	BUTTON	INPUTS	OUTPUTS	ACCESS CONTROL	SIP	RTSP HTTP	A	DV.	
-CLIENT SET	TINGS							🚺 Enable SIP (	Client
User ID:	101		Passi	word:		Local S.	IP Port:	5060	
Auth. Name:	101		Do	main:		RTP Aua	io Port:	5004	
Server:			Reg. Expiry Time	: (m):		RTP Vide	eo Port:	5006	
	SIP Registration	n	Media Pre	view: 🔽		Server S.	IP Port:	5060	
DTMF									
	33		Open Relay	<i>c 1</i> ; 6					
SIP INF	0		Open Relay	(2: 7					
	c						AUDI	O CODEC	
VIDEO CODE	<u>.</u>								
VIDEO CODE	Selected	t		H263 Frame Size	352x28	R (CTE)	Availa	able:	Selected:
VIDEO CODE Available:	Selected	<i>t:</i>		H263 Frame Size:	352x288	8 (CIF) 🔻	Availa	able:	Selected:
VIDEO CODE Available: H263+	Selected > H264 H263	<i>t:</i>	,	H263 Frame Size: 4263+ Payload Type:	352x288	B (CIF) •	Availa	able:	Selected: PCMU PCMA
Available:	Selected H264 H263	<i>d:</i>	,	H263 Frame Size; H263+ Payload Type; H264 Frame Size;	352x288 96 1280x77	3 (CIF) 20 (720p)	Availa	able:	Selected: PCMU PCMA







### lares 4.0: IP Video Intercom and Outputs configuration

Indoor monitor configuration (ergo-T pro) from Installer web server interface.

Menu	Field	Description				
IP Devices -> Video Intercom	Description	Give a name to the video intercom				
Brand section	Brand	Videx (preconfigured)				
	Model	4534x (preconfigured)				
Address section	IP Address*	Enter the static IP address of video intercom				
	HTTP port*	Enter the HTTP port configured on the video intercom				
section HTTP Authentication	Authentication type*	HTTP authentication configured on the video intercom. If Authentication is different from "none" also enter the Username and Password configured on the video intercom.				
Output 1 section	Category**	Select a category from the list: <b>Light, Door or Gate</b> . The category icon will be shown on the ergo-T pro as first output button.				
	Description	Enter a description to identifies the first button. Description and icon will be shown as first output button.				
	Resource path*	<b>RELAY/1/TRIG</b> (preconfigured): it is the resource path configured on the video intercom to activate the output 1.				
Output 2 section	Category**	Select a category from the list: Light, Door or Gate. The category icon will be shown on the ergo-T pro as second output button.				
	Description	Enter a description to identifies the first button. Description and icon will be shown as second output button.				
	Resource path*	<b>RELAY/2/TRIG</b> (preconfigured): It is the resource path configured on the video intercom to activate the output 2.				
(*) See chapter <u>Videx device:</u> (**) If you don't use this outpu	outdoor station configuratio ut, please leave this field emp	<u>n</u> and its submenus. Ity and also the button will not be shown.				







Advanced Mode	•	Ksenia			ē 9
Home	+	Video Intercom			
Partitions	¢	1 - Intercom VIDEX	General	0	Address (2)
Hashtags	#				
Rooms/Maps	0		Description Intercom VIDEX		IP-Address 192.168.66.225
Bus Peripherals	1				
Wireless Peripherals	<u>((+))</u>		Brand	0	B0
IP Devices	î				
ergo-T			Brand Videx		HTTP authentication
Supervisors					Authentication Type
Cameras			4534x		Digest
gemino IoT					Usemame
Gatowaye			Output 1	0	admin
Video Intercom			Category		Password
video intercom			Gate	~	
Users management	Ŕ		Description		
Layout	Ê		Cancello		
Time Schedulers	O		Resource path		
Chronothermostats	۲		/RELAY/1/TRIG		
Consumption	Ľ		Output 2	0	
Cronotermostati	0		Category		
Gestione Consumi	Ķ		Light	$\sim$	
			Description		
			Luce		
			Resource path		
			/RELAY/2/TRIG		
					•





## Compatible versions

	lares 4.0	lares 4.0 user App for ergo-T	Videx
Software	1.35.1	2.18.17	Videx IPure Wizard 2.7.0
Firmware	1.103.6	-	1.3.0 (minimum version)

## Quantity data

lares 4.0 models	wls 96	16	40	40 wls	140 wls	644 wls
Maximum number of IP Video Intercom (door station)	1	1	1	1	1	1
ergo-T pro (indoor monitor)	1	2	4	4	8	14

Ksenia Security SpA reserves the right to change or update the information contained in this document at any time and without notice and is not responsible for any errors or omissions.

