

EDVAX DOOR ENTRY

MANUAL ENGLISH

DUE FILI PLUS VIDEO AND AUDIO DOOR ENTRY SYSTEMS



This document presents the functions, the main components and the general rules for sizing and building video door entry and door entry systems with the Elvox Due Fili Plus system.

Please consult the General Catalogue for further devices.

The technical information provided is not exhaustive of all the information required to build the systems: it is in any case necessary and indispensable to refer to the instructions that accompany each product.



Due Fili Plus technology, quick and flexible.



Due Fili Plus technology is used to create high-performing video entryphone and entryphone communication systems in all types of building, whether new builds or refurbishments, in the simplest possible way. Due Fili Plus technology guarantees faultless connections between all devices used for receiving and transmitting power, audio/video and data signals.



Up to 6400 indoor stations.

With Due Fili Plus technology, systems are designed to handle up to a maximum of **484 outdoor stations** and up to **6400 indoor stations**. With the **expansion interface**, you can expand the system by replicating several Due Fili Plus systems with **up to 32 blocks** and **128 reception video-switchboards**.

Up to 1200 metres.

Due Fili Plus technology can be used to create extended systems, with a distance between the indoor station and outdoor station of up to **1200 metres, without losing any audio or video signal quality**. The signal is carried along a single, small-diameter twisted-pair cable.

Simple configuration.

Due Fili Plus technology ensures really simple programming. The installer can programme the outdoor station directly from the indoor station. Once the indoor station has been encoded, the system can even simulate an audio/video call from the outdoor station, to check whether installation was successful straight away.

Remote management by smartphone and tablet.

The **View App** enables remote video door entry system management via smartphone and tablet in combination with the **Tab 7S Up** and **Tab 5S Up** video indoor stations. It allows you to receive a video entryphone call, see the video surveillance cameras or open your door wherever you are. What's more, it allows you to manage up to **10 mobile devices** and up to **5 different systems**.



Professionalism guaranteed.

Our professional, technologically sophisticated products are designed to guarantee superior performance and durability.

Solutions for any building.

Our video door entry system solutions adapt to the most diverse application environments. Versatility and scalability, combined with sophisticated technology and ease of use, are all distinguishing features which make them suitable for the smallest apartment to large shopping centres and executive compounds, through to large residences.

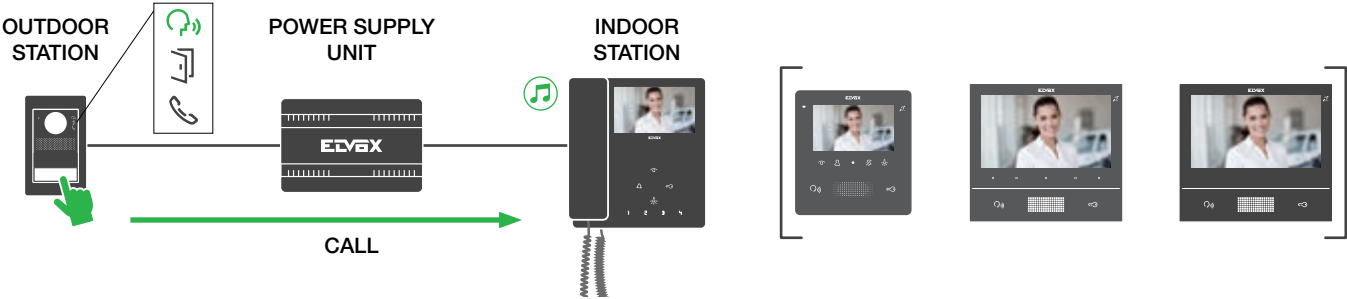
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Due Fili Plus video and audio door entry systems

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Call from an outdoor station.

When a call is made from the outdoor station, the indoor station being called rings (entryphone) and displays (video entryphone) images recorded by the camera at the outdoor station.



To answer, lift the handset (for the handset version) or press the talk/listen button (for the hands-free version); to end the call, replace the handset or press the talk/listen button again.

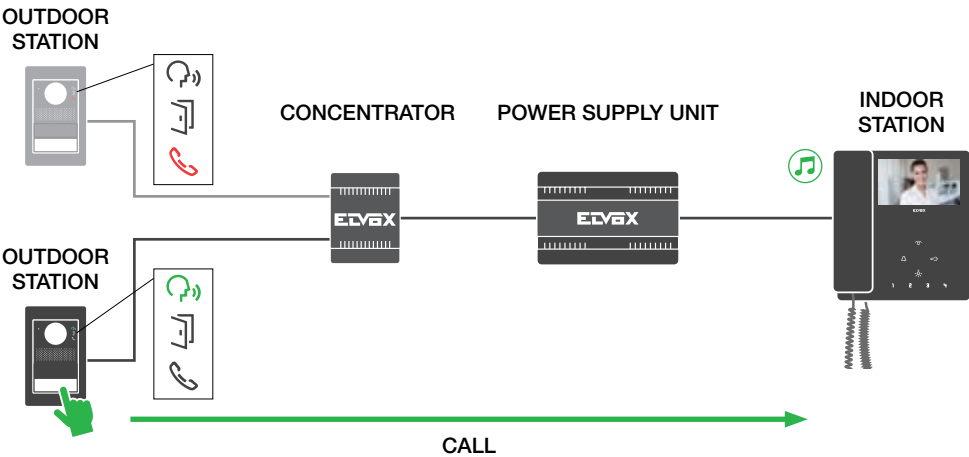
Sending the call to a mobile device.

Video entryphones with integrated Wi-Fi, combined with the **Video Door App**, make it possible to receive a call, to view the video surveillance cameras, to open the door to your home, to activate auxiliary services (stair lighting, turning on the sprinkler system, etc.) directly from your smartphone or tablet, wherever you may be, indoors or out and about.



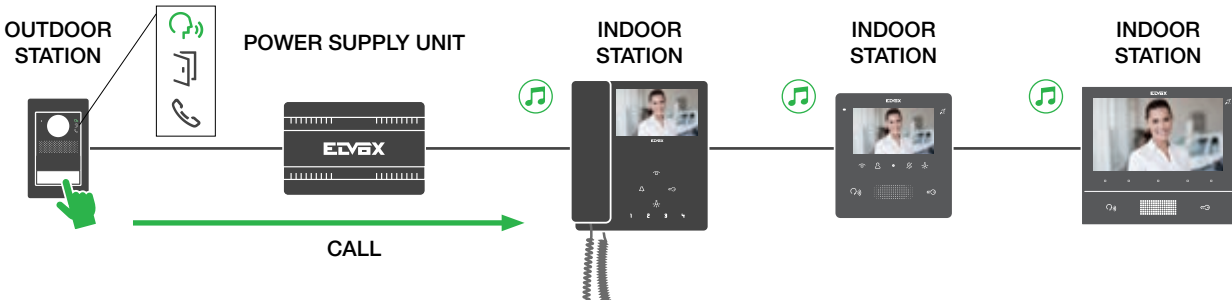
Call from an outdoor station with several parallel outdoor stations.

If the system contains **more than one outdoor station**, during the call sending phases or during a call between an entrance panel and an entryphone/video entryphone, the other outdoor stations will signal that the system is engaged in another conversation.



Call from an outdoor station towards a group of indoor stations.

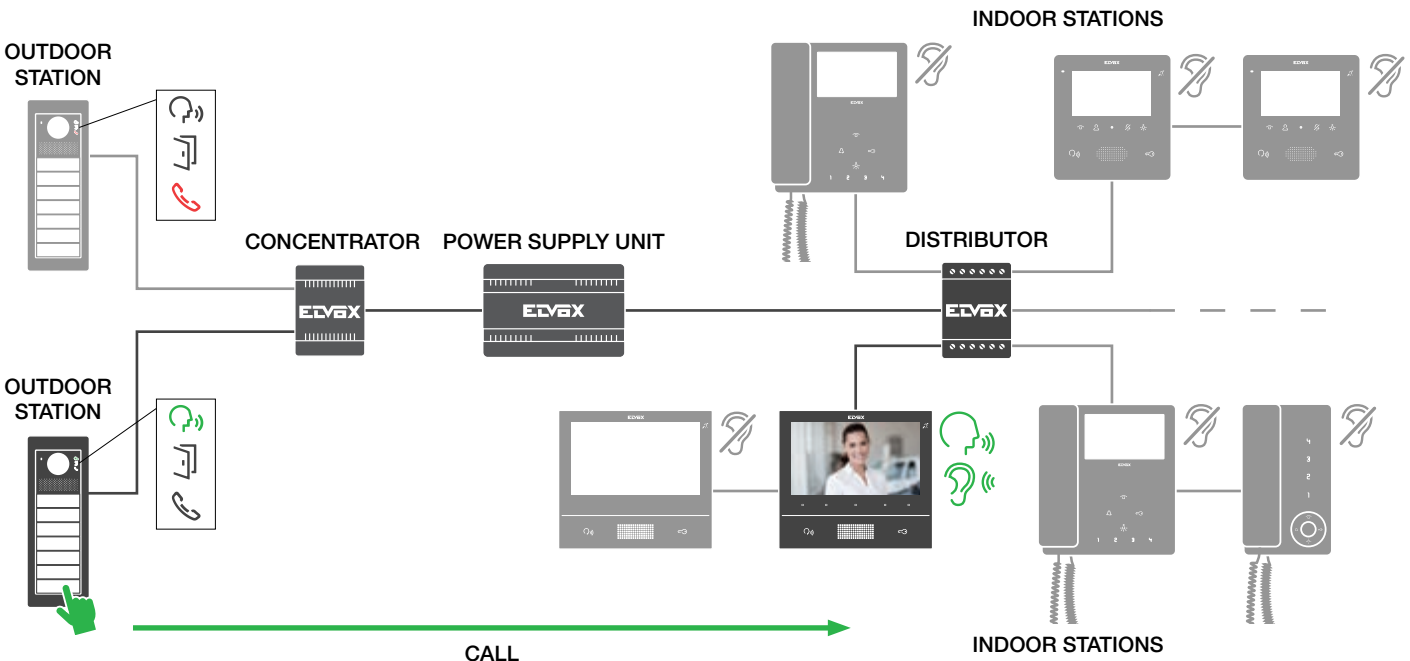
When a call is made from the **outdoor station** towards a **group of indoor stations** (apartment/office), they ring simultaneously and display (video entryphone) the images recorded by the camera of the outdoor station (for the maximum number of video indoor stations simultaneously on, please refer to the consumption table). This function depends on the indoor station model used, please refer to the individual reference instruction manual.



The first indoor station that answers by lifting the handset or pressing the talk/listen button will begin communicating with the outdoor station, while the others will stop ringing and generate the engaged tone.

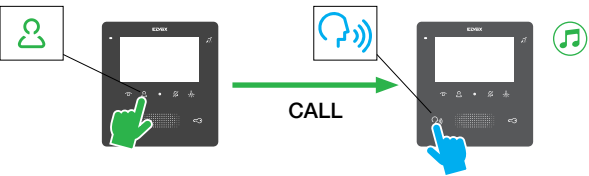
Confidential conversation.

During a call between the outdoor station and the indoor station, the confidentiality of the conversation is guaranteed. All the other objects not involved in the communication are excluded.



Intercom call.

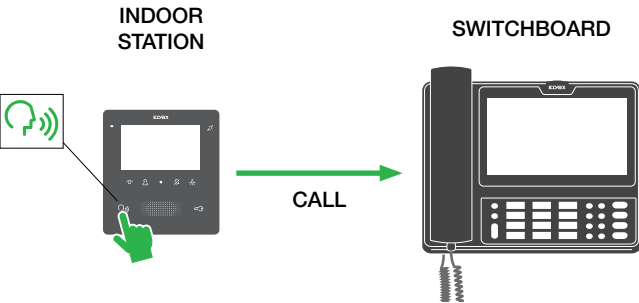
The dedicated indoor stations programmed specifically for this purpose allow you to send an audio intercom call to another indoor station. If the indoor station called answers, the conversation begins. In this case too, the confidential conversation function guarantees its confidentiality. A possible call from an outdoor station or from a reception switchboard takes priority and interrupts the intercom call.



Call to the reception switchboard.

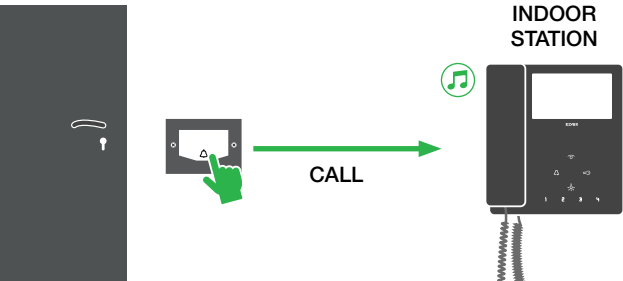
The two typical ways to make calls to the **switchboard**, once the function is active, are:

- for **hands-free indoor stations**, on standby press the “talk/listen” button (please refer to the model installed);
- for **indoor stations with a handset**, on standby press the “door lock” button.



Landing call.

This function is used to make a call to indoor stations, connecting a call button directly to the dedicated terminals of the indoor station itself. You can also set a ringtone or a different call tone from the outdoor station's.

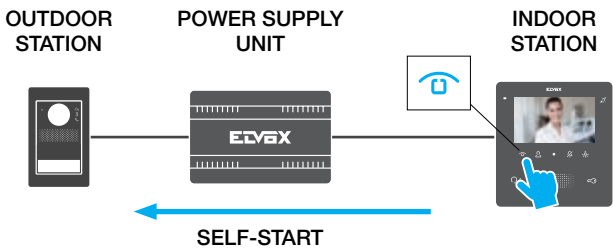


Self-start.

With the system on standby, press the self-start button to turn on the camera on the outdoor station and the footage recorded will be shown on the display (only if it is a video entryphone).

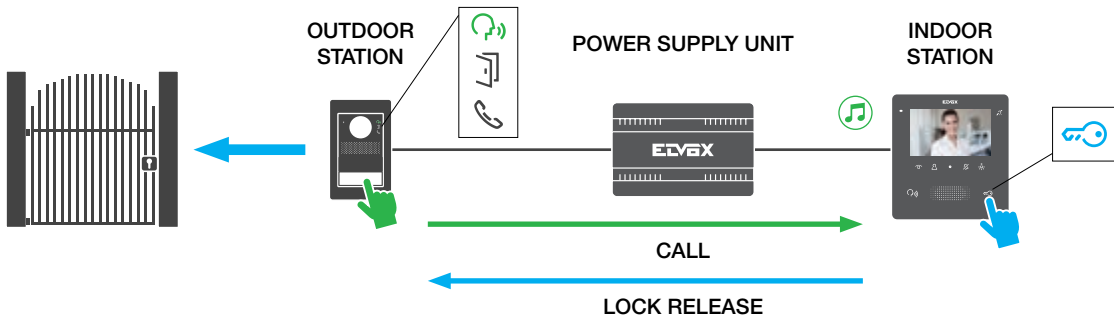
If several outdoor stations and/or cameras are present, you can view the images from these, by pressing the self-start button repeatedly. The viewing order is automatically determined by the system (by default only the master entrance panel is intended for self-start).

The section of the system can only be engaged by one communication at a time.

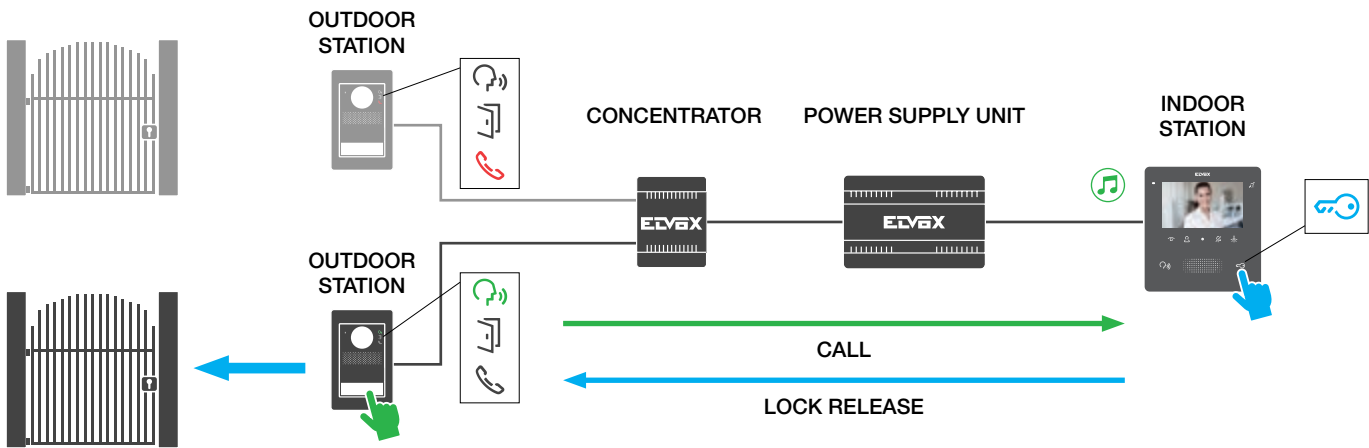


Lock control.

The **lock** button on all indoor stations operates the locks in the system. During a communication, if you press this button, you will release the lock connected to the calling outdoor station.

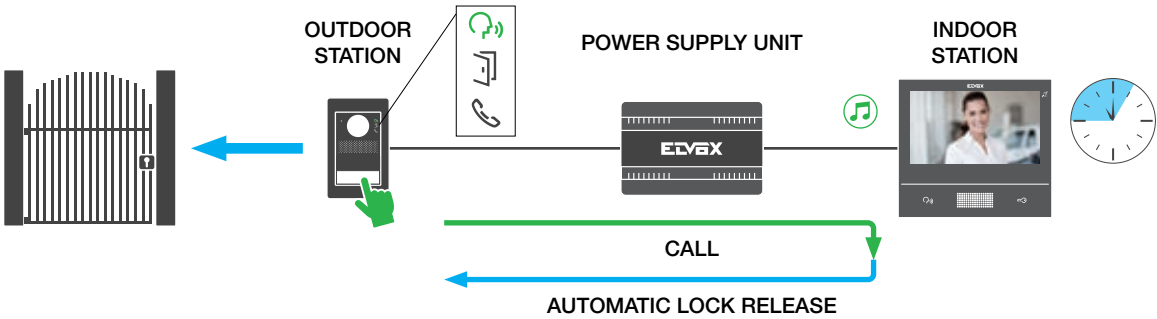


A second lock could be operated from a secondary outdoor station. In this case too, the lock will be released by pressing the **lock** button on the indoor station, during the call or during a conversation with that outdoor station, or following the self-start from the indoor station.



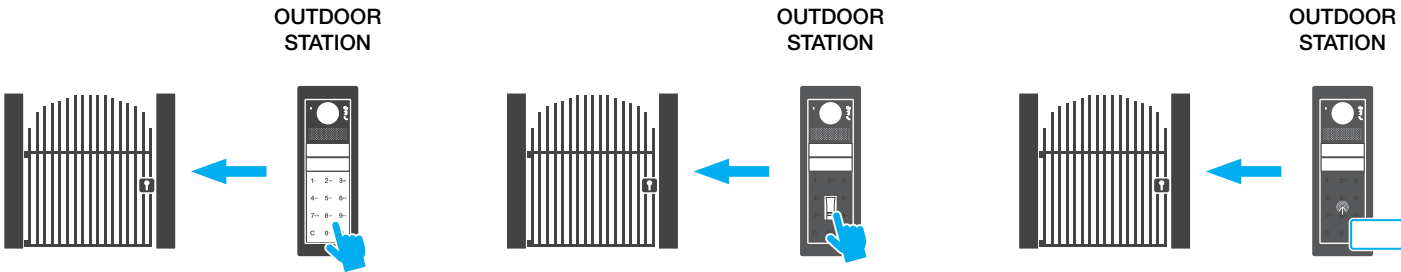
Professional firm function.

The dedicated indoor stations programmed specifically for this purpose, after a call from the outdoor station, automatically send the lock release control. This function is used mostly in doctor's surgeries, dental surgeries and offices in general. Some indoor stations make it possible to set the automatic activation of this function, also according to the days of the week and time brackets.



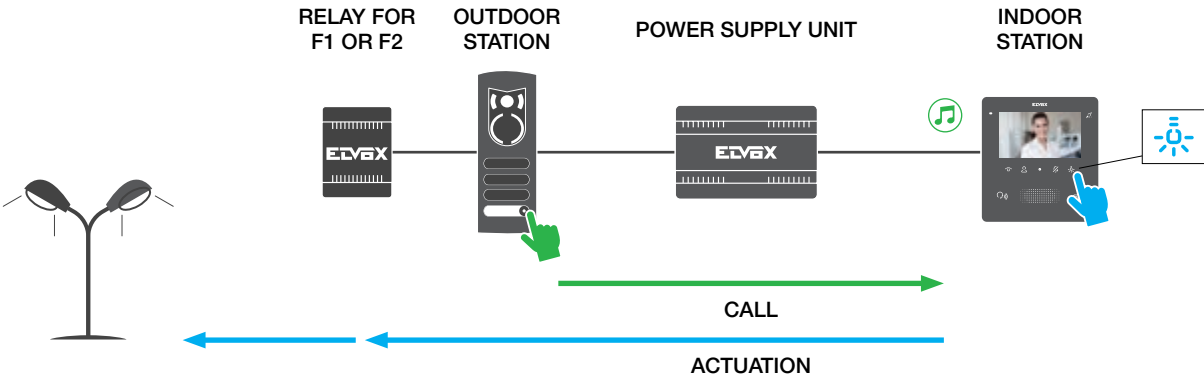
Lock release with code from outdoor station.

The door lock release control can also be enabled with numerical codes, fingerprints or RFID badges using the dedicated, duly programmed functional modules (please refer to the model installed).



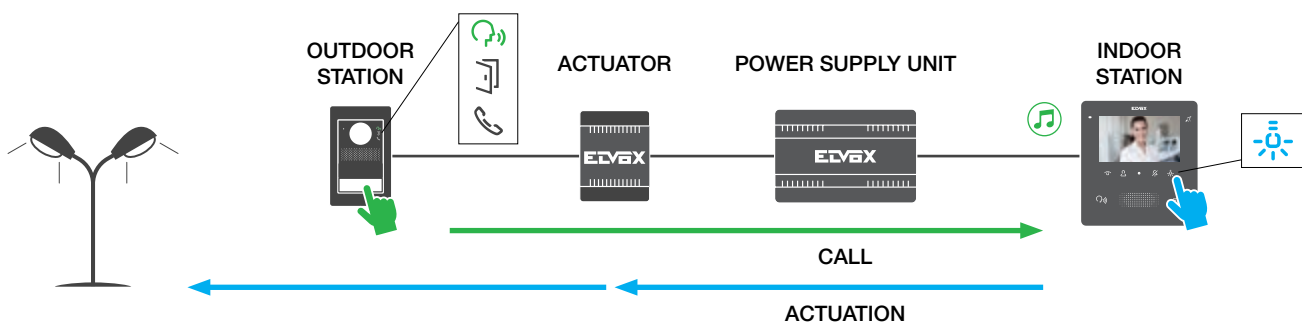
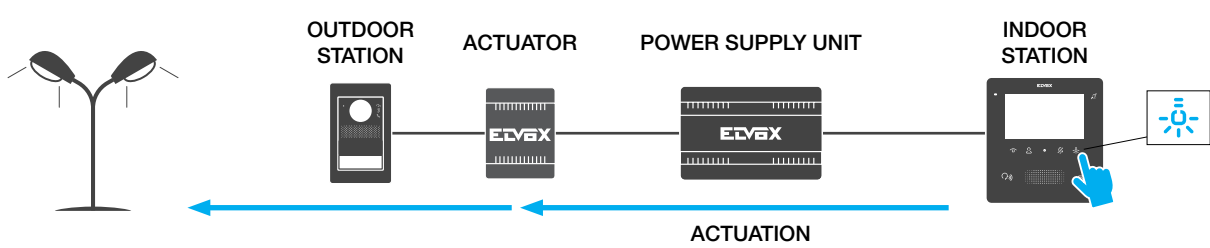
Actuation control with auxiliary outputs F1 and F2.

From the indoor station, you can control timed actuations during a call or a conversation, using auxiliary functions F1 and F2. Using preliminary programming, you need to associate one of the push buttons on the indoor station with function F1 or F2. The outdoor stations of series 1300, Steely and Patavium are equipped with outputs for auxiliary functions F1 and F2.



Actuation control.

From the indoor station, you can also control a timed actuation both with the system on standby and during a call or a conversation. The dedicated indoor stations have a push button dedicated to actuations; it is dedicated, as standard, to the activation of the first output of the first relay module.



OUTDOOR STATIONS.

Communicating is simple, effective and safe.

Outdoor stations are available in various dimensions and can be mounted in various ways, from surface mounting to flush mounting, monobloc, modular or special flush with the wall, but they all have one thing in common: an elegant and sophisticated design in keeping with the most demanding architectural requirements.

- **Pixel and Pixel Heavy** - just 10 cm wide, it can easily be installed in small spaces without compromising on either design or technological quality. In audio/video or audio only versions, Pixel and Pixel Heavy entrance panels are characterised by their **extensive modularity** which provides complete customisation of installation, combining different types of push buttons and a **3.5" colour LCD display**.



- **Pixel Up** - entrance panel with front cover plate made of 316 stainless steel with brushed finish, distinguished by a linear design and by a **reduced protrusion from the wall, of just 3 mm**. With **alphanumeric keyboard**, with stainless steel buttons and **colour display** with polycarbonate protective glass, with IP54 degree of protection and IK08 impact resistance.

- **1300 Series** - with soft and modern silhouettes and a scratch-resistant finish, suitable for any domestic context, in electro-polished anodised aluminium.







- **Steely** - boasting a design that is trendy, linear and simple. It is the perfect solution for innovative environments complementing a comprehensive range of stylistic requirements, building types and functional needs. **Steely by name, steel by nature**. A simple, hard-wearing material that characterises the DNA of the entrance panel and complements its contemporary, modern and technological style.



- **Patavium** - sinuous curves, beauty and sophistication, **ideal for refined environments as it** adapts to suit all types of architectures, particularly **historical buildings**. In **brass with an elegant satin finish**, also available on request in a **polished version** to enhance and endow every space with its very own personal form of expression.












Summary table of outdoor station functionality

Type		Modular			
Series		Pixel		Pixel Heavy	
		 		 	
Call type		Push buttons	Alphanumerical with electronic contacts list	Push buttons	Alphanumerical with electronic contacts list
Audio version		✓		✓	
Audio/video version		✓		✓	
Installation	Flush mounting	✓		✓	
	Surface mounting	✓		-	
Material		Anodised aluminium		Die-cast aluminium and Zamak	
Finishes		Grey Slate grey White Anodised grey		Sable grey	
Maximum number of calls with keyboard		-	6,400 ⁽¹⁾	-	6,400 ⁽¹⁾
Maximum number of calls with push buttons		42 (buttons along 1 row)	-	42 (buttons along 1 row)	-
		84 (buttons along 2 rows)		84 (buttons along 2 rows)	
Breadth of recording range HxV		104°x83°		104°x83°	
Mechanical camera adjustment		-		-	
Automatic audio microphone control (indoor and outdoor)		✓		✓	
Echo cancellation ⁽²⁾		✓		✓	
call status LED indication		✓		✓	
Indication: “BUSY-WAIT”		✓	✓	✓	✓
Name plate LED lighting colour		✓	✓	✓	✓
Teleloop for hearing aids		✓		✓	
State voice synthesis		✓		✓	
Door release with keyboard code		✓		✓	
Door release with badge		✓		✓	
Rain guard		✓		-	
IP protection degree		IP54		IP54	
IK Degree of resistance		IK08		IK10	

1) The maximum number of calls is equivalent to the maximum number of indoor stations, divided up by a maximum of 200 indoor stations for each block and a maximum of 32 blocks per system (6,400 = 200 indoor stations x 32 blocks).

2) The echo cancellation algorithm means you can have natural, two-way conversations, automatically avoiding annoying audio feedback or whistling (Larsen effect), without having to adjust the microphone and speaker during installation.

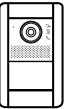




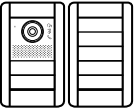



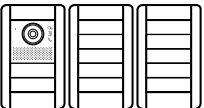



Flat					Monobloc			
Pixel Up	Patavium		Steely		1300		13K1	1300/E
								
Alphanumeric with electronic contacts list	Push buttons	Alphanumeric with electronic contacts list	Push buttons	Alphanumeric with electronic contacts list	Push buttons	Alphanumeric with electronic contacts list	Push buttons	Push buttons
✓	✓		✓		✓		✓	✓
✓	✓		✓		✓		✓	✓
✓	✓		✓		✓		✓	✓
✓	-		-		✓		✓	✓
316 steel	Brass		316L steel		Anodised aluminium		Anodised aluminium	Anodised aluminium
Brushed steel	Polished satin finish		Brushed steel		Electro-polished		Electro-polished	Electro-polished
6,400 ⁽¹⁾	-	6,400 ⁽¹⁾	-	6,400 ⁽¹⁾	-	6,400 ⁽¹⁾	-	-
-	44	-	44	-	200	8	2	2
104°x83°	84°x69°		84°x69°		84°x69°		100°x82°	100°x82°
-	-		-		✓		-	-
✓	-		-		-		-	-
✓	-		-		-		-	-
✓	-		-		-		-	-
✓	-	✓	-	✓	✓	✓	-	-
✓	-	✓	-	✓	✓	✓	-	-
✓	-		-		-		-	-
✓	-		-		-		-	-
✓	-	✓	-	✓	-	✓	-	-
✓	-		-		✓		✓	✓
IP54	IP54		IP54		IP54		IP54	IP54
IK08	IK08	IK07	IK08	IK07	IK07		IK08	IK08

OUTDOOR STATIONS






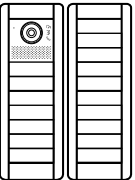



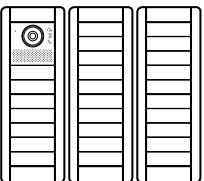



Pixel Series

Entrance panel installation

1-module entrance panel with push buttons

Composition	Number of possible calls	Flush or surface mounting installation
	Up to 1 	 Rain-proof frame 1-module flush mounting box Audio or audio/video electronic units Audio or audio/video unit front modules Button modules and/or blank modules Frame Surface mounting box with rain guard
	Up to 2 	
	Up to 4 	
	Up to 3 	
	Up to 7 	
	Up to 14 	
	Up to 5 	
	Up to 12 	
	Up to 24 	






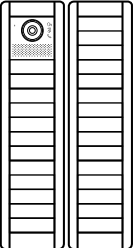



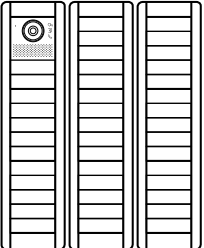



2-module entrance panel with push buttons

Composition	Number of possible calls	Flush or surface mounting installation
	Up to 3 	 Rain-proof frame 2-module flush-mounting back box Audio or audio/video electronic units Audio or audio/video unit front modules Button modules and/or blank modules Frame Surface mounting box with rain guard
	Up to 7 	
	Up to 14 	
	Up to 7 	
	Up to 17 	
	Up to 34 	
	Up to 11 	
	Up to 27 	
	Up to 54 	

Pixel Series

Entrance panel installation

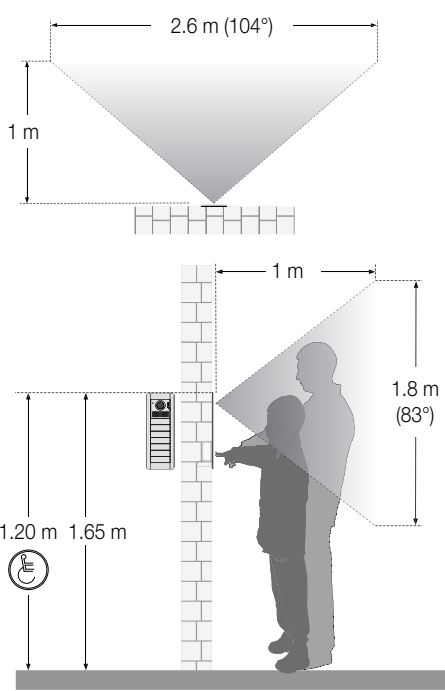
3-module entrance panel with push buttons

Composition	Number of possible calls	Flush or surface mounting installation
	Up to 5 	 Rain-proof frame Flush mounting box 3 module Audio or audio/video electronic units Audio or audio/video unit front modules Button modules and/or blank modules Frame Surface mounting box with rain guard
	Up to 12 	
	Up to 24 	
	Up to 11 	
	Up to 27 	
	Up to 54 	
	Up to 17 	
	Up to 42 	
	Up to 84 	

Key to Pixel buttons

		
Double button	Single axial button	Double row single rocker button

Height of installation and recording range of entrance panels



Universal adaptors



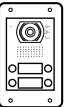


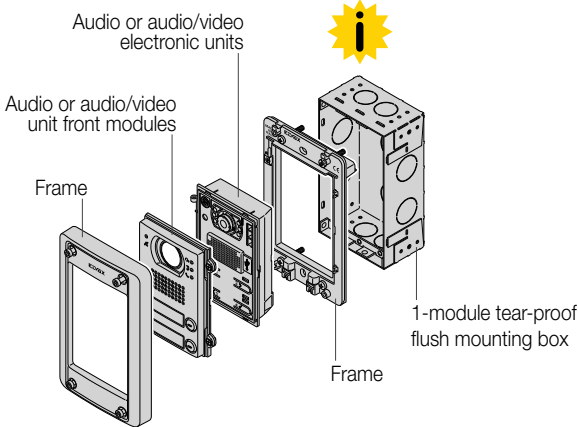
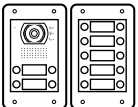


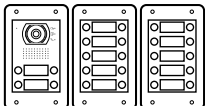


If you are unable to change the box already mounted, **use the Pixel 1- and 2-module universal adaptors (41135... or 41136...)**, which are compatible with the most commonly used flush mounting boxes on the market. The adaptors are compatible with the following distances between centres (min. - max):

- 1 module (192 - 197 mm);
- 2 modules (282.5 - 288.5 mm).

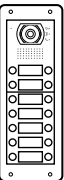


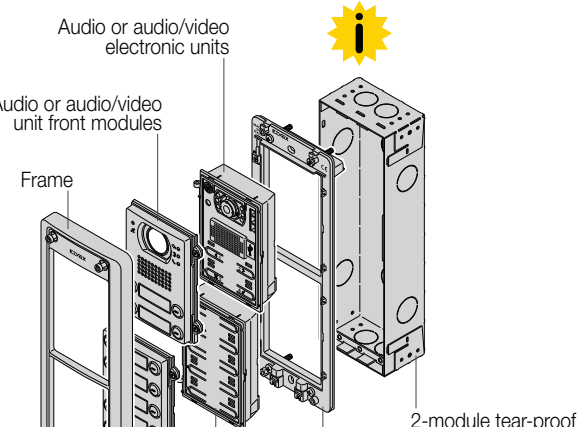
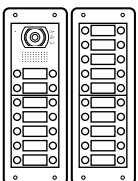


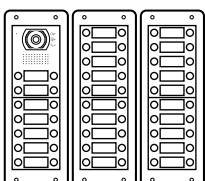


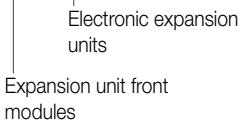
Pixel Heavy Series

Entrance panel installation

1-module entrance panel with push buttons

Composition	Number of possible calls	Flush or surface mounting installation
	Up to 2  Up to 4 	 Audio or audio/video electronic units Audio or audio/video unit front modules Frame
	Up to 7  Up to 14 	
	Up to 12  Up to 24 	

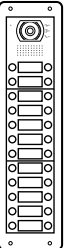


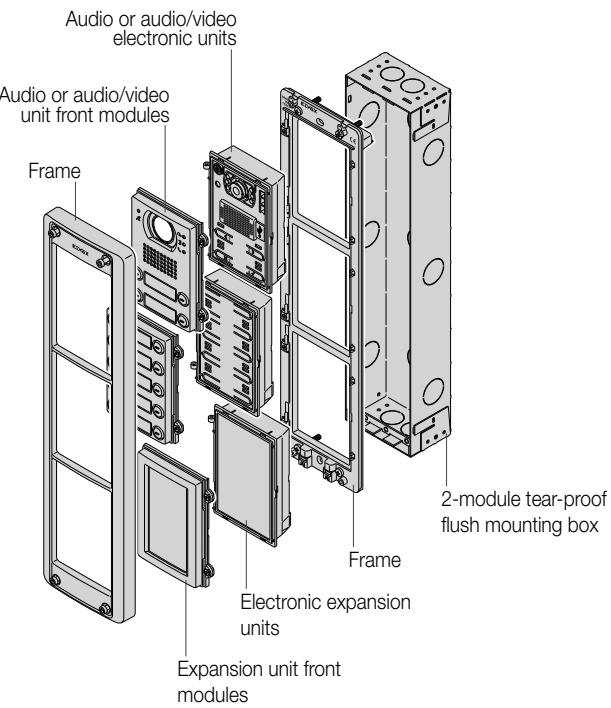
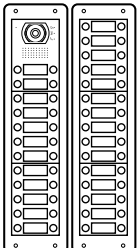


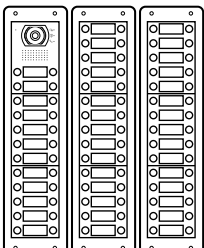


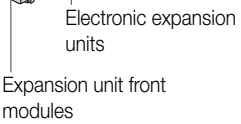
2-module entrance panel with push buttons

Composition	Number of possible calls	Flush or surface mounting installation
	Up to 7  Up to 14 	 Audio or audio/video electronic units Audio or audio/video unit front modules Frame
	Up to 17  Up to 34 	
	Up to 27  Up to 54 	 Electronic expansion units Frame



Pixel Heavy Series

Entrance panel installation

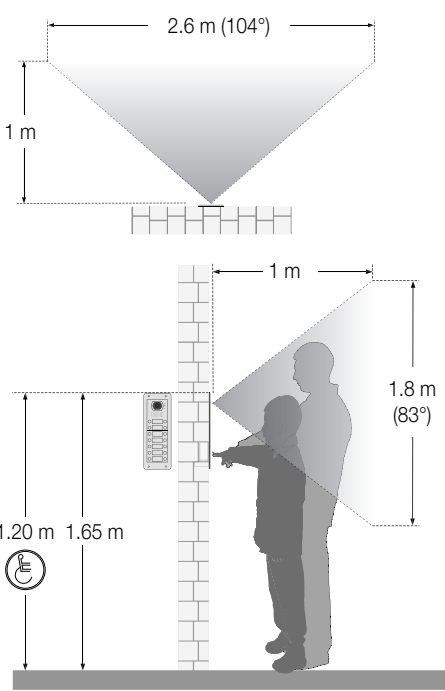
3-module entrance panel with push buttons

Composition	Number of possible calls	Flush or surface mounting installation
	Up to 12  Up to 24 	 Audio or audio/video electronic units Audio or audio/video unit front modules Frame
	Up to 27  Up to 54 	
	Up to 42  Up to 84 	 Electronic expansion units Frame

Key to Pixel Heavy buttons

	
Button on single row	Buttons on double row

Height of installation and recording range of entrance panels



Universal adaptors



































































If you are unable to change the box already mounted, **use the Pixel 1- and 2-module universal adaptors** (41135.02 or 41136.02), which are compatible with the most commonly used flush mounting boxes on the market. The adaptors are compatible with the following distances between centres (min. - max):

- 1 module (192 - 197 mm);
- 2 modules (282.5 - 288.5 mm).

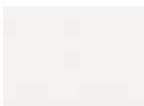
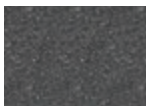


Pixel and Pixel Heavy series.

Pixel and Pixel Heavy series entrance panel composition table

Composition	Number of calls	Electronic units								Electronic expansion units							Installation											
		Audio				Audio/video				Push buttons			Name plates	LCD display	Alphanumeric keyboard	Access control keyboard	Digital fingerprint reader	Transponder reader	Blank front ⁽⁴⁾	Mounting frame and cover plate	Boxes and accessories							
																					Flush mounting		Surface mounting					
		Mounting boxes		Rain-proof frame (optional)																								
																												
		41000 ⁽¹⁾ Basic	41002 With teleloop and camera input		41005 With teleloop and wide-angle camera				41010 10 buttons in a double row			41015 Name plates/ address number	41018	41019	41020	41016	41017											
Pixel		Pixel front modules								Pixel front modules							Pixel installation											
																												
		41100.yy ⁽³⁾		41102.yy ⁽³⁾		41105.yy ⁽³⁾																						
		Buttons and blank module				Buttons and blank module																	Buttons and blank module					
																												
		41110 x 1 Single axial	41110 x 2 Single axial	41112 x 1 Double axial	41111 x 2 Single rocker		41110 x 1 Single axial	41110 x 2 Single axial	41112 x 1 Double axial														41111 x 2 Single rocker	41110 (max 5) Single axial	41112 (max 2) Double axial	41111 (max 5) Single rocker		
																												
		41114.yy ⁽³⁾ Double blank module	41113.yy ⁽³⁾ Single blank module				41114.yy ⁽³⁾ Double blank module	41113.yy ⁽³⁾ Single blank module																	41113.yy ⁽³⁾ ⁽⁴⁾ (max 5) Single blank module	41114.yy ⁽³⁾ ⁽⁴⁾ (max 2) Double blank module		
		0 push b.	1 push b.	2 push b.	1 push b.	4 push b.	0 push b.	1 push b.	2 push b.	1 push b.	4 push b.	5 push b.	2 push b.	10 push b.			41115	41118.yy ⁽³⁾	41119.yy ⁽³⁾	41119.yy ⁽³⁾	41116.yy ⁽³⁾	41117	41121.yy ⁽³⁾	41131.xx ⁽³⁾ 1 module Dim. 99.5x161 mm	9191 1 module Dim. 98x143x50 mm	41141.xx ⁽³⁾ 1 module Dim.110x167x35.8 mm	41151.xx ⁽³⁾ 1 module Dim. 110x167x70.6 mm	
Pixel Heavy		Pixel Heavy front modules								Pixel Heavy front modules							Pixel Heavy installation											
																												
		For 41000													41215	41218	41219	41219	-	-	41221 Blank front	41231 1 module Dim. 99.6x163 mm	40291 1 module Dim. 82.4x144x50 mm	-	-			
		41200	41201	41202	41204	41270	41271	41272	41274	41223	41225	41230																
		For 41002																										
		41210	41211	41212	41214																							
		0 push b.	1 push b.	2 push b.	4 push b.	0 push b.	1 push b.	2 push b.	4 push b.	3 push b.	5 push b.	10 push b.																
	Max 4 ⁽²⁾	1								-			-	-	-	-	-	-	-	1	1	1	1	1				
	Max 14 ⁽²⁾	1								Max 1			Max 1	Max 1	Max 1	Max 1	Max 1	Max 1	Max 1	2	2	-	-					
	Max 24 ⁽²⁾	1								Max 2			Max 2	Max 1	Max 1	Max 1	Max 1	Max 1	Max 2	3	3	-	-					

¹ Electronic unit 41000 allows a maximum of 54 calls and cannot be used in conjunction with electronic units 41018 and 41019.
² Maximum number of calls that can be made using traditional push buttons. The use of electronic units 41018+41019 allows up to 6400 calls.
³ Replace "xx" with 01: grey, 02: slate grey, 03: white and 04: anodised grey.
Replace "yy" with 01: grey, 02: slate grey, 03: white.
⁴ The number of blank modules/blank fronts is complementary to the number of buttons/front modules.



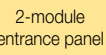
























































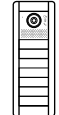
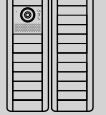
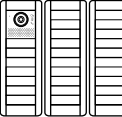
Accessory - Electronic unit wiring

41190
Wiring for the vertical and/or horizontal connection of modules with integrated IP protections, 485 mm length



Pixel and Pixel Heavy series.

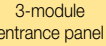
































































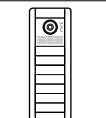
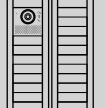
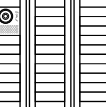
Pixel and Pixel Heavy series entrance panel composition table

Composition		Electronic units								Electronic expansion units								Installation								
		Audio				Audio/video				Push buttons				Name plates	LCD display	Alphanumeric keyboard	Access control keyboard	Digital fingerprint reader	Transponder reader	Blank front ⁽⁴⁾	Mounting frame and cover plate	Boxes and accessories				
																						Flush mounting		Surface mounting		
		Mounting boxes		Rain-proof frame (optional)																						
	Number of calls																									
		41000 ⁽¹⁾ Basic	41002 With teleloop and camera input	41005 With teleloop and wide-angle camera				41010 10 buttons in a double row				41015 Name plates/ address number	41018	41019	41020	41016	41017									
Pixel		Pixel front modules								Pixel front modules								Pixel installation								
																										
		41100.yy ⁽³⁾		41102.yy ⁽³⁾		41105.yy ⁽³⁾																		41142.xx ⁽³⁾ 2 modules Dim. 110x281.7x35.8 mm	41152.xx ⁽³⁾ 2 modules Dim. 110x281.7x70.6 mm	
		Buttons and blank module				Buttons and blank module				Buttons and blank module																
																									41144.xx ⁽³⁾ 4 modules (2x2). Dim. 210x281.7x35.8 mm	41154.xx ⁽³⁾ 4 modules (2x2). Dim. 210x281.7x70.6 mm
																										
		41114.yy ⁽³⁾ Double blank module	41113.yy ⁽³⁾ Single blank module					41114.yy ⁽³⁾ Double blank module	41113.yy ⁽³⁾ Single blank module				41113.yy ^{(3) (4)} Single blank module	41114.yy ^{(3) (4)} Double blank module											41147.xx ⁽³⁾ 6 modules (3x2). Dim. 310x281.7x35.8 mm	41157.xx ⁽³⁾ 6 modules (3x2). Dim. 310x281.7x70.6 mm
		0 push b.	1 push b.	2 push b.	1 push b.	4 push b.	0 push b.	1 push b.	2 push b.	1 push b.	4 push b.	5 push b.	2 push b.	10 push b.												
Pixel Heavy		Pixel Heavy front modules								Pixel Heavy front modules								Pixel Heavy installation								
																										
		For 41000				41270	41271	41272	41274	41223	41225	41230			41215	41218	41219	41219	-	-	41221 Blank front	41232 2 modules Dim. 99.6x278 mm	40292 2 modules Dim. 82.4x256.5x50 mm	-	-	
		41200	41201	41202	41204																					
		For 41002																								
		41210	41211	41212	41214																					
0 push b.	1 push b.	2 push b.	4 push b.	0 push b.	1 push b.	2 push b.	4 push b.	3 push b.	5 push b.	10 push b.																
	Max 14 ⁽²⁾	1								Max 1					Max 1	Max 1	Max 1	Max 1	Max 1	Max 1	Max 1	1	1	1	1	
	Max 34 ⁽²⁾	1								Max 3					Max 2	Max 1	Max 1	Max 1	Max 1	Max 1	Max 3	2	2	1	1	
	Max 54 ⁽²⁾	1								Max 5					Max 4	Max 1	Max 1	Max 1	Max 1	Max 1	Max 5	3	3	1	1	



Pixel and Pixel Heavy series.

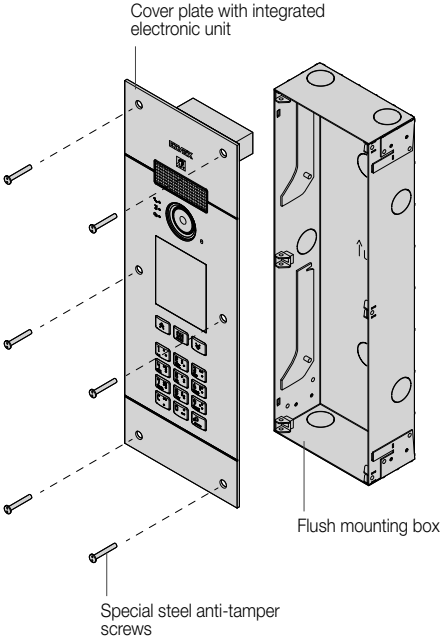
Pixel and Pixel Heavy series entrance panel composition table

Composition	Number of calls	Electronic units								Electronic expansion units								Installation																												
		Audio				Audio/video				Push buttons			Name plates	LCD display	Alphanumeric keyboard	Access control keyboard	Digital fingerprint reader	Transponder reader	Blank front ⁽⁴⁾	Mounting frame and cover plate	Boxes and accessories																									
																					Flush mounting		Surface mounting																							
		Mounting boxes		Rain-proof frame (optional)																																										
																																														
		41000 ⁽¹⁾ Basic	41002 With teleloop and camera input	41005 With teleloop and wide-angle camera				41010 10 buttons in a double row				41015 Name plates/ address number	41018	41019	41020	41016	41017																													
Pixel		Pixel front modules								Pixel front modules								Pixel installation																												
																																														
		41100.yy ⁽³⁾		41102.yy ⁽³⁾		41105.yy ⁽³⁾															41143.xx ⁽³⁾ 3 modules Dim. 110x397x35.8 mm		41153.xx ⁽³⁾ 3 modules Dim. 110x397x70.6 mm																							
		Buttons and blank module				Buttons and blank module				Buttons and blank module																																				
																								41146.xx ⁽³⁾ 6 modules (2x3). Dim. 210x397x35.8 mm		41156.xx ⁽³⁾ 6 modules (2x3). Dim. 210x397x70.6 mm																				
		41110 x 1 Single axial	41110 x 2 Single axial	41112 x 1 Double axial	41111 x 2 Single rocker	41110 x 1 Single axial	41110 x 2 Single axial	41112 x 1 Double axial	41111 x 2 Single rocker	41110 (max 5) Single axial	41112 (max 2) Double axial										41111 (max 5) Single rocker																									
																									41115		41118.yy ⁽³⁾		41119.yy ⁽³⁾		41119.yy ⁽³⁾		41116.yy ⁽³⁾		41117		41121.yy ⁽³⁾		41133.xx ⁽³⁾ 3 modules Dim. 99.5x391 mm		9193 3 modules Dim. 98x365x50 mm		41149.xx ⁽³⁾ 9 modules (3x3). Dim. 310x397x35.8 mm		41159.xx ⁽³⁾ 9 modules (3x3). Dim. 310x397x70.6 mm	
		0 push b.	1 push b.	2 push b.	1 push b.	4 push b.	0 push b.	1 push b.	2 push b.	1 push b.	4 push b.										5 push b.	2 push b.	10 push b.																							
Pixel Heavy		Pixel Heavy front modules								Pixel Heavy front modules								Pixel Heavy installation																												
																			-	-																										
		For 41000				41270	41271	41272	41274	41223	41225	41230			41215	41218	41219	41219	-	-	41221 Blank front	41233 3 modules Dim. 99.6x393 mm	40293 3 modules Dim. 82.4x369x50 mm	-	-																					
		41200	41201	41202	41204																																									
		For 41002																																												
		41210	41211	41212	41214																																									
0 push b.	1 push b.	2 push b.	4 push b.	0 push b.	1 push b.	2 push b.	4 push b.	3 push b.	5 push b.	10 push b.																																				
	Max 24 ⁽²⁾	1								Max 2				Max 1	Max 1	Max 1	Max 1	Max 1	Max 1	Max 2	1	1	1	1																						
	Max 54 ⁽²⁾	1								Max 5				Max 4	Max 1	Max 1	Max 1	Max 1	Max 1	Max 5	2	2	1	1																						
	Max 84 ⁽²⁾	1								Max 8				Max 7	Max 1	Max 1	Max 1	Max 1	Max 1	Max 8	3	3	1	1																						

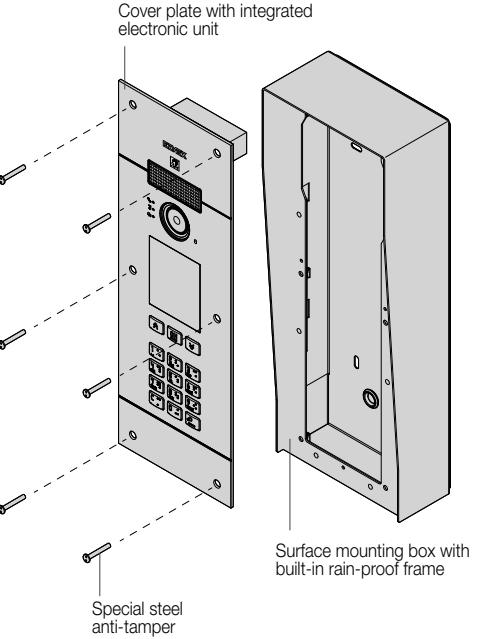
Pixel Up Series

Pixel Up series entrance panel installation

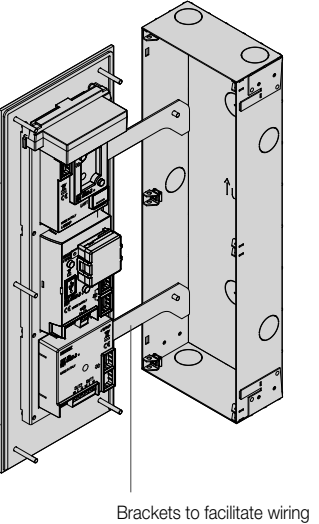
Flush mounting



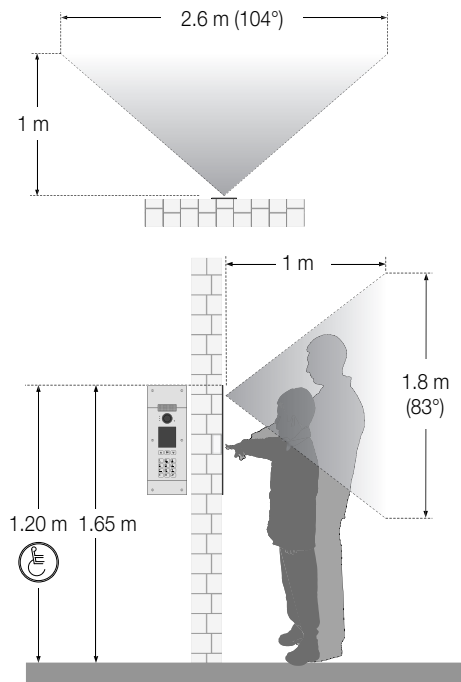
Surface mounting



Installation for wiring









Height of installation and recording range of entrance panels



Pixel Up Series

Pixel Up series entrance panel composition table

Entry panels			Accessories	Installation	
Number of calls	Cover plate + electronic unit + flush mounting box		RFID reader	Boxes and accessories	
	Audio	Audio/video		Flush mounting	Surface mounting
6400				As standard	
	40425	40405			40440
	Cover plate dim. 145x405x3 mm Flush mounting box dim. 124x382x60 mm				Dim. 158x416.5x88.3 mm
6400				As standard	-
	40424	40404	41022		
	Cover plate dim. 145x460x3 mm Flush mounting box dim. 124x437x60 mm				

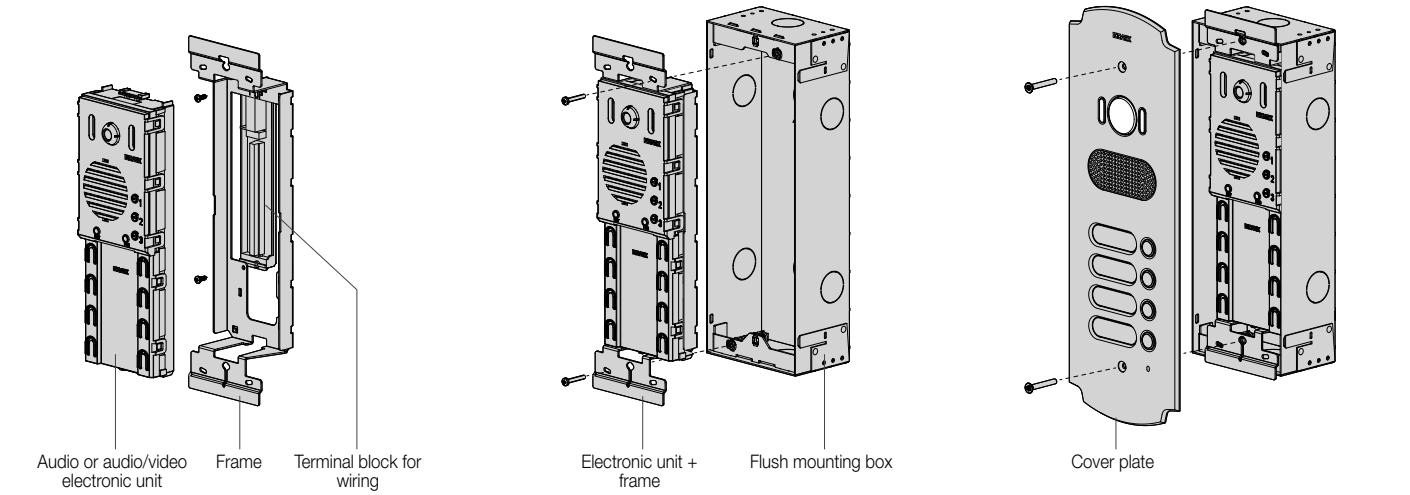
Patavium series

Patavium series entrance panel installation

Fixing the electronic unit to the frame

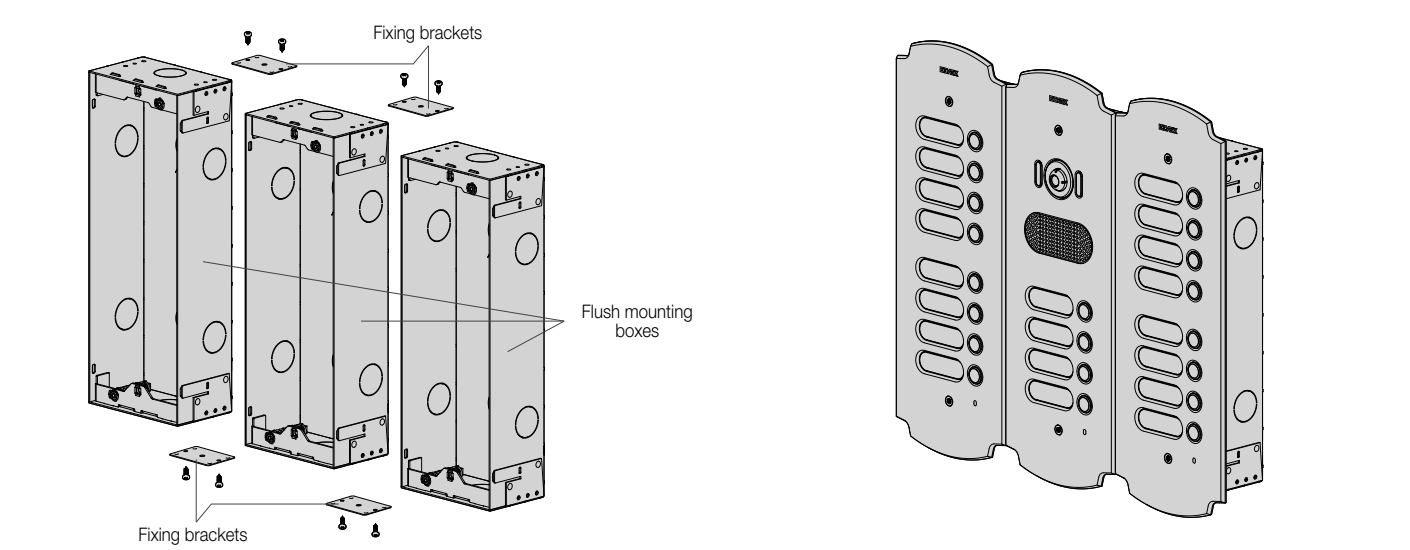
Fixing to the flush mounting box

Fixing the cover plate

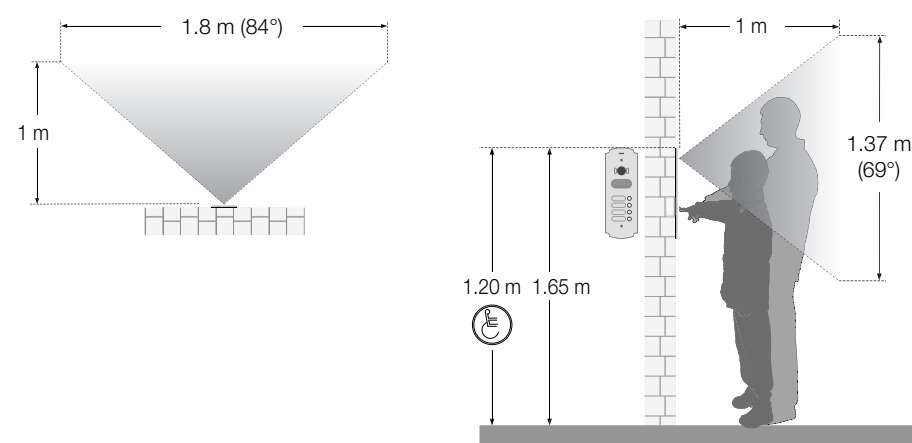


Side-by-side positioning of several flush mounting boxes

Cover plates placed side-by-side










































Height of installation and recording range of entrance panels



Patavium series

Patavium series 2-, 3- and 4-module entrance panel composition table

Composition		2-module entrance panels				3-module entrance panels	4-module entrance panels	Installation								
	Number of calls	Push buttons		Alphanumeric		Push buttons										
		Audio electronic unit		Supplem.	Audio electronic unit	Supplem.	Audio electronic unit				Flush mounting boxes					
																
		13F3.B		12TS.B	13A4.B.43		13F3.B									
		With 4+4 push buttons		4 push b.	With keyboard and alphanumeric display		With 4+4 push buttons									
																
		41601	41602	41603	41604	41643	41640	41642	41606	41608	41610	41612	41592	41593	41594	
		1 push b.		2 push b.	3 push b.	4 push b.	8 push b.		6 push b.	8 push b.	10 push b.	12 push b.				
		Audio/video electronic units		Supplem.	Audio/video electronic units		Supplem.	Audio/video electronic units								
																
		13F5.B		12TS.B	13A7.B.43			13F5.B								
		With 4+4 push buttons		4 push b.	With keyboard and alphanumeric display			With 4+4 push buttons								
																
		41621	41622	41623	41624	41643	41641	41642	41626	41628	41630	41632	41592	41593	41594	
		1 push b.		2 push b.	3 push b.	4 push b.	8 push b.		6 push b.	8 push b.	10 push b.	12 push b.				
		2 modules Dim. ⁽²⁾				3 modules Dim. ⁽³⁾		4 modules Dim. ⁽⁴⁾		2 modules Dim. ⁽²⁾	3 modules Dim. ⁽³⁾	4 modules Dim. ⁽⁴⁾				
	Max 4 ⁽¹⁾	1		0	1	0	0	0	0	0	1	0	0			
	Max 6 ⁽¹⁾	0		0	0	0	1	0	0	0	0	1	0			
	Max 8 ⁽¹⁾	0		0	0	0	0	1	0	0	0	1	0			
	Max 10 ⁽¹⁾	0		0	0	0	0	0	1	0	0	0	1			
	Max 12 ⁽¹⁾	0		0	0	0	0	0	0	1	0	0	1			
	Max 12 ⁽¹⁾	1		1	1	1	0	0	0	0	2	0	0			
	Max 20 ⁽¹⁾	1		2	1	2	0	0	0	0	3	0	0			
	Max 28 ⁽¹⁾	1		3	1	3	0	0	0	0	4	0	0			

¹ Maximum number of calls that can be made using traditional push buttons. The use of electronic units 13A4.B.43 or 13A7.B.43 allows up to 6400 calls.
² Dimensions of 2-module cover plate: 119.8x334x4 mm. Dimensions of 2-module flush mounting box: 99.9x270.2x60.6 mm.
³ Dimensions of 3-module cover plate: 119.8x448x4 mm. Dimensions of 3-module flush mounting box: 99.9x384.7x60.6 mm.
⁴ Dimensions of 4-module cover plate: 119.8x563x4 mm. Dimensions of 4-module flush mounting box: 99.9x499.2x60.6 mm.

OUTDOOR STATIONS

Steely series

Steely series entrance panel installation

Fixing the electronic unit to the frame

Fixing to the flush mounting box

Fixing the cover plate

Audio or audio/video electronic unit

Frame

Terminal block for wiring

Electronic unit + frame

Flush mounting box

Cover plate

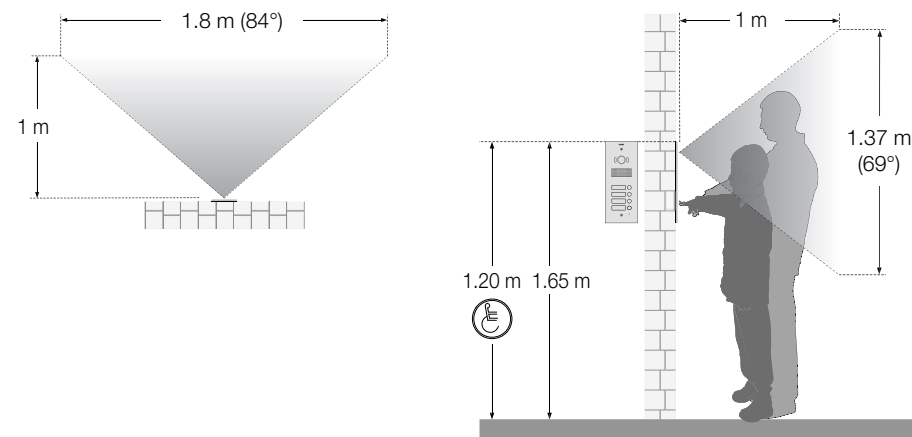
Side-by-side positioning of several flush mounting boxes

Cover plates placed side-by-side

Fixing brackets

Flush mounting boxes

Height of installation and recording range of entrance panels



Steely series

Steely series 2-, 3- and 4-module entrance panel composition table

Composition		2-module entrance panels				3-module entrance panels	4-module entrance panels	Installation							
	Number of calls	Push buttons		Alphanumeric		Push buttons									
		Audio electronic unit		Supplem.	Audio electronic unit	Supplem.	Audio electronic unit				Flush mounting boxes				
		13F3.B		12TS.B	13A4.B		13F3.B								
		With 4+4 push buttons		4 push b.	With keyboard and alphanumeric display		With 4+4 push buttons								
		41501	41502	41503	41504	41543	41540	41642	41506	41508	41510	41512	41592	41593	41594
		1 push b.	2 push b.	3 push b.	4 push b.	8 push b.			6 push b.	8 push b.	10 push b.	12 push b.			
		Audio/video electronic units			Supplem.	Audio/video electronic units		Supplem.	Audio/video electronic units						
		13F5.B		12TS.B	13A7.B		13F5.B								
		With 4+4 push buttons		4 push b.	With keyboard and alphanumeric display		With 4+4 push buttons								
41521	41522	41523	41524	41543	41541	41542	41526	41528	41530	41532	41592	41593	41594		
1 push b.	2 push b.	3 push b.	4 push b.	8 push b.			6 push b.	8 push b.	10 push b.	12 push b.					
2 modules Dim. ⁽²⁾							3 modules Dim. ⁽³⁾		4 modules Dim. ⁽⁴⁾		2 modules Dim. ⁽²⁾	3 modules Dim. ⁽³⁾	4 modules Dim. ⁽⁴⁾		
	Max 4 ⁽¹⁾	1		0	1	0	0	0	0	0	1	0	0		
	Max 6 ⁽¹⁾	0		0	0	0	1	0	0	0	0	1	0		
	Max 8 ⁽¹⁾	0		0	0	0	0	1	0	0	0	1	0		
	Max 10 ⁽¹⁾	0		0	0	0	0	0	1	0	0	0	1		
	Max 12 ⁽¹⁾	0		0	0	0	0	0	0	1	0	0	1		
	Max 12 ⁽¹⁾	1		1	1	1	0	0	0	0	2	0	0		
	Max 20 ⁽¹⁾	1		2	1	2	0	0	0	0	3	0	0		
	Max 28 ⁽¹⁾	1		3	1	3	0	0	0	0	4	0	0		

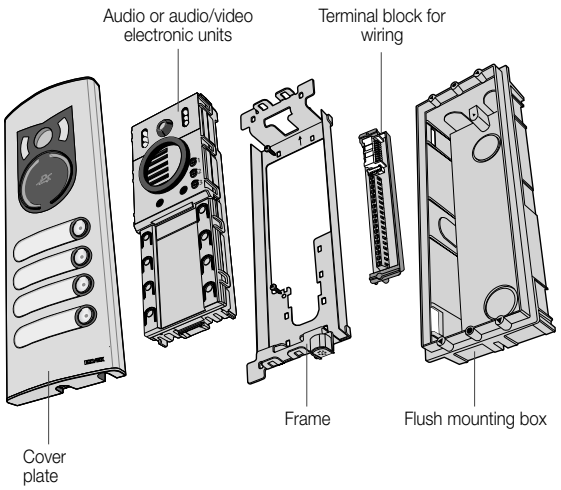
1 Maximum number of calls that can be made using traditional push buttons. The use of electronic units 13A4.B.43 or 13A7.B.43 allows up to 6400 calls.
2 Dimensions of 2-module cover plate: 119.8x299.5x4 mm. Dimensions of 2-module flush mounting box: 99.9x270.2x60.6 mm.
3 Dimensions of 3-module cover plate: 119.8x414x4 mm. Dimensions of 3-module flush mounting box: 99.9x384.7x60.6 mm.
4 Dimensions of 4-module cover plate: 119.8x528.5x4 mm. Dimensions of 4-module flush mounting box: 99.9x499.2x60.6 mm.

OUTDOOR STATIONS

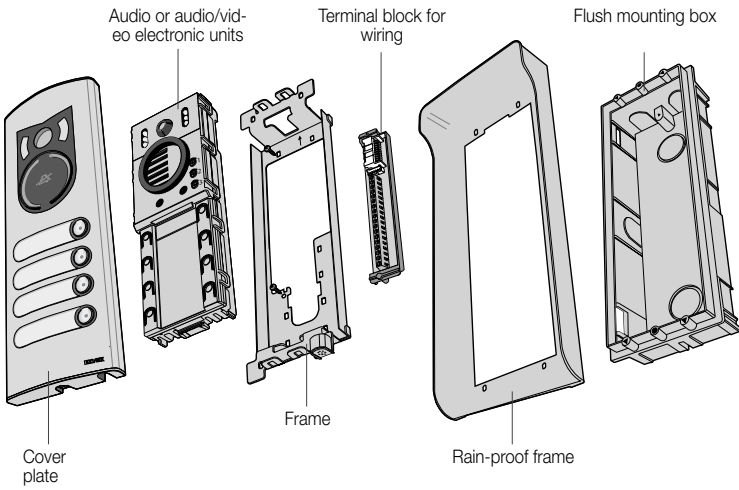
1300 Series

1300 series entrance panel installation

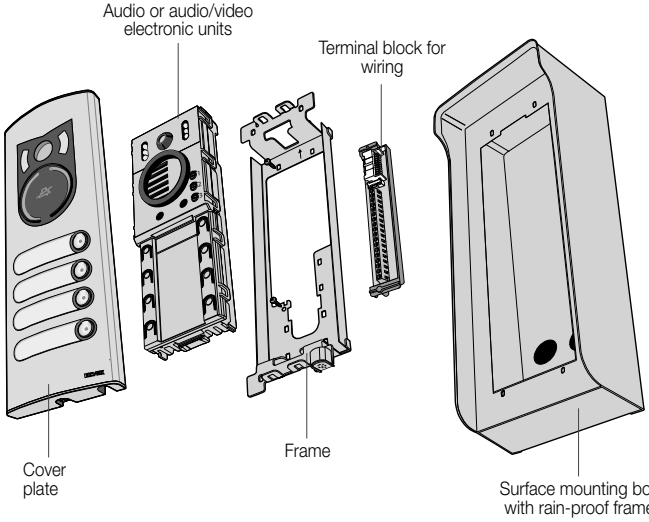
Flush mounting



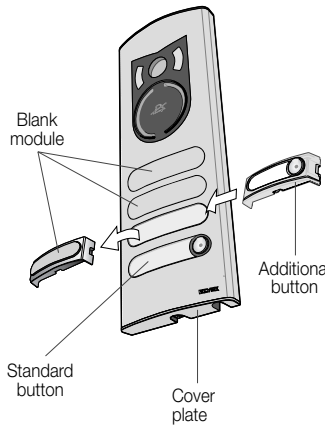
Flush mounting with rain-proof frame



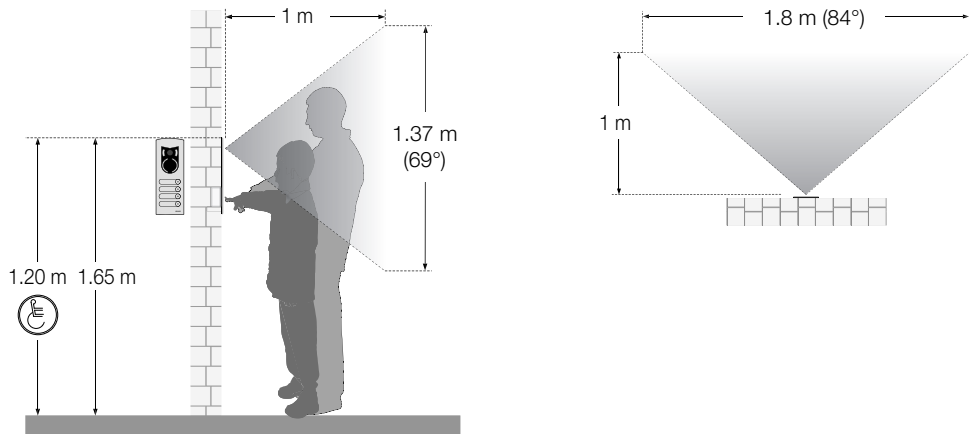
Surface mounting



Adding buttons























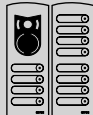
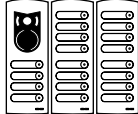
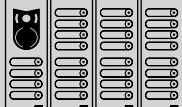


Height of installation and recording range of entrance panels



1300 Series























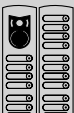
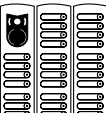
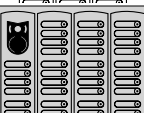
1300 series 2-module entrance panel composition table

Composition		Electronic units						Installation		
2-module entrance panel	Number of calls	Push buttons			Alphanumeric			Boxes and accessories		
		Audio	Audio/video	Supplem.	Audio	Audio/video	Supplem.	Flush mounting		Surface mounting
								Mounting boxes	Rain-proof frame (optional)	
										
		13F3	13F5	12TS	13F4	13F7				
		With 4+4 push buttons		4 push buttons	With keyboard and alphanumeric display					
		1300 cover plates								
										
		1321		1358	132D		132N		C321 (2 modules). Dim. 120x288x39 mm	S321 (2 modules). Dim. 120x288x74 mm
		2 modules Dim. 100x272x22 mm								
		Buttons and blank module								
										
		R131 (max 3) Push button max 4 push buttons		R130 (max 8) Blank module max 8 push buttons				9192 (2 modules). Dim. 98x254x50 mm	C324 (2x4 modules). Dim. 420x288x39 mm	S324 (2x4 modules). Dim. 420x288x74 mm
	Max 4 ⁽¹⁾	1	0	1	0	1	1	1	1	
	Max 12 ⁽¹⁾	1	1	1	1	2	2	1	1	
	Max 20 ⁽¹⁾	1	2	1	2	3	3	1	1	
	Max 28 ⁽¹⁾	1	3	1	3	4	4	1	1	

¹ Maximum number of calls that can be made using traditional push buttons. The use of electronic units 13F4 or 13F7 allows up to 6400 calls.

1300 Series

1300 series 3-module entrance panel composition table

Composition		Electronic units						Installation		
		Push buttons			Alphanumeric			Boxes and accessories		
		Audio	Audio/video	Supplem.	Audio	Audio/video	Supplem.	Flush mounting		Surface mounting
3-module entrance panel	Number of calls							Mounting boxes	Rain-proof frame (optional)	
	    	13F3	13F5	12TS	13F4	13F7				
		With 4+4 push buttons		4 push buttons	With keyboard and alpha-numerical display					
		1300 cover plates								
	    							 C321 (2 modules). Dim. 120x402x39 mm	 S321 (2 modules). Dim. 120x402x74 mm	
								 C322 (2x2 modules). Dim. 220x402x39 mm	 S322 (2x2 modules). Dim. 220x402x74 mm	
								 C323 (2x3 modules). Dim. 320x402x39 mm	 S323 (2x3 modules). Dim. 320x402x74 mm	
		Buttons and blank module							 C324 (2x4 modules). Dim. 420x402x39 mm	 S324 (2x4 modules). Dim. 420x402x74 mm
		 R131 (max 7) Push button	 R130 (max 11) Blank module					9193 (3 modules). Dim. 98x365x50 mm		
		max 8 push buttons	max 12 push buttons							
	Max 8 ⁽²⁾	1	0	1	0	1	1	1		
	Max 20 ⁽²⁾	1	1	1	1	2	1	1		
	Max 32 ⁽²⁾	1	2	1	2	3	1	1		
	Max 44 ⁽²⁾	1	3	1	3	4	1	1		

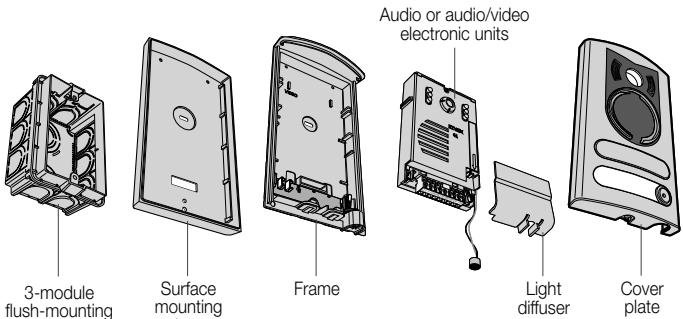
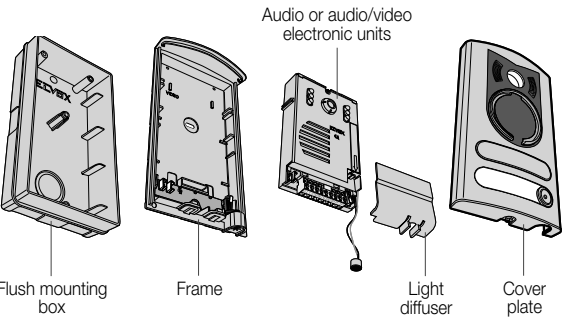
^(*) Maximum number of calls that can be made using traditional push buttons. The use of electronic units 13F4 or 13F7 allows up to 6400 calls.

1300 Series

13K1 cover plate installation

Flush mounting

Flush mounting with rain-proof frame

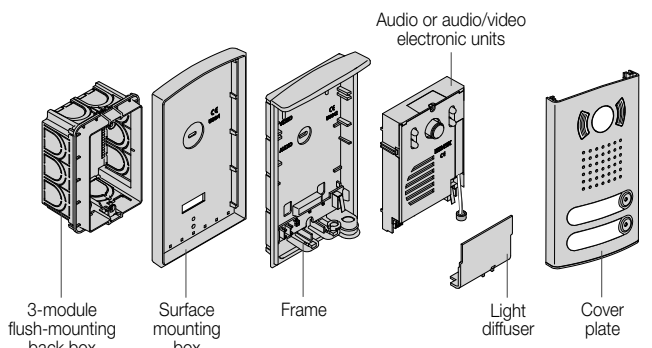
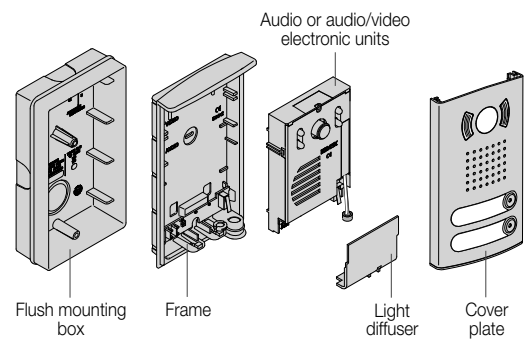


1300/E series

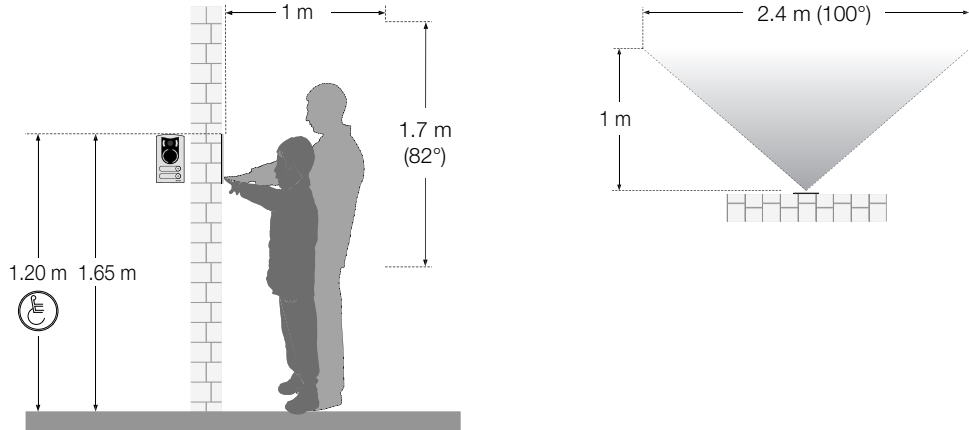
40151 and 40152 cover plate installation

Flush mounting

Flush mounting with rain-proof frame










Height of installation and recording range of entrance panels












1300 Series

13K1 entrance panel composition table

Composition		Electronic units			Installation	
1-module entrance panel	Number of calls	Push buttons			Boxes and accessories	
		Audio	Audio/video	Push buttons	Flush mounting	Surface mounting
					As standard	As standard
		13F1	13F2.1			
		With 2 push buttons				
		1300 cover plates		Additional push button		
						
		13K1	R131 (max 1)	Cover plate dim.: 101x173x25 mm Flush mounting box dim.: 96x167x38 mm	Cover plate dim.: 101x173x40 mm	
	1	1	0	-	-	
	2	1	1			

1300/E series

1300/E series entrance panel composition table

Composition		Electronic units				Installation	
1-module entrance panel	Number of calls	Push buttons				Boxes and accessories	
						Flush mounting	Surface mounting
		Audio		Audio/video		Mounting box with rain-proof frame	Mounting box with rain-proof frame
						As standard	As standard
		40131		40135			
		With 2 push buttons		With 2 push buttons			
		1300/E cover plates					
							
		40141	40142	40151	40152	Cover plate dim.: 101x173x25 mm Flush mounting box dim.: 96x167x38 mm	Cover plate dim.: 101x173x40 mm
	1	1	0	1	0		
	2	0	1	0	1		

Video and audio door entry systems: outdoor stations



Outdoor stations for Pixel, Pixel Heavy and Pixel Up cover plates

Audio/Video and audio electronic units



41005
Audio/video unit with wide-angle and teleloop

41002
Audio unit with wide-angle and video input



41000
Audio unit

Technical characteristics:	41005	41002	41000
Camera	CCD 1/4" with output PAL/CVBS		
Resolution	512 TVL		
Viewing angles (horizontal/vertical)	104°/83°		
Minimum lighting	0.1 lux		
Power supply	From BUS 28 VDC rated 21 VDC min	From BUS 28 VDC rated 21 VDC min	From BUS 28 VDC rated 21 VDC min
Absorption:			
in standby	40 mA	40 mA	25 mA
in communication	200 mA	130 mA	120 mA
in communication and lock activation	250 mA	180 mA	180 mA
Max residual absorption with additional power supply unit 6923	50 mA	50 mA	
Absorption for additional module power supply	130 mA max	130 mA max	130 mA max
Max modules 41010	8	8	5
Video signal output	16 dBm at 100 Ohm		
Operating temperature	-25 °C ~ +55 °C		
Ambient class	A2		

The maximum current delivered to the additional electronic modules is 500 mA at 5 VDC.

Additional electronic modules



41010
10 buttons Unit with name panel backlit



41016
Fingerprint reader

41017
Transponder reader



41018
3,5" display

41019
Alphanumeric keypad

Additional electronic module absorption:						
	41010	41015	41016	41017	41018	41019
Type of module	Push buttons	Name plates/ address number	Digital fingerprint reader	Transponder reader	3.5" display	Alphanumeric keyboard
Absorption at 5 VDC	60 mA	60 mA	260 mA	250 mA	220 mA	90 mA

Video and audio door entry systems: outdoor stations



Outdoor stations for Pixel, Pixel Heavy and Pixel Up cover plates

Audio/Video and audio entrance panels



40405
Pixel Up audio/video entrance panel, stainless steel

40404
Pixel Up audio/video entrance panel with 4x4 hole for reader, stainless steel



40425
Pixel Up audio entrance panel, stainless steel

40424
Pixel Up audio entrance panel with 4x4 hole for reader, stainless steel

Technical characteristics:	40405/40404	40425/40424
Camera	CCD 1/4" with output PAL/CVBS	
Resolution	512 TVL	
Viewing angles (horizontal/vertical)	104°/83°	
Minimum lighting	0.1 lux	
Power supply	From BUS 28 VDC rated 21 VDC min	From BUS 28 VDC rated 21 VDC min
Absorption:		
in standby	120 mA	120 mA
in communication	280 mA	280 mA
in communication and lock activation	330 mA	330 mA
Max residual absorption with additional power supply unit 6923	50 mA	50 mA
Absorption for additional module power supply	50 mA max	50 mA max
Video signal output	16 dBm at 100 Ohm	
Operating temperature	-25 °C ~ +55 °C	-25° C ~ +55° C
Ambient class	A2	
Indoor/outdoor use	Outdoor	
IP protection degree	IP54	
IK protection degree	IK08	
Dimensions (W x H x D)	145 x 460 x 63 mm (thickness of cover plate flush with wall 3 mm)	145 x 460 x 63 mm (thickness of cover plate flush with wall 3 mm)

Outdoor stations for 1300, Steely and Patavium cover plates

Audio/Video and audio electronic units with push button call



13F5
13F5.B
Audio/video unit with 8-button. Backlighting: green LED (13F5) or white LED (13F5.B)

13F3
13F3.B
Audio unit with 8-button. Backlighting: green LED (13F3) or white LED (13F3.B)

Technical characteristics:	13F5, 13F5.B	13F3, 13F3.B
Camera	CCD 1/4" with output PAL/CVBS	
Resolution	500 TVL	
Viewing angles (horizontal/vertical)	84°/69°	
Minimum lighting	1.0 lux	
Power supply	From BUS min 24 VDC	From BUS min 24 VDC
Absorption:		
in standby	60 mA	60 mA
in communication	260 mA	260 mA
in communication and lock activation	410 mA	410 mA
Max residual absorption with additional power supply unit 6923	50 mA	50 mA
Absorption for additional module power supply	40 mA	40 mA
Video signal output	16 dBm at 100 Ohm	
Operating temperature	-25 °C ~ +55 °C	
Ambient class	A2	

Outdoor stations for Pixel, Pixel Heavy and Pixel Up cover plates

Audio/Video and audio electronic units with alphanumeric call



13F7
13F7.B
Audio/video unit with stainless steel keypad. Backlighting: green LED (13F7) or white LED (13F7.B)

13A7.B
Audio/video unit with stainless steel keypad. White LED backlighting

13A7.B.43
Audio/video unit with golden finish stainless steel keypad. White LED backlighting



13F4
13F4.B
Audio unit with stainless steel keypad. Backlighting: green LED (13F4) or white LED (13F4.B)

13A4.B
Audio unit with stainless steel keypad. White LED backlighting

13A4.B.43
Audio unit with golden finish stainless steel keypad. White LED backlighting

Technical characteristics:		13F7, 13F7.B, 13A7.B, 13A7.B.43	13F4, 13F4.B, 13A4.B, 13A4.B.43
Camera		CCD 1/4" with output PAL/CVBS	
Resolution		500 TVL	
Viewing angles (horizontal/vertical)		84°/69°	
Minimum lighting		1.0 lux	
Power supply		From BUS min 24 VDC	From BUS min 24 VDC
Absorption:			
in standby		120 mA	120 mA
in communication		300 mA	300 mA
in communication and lock activation		450 mA	450 mA
Max residual absorption with additional power supply unit 6923		50 mA	50 mA
Absorption for additional module power supply		20 mA	20 mA
Video signal output		16 dBm at 100 Ohm	
Operating temperature		-25 °C ~ +55 °C	-25 °C ~ +55 °C
Ambient class		A2	

Additional electronic modules



12TS
12TS.B
Unit with 4-button. Backlighting: green LED (12TS) or white LED (12TS.B)

12TD
Unit with 4-button. Green LED backlighting

Additional electronic module absorption:			
	12TS	12TS.B	12TD
Type of module	4 push buttons (Green LED backlighting)	4 push buttons (White LED backlighting)	8 push buttons (Green LED backlighting)
Absorption at 12 VDC	7 mA	7 mA	7 mA
Maximum 5 additional modules			

Outdoor stations for 1300 and 1300/E series cover plates for one-family/two-family kits

Audio/Video and audio electronic units



13F2.1
Audio/video unit for 13K1 plate

13F1
Audio unit for 13K1 plate

Technical characteristics:		13F2.1	13F1
Camera		CMOS 1/4" with PAL/CVBS output	
Resolution		500 TV lines	
Viewing angles (horizontal/vertical)		100°/82°	
Minimum lighting		1.0 lux	
Power supply		From BUS min 24 VDC	From BUS min 24 VDC
Absorption:			
in standby		40 mA	40 mA
in communication		250 mA	250 mA
in communication and lock activation		350 mA	350 mA
Max residual absorption with additional power supply unit 6923		50 mA	50 mA
Video signal output		16 dBm at 100 Ohm	
Operating temperature		-25 °C ~ +55 °C	-25 °C ~ +55 °C
Ambient class		A2	



40135
Audio/video unit for 40151 and 40152 plate

40131
Audio unit for 40141 and 40142 plate

Technical characteristics:		40135	40131
Camera		CMOS 1/4" with PAL/CVBS output	
Resolution		380 TV lines	
Viewing angles (horizontal/vertical)		100°/82°	
Minimum lighting		1.0 lux	
Power supply		From BUS min 24 VDC	From BUS min 24 VDC
Absorption:			
in standby		40 mA	25 mA
in communication		200 mA	80 mA
in communication and lock activation		250 mA	140 mA
Video signal output		16 dBm at 100 Ohm	
Operating temperature		-25 °C ~ +55 °C	-25 °C ~ +55 °C
Ambient class		A2	

Outdoor stations for 8000 series cover plates and letterbox entrance panels

Audio and video electronic units



6931
Audio unit

6932
Audio unit for kit

Technical characteristics:		6931	6932
Power supply		From BUS min 24 VDC	From BUS min 24 VDC
Absorption:			
in standby		60 mA	60 mA
in communication		265 mA	265 mA
in communication and lock activation		415 mA	415 mA
Operating temperature		-25 °C ~ +55 °C	-25 °C ~ +55 °C
Ambient class		A2	



657C
Colour video unit

Technical characteristics:		657C
Camera		CCD 1/4" with PAL/CVBS output
Resolution		380 TV lines
Viewing angles (horizontal/vertical)		72°/58°
Minimum lighting		1 lux
Power supply		From BUS rated 28 VDC
Absorption:		
in standby		20 mA
in communication		180 mA
Max residual absorption with additional power supply unit 6923		50 mA
Video signal output		10 dBm at 100 Ohm
Operating temperature		-5 °C ~ +50 °C
Ambient class		A2

INDOOR STATIONS.

Communicating is simple, effective and safe.

The **indoor video door entry system** stations - hands-free or with a handset - stand alone or integrated in the By-me Plus home automation system, feature exquisite, modern, prized finishes and are thinner than traditional devices.



- **Tab 7S Up and 5S Up video entryphones** - inspired by the light weight and simple silhouettes that distinguish all the models in the Tab series, affording revolutionary functions teamed with stylish design. In addition to traditional video door entry functions, **Tab 7S Up and 5S Up - thanks to the integrated Wi-Fi** and to the Video Door app - allow **call repetition on your smartphone**, ensuring total control even when you are out and about. In short, this is a product with its sights set firmly on the future.



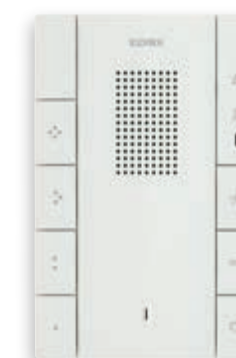
- **Tab Free 4.3 video entryphones** - with 4.3" display are designed to communicate with the outside in complete freedom while keeping your hands free and providing a generous view of the world outside your home. A **compact and stylish video entryphone**, with gentle silhouettes that soften the corners and extend across the entire smooth, glass-like surface.



- **Tab 4.3 video entryphones** - with 4.3" display and a thin profile just 2.6 cm thick, for surface mounting, and up to 2 cm for the Tab video entryphone, thanks to a special mounting frame for semi-flush mounting.



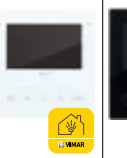
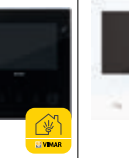






- **Tab jr. ENTRYPHONES** - for those who don't need the video function. It is an audio entryphone device only offering the same technology, quality, design and standard functions of the Tab 4,3 "bigger" version.



- **Voxie entryphones** - simple shapes, regular silhouettes, ergonomic controls and with an elegant matt white finish. For those looking for a striking yet simple appearance and full functionality. Available in the versions with a handset with 2 and with 6 push buttons and in the hands-free version with 7 push buttons and teleloop function.





Summary table of video door entry indoor station functionality

		Tab 7S Up		Tab 5S Up		Tab 7	Tab Free 4.3		Tab 4.3	
Series										
Code		40517	40517.04	40515	40515.04	40505	7559	7558	7549	7548
Type		Hands-free		Hands-free		Hands-free	Hands-free	Hands-free	Handset	Handset
Display		7" Touch 1024x600		5" 800x480		7" 800x480	4.3" 480x272	4.3" 480x272	4.3" 480x272	4.3" 480x272
Button type		Capacitive		Capacitive		Capacitive	Capacitive	Capacitive	Capacitive	Capacitive
User interface		GUI		GUI		GUI	OSD	OSD	-	-
Call forwarding to smartphone or tablet		✓		✓		-	-	-	-	-
Lock release		✓		✓		✓	✓	✓	✓	✓
Auxiliary controls		✓		✓		✓	✓	✓	✓	✓
Self-start/cyclic operation		✓		✓		✓	✓	✓	✓	✓
Intercom		✓		✓		✓	✓	✓	✓	✓
Landing call		✓		✓		✓	✓	✓	✓	✓
Switchboard call		✓		✓		✓	✓	✓	✓	✓
Alert function		✓		✓		✓	✓	✓	✓	✓
Teleloop for hearing aids		✓		✓		✓	✓	✓	✓	✓
Professional firm function		✓		✓		-	✓	-	-	-
Voice mail		✓		✓		-	-	-	-	-
Colour		White	Black	White	Black	White	White	White	White	White
Installation	Flush mounting	Only for semi-flush mounting box 40591		Only for semi-flush mounting box 40590		-	-	-	Only for flush mounting box 4+4, V71318 or 6149	Only for flush mounting box 4+4, V71318 or 6149
	Surface mounting	With Vimar flush mounting box V71701 or V71303 or V71703 or 71318 or V71718		With Vimar flush mounting box V71701 or V71303 or V71703 or 71318 or V71718 or 6149		With Vimar flush mounting box V71701 or V71303 or V71703 or 71318 or V71718	✓	✓	✓	✓
	Table mounting	With base 40596		With base 40595		With base 40195	With base 753A+753B	With base 753A+753B	With base 753A+753B	With base 753A+753B



View app available from the Vimar website or Apple Store and Google Play

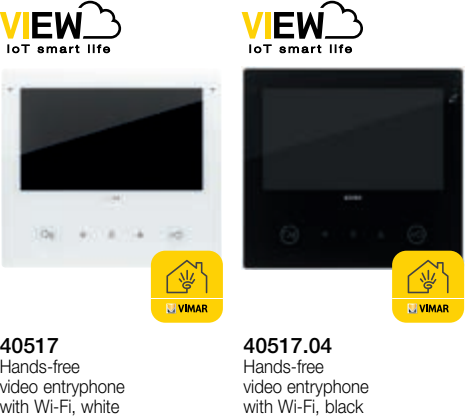
Summary table of door entry indoor station functionality

Series		Tab jr.		Voxie		
						
Code		7509	7509/D	40540	40542	40547
Type		Handset	Handset	Handset	Handset	Hands-free
Button type		Capacitive	Capacitive	Mechanical	Mechanical	Mechanical
Lock release		✓	✓	✓	✓	✓
Auxiliary controls		✓	✓	✓	✓	✓
Self-start/cyclic operation		✓	✓	-	-	-
Intercom		✓	✓	-	✓	✓
General intercom call		-	-	-	✓	✓
Landing call		✓	✓	✓	✓	✓
Switchboard call		✓	✓	✓	✓	✓
Alert function		✓	✓	✓	✓	✓
Teleloop for hearing aids		-	✓	-	-	✓
Professional firm function		-	-	✓	✓	✓
“Paging” function		-	-	-	✓	✓
Colour		White	White	White	White	White
Installation	Surface mounting	✓	✓	✓	✓	✓
	Table mounting	With base 753A+753B	With base 753A+753B	With base 40598	With base 40598	With base 40598

INDOOR STATIONS

Hands-free video indoor stations

Tab 7S Up - Video entryphone



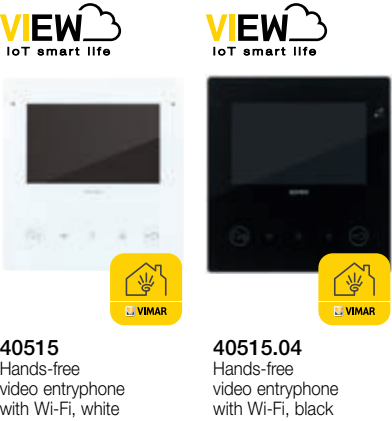
Technical characteristics:	40517 and 40517.04
Display	7" 16:9 LCD Touch Screen, 1024 x 600 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	5 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	58 mA
maximum current	480 mA
Max residual absorption with additional power supply unit 6923	50 mA
Wi-Fi:	
frequency bands	802.11 b, g, n, 2,4 GHz
frequency range and RF transmission power	2412 - 2472 MHz, < 100 mW (20 dBm)
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	189 x 171 x 24.4 mm (semi-flush thickness 13.1 mm)
Mounting: from semi-flush mounting on masonry walls or hollow walls with Vimar flush mounting box 40591, to surface mounting in round flush mounting box ø 60 mm (Vimar V71701), 3 modules (Vimar V71303, V71703) horizontal and vertical, 4+4 modules (Vimar V71318, V71718 or Elvox 6149) and square British standard. Table mounting with Vimar accessories 40596	

Tab 7 - Video entryphone



Technical characteristics:	40505
Display	7" 16:9 LCD, 800 x 480 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	7 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	25 mA
maximum current	350 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	165.8 x 184 x 25 mm
Mounting:surface mounting in round flush mounting box ø 60 mm (Vimar V71701), 3 modules (Vimar V71303, V71703) horizontal and vertical, 4+4 modules (Vimar V71318, V71718) and square British standard. Table mounting with Vimar accessories 40195, 753B	

Tab 5S Up - Video entryphone



Technical characteristics:	40515 and 40515.04
Display	5" 16:9 LCD Touch Screen, 800 x 480 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	5 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	55 mA
maximum current	420 mA
Max residual absorption with additional power supply unit 6923	50 mA
Wi-Fi:	
frequency bands	802.11 b, g, n, 2,4 GHz
frequency range and RF transmission power	2412 - 2472 MHz, < 100 mW (20 dBm)
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	148 x 158 x 24.4 mm (semi-flush thickness 13.1 mm)
Mounting: from semi-flush mounting on masonry walls or hollow walls with Vimar flush mounting box 40590, to surface mounting in round flush mounting box ø 60 mm (Vimar V71701), 3 modules (Vimar V71303, V71703) horizontal and vertical, 4+4 modules (Vimar V71318, V71718 or Elvox 6149) and square British standard. Table mounting with Vimar accessories 40595	

Hands-free video indoor stations

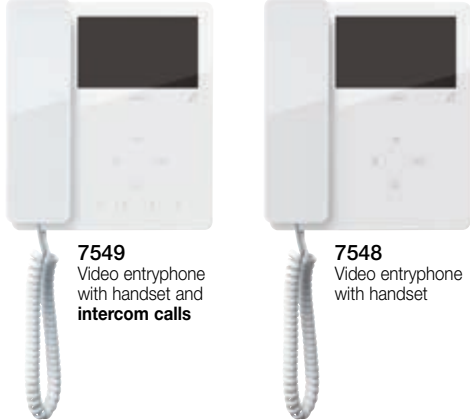
Tab Free 4.3 - Video entryphones



Technical characteristics:	7558 and 7559
Display	4.3" 16:9 LCD, 480 x 272 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	7 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	17 mA
maximum current	280 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	155 x 145 x 23.5 mm
Mounting:surface mounting in round flush mounting box ø 60 mm (Vimar V71701), 3 modules (Vimar V71303, V71703) or vertical and square British standard. Table mounting with Vimar accessories 753A, 753B	

Video indoor stations with handset

Tab 4.3 - Video entryphones



Technical characteristics:	7549 and 7548
Display	4.3" 16:9 LCD, 480 x 272 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	12 (7549) / 8 (7548) capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	18 mA
maximum current	180 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	160 x 180 x 45.4 mm
Mounting: surface with wall plugs or in round flush mounting box ø 60 mm (Vimar V71701) or 3 modules (Vimar V71303, V71703). Table mounting with Vimar accessories 753A, 753B	



View app available from the Vimar website or Apple Store and Google Play



All video indoor stations are fitted with an integrated induction coil for wearers of hearing aids fitted with T-Coil to be able to hear.

Hands-free audio indoor stations

Voxie - Entryphones



40547
Hands-free entryphone
with 7-button

Technical characteristics:	40547
Keyboard	7 mechanical buttons
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	10 mA
peak current with ringtone in operation	140 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies for entrance panel, landing and intercom calls.
Dimensions	95 x 146 x 19.8 mm
Mounting:surface mounting in round flush mounting box ø 60 mm (Vimar V71701), 3 modules (Vimar V71303, V71703) vertical, 4+4 modules (Vimar V71318, V71718) and square British standard. Table mounting with Vimar accessories 40598	

Audio indoor stations with handset

Tab jr. - Entryphones



7509
7509/D
Entryphone with
handset

Technical characteristics:	7509 and 7509/D
Keyboard	8 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	7 mA
peak current with ringtone in operation	100 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	105 x 179.3 x 40 mm
Mounting: surface with wall plugs or in 3-module flush mounting box (Vimar V71303, V71703) or 60 or 70 mm round mounting box. Table mounting with the desktop base accessory 753A and the interconnecting stud 753B (sold separately)	

Voxie - Entryphones



40540
40540.D
Entryphone
with handset
and 2-button



40542
Entryphone
with handset
and 6-button

Technical characteristics:	40540, 40540.D and 40542
Keyboard	2 (40540 and 40540.D) / 6 (40542) mechanical buttons
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	10 mA
peak current with ringtone in operation	100 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies for entrance panel, landing and intercom calls.
Dimensions	95 x 200 x 28.5 mm
Mounting:surface mounting in round flush mounting box ø 60 mm (Vimar V71701), 3 modules (Vimar V71303, V71703) vertical, 4+4 modules (Vimar V71318, V71718) and square British standard. Table mounting with Vimar accessories 40598	

Versions entryphones 40540.D, 40547 and 7509/D are fitted with an integrated induction coil for wearers of hearing aids fitted with T-Coil to be able to hear.

Porter switchboards

Switchboards



40510
Porter switchboard with
7" display

Technical characteristics:	40510
Display	7" LCD 16:9, 800x480 pixel resolution
Keyboard	Alphanumeric keyboard
Power supply	28 VDC - via power supply unit 6923 (not supplied as standard)
Absorption:	
in standby	86 mA
maximum current	300 mA
Max residual absorption with additional power supply unit 6923	50 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	242 x 213 x 221 mm

System components

System power supply units



40110
Power supply unit for
video door entry system

Technical characteristics:	40110
Power supply	110 ~ 240 VAC
Maximum consumption	1.2 A 100 VAC ~ 0.6 A 240 VAC
Dissipated power	15 W
BUS output voltage	28 VDC rated (SELV - EN60950-1)
Max. current output	1.6 A (1 A continuous + 0.6 A with cycle 30 s ON - 150 s OFF)
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	108 x 106 x 63 mm (6 modules DIN 60715 TH35)



40100
Supply unit for
audio kit

Technical characteristics:	40100
Power supply	100 ~ 240 VAC
Maximum consumption	0.5 A 110 VAC ~ 0.3 A 240 VAC
Dissipated power	6 W
BUS output voltage	28 VDC rated (SELV - EN60950-1)
Max. current output	0.66 A (0.15 A continuous + 0.51 A with cycle 60 s ON - 150 s OFF)
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	108 x 106 x 63 mm (6 modules DIN 60715 TH35)

System components

Additional power supply units



6923
6923/117
6923/120
6923/240
Supply unit with
28 VDC output

Technical characteristics: 6923, 6923/120, 6923/240	
Power supply	230 VAC 50/60Hz - 6923
	120 VAC 50/60Hz - 6923/120
	240 VAC 50/60Hz - 6923/240
Maximum consumption	107 mA (6923, 6923/240), 209 mA (6923/120)
Dissipated power	6 W
Output voltage	28 VDC rated (SELV - EN60950-1)
Max. current output	0.5 A (0.15 A continuous + 0.35 A with cycle 30 s ON - 180 s OFF)
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	119.40 x 72 x 59 mm (4 modules DIN 60715 TH35)



6582.1
Adjustable supply unit

Technical characteristics: 6582.1	
Power supply	230 VAC 50/60Hz
Maximum consumption	120 mA
Dissipated power	35 VA
Output voltage	10.5 VDC, 13.5 VDC and 18 VDC outputs
Max. current output	0.8 A with cycle 30s ON - 90s OFF
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	119.40 x 72 x 59 mm (4 modules DIN 60715 TH35)

Passive floor video distributor



691D
1-output
distributor

Technical characteristics: 691D	
Video gain in pass-through output	-0.5 dB
Tap-off video gain	-20 dB
Tap-off outputs	1
Max number of distributors in cascade per riser	20 with Elvox cable type 732x.../15 with cable CAT5
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	36.8 x 32.4 x 13.8 mm

Maximum output current: 700 mA (for each output supports two monitors connected in in-out which are turned on together)



692D
4-output
distributor

Technical characteristics: 692D	
Power supply	From BUS rated voltage 28 VDC
Video gain in pass-through output	-0.5 dB
Tap-off video gain	-20 dB
Tap-off outputs	4
Max number of distributors in cascade per riser	15 with Elvox cable type 732x.../10 with cable CAT5
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	60 x 82 x 21 mm

Maximum current for each output: 700 mA (for each output supports two monitors connected in in-out which are turned on together)

System components

Relay modules



69RH
Programmable
device with 2
relays



69RH/L
Programmable device
with 2 relays for calls
from the outdoor station

Technical characteristics: 69RH, 69RH/L	
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	15 mA
maximum current	80 mA
Type of Contacts	2 NO
Contacts rating	230 VAC 3 A
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	70 x 92 x 50 mm (4 modules DIN 60715 TH35)



69PH
Programmable device with
2 relays. It can be used as
a monostable rely or call
repeater

Technical characteristics: 69PH	
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	15 mA
maximum current	40 mA
Type of Contacts	2 NO/NC
Contacts rating	230 VAC 3 A / AC1
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	70 x 92 x 50 mm (4 modules DIN 60715 TH35)



0170/101
Relay with power supply
12 VDC or VAC or
Sound System call

Technical characteristics: 0170/101	
Power supply	12 VDC / VAC
Absorption	80 mA (terminals 1/2-C)
Type of Contacts	1 NO/NC change-over
Contacts rating	230 VAC 3 A / AC1
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	70 x 92 x 50 mm (4 modules DIN 60715 TH35)

Relay for call repetition

Separators



692S.1
Separator

Technical characteristics: 692S.1	
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	15 mA (main BUS) and 25 mA (secondary BUS)
maximum current	40 mA (main BUS) and 50 mA (secondary BUS)
Video gain in pass-through output	-0.2 dB
Tap-off video gain	0 dB
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	72 x 110 x 60 mm (4 modules DIN 60715 TH35)

System components

Riser splitters for 4 lines



69DV
69DV/5
Riser splitter for
4 riser lines

Technical characteristics:	69DV and 69DV/5
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby in the absence of video signal	15 mA
maximum current	50 mA
Max output current	800 mA
Video gain in pass-through output	-0.2 dB
Tap-off video gain	0 dB
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	119.40 x 72 x 59 mm (4 modules DIN 60715 TH35)
69DV: riser splitter for twisted pair 69DV/5: riser splitter with CAT5 cable	

Concentrator for 4 outdoor stations and 2 output risers



69MX
69MX/5
Concentrator for 4 outdoor
stations in parallel

Technical characteristics:	69MX and 69MX/5
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby in the absence of video signal	25 mA
maximum current	50 mA
Max current between OUT1 and IN1 or IN2 or IN3 or IN4	800 mA
Max current between OUT1 and OUT2	1500 mA
Minimum level of input signal	-10 dBm
Output level	+16 dBm
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	119.40 x 72 x 59 mm (4 modules DIN 60715 TH35)
69MX: concentrator for twisted pair; 69MX/5: Concentrator with CAT5 cable	

Expansion interface for system with 200 indoor stations



69RS.1
Expansion interface for
200 indoor stations

Technical characteristics:	69RS.1
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	15 mA (main BUS) and 25 mA (secondary BUS)
maximum current	40 mA (main BUS) and 50 mA (secondary BUS)
Video gain in output	-0.2 dB
Tap-off video gain	0 dB
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	72 x 110 x 60 mm (4 modules DIN 60715 TH35)

IoT gateway for integration of Due Fili Plus video door entry system



01415
IoT gateway for integration
of Due Fili Plus video door
entry system

Technical characteristics:	01415
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	120 mA
maximum current	300 mA
Max residual absorption with additional power supply unit 6923	50 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	109.8 x 107.7 x 59.5 mm (6 modules DIN 60715 TH35)
Installation always requires the use of the additional power supply unit 6923, with the exception of a system comprising solely: 1 outdoor station, 1 system power supply unit, at most 2 art. 01415	

System components

Video signal riser amplifier



692M
692M/5
Video signal riser
amplifier

Technical characteristics:	692M and 692M/5
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby in the absence of video signal	24 mA
maximum current	48 mA
Max output current	1400 mA
Gain	+6 dB “-“/ +14 dB “+”
Max IN level with setting “-“	9 dBm
Max IN level with setting “+”	1 dBm
Protection degree:	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	60 x 82 x 21 mm
692M: video signal riser amplifier for twisted pair 692M/5: video signal riser amplifier with CAT5 cable	

Other devices



6120
Interface for
2 buttons

Technical characteristics:	6120
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby in the absence of video signal	2 mA
maximum current	10 mA
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	48 x 70 x 19 mm



693T
CCTV-type camera
interface

Technical characteristics:	693T
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby	20 mA
maximum current	100 mA
Protection degree	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)
Dimensions	70 x 115 x 50 mm (4 modules DIN 60715 TH35)
Interface for connecting cameras to dedicated audio outdoor stations	



69AM/T
Video selector for
4 cameras

Technical characteristics:	69AM/T
Power supply	From BUS rated voltage 28 VDC
Absorption:	
in standby in the absence of video signal	25 mA
maximum current	50 mA
Max residual absorption with additional power supply unit 6923	50 mA
Video signal output	10 dBm at 100 Ohm
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Dimensions	139 x 114.5 x 51 mm (8 modules DIN 60715 TH35)



69MD
Interface for converting a
Due Fili digital signal into a
standard audio/video signal

Technical characteristics:	69MD
Power supply	18 VDC from power supply 6582.1
Absorption:	
from 18 VDC	100 mA intermittent
in standby	10 mA from BUS
maximum current	60 mA from BUS
Grado di protezione	IP30
Operating temperature	-0 °C ~ +40 °C (indoor use)
Dimensions	70 x 115 x 50 mm (4 modules DIN 60715 TH35)
Interface for conversion from Due Fili Plus signal in PAL/CVBS standard video signal and audio signal	

System components

Other devices



692E
Overvoltage protection device

Technical characteristics:	692E
Operating voltage	40 V
Protection degree	IP30
Operating temperature	+5 °C ~ +40 °C (indoor use)
Dimensions	55.8 x 57.5 x 18.2 mm



692G
Ground divider

Technical characteristics:	692G
Power supply	12 VDC
Max. absorbed current	100 mA
Protection degree	IP30
Operating temperature	+5 °C ~ +40 °C (indoor use)
Dimensions:	60 x 55 x 17.5 mm

Galvanic insulation device for the video signal

Electronic ringtones



860A
Electronic ringtone with 2 inputs, 230 VAC

Technical characteristics:	860A
Power supply	230 VAC
Max. absorbed current	230 VAC 4.5 W intermittent
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	+5 °C ~ +40 °C (indoor use)
Dimensions	150 x 150 x 60 mm



860B
Electronic ringtone with 2 inputs, 15 VAC

Technical characteristics:	860B
Power supply	15 VAC
Max. absorbed current	15 VAC 4 W intermittent
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	+5 °C ~ +40 °C (indoor use)
Dimensions	150 x 150 x 60 mm



860C
Electronic ringtone with 3 inputs, 12-15 VAC/VDC

Technical characteristics:	860C
Power supply	12-15 VAC, 12-15 VDC
Max. absorbed current	12-15 VAC or 10-15 VDC 4.5 W intermittent
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	+5 °C ~ +40 °C (indoor use)
Dimensions	150 x 150 x 60 mm

Electronic ringtone with 3 inputs

System components

Programming devices



692I/U

692I/U PC USB interface for programming Due Fili Plus systems

PC interface with USB connector and 69CD software for basic and advanced programming of Due Fili devices, for apartments with more than 4 video entryphones or entryphones in a single apartment



692I

692I PC RS232 interface for programming Due Fili Plus systems

PC interface with RS232 connector and 69CD software for basic and advanced programming of Due Fili devices, for apartments with more than 4 video entryphones or entryphones in a single apartment



R963

R963 Wiring set

Complete wiring set for programmable time switch 950C and interface 692I/U

Cables



732H.E.100
732H.E.500

732H.E.100 and 732H.E.500

Due Fili Plus cable for internal laying, 2x1 mm² twisted conductors, with PVC sheath, CPR Eca class, operating temperature -25/+70 °C, not suitable for laying in underground ducting, suitable for installation with category I energy cable (U0 = 400 V), blue.
732H.E.100: 100 m bundle.
732H.E.500: 500 m coil



732I.C.100

732I.C.100

Due Fili Plus cable for internal/external laying, 2x1 mm² twisted conductors, with insulation and LSZH sheath, Cca class - s1b, d1, a1, operating temperature -25/+70 °C, insulation degree 600/1000 V, suitable for laying underground in dry ducting or channels with efficient drainage (max. 24 hrs wet), not suitable for laying directly underground, suitable for installation with category I energy cable (U0 = 400 V), purple - 100 m bundle





732I.E.100
732I.E.500


732H.I.100 and 732H.I.500

Due Fili Plus cable for internal/external laying, 2x1 mm² twisted conductors, with insulation and LSZH sheath, Eca class, operating temperature -25/+70 °C, insulation degree 600/1000 V, suitable for laying underground in dry ducting or channels with efficient drainage (max. 24hrs wet), not suitable for laying directly underground, suitable for installation with category I energy cable (U0 = 400 V), green.
732I.E.100: 100 m bundle.
732I.E.500: 500 m coil

Summary table of video door entry indoor station functionality

		Tab 7S	Tab Free 3.5
Series			
Code		40507	7539
Type		Hands-free	Hands-free
Display		7" Touch 800x480	3.5" 320x240
Button type		Capacitive	Capacitive
User interface		GUI	-
Call forwarding to smartphone or tablet		✓	-
Lock release		✓	✓
Auxiliary controls		✓	✓
Self-start/cyclic operation		✓	✓
Intercom		✓	✓
Landing call		✓	✓
Switchboard call		✓	✓
Alert function		✓	✓
Teleloop for hearing aids		✓	✓
Professional firm function		✓	-
Voice mail		✓	-
Colour		White	White
Installation	Flush mounting	-	-
	Surface mounting	With Vimar flush mounting box V71701 or V71303 or V71703 or 71318 or V71718	✓
	Table mounting	With base 40195	With base 753A+753B

Summary table of door entry indoor station functionality

		6900		Petrarca	8870	
Series						
Code		6901	6901/D	6209/P	8879.1	8879.1/D
Type		Hands-free	Hands-free	Handset	Handset	Handset
Button type		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Lock release		✓	✓	✓	✓	✓
Auxiliary controls		✓	✓	✓	✓	✓
Self-start/cyclic operation		✓	✓	-	-	-
Intercom		✓	✓	✓	✓	✓
General intercom call		-	-	-	-	-
Landing call		✓	✓	✓	✓	✓
Switchboard call		✓	✓	✓	✓	✓
Alert function		-	-	✓	✓	✓
Teleloop for hearing aids		-	✓	-	-	✓
Professional firm function		-	-	-	-	-
“Paging” function		-	-	-	-	-
Colour		White	White	White	White	White
Installation	Surface mounting	✓	✓	✓	✓	✓
	Table mounting	-	-	With base 6140	-	-

Hands-free video indoor stations

Tab 7S - Video entryphone



40507
Hands-free video entryphone with Wi-Fi

Technical characteristics:	40507
Display	7" 16:9 LCD Touch Screen, 800 x 480 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	2 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption: in standby	120 mA
peak current with ringtone in operation	400 mA
Max residual absorption with additional power supply unit 6923	50 mA
Wi-Fi:	
frequency bands	802.11 b, g, n, 2,4 GHz
frequency range and RF transmission power	2412 - 2472 MHz, < 100 mW (20 dBm)
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	165.8 x 184 x 25 mm
Mounting: surface mounting in round flush mounting box ø 60 mm (Vimar V71303, V71703) horizontal and vertical, 4+4 modules (Vimar V71318, V71718) and square British standard. Table mounting with Vimar accessories 40195, 753B	

Tab Free 3.5 - Video entryphone



7539
Hands-free video entryphone

Technical characteristics:	7539
Display	3.5" 4:3 LCD, 320 x 240 pixel resolution
Minimum video signal level on the bus for reception	-20 dBm
Keyboard	9 capacitive buttons with backlit symbols
Power supply	From BUS rated voltage 28 VDC
Absorption: in standby	10 mA
maximum current	160 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	131 x 150 x 25.5 mm
Mounting: surface with wall plugs or in round flush mounting box ø 60 mm (Vimar V71701) or 3 modules (Vimar V71303, V71703). Table mounting with Vimar accessories 753A, 753B	

Hands-free audio indoor stations

6900 series - Entryphones



6901
6901/D
Hands-free entryphone

Technical characteristics:	6901 and 6901/D
Keyboard	10 mechanical buttons
Power supply	From BUS rated voltage 28 VDC
Absorption: in standby	10 mA
peak current with ringtone in operation	110 mA (6901) / 130 mA (6901/D)
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (10)
Dimensions	102 x 142 x 23 mm
Mounting: surface with wall plugs or in round flush mounting box ø 60 mm (Vimar V71001, V71701) or 3 modules (Vimar V71303, V71703)	

View app available from the Vimar website or Apple Store and Google Play



Video indoor stations and versions entryphones 6209/D, 6901/D and 8879.1/D are fitted with an integrated induction coil for wearers of hearing aids fitted with T-Coil to be able to hear.

Audio indoor stations with handset

Petrarca - Entryphones



6209/P
6209/D
Entryphone with handset and 5-button (6209/P) or 3-button (6209/D)

Technical characteristics:	6209/P and 6209/D
Keyboard	5 (6209/P) / 3 (6209/D) mechanical buttons expandable up to 9
Power supply	From BUS rated voltage 28 VDC
Absorption: in standby	10 mA
peak current with ringtone in operation	65 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (3)
Dimensions	85 x 220 x 65 mm
Mounting: surface with wall plugs or in 3-module flush mounting box (Vimar V71303, V71703) vertical	

8870 series - Entryphones



8879.1
8879.1/D
Entryphone with handset

Technical characteristics:	8879.1 and 8879.1/D
Keyboard	2 mechanical buttons
Power supply	From BUS rated voltage 28 VDC
Absorption: in standby	10 mA
peak current with ringtone in operation	160 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	Electronic with different melodies (3)
Dimensions	75 x 220 x 60.5 mm
Mounting: surface with wall plugs or in 3-module flush mounting box (Vimar V71303, V71703) vertical	

Porter switchboards

Switchboards



945F
Porter switchboard

Technical characteristics:	945F
Display	Alphanumeric (2 rows x 40 characters)
Keyboard	Alphanumeric keyboard
Power supply	28 VDC - via power supply unit 6923 (not supplied as standard)
Absorption: in standby	25 mA
maximum current	150 mA
Max residual absorption with additional power supply unit 6923	50 mA
Ambient class	A1 (indoor use)
Protection degree	IP30
Operating temperature	-5 °C ~ +40 °C (indoor use)
Operating environment humidity	10 ~ 80% (non-condensing)
Ringtone	2 fixed, different for indoor/outdoor
Dimensions	308 x 120 x 239 mm

System components

System power supply units

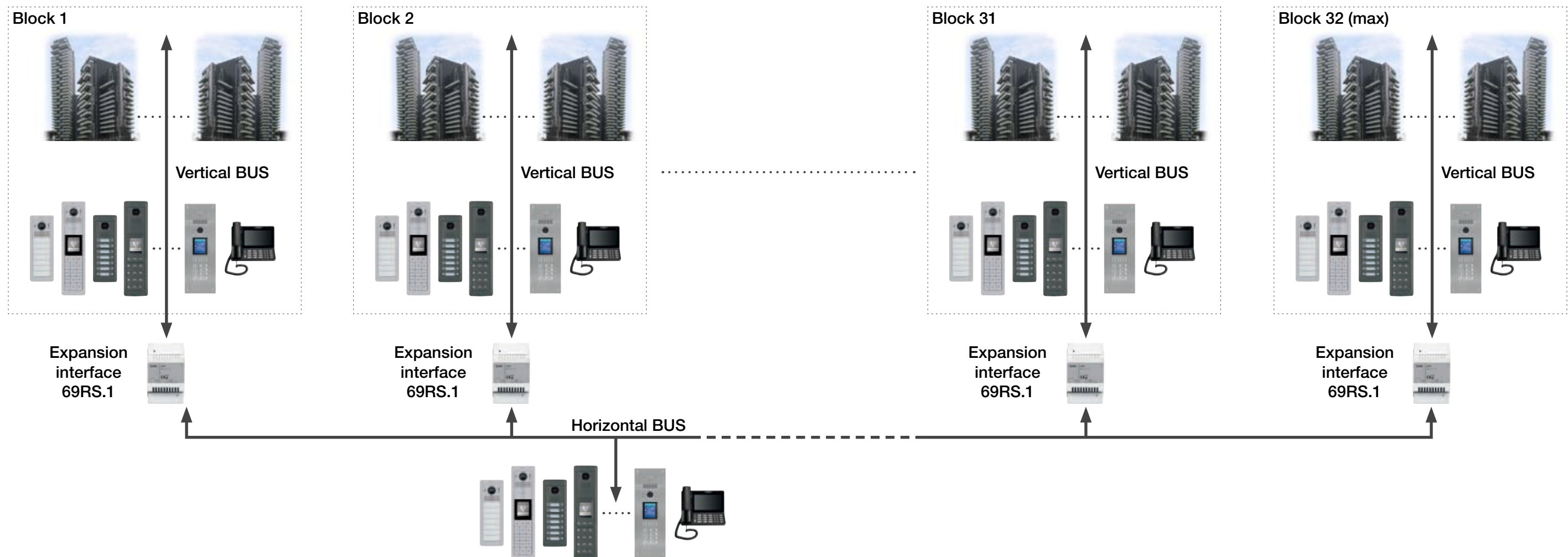


6922.1
Power supply unit for video door entry system

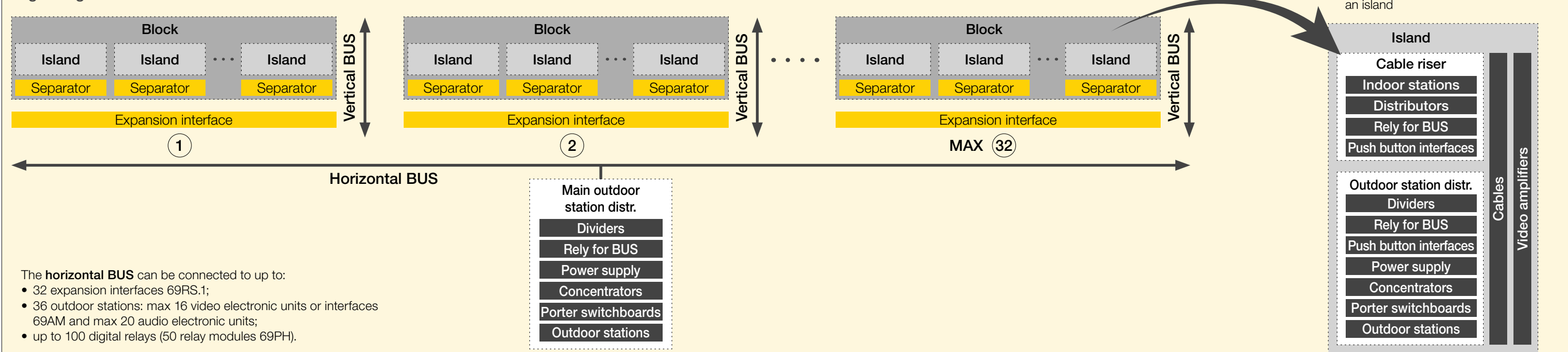


40101
Supply unit for audio entry system

Technical characteristics:	6922.1	40101
Power supply	110 ~ 240 VAC	110 ~ 240 VAC
Maximum consumption	1 A 110 VAC ~ 0.6 A 240 VAC	0.7 A 110 VAC ~ 0.4 A 240 VAC
Dissipated power	15 W	12 W
BUS output voltage	28 VDC rated (SELV - EN60950-1)	28 VDC rated (SELV - EN60950-1)
Max. current output	1.6 A (1 A continuous + 0.6 A with cycle 30 s ON - 180 s OFF)	1 A (0.6 A continuous + 0.4 A with cycle 60 s ON - 120 s OFF)
Protection degree	IP30	IP30
Operating temperature	-5 °C ~ +35 °C (indoor use)	-5 °C ~ +35 °C (indoor use)
Dimensions	140 x 115 x 65 mm (8 modules DIN 60715 TH35)	108 x 97 x 63 mm (6 modules DIN 60715 TH35)

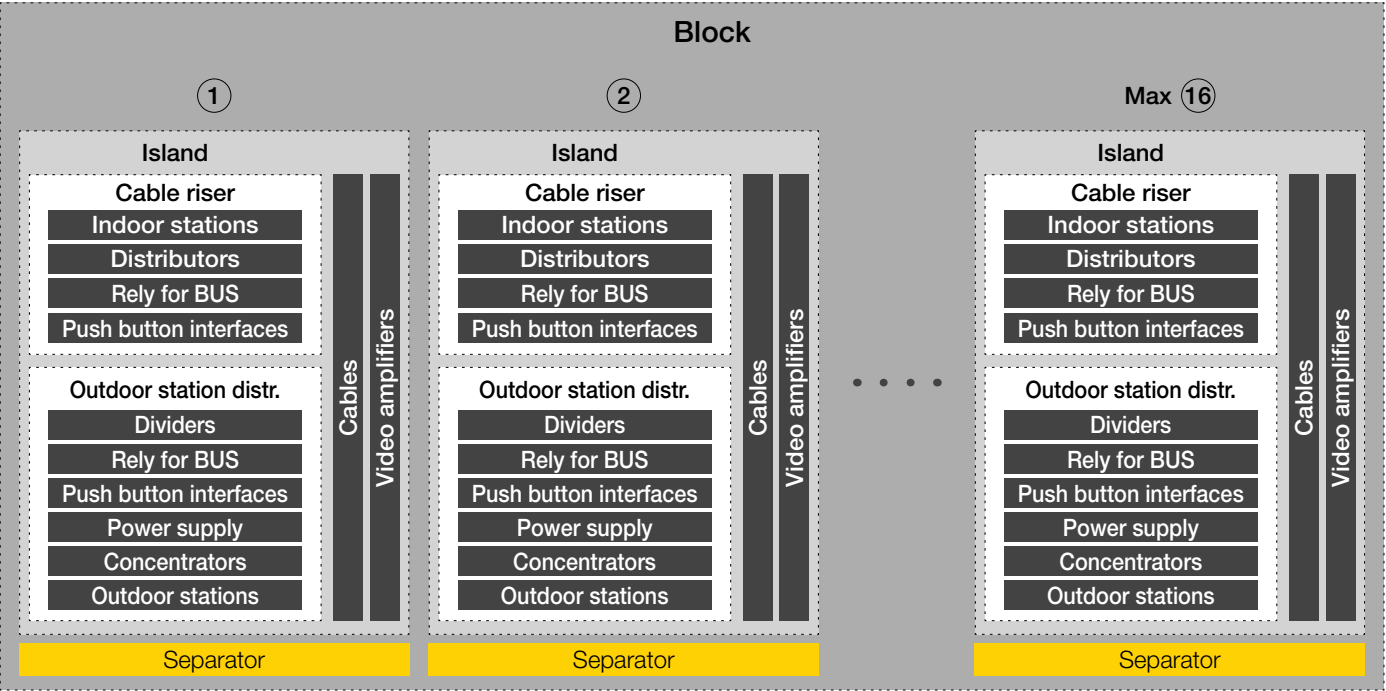


Logic diagram



Logical system sizing

A system can have a maximum of **32 blocks**; each block can be logically represented as follows:



Consequently, the maximum system capacity is as follows:

Capacity for each block	
Indoor stations	200

Capacity for each island	
Indoor stations	40
Outdoor stations (electronic units and interfaces 69AM)	14
Switchboards	4
BUS controllable relays (modules 69PH)	16 (8)
Push buttons interfaced on BUS (modules 6120)	16 (8)

x32

Overall system capacity	
Max total cable run of the branch in conversation	2,000 m
Max cable length between the two furthest devices, shunting not included	1,200 m
Main outdoor stations	36

Indoor stations	6,400
Outdoor stations (electronic units and interfaces 69AM)	448
Switchboards	128
BUS controllable relays (modules 69PH)	512 (256)
Push buttons interfaced on BUS (modules 6120)	512 (256)

Separator 692S.1	16*
* 8 connected in "in-out"	

Expansion interfaces 69RS.1	32*
* 8 connected in "in-out"	

Cables to use and maximum distances achievable

Recommended cables for any type of **outdoor/indoor** installation.
Use the same type of cable in the same installation. Do not use an Elvox cable with a UTP cable.

Elvox cables for indoor use



732H.E.100 (Eca)
732H.E.500 (Eca)

Elvox cables for outdoor/indoor use (with LSZH sheath)



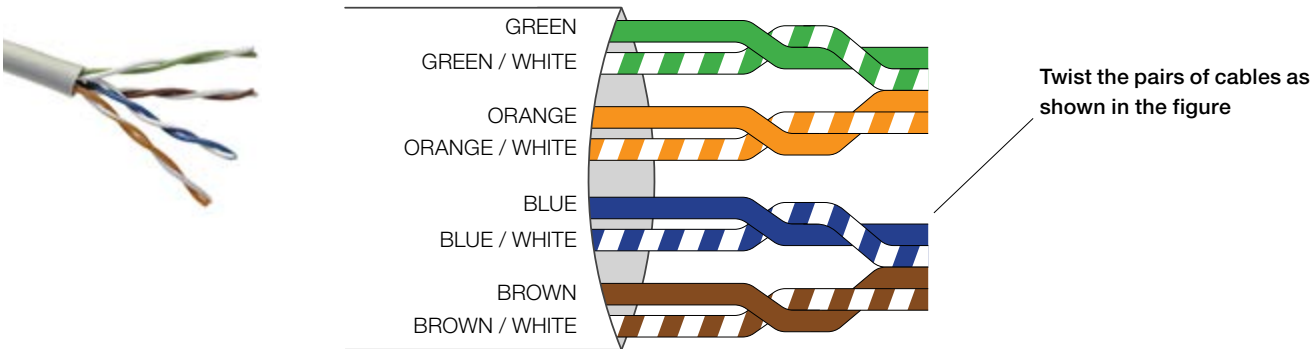
732I.E.100 (Eca)
732I.E.500 (Eca)



732I.C.100 (Cca)

UTP cables Cat5 and Cat6

Using UTP cables in the system requires the use of certain specific system devices for this type of cable: riser splitter **69DV/5**, concentrator **69MX/5** and amplifier **692M/5**.



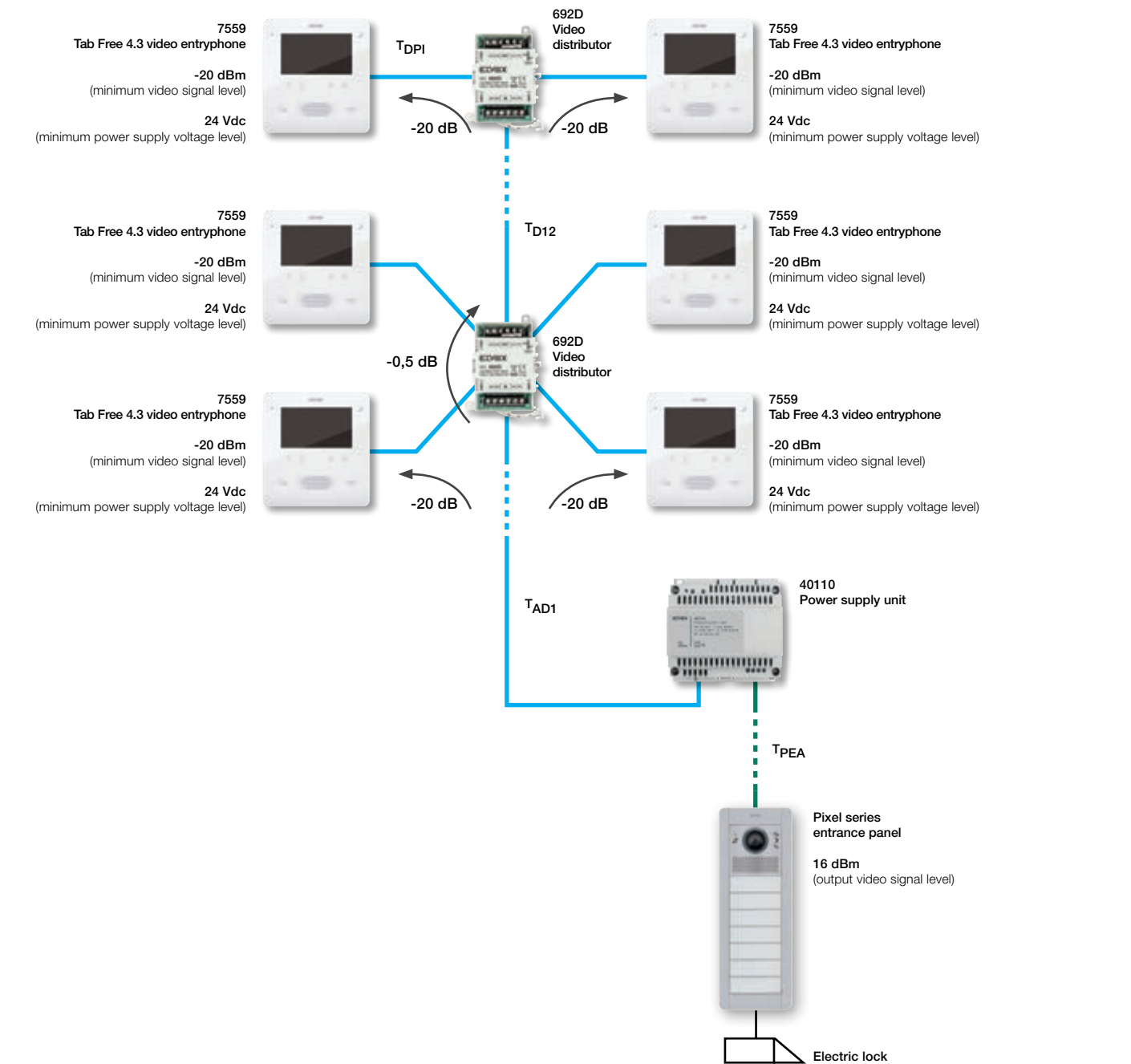
Basic rules for system sizing

When designing the system, certain preliminary checks should be carried out to assess the distances and the maximum current required by the devices:

- maximum current with all the devices on standby (no conversation in progress);
- maximum current with one conversation/call in progress;
- video signal level of the indoor station (video entryphone) furthest from the outdoor station (entrance panel);
- power supply voltage level of the indoor station (video entryphone) furthest from the power supply unit.

Please refer to the tables on pages 66 and 67 of the Due Fili Plus devices for: the absorption current, the current outputs from the power supply units, the attenuation/amplification of the video signal and the resistance of the Elvox cables.

- Example of checks on a typical system with:
- 6 video entryphones 7559;
 - 2 video distributors 692D;
 - 1 power supply unit 40110;
 - 1 Pixel entrance panel with audio/video electronic unit 41005.



Basic rules for system sizing

Maximum current with all the devices on standby:

Video entryphones 7559:	6	x	17 mA	+
Video distributors 692D:	2	x	0 mA	+
Audio/video electronic unit 41005:	1	x	40 mA	+

Maximum absorbed current: 142 mA (less than 1000 mA, current output from the power supply unit 40110)

Maximum current with one conversation/call in progress and electrical lock activation:

Video entryphone 7559 in operation:	1	x	280 mA	+
Video entryphones 7559 on standby:	5	x	17 mA	+
Video distributors 692D:	2	x	0 mA	+
Audio/video electronic unit 41005 in operation:	1	x	250 mA	+

Maximum absorbed current: 615 mA (less than 1000 mA, current output from the power supply unit 40110)

Video signal level of the indoor station (video entryphone) furthest from the outdoor station (entrance panel):

Video signal level at entrance panel output with audio/video electronic unit 41005:	16 dBm	-
Throughpass attenuation, 1st video distributor 692D:	0.5 dB	-
Video output attenuation, 2nd video distributor 692D:	20 dB	-
Minimum video signal level in video entryphone 7559:	-20 dBm	

Maximum attenuation on the cable run (TPEA + TAD1 + TD12 + TDPI): 15.5 dB

Maximum distance between furthest indoor station and outdoor station = $15.5 / 5 \times 100 = 310$ m (attenuation of Elvox cable type 732x... of 5 dB every 100 m)

Power supply voltage level of the indoor station (video entryphone) furthest from the power supply unit:

Power supply unit 40110 output voltage:	28 VDC	-
Minimum power supply voltage level of video entryphone 7559:	24 VDC	

Maximum attenuation on the cable run (TAD1 + TD12 + TDPI): 4 VDC

The maximum distance between the furthest indoor station and the power supply unit should be assessed while considering the resistance of the cable (3.8 Ω/ 100 m with Elvox cable type 732x...) and the currents absorbed by the indoor stations in the various runs:

TAD1 run: 365 mA = 5 x 17 mA (Video entryphones 7559 on standby) + 1 x 280 mA (Video entryphones 7559 in operation)
TD12 run: 297 mA = 1 x 17 mA (Video entryphones 7559 on standby) + 1 x 280 mA (Video entryphones 7559 in operation)
TDPI run: 280 mA

Summary table of absorptions and video signal level

Audio/Video indoor stations, audio indoor stations and reception switchboards

Code	Description	Min level of video signal (dBm)	Absorption (mA)	
			Rest	Maximum consumption
7539	Tab Free 3.5 hands-free video entryphone, white	-20	10	160
7548	Tab 4.3 video entryphone with handset without intercom., white		18	180
7549	Tab 4.3 video entryphone with handset, white		18	180
7558	Tab Free 4.3 hands-free video entryphone, white		17	280
7559	Tab Free 4.3 hands-free video entryphone, white		17	280
40505	Tab 7 hands-free video entryphone, white		25	350
40507	Tab 7S Wi-Fi hands-free video entryphone, white ⁽¹⁾		120	400
40515	Tab 5S Up Wi-Fi hands-free video entryphone, white		55	420
40517	Tab 7S Up Wi-Fi hands-free video entryphone, white		58	480
8879.1	Surface mounting entryphone, white		10	160
8879.1/D	Surface mounting entryphone, teleloop, white	-	10	160
7509	Tab jr. entryphone with handset, white		7	100
7509/D	Tab jr. entryphone with handset, teleloop, white		7	100
6901	Surface mounting hands-free entryphone, white		10	110
6901/D	Surface mounting hands-free entryphone, teleloop, white		10	110
6209/P	Petrarca entryphone, white		10	65
6209/D	Petrarca entryphone, teleloop, white		10	65
40540	Voxie entryphone with handset and 2 push buttons, white		10	100
40542	Voxie entryphone with handset and 6 push buttons, white		10	100
40547	Voxie hands-free entryphone with 7 push buttons, white		10	140
40510	7" reception switchboard, black ⁽¹⁾	-20	86	300
945F	Reception switchboard, black ⁽¹⁾	-	25	150

The consumption of devices powered locally, via additional power supply units, should not be calculated at less than 50 mA residual during a call.
1) With additional power supply unit 6923.

Audio/video and audio electronic units

Code	Description	Video signal level (dBm)	Absorption (mA)		
			Rest	Talk	Conversation + electrical lock
6931	Audio entrance panel Due Fili unit	-	60	265	415
6932	Audio entrance panel Due Fili unit		60	265	415
41000	Due Fili Plus basic audio unit		25	120	180
40131	Due Fili Plus audio unit		25	80	140
40424	Due Fili Plus audio entrance panel with keyboard, display and electronic contacts list		120	280	330
40425	Due Fili Plus audio entrance panel with keyboard, display and electronic contacts list		120	280	330
13F1	Due Fili Plus audio unit		40	250	350
13F3	Due Fili Plus audio unit with 8 push buttons		60	260	410
13F3.B	Due Fili Plus audio white LED unit with 8 push buttons		60	260	410
13F4	Due Fili Plus audio unit with steel buttons		120	300	450
13F4.B	Due Fili Plus audio white LED unit with steel keyboard	+16	120	300	450
13A4.B	Due Fili Plus audio white LED unit with steel keyboard		120	300	450
13A4.B.43	Due Fili Plus audio white LED unit with gold keyboard		120	300	450
41002	Due Fili Plus audio teleloop IN video unit		40	130	180
41005	Due Fili Plus audio/video teleloop wide-angle unit		40	200	250
40135	Due Fili Plus audio video unit		40	200	250
40404	Due Fili Plus audio/video entrance panel with keyboard, display and electronic contacts list		120	280	330
40405	Due Fili Plus audio/video entrance panel with keyboard, display and electronic contacts list		120	280	330
13F2.1	Due Fili Plus audio/video unit for cover plate 13K1		40	250	350
13F5	Due Fili Plus audio/video unit for entrance panel with 8 pushb.		60	260	410
13F5.B	Due Fili Plus audio/video white LED unit with 8 push buttons	+10	60	260	410
13F7	Due Fili Plus a/v unit with steel keyboard		120	300	450
13F7.B	Due Fili Plus audio/video white LED unit with steel keyboard		120	300	450
13A7.B	Due Fili Plus audio/video white LED unit with steel keyboard		120	300	450
13A7.B.43	Due Fili Plus audio/video white LED unit with gold keyboard		120	300	450
69AM/T	Selettore video per 4 telecamere		25	50	-
657C	Due Fili colour video unit		20	180	-

The consumption of devices powered locally, via additional power supply units, should not be calculated at less than 50 mA residual during a call.

Summary table of absorptions and video signal level

System components for vertical BUS

Code	Description	Video signal attenuation/ amplification (dB)	Absorption (mA)	
			Main and secondary vertical BUS	
			Rest	Function
691D	Single-output passive Video Distributor	-0.5 riser line -20 tap-off line	0	0
692D	Passive video distributor on landing	-0.5 riser line -20 tap-off line	0	0
692S.1	Separator for Due Fili Plus systems	-0.2 riser line 0 tap-off line	15 25	40 50
69RH	Programmable device with 2 relays	0	15	80
69RH/L	Programmable device with 2 relays	0	15	80
69DM	Digibus / Due Fili Plus backbone interface	0	25	100
69RS.1	Expansion interface for 200 indoor stations	-0.2 riser line 0 tap-off line	15 25	40 50
692M	Video signal riser amplifier	+6 or +14	20 (24)	50 (48)
6120	Interface for 2 Due Fili Plus push buttons	0	2	10
69MD	Due Fili Plus standard signal interface	0	10	60
0170/101	Relay for call repetition	0	0	0
693T	Interface for camera with CVBS video signal	0	20	100
692E	Overvoltage protection device	0	0	0
692G	Earth separator	0	0	100

The main vertical BUS is the connection backbone before the separator 692S.1, while the secondary vertical BUS is the one after the separator.

System components for vertical and horizontal BUS

Code	Description	Video signal attenuation/ amplification (dB)	Absorption (mA)			
			Main and secondary vertical BUS		Horizontal BUS	
			Rest	Function	Rest	Function
69PH	Programmable device with 2 relays	0	15	40	15	40
69DV	Riser splitter in 4 riser lines	-0.2 riser line 0 tap-off line	15	50	15	50
69DV/5	Riser splitter in 4 Cat5 lines	-0.2 riser line 0 tap-off line	15	50	15	50
69MX	Concentrator for 4 parallel entrance panels	+16	25	50	25	50
69MX/5	Concentrator for 4 parallel entrance panels Cat. 5	+16	25	50	25	50
01415	Video entry system gateway Due Fili Plus	0	120	300	120	300

The main vertical BUS is the connection backbone before the separator 692S.1, while the secondary vertical BUS is the one after the separator.

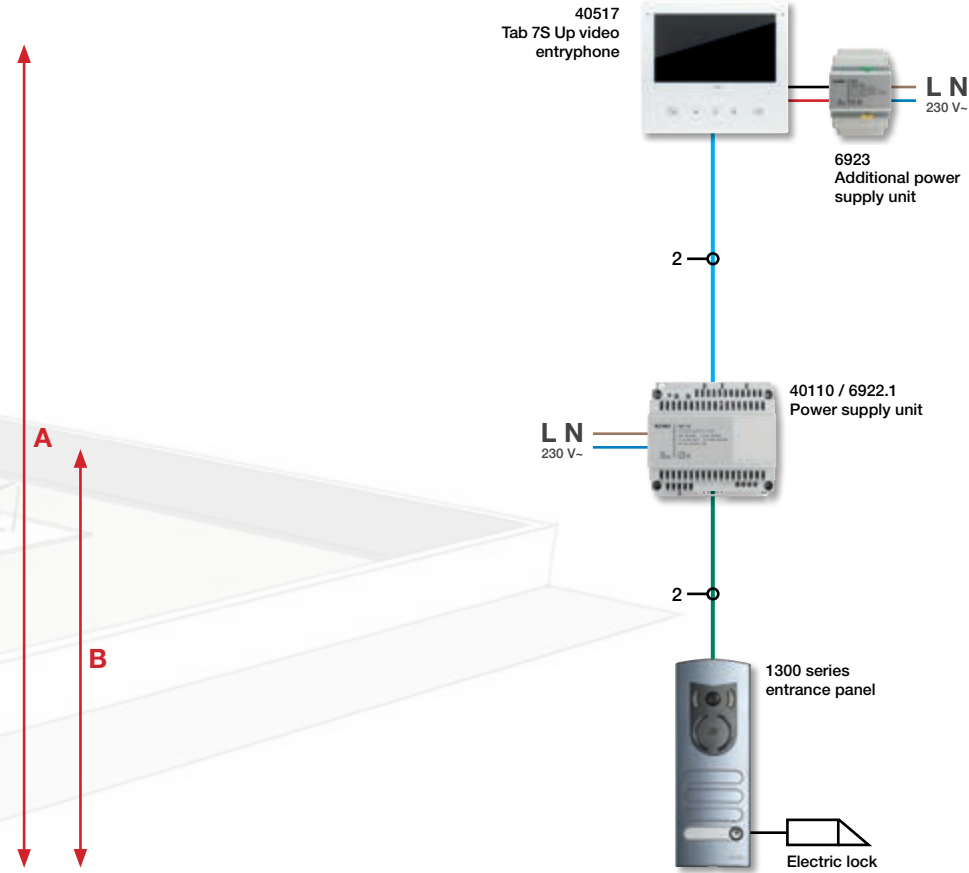
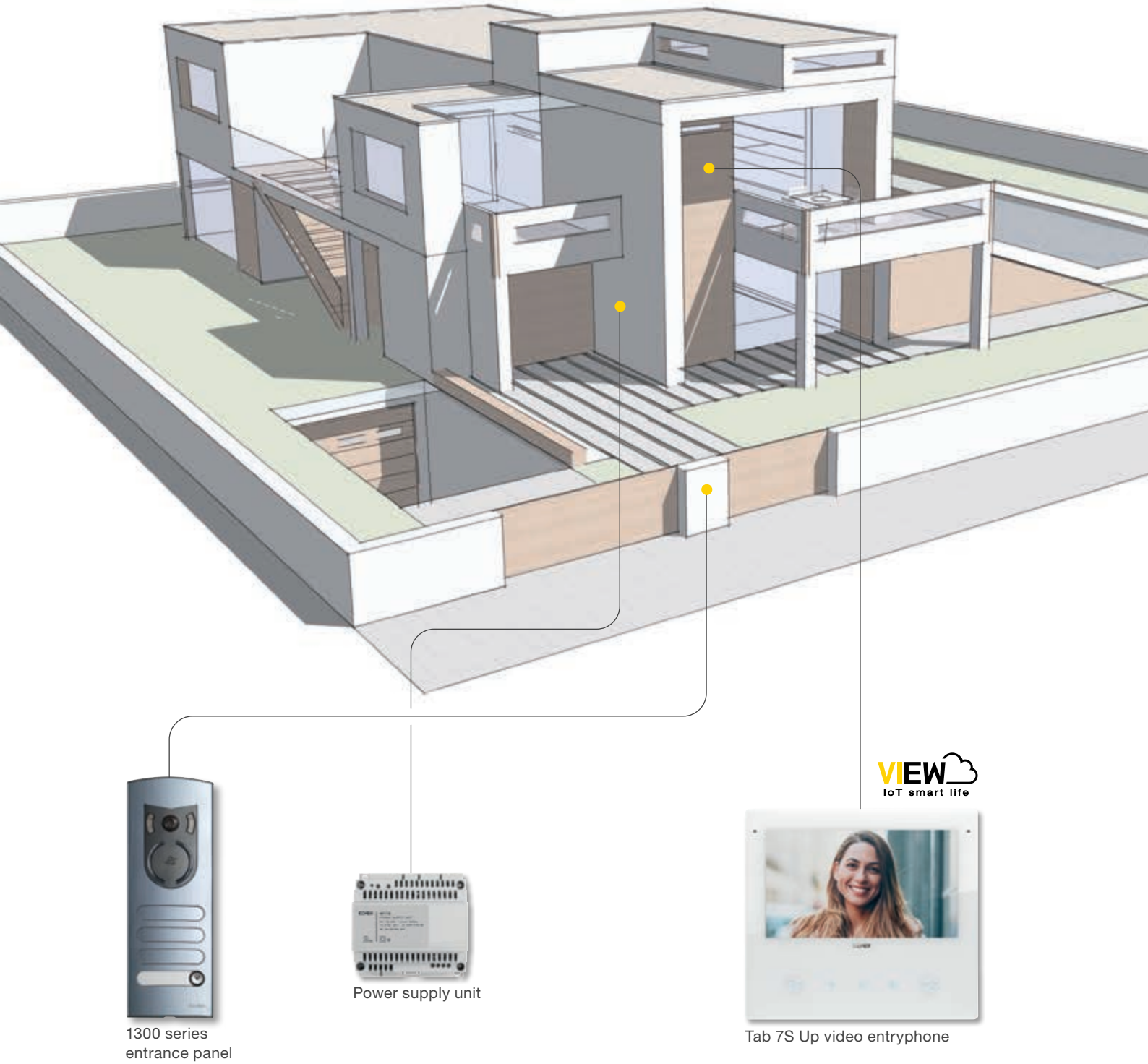
Cables

Code	Description	Total attenuation (dBm)	Resistor (Ω)
732H.E.100	Due Fili Plus 2x1 cable for internal laying PVC Eca 100 m	-5	3.8
732H.E.500	Due Fili Plus 2x1 cable for internal laying PVC Eca 500 m	-25	19
732I.C.100	Due Fili Plus 2x1 cable LSZH Cca 100 m purple	-5	3.8
732I.E.100	Due Fili Plus 2x1 cable for external laying LSZH Eca 100 m	-5	3.8
732I.E.500	Due Fili Plus 2x1 cable for external laying LSZH Eca 500 m	-25	19

Power supply units

Code	Description	Current supplied (mA)	
		Continuous	Intermittent
40100	Due Fili Plus power supply unit for audio kit	150	510
40101	Due Fili Plus Audio system power supply unit	600	400
40110	Due Fili Plus Video system power supply unit	1000	600
6922.1	Due Fili Plus Video system power supply unit	1000	600
6923	Additional power supply unit	150	350
6582.1	Additional power supply unit	250 (with 10.5 VDC and 13.5 VDC)	800 (with 18 VDC)

Example of a typical system: villa with 1 video entryphone.



Type of cable	Max distance A	Max distance B
732H.E., 732I.E., 732I.C..	700 m	200 m
Cat.5 or Cat.6	570 m	200 m
Twisted phone	120 m	40 m
Single > 0.2 mm²	50 m	

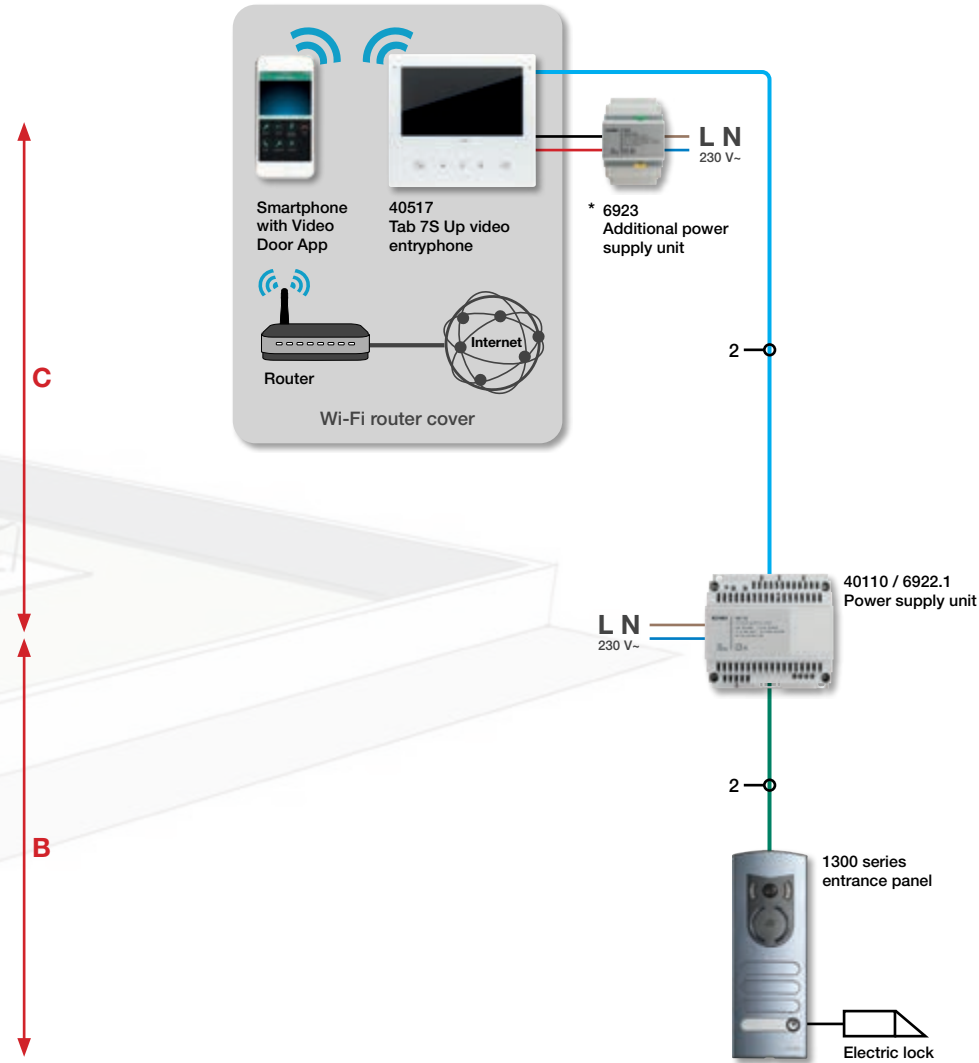
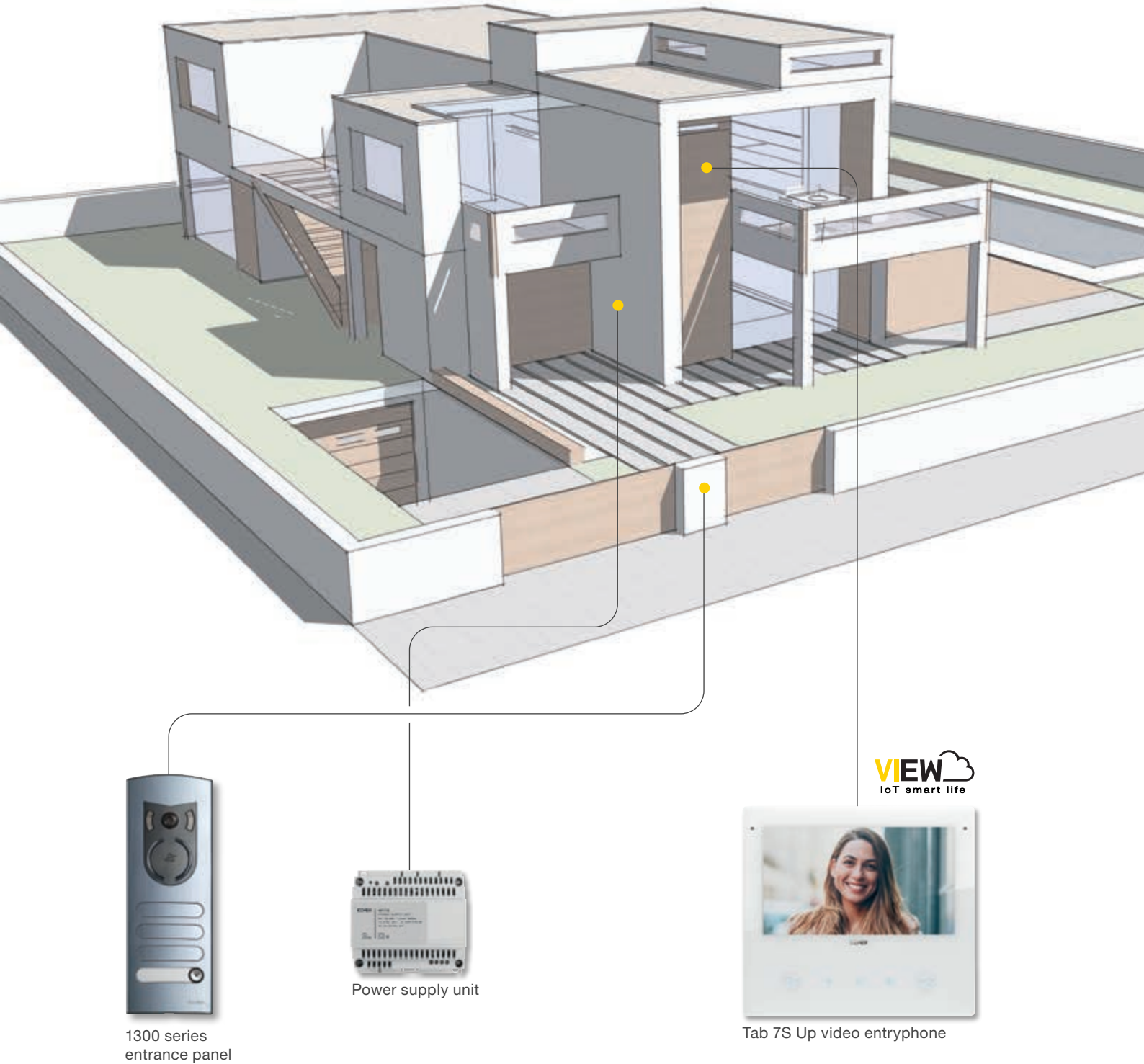
Type of cable	Video amplifiers (692M)	Max distance A	Max distance B
732H.E., 732I.E., 732I.C..	2	1200 m	200 m
Cat.5 or Cat.6	2	970 m	200 m
Twisted phone	0	120 m	40 m
Single > 0.2 mm²	0	50 m	

Table of configuration of a video door entry system with amplifiers

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Example of a typical system: villa with 1 Tab 7S Up or Tab 5S Up connected video entryphone.



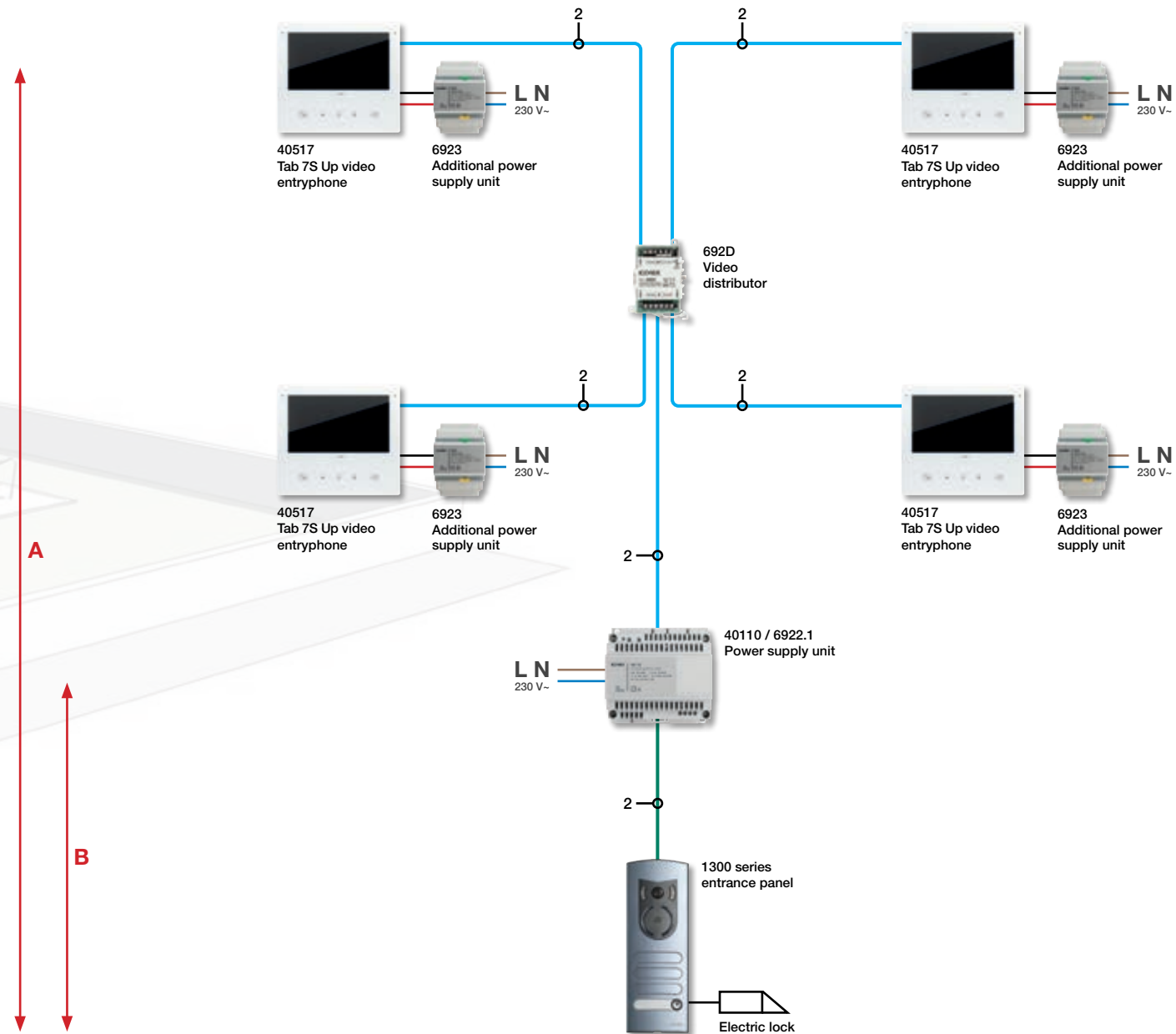
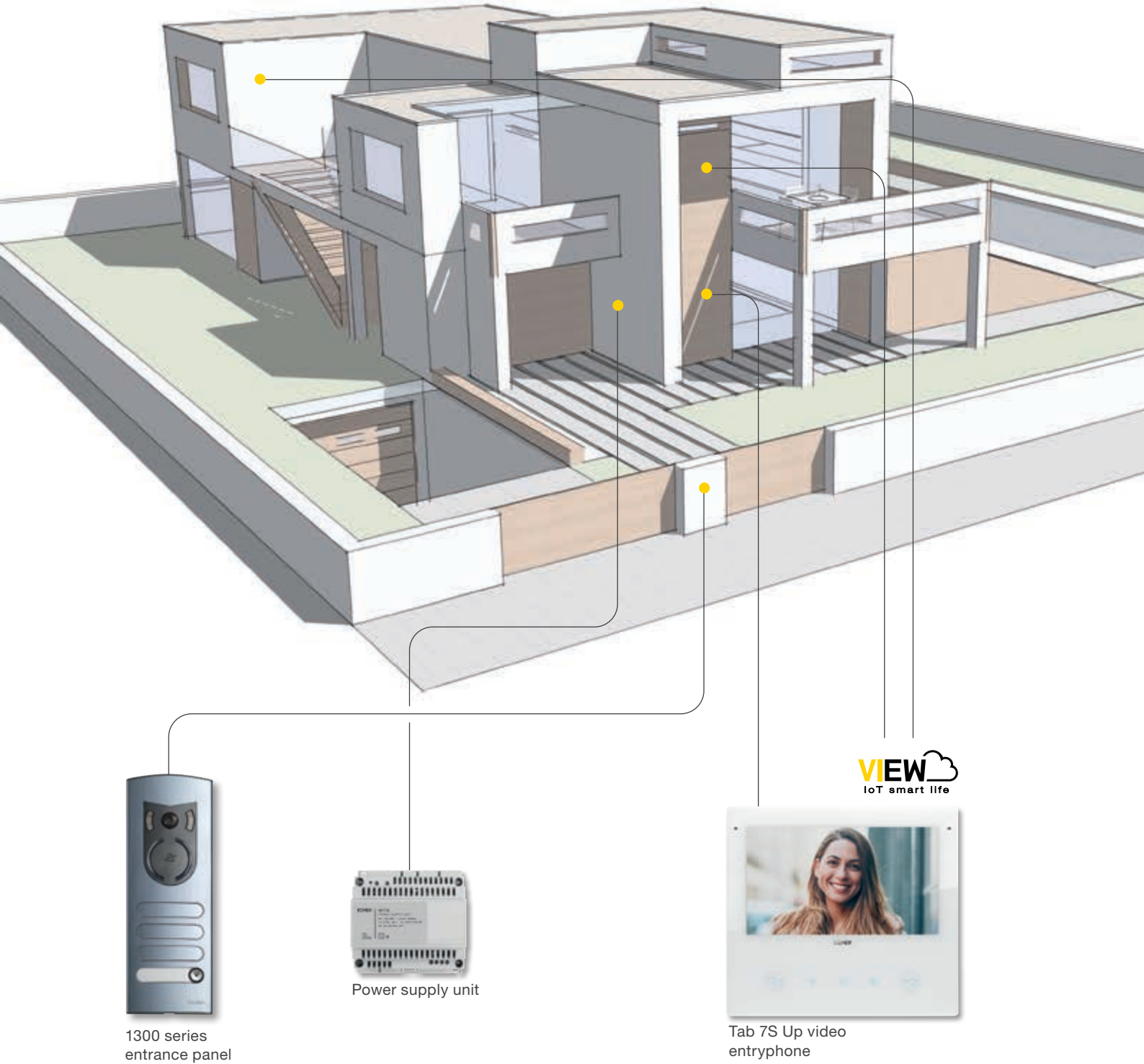
Type of cable	Max distance B	Max distance C	
		Tab 7S Up (40517)	Tab 5S Up (40515)
732H.E., 732I.E., 732I.C..	200 m	230 m ¹	300 m ¹
Cat.5 or Cat.6	200 m	210 m ¹	270 m ¹
Twisted phone	40 m	20 m ¹	40 m ¹

The use of video amplifiers 692M does not lengthen the distances.
1) Energy saving mode active or not.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.

Key
B - Maximum distance between the entrance panel and the power supply unit.
C - Maximum distance between the power supply unit and the furthest indoor station.

Example of a typical system: villa with 4 video entryphones.



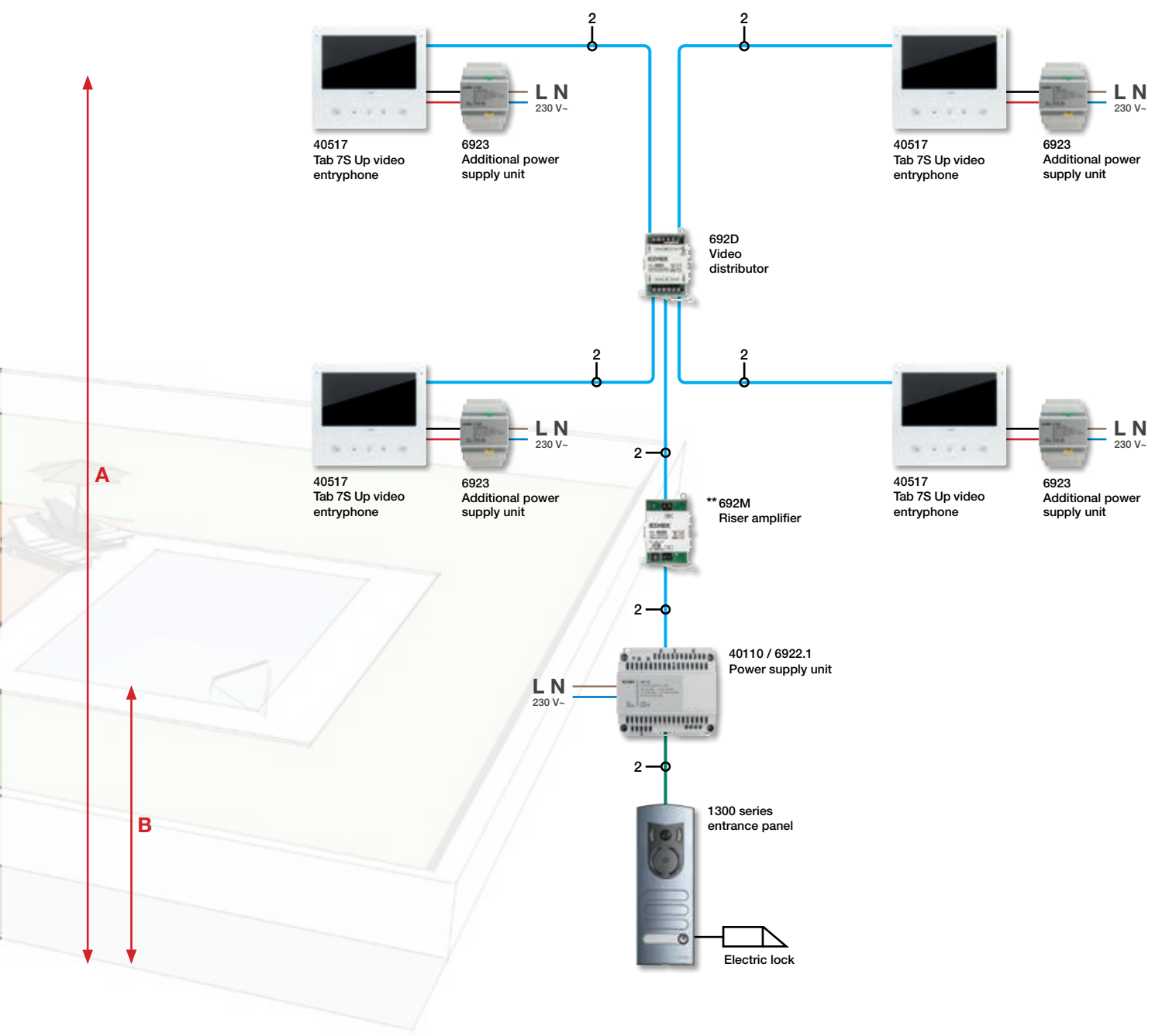
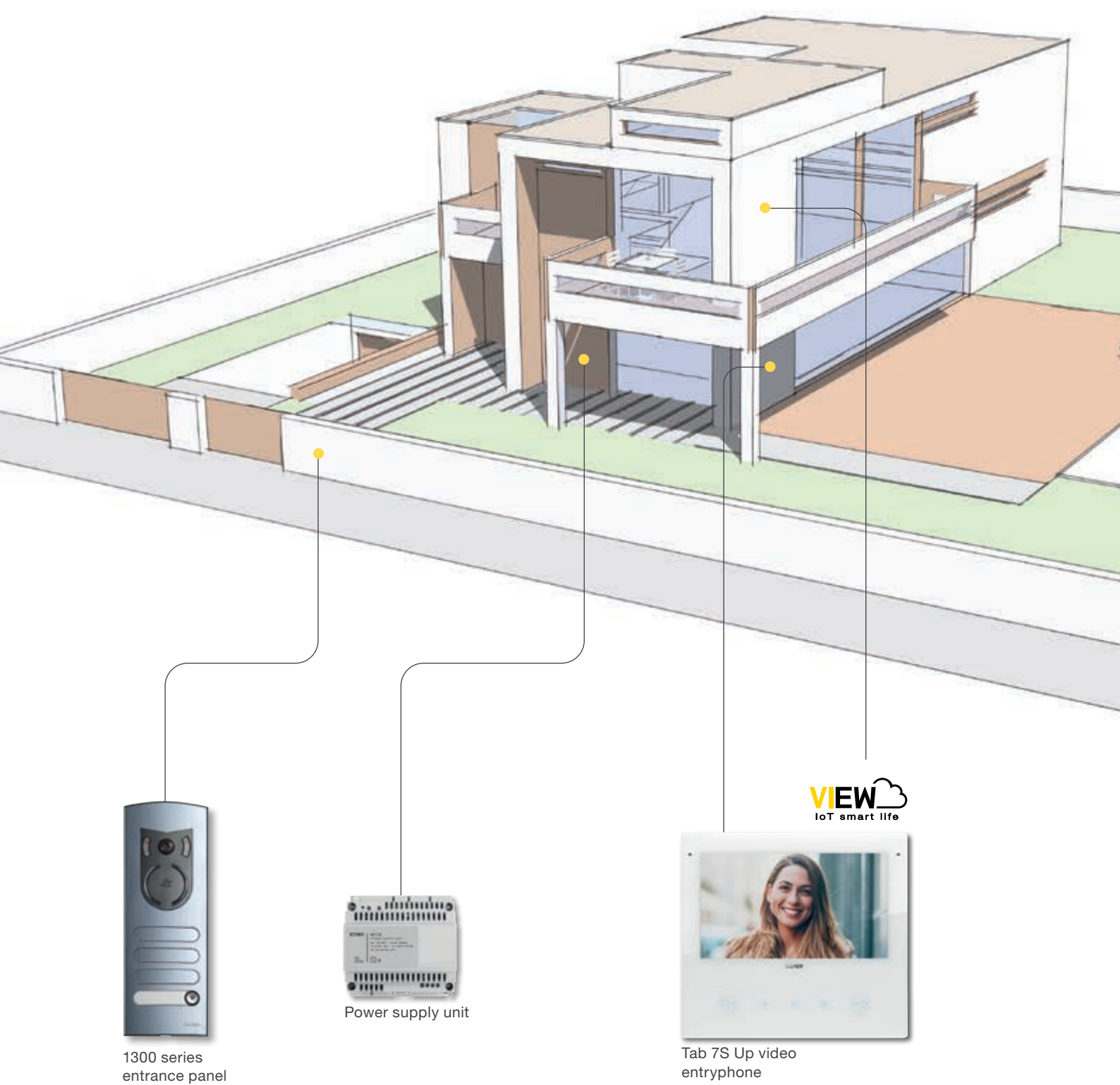
Type of cable	Max distance A	Max distance B
732H.E., 732I.E., 732I.C..	320 m	200 m
Cat.5 or Cat.6	250 m	200 m
Twisted phone	100 m	40 m
Single > 0.2 mm²	50 m	

Table relating to the diagram in configuration with 1 entrance panel, 4 individually activated indoor stations, power supply unit and video distributor.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Example of typical system: villa with 4 video entryphones and extension of the cable runs, via riser amplifier.



Type of cable	Video amplifiers (692M)	Max distance A	Max distance B	Max total cable run (of the branch in conversation)
732H.E., 732I.E., 732I.C..	1	600 m	200 m	2000 m
732H.E., 732I.E., 732I.C..	2	900 m	200 m	2000 m
Cat.5 or Cat.6	1	510 m	200 m	2000 m
Cat.5 or Cat.6	2	770 m	200 m	2000 m

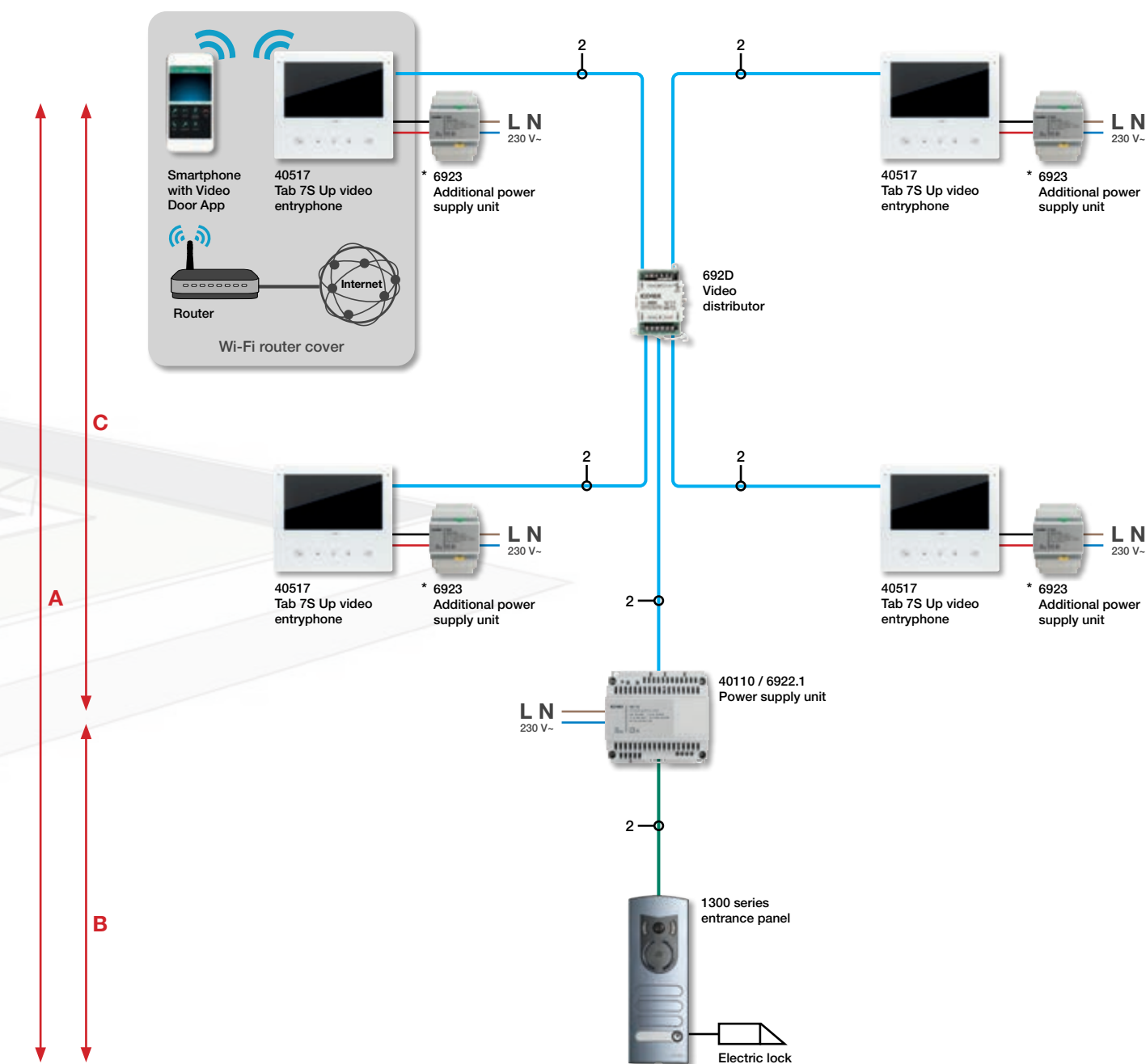
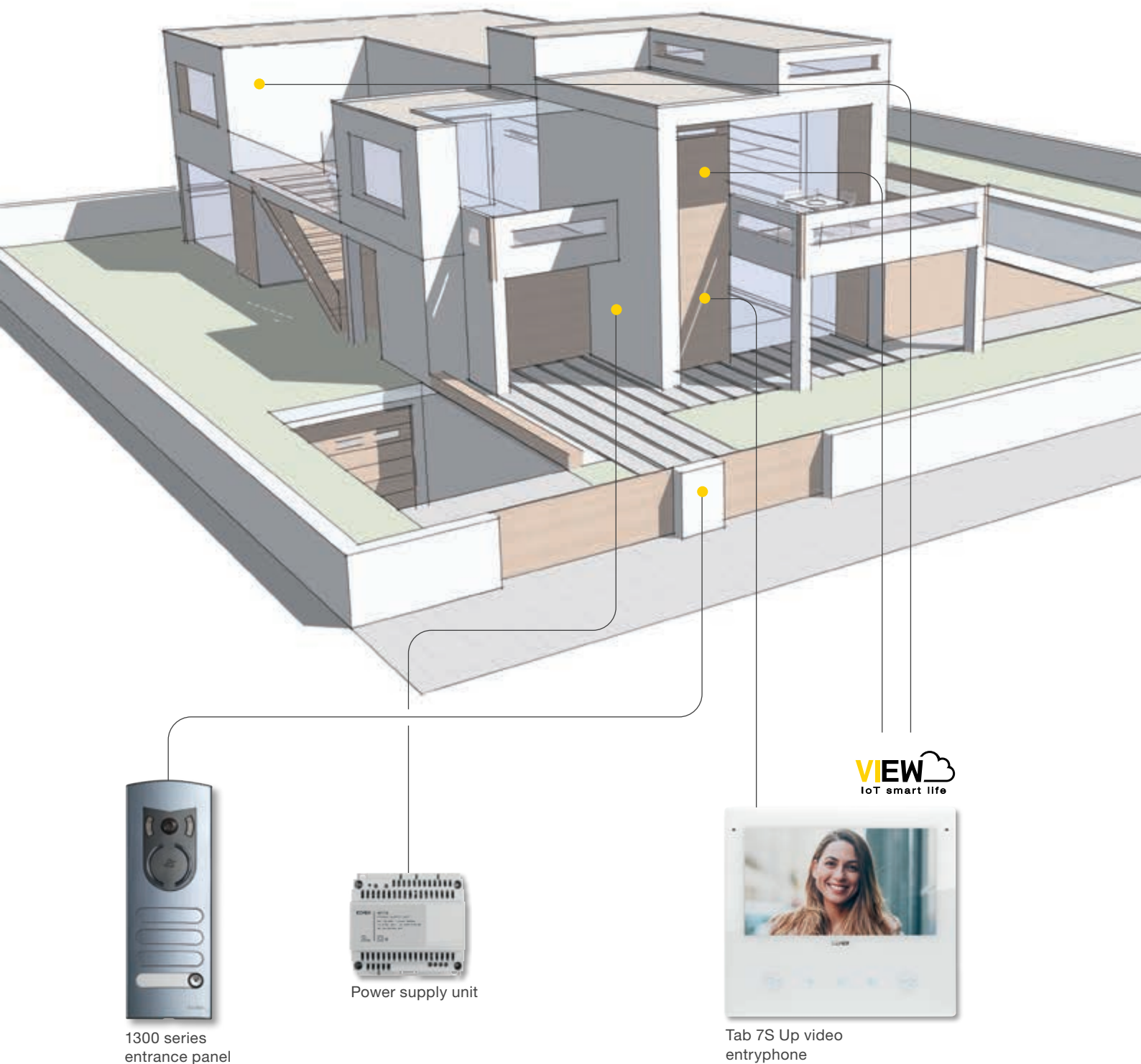
Table relating to the diagram in configuration with 1 entrance panel, 4 individually activated indoor stations, power supply unit and video distributor.
Use amplifier 692M for cables 732H.E., 732I.E. and 732I.C. or 692M/5 for Cat.5 and Cat.6 cables.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).

** Position the 692M amplifier at least 200 m from the entrance panel or previous 692M.

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Example of a typical system: villa with 4 Tab 7S Up and Tab 5S Up connected video entryphones.



Type of cable	Max distance A	Max distance B	Max distance C		Max cable run (of the branch in conversation)
			Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E., 732I.E., 732I.C..	280 m	200 m	110 m ¹	130 m ¹	2000 m
			70 m ²	100 m ²	
Cat.5 or Cat.6	210 m	200 m	90 m ¹	110 m ¹	1500 m
			60 m ¹	80 m ¹	
Twisted phone	120 m	40 m	Not applicable	30 m ¹	1000 m
				20 m ¹	

Table relating to the diagram in configuration with 1 entrance panel, 4 indoor stations, power supply unit and video distributor.

1) Energy saving mode active.

2) *Energy saving mode not active.*

Notes:

Notes:

In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.

The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732L.E and 732L.C).

* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.

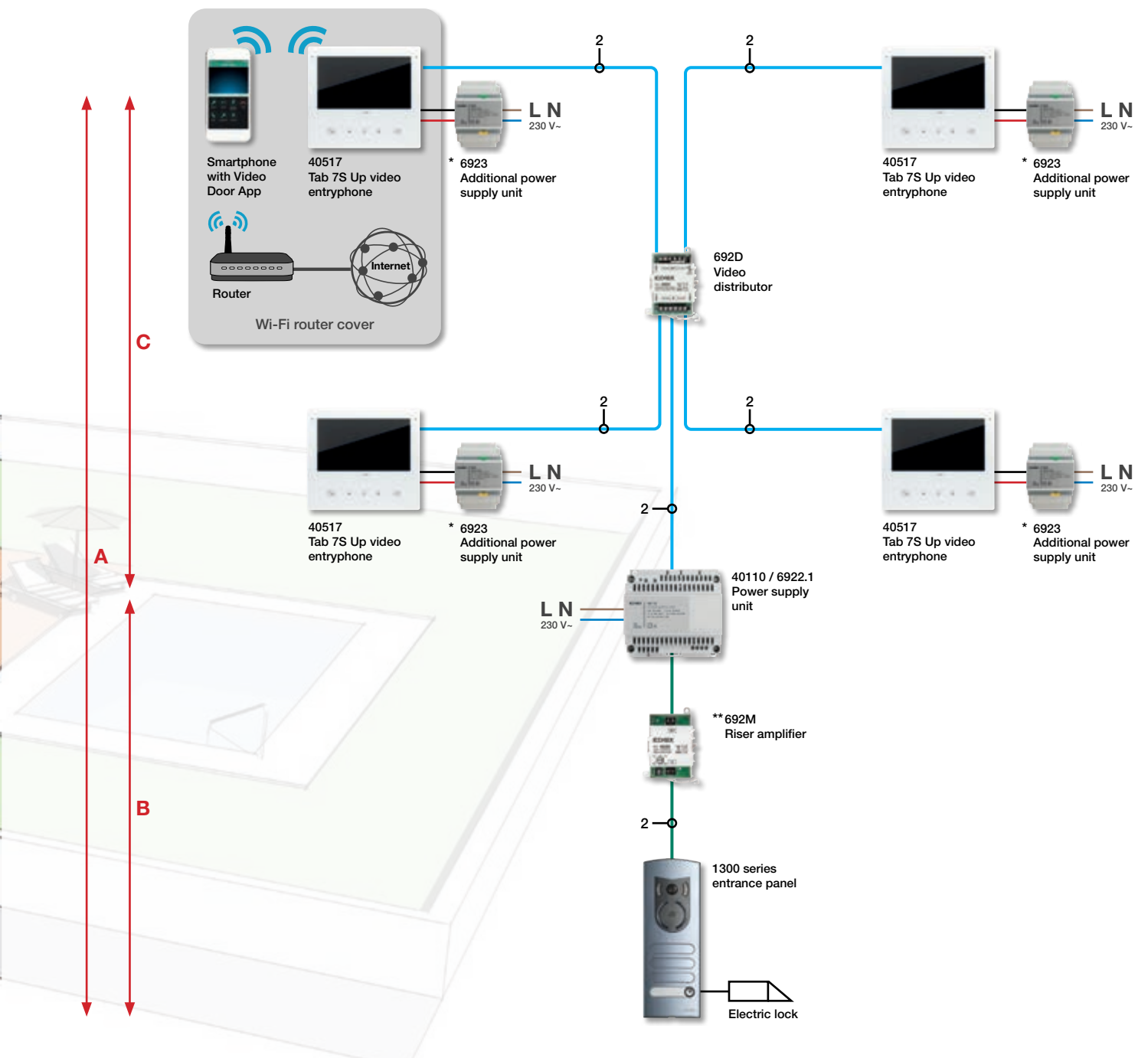
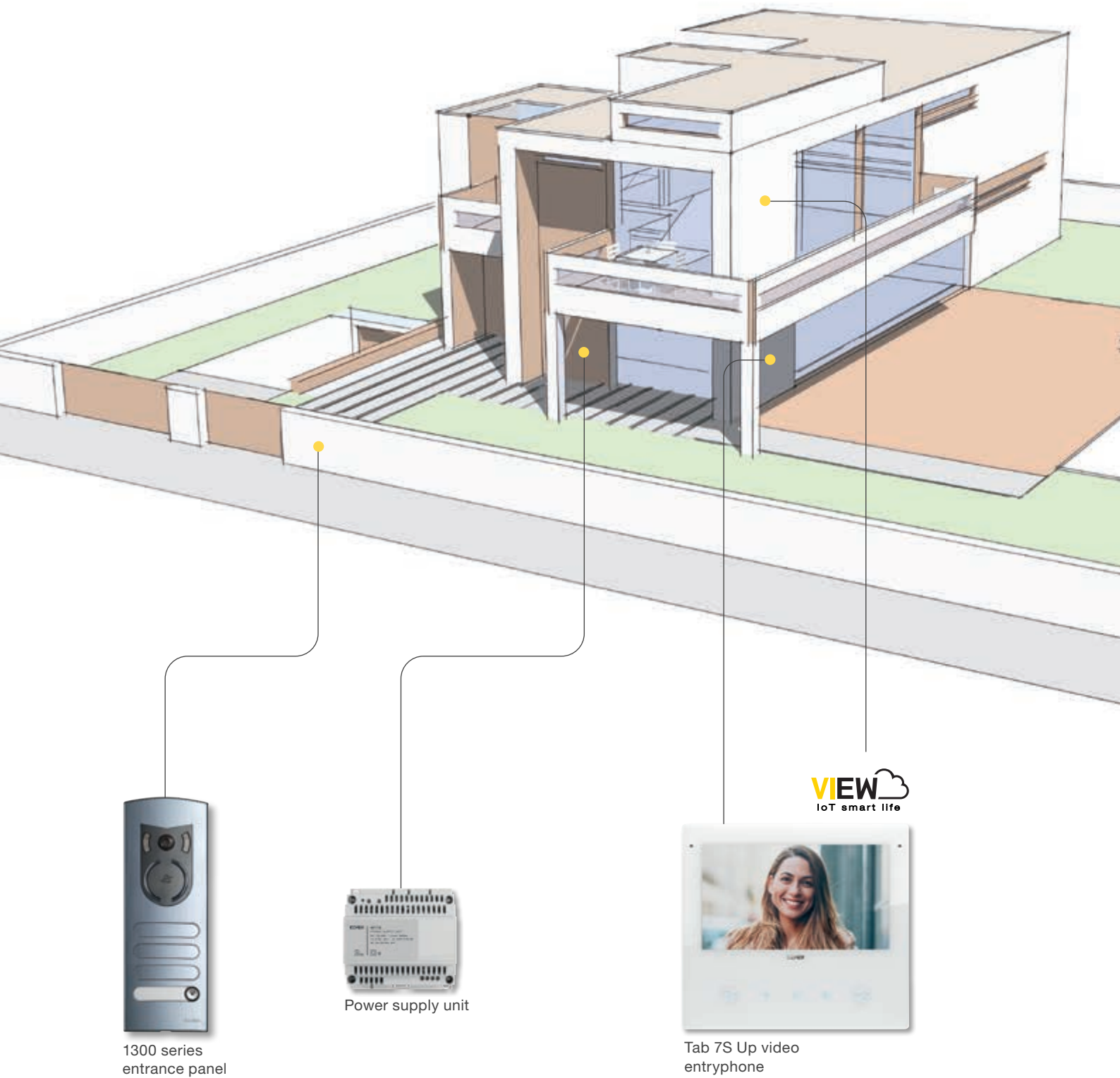
Key

A - Maximum distance between the indoor station and the furthest entrance panels.

B - Maximum distance between the entrance panel and the power supply unit.

C - Maximum distance between the power supply unit and the furthest indoor station.

Example of a typical system: villa with 4 Tab 7S Up and Tab 5S Up connected video entryphones and extension of the cable runs, via riser amplifier.



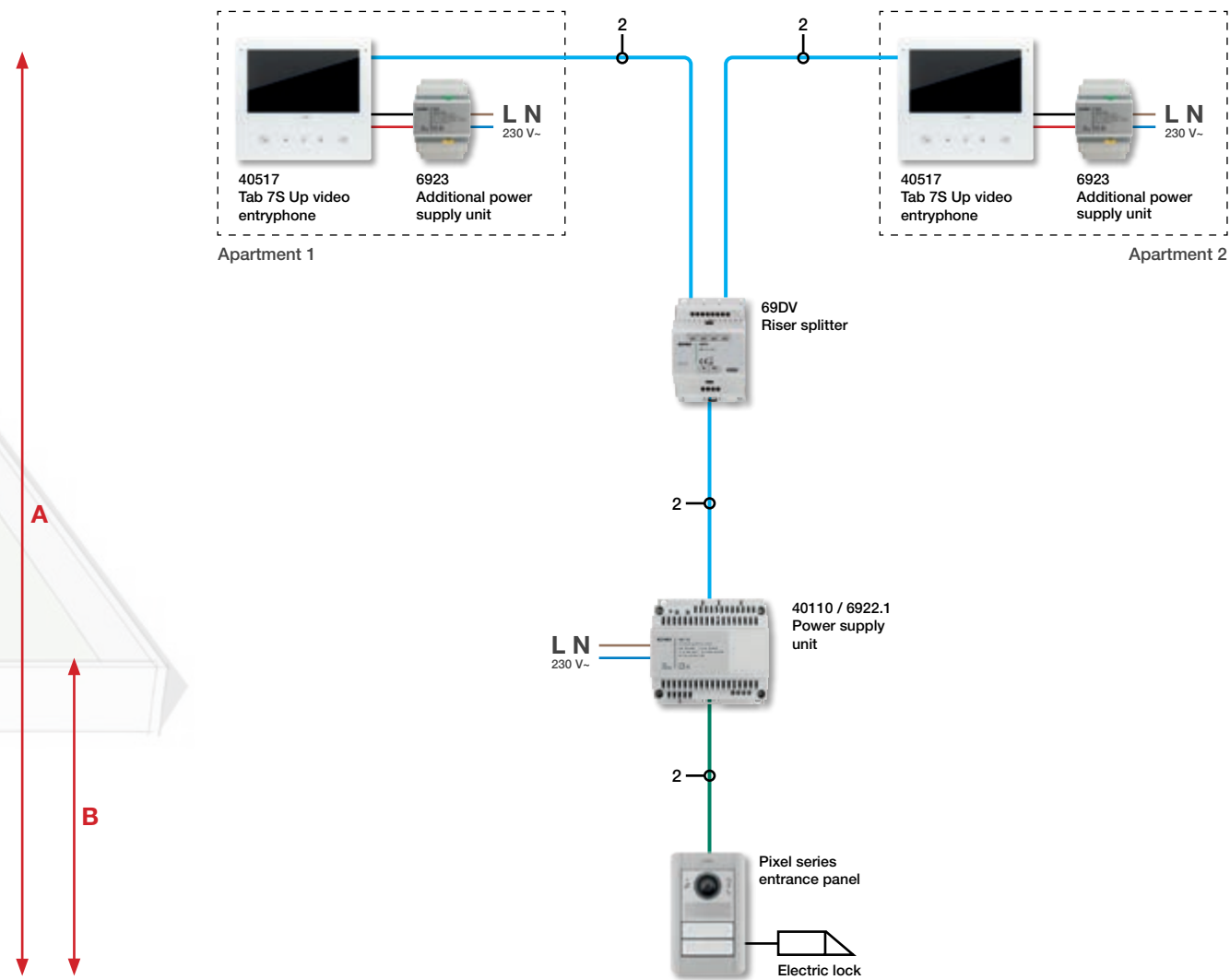
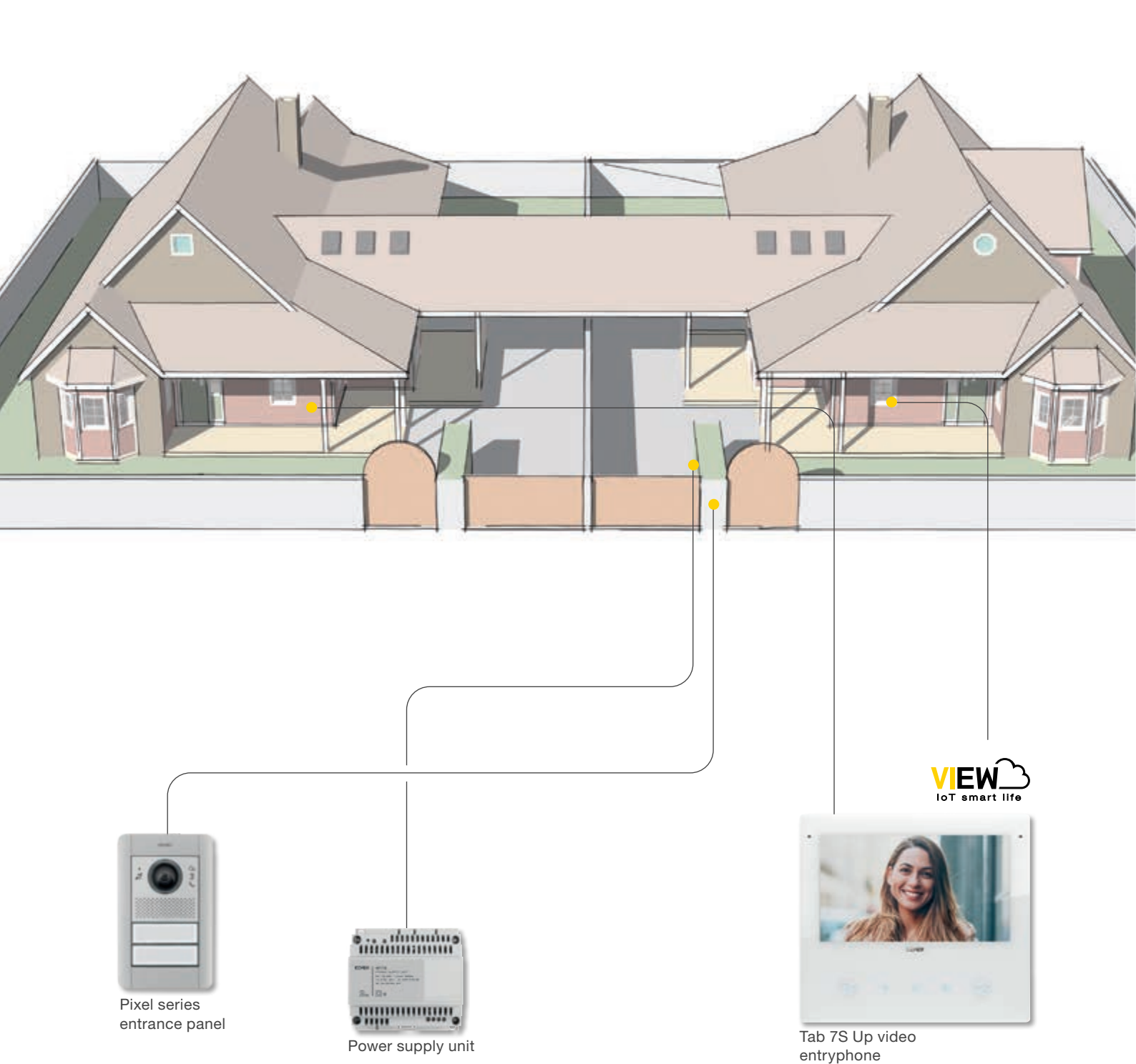
Type of cable	Video amplifiers (692M)	Max distance A	Max distance B	Max distance C		Max cable run (of the branch in conversation)
				Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E..., 732I.E..., 732I.C..	1	-	200 m	110 m ¹	130 m ¹	2000 m
				70 m ²	110 m ²	
Cat.5 or Cat.6	1	300 m	200 m	90 m ¹	130 m ¹	1500 m
				60 m ²	80 m ²	

Table relating to the diagram in configuration with 1 entrance panel, 4 indoor stations, power supply unit and video distributor. Use amplifier 692M for cables 732H.E..., 732I.E... and 732I.C... or 692M/5 for Cat.5 and Cat.6 cables.
1) Energy saving mode active.
2) Energy saving mode not active.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.
** Position the 692M amplifier at least 200 m from the entrance panel or previous 692M.

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.
C - Maximum distance between the power supply unit and the furthest indoor station.

Example of a typical system: two-family home with 1 video entryphone per home.



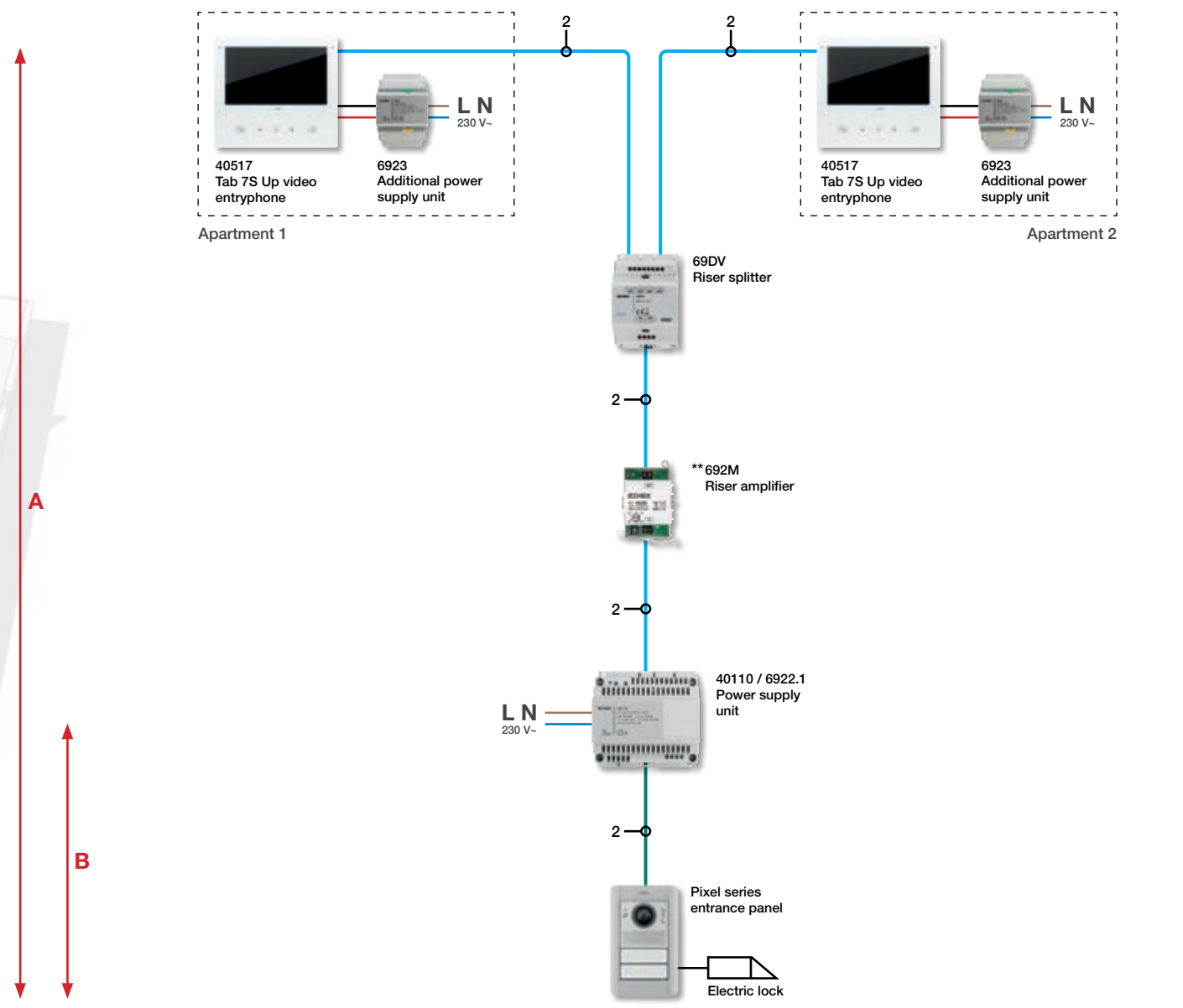
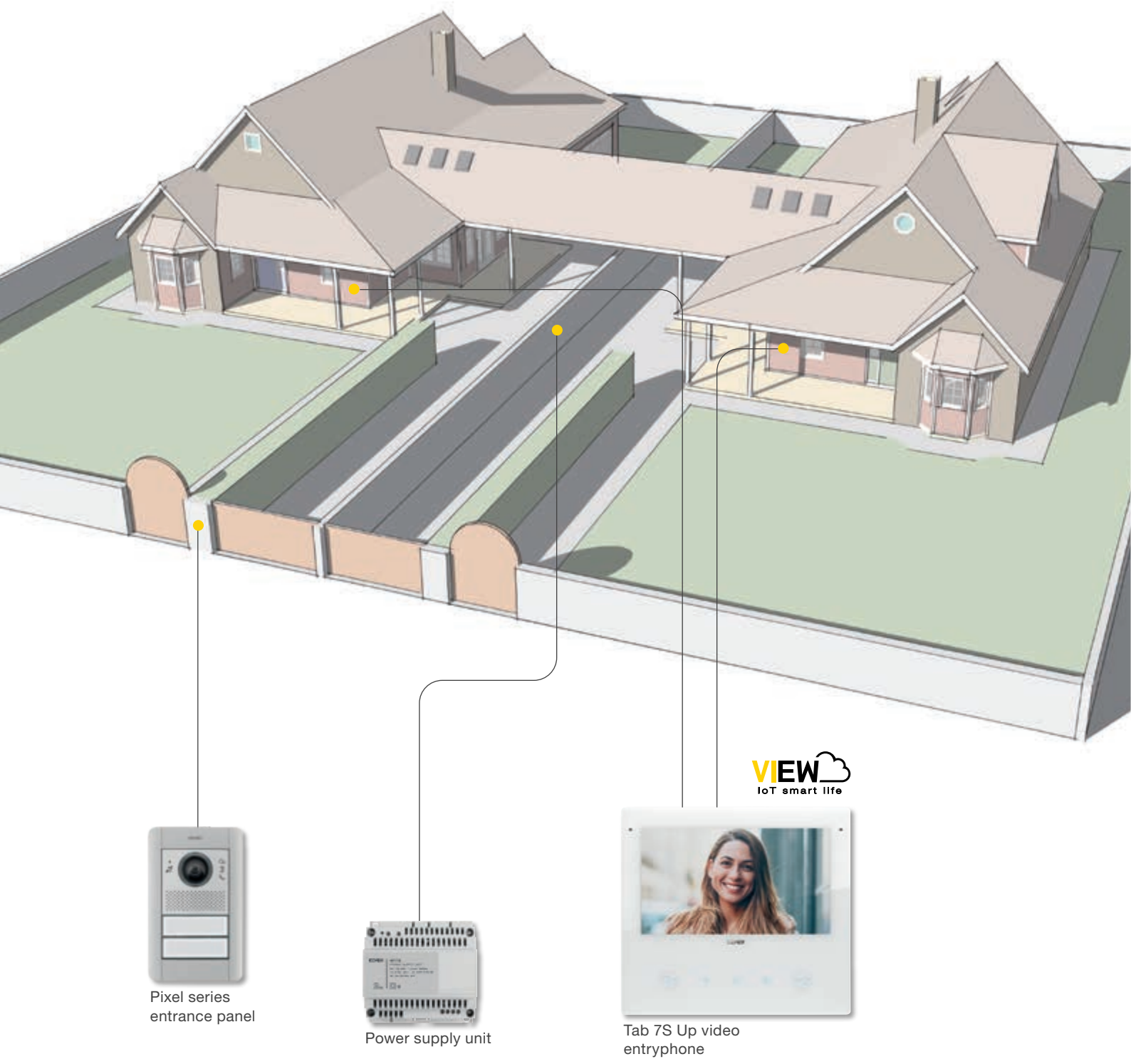
Type of cable	Max distance A	Max distance B	Max cable run (of the branch in conversation)
732H.E., 732L.E., 732L.C..	600 m	200 m	2000 m
Cat.5 or Cat.6	500 m	200 m	2000 m
Twisted phone	100 m	40 m	2000 m
Single > 0.2 mm²	50 m		100 m

Table relating to configuration with 1 entrance panel, 1 indoor station per call, power supply unit and riser splitter

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732L.E and 732L.C).

- Key**
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.

Example of a typical system: two-family home with 1 video entryphone per home and extension of the cable runs, via riser amplifier.



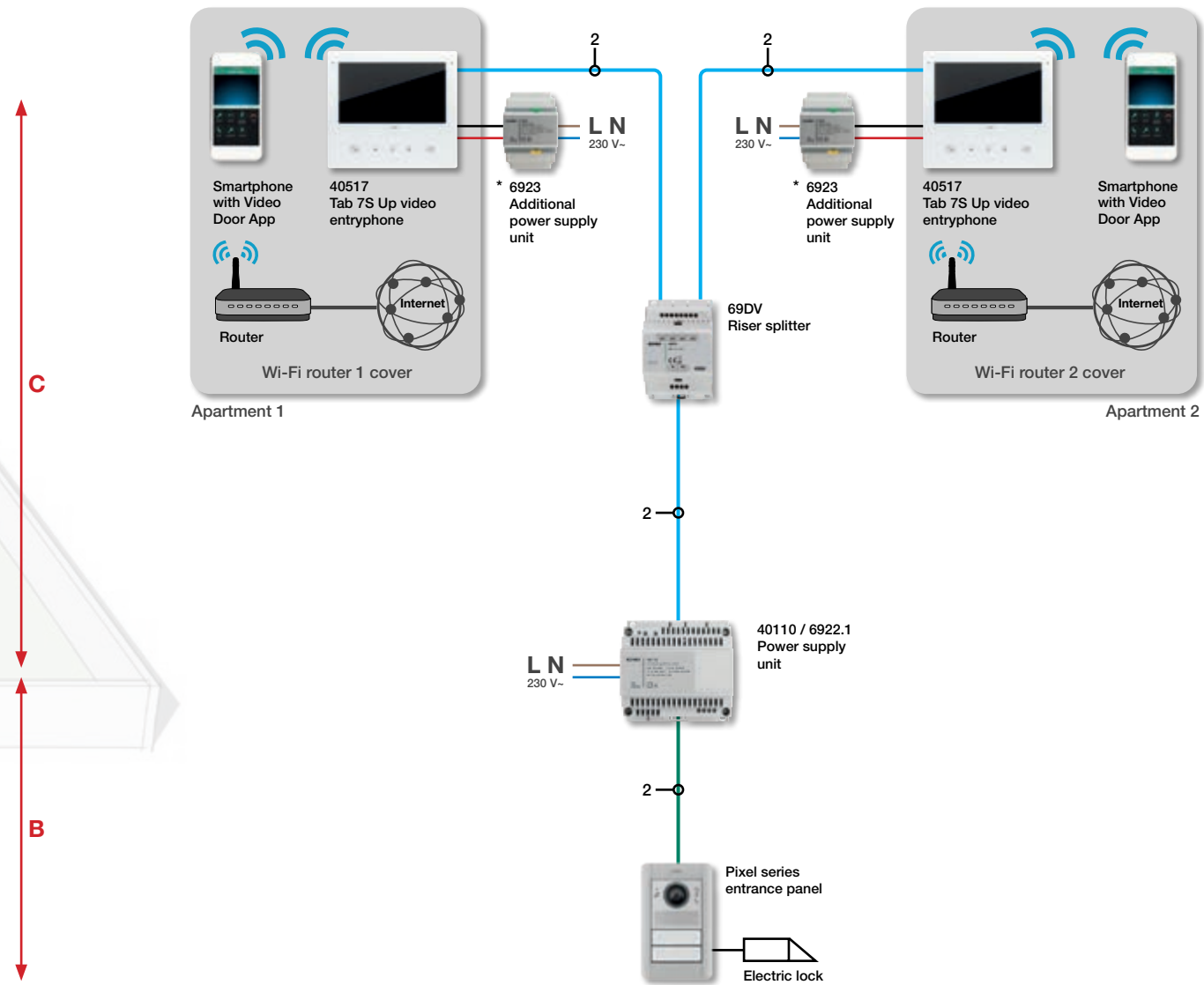
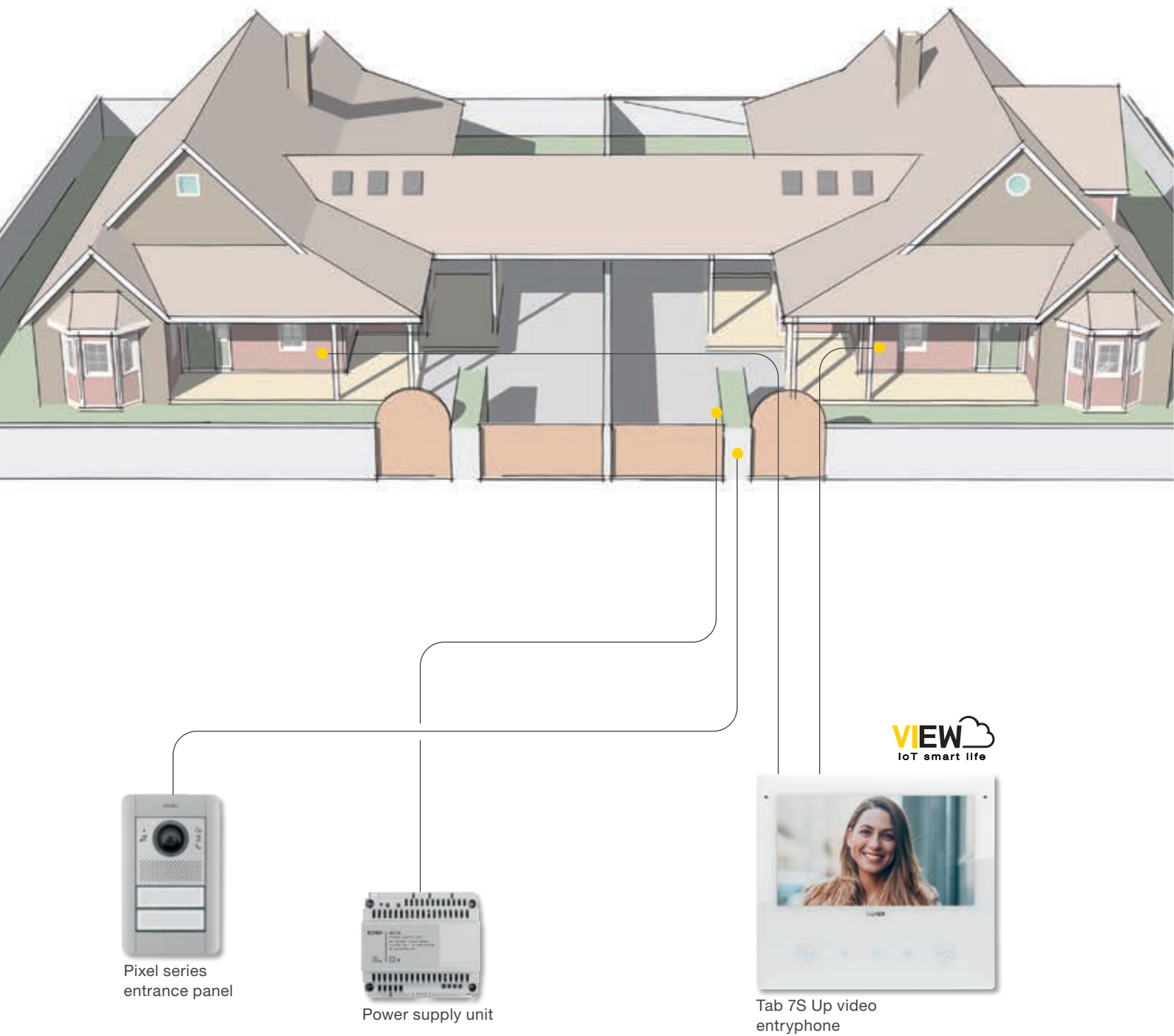
Type of cable	Video amplifiers (692M)	Max distance A	Max distance B	Max total cable run (of the branch in conversation)
732H.E..., 732I.E..., 732I.C..	1	970 m	200 m	2000 m
732H.E..., 732I.E..., 732I.C..	2	1200 m	200 m	2000 m
Cat.5 or Cat.6	1	800 m	200 m	2000 m
Cat.5 or Cat.6	2	1000 m	200 m	2000 m

Table relating to configuration with 1 entrance panel, 1 indoor station per call, power supply unit and riser splitter. Use amplifier 692M for cables 732H.E..., 732I.E... and 732I.C... or 692M/5 for Cat.5 and Cat.6 cables.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
** Position the 692M amplifier at least 200 m from the entrance panel or previous 692M.

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Example of a typical system: two-family home with 1 Tab 7S Up and Tab 5S Up connected video entryphone per home.



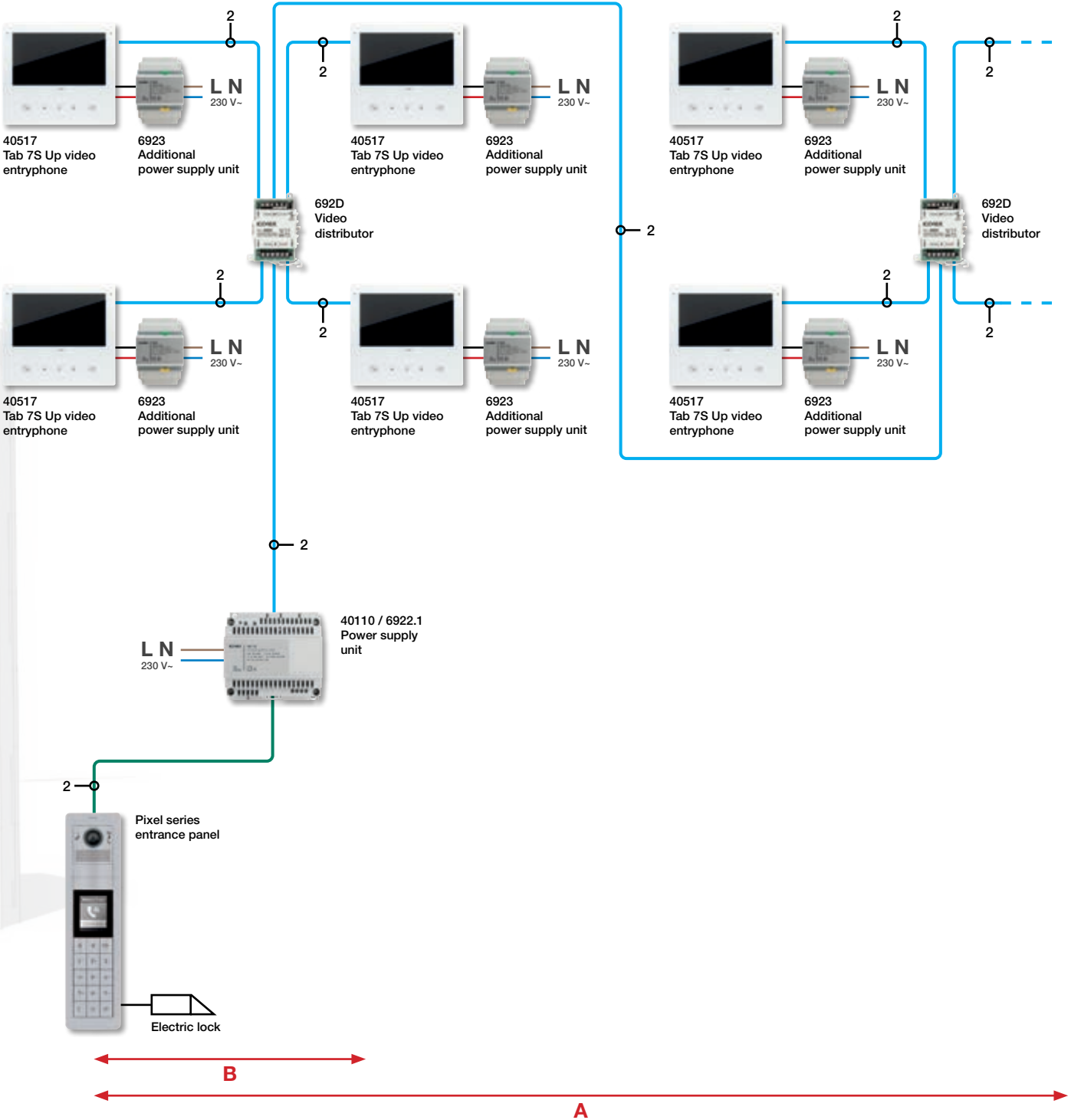
Type of cable	Max distance B	Max distance C		Max cable run (of the branch in conversation)
		Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E., 732I.E., 732I.C..	200 m	130 m ¹	160 m ¹	2000 m
Cat.5 or Cat.6	200 m	110 m ¹	130 m ¹	1500 m
Twisted phone	40 m	20 m ¹	30 m ¹	1000 m

Table relating to configuration with 1 entrance panel, 1 indoor station per call, power supply unit and riser splitter.
The use of video amplifiers 692M does not lengthen the distances.
1) Energy saving mode active or not.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.

- Key
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.
 - C - Maximum distance between the power supply unit and the furthest indoor station.

Example of a typical system: apartment building with video door entry system with up to 8 indoor stations.



Type of cable	Max distance A	Max distance B	Max cable run (of the branch in conversation)
732H.E., 732I.E., 732I.C..	320 m	200 m	2000 m
Cat.5 or Cat.6	260 m	200 m	2000 m
Twisted phone	100 m	40 m	2000 m
Single > 0.2 mm²	50 m		100 m

Table relating to configuration with 1 entrance panel, 8 individually activated indoor stations, power supply unit and video distributor

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Video and audio door entry systems: system characteristics

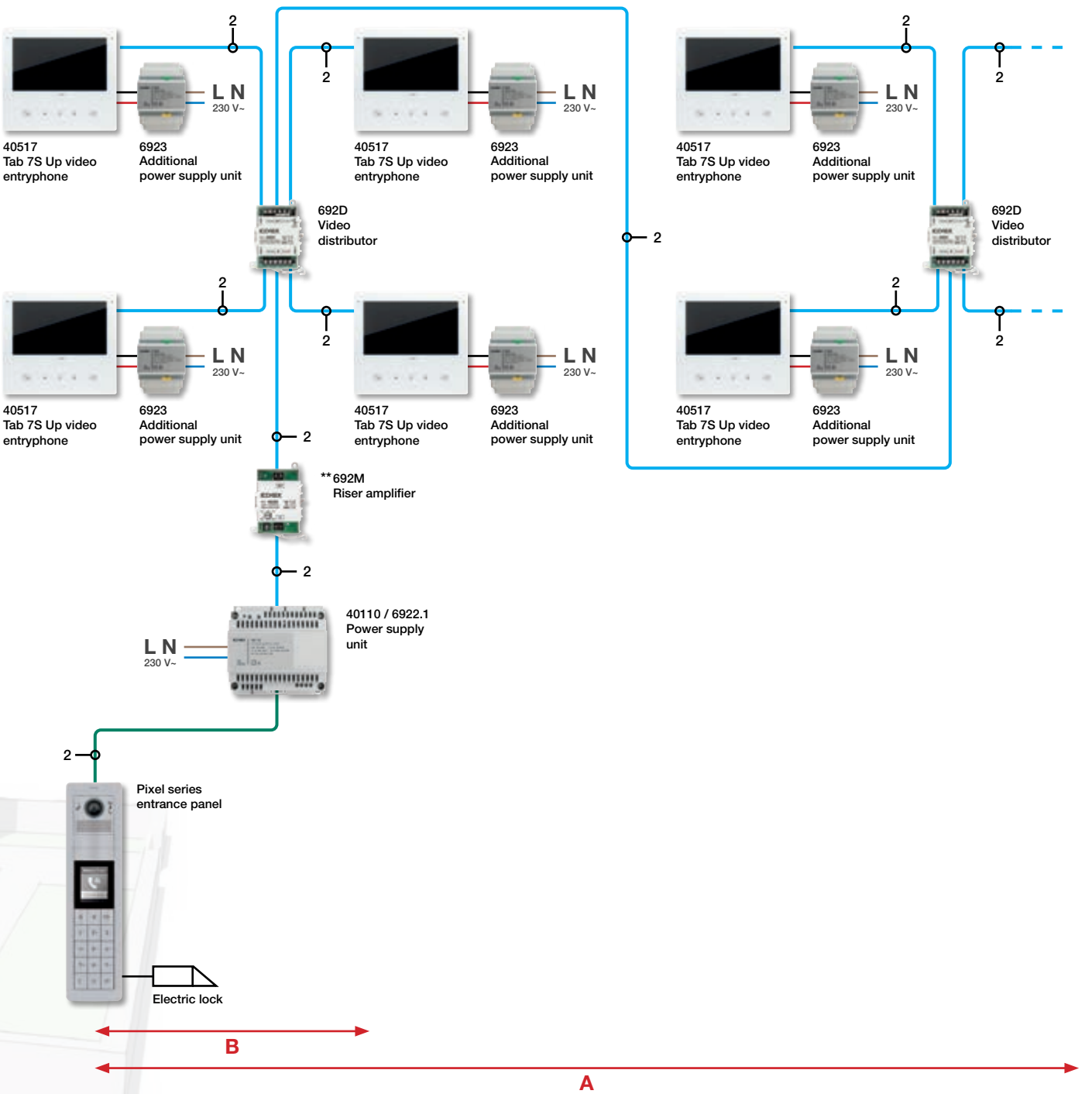
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Example of a typical system: apartment building with video door entry system with up to 8 indoor stations and extension of the cable runs, via riser amplifier.



Video and audio door entry systems: system characteristics

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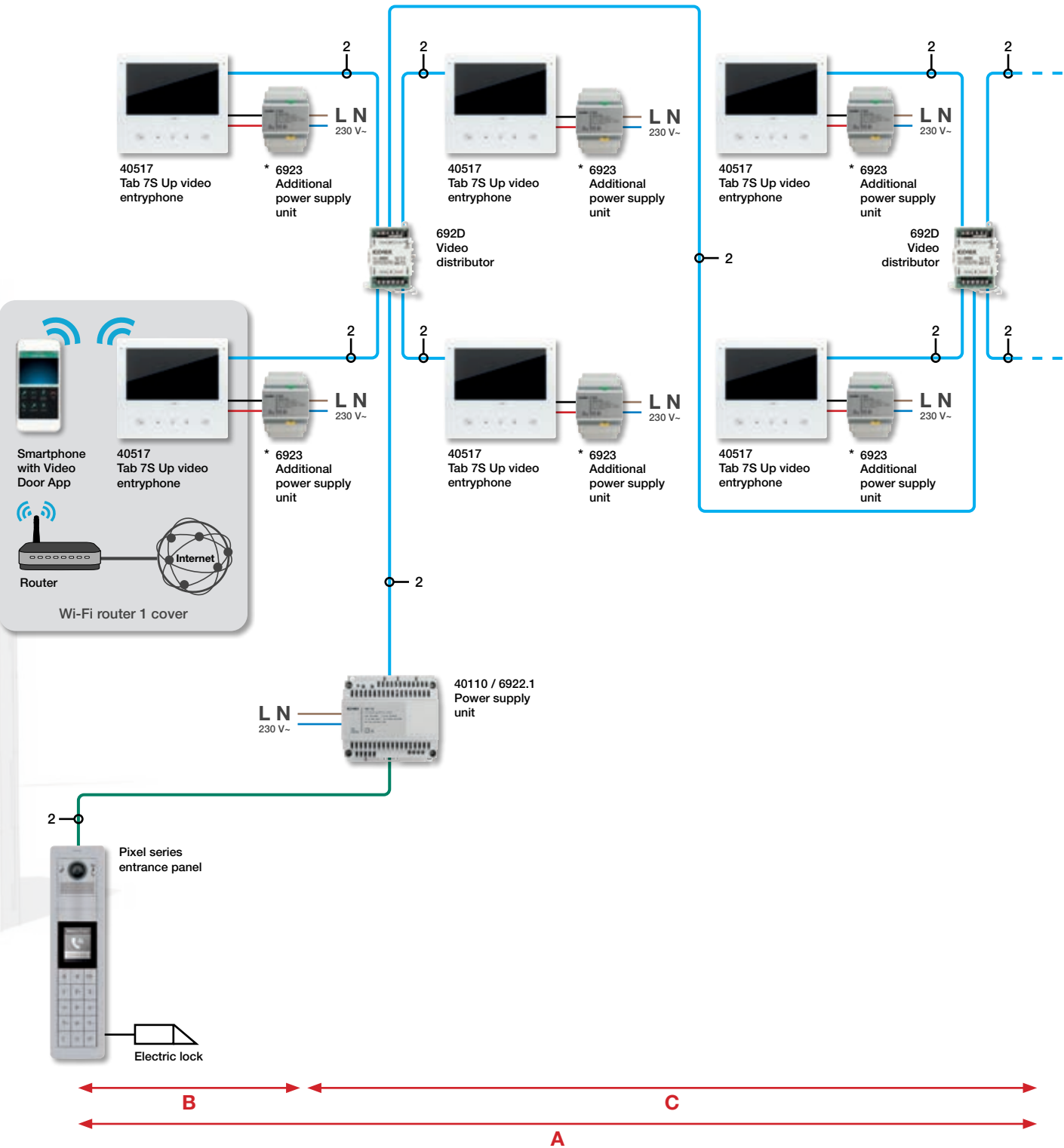
Type of cable	Video amplifiers (692M)	Max distance A	Max distance B	Max cable run (of the branch in conversation)
732H.E., 732I.E., 732I.C..	1	550 m	200 m	2000 m
732H.E., 732I.E., 732I.C..	2	800 m	200 m	2000 m
Cat.5 or Cat.6	1	450 m	200 m	2000 m
Cat.5 or Cat.6	2	650 m	200 m	2000 m

Table relating to configuration with 1 entrance panel, 8 individually activated indoor stations, power supply unit and video distributor. Use amplifier 692M for cables 732H.E., 732I.E. and 732I.C. or 692M/5 for Cat.5 and Cat.6 cables.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
In a system with extended cable runs use only the cables indicated in the table.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
** Position the 692M amplifier at least 200 m from the entrance panel or previous 692M.

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Example of a typical system: apartment building with video door entry system with Tab 7S Up and Tab 5S Up connected video entryphones.



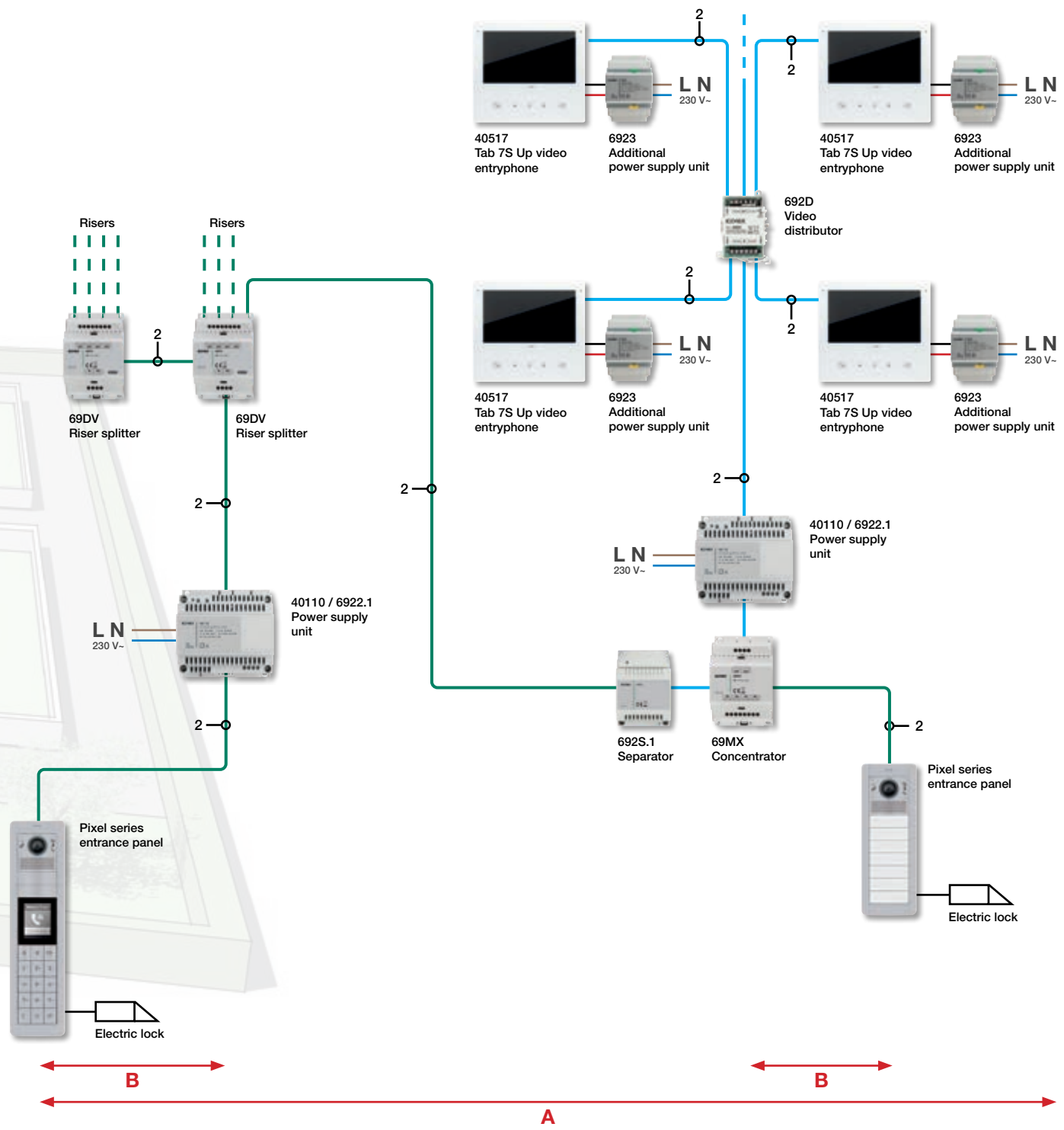
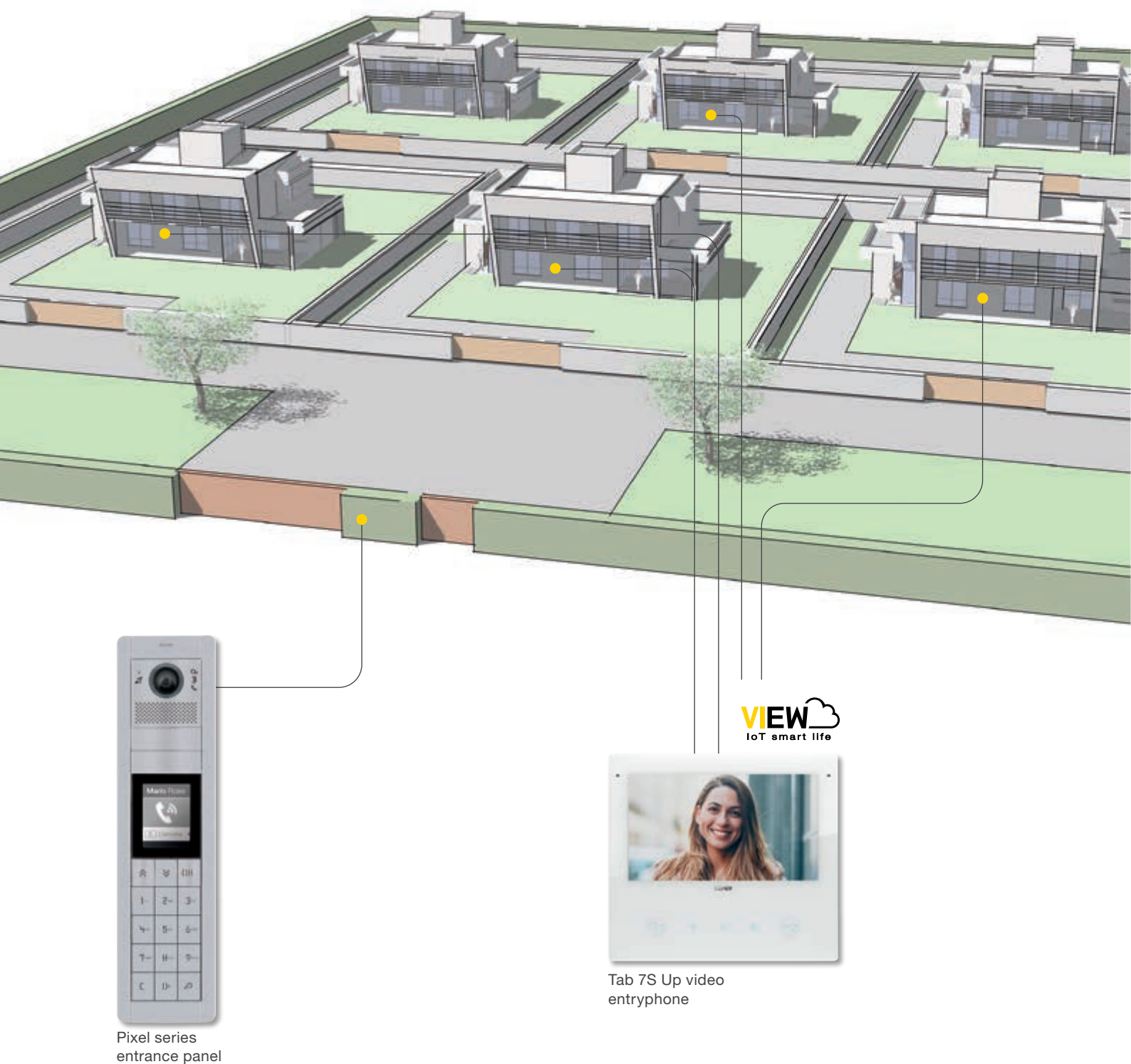
Type of cable	Max distance A	Max distance B	Max distance C		Max cable run (of the branch in conversation)
			Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E., 732I.E., 732I.C..	250 m	200 m	50 m ¹	70 m ¹	2000 m
Cat.5 or Cat.6	180 m	200 m	50 m ¹	60 m ¹	1500 m

Table relating to configuration with 1 entrance panel, 8 indoor stations, power supply unit and video distributor.
The use of video amplifiers 692M does not lengthen the distances.
1) Energy saving mode active.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.

- Key**
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.
 - C - Maximum distance between the power supply unit and the furthest indoor station.

Example of a typical system: residential complex with video door entry system with up to 200 indoor stations.



Type of cable	Max distance A	Max distance B	Max cable run (of the branch in conversation)
732H.E., 732I.E., 732I.C..	570 m	200 m	2000 m
Cat.5 or Cat.6	470 m	200 m	2000 m

Maximum number of riser splitters: 2 devices in series for a maximum of 8 risers, or connect 4 riser splitters in cascade to the outputs of another splitter for a maximum of 16 risers. The maximum distance and the extended cable are taken into account for a single riser of the 69DV, from the entrance panel to the last device on the riser.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
In a system with 200 indoor stations use only the cables indicated in the table.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C.).

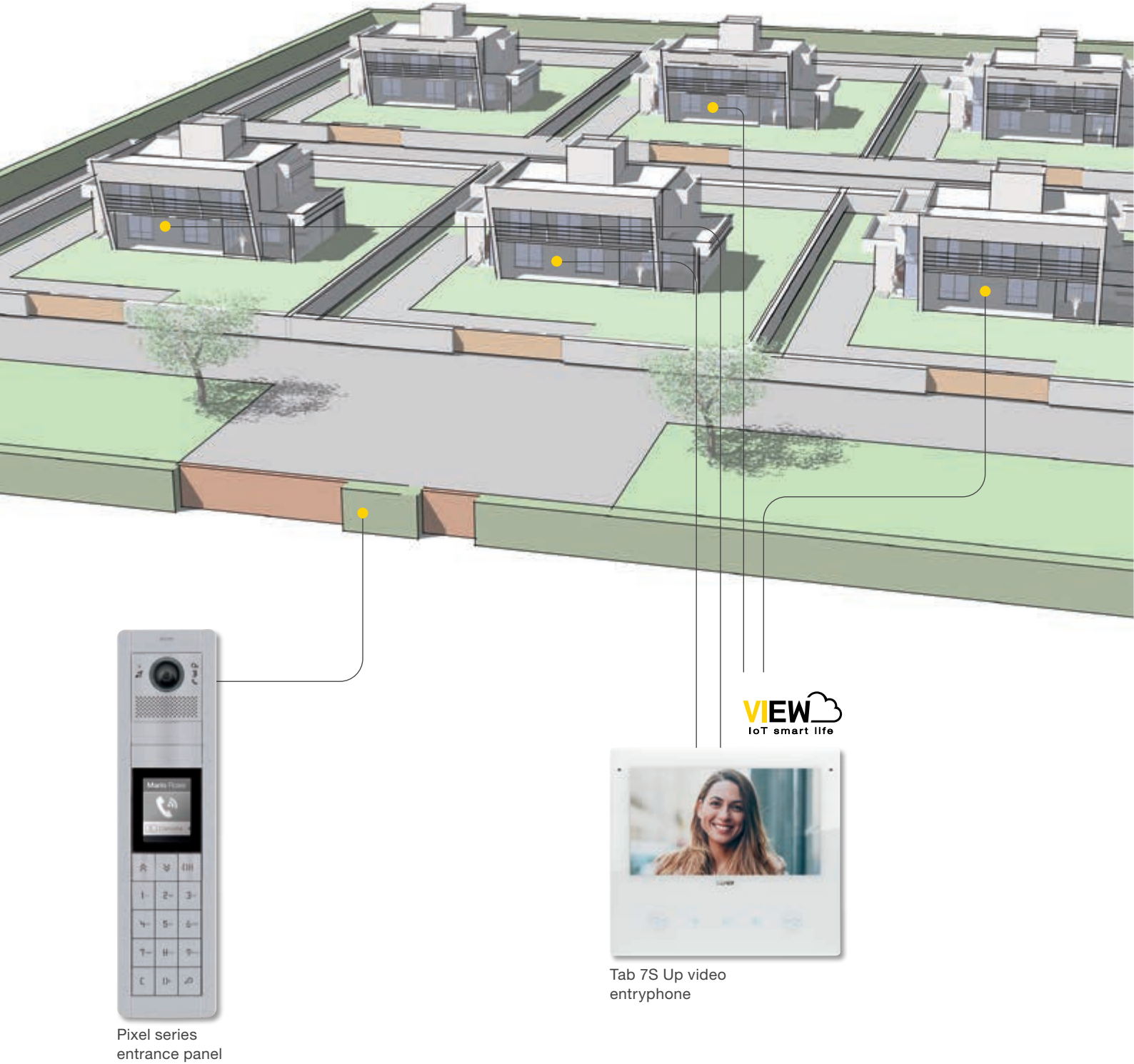
- Key**
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.

Video and audio door entry systems: system characteristics

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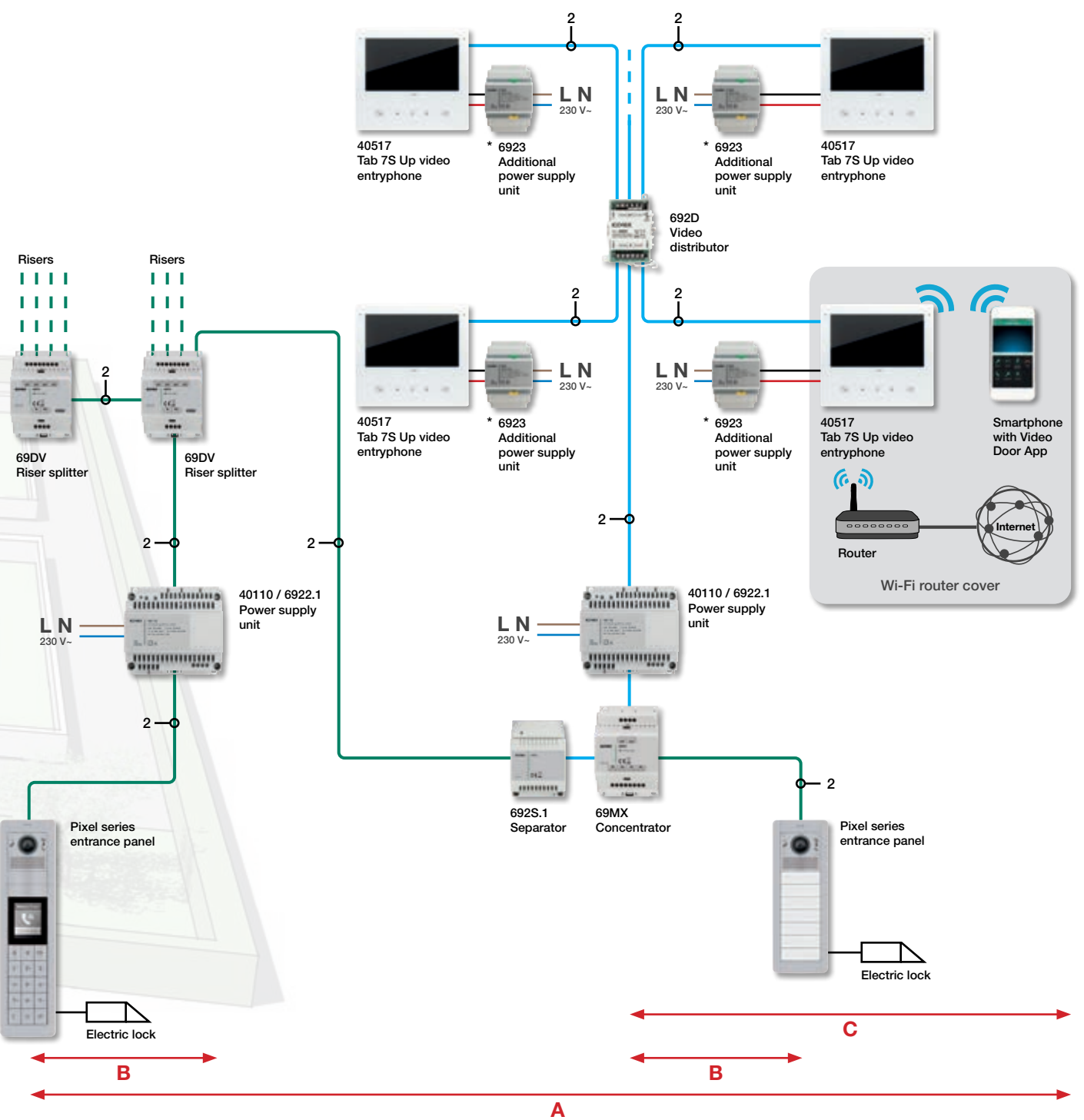
Example of a typical system: residential complex with video door entry system with up to 200 connected video entryphones; maximum 14 Tab 7S Up or 16 Tab 5S Up per riser.

The installation of a larger quantity of Tab 7S Up or Tab 5S Up per riser is possible, if you divide the connected video entryphones in several islands, using the separator 692S.1.



Video and audio door entry systems: system characteristics

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Type of cable	Max distance A	Max distance B	Max distance C		Max cable run (of the branch in conversation)
			Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E., 732I.E., 732I.C..	570 m	200 m	50 m'	70 m'	2000 m
Cat.5 or Cat.6	470 m	200 m	50 m'	60 m'	1500 m

Maximum number of riser splitters: 2 devices in series for a maximum of 8 risers, or connect 4 riser splitters in cascade to the outputs of another splitter for a maximum of 16 risers. The maximum distance and the extended cable are taken into account for a single riser of the 69DV, from the entrance panel to the last device on the riser.

1) Energy saving mode active.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.

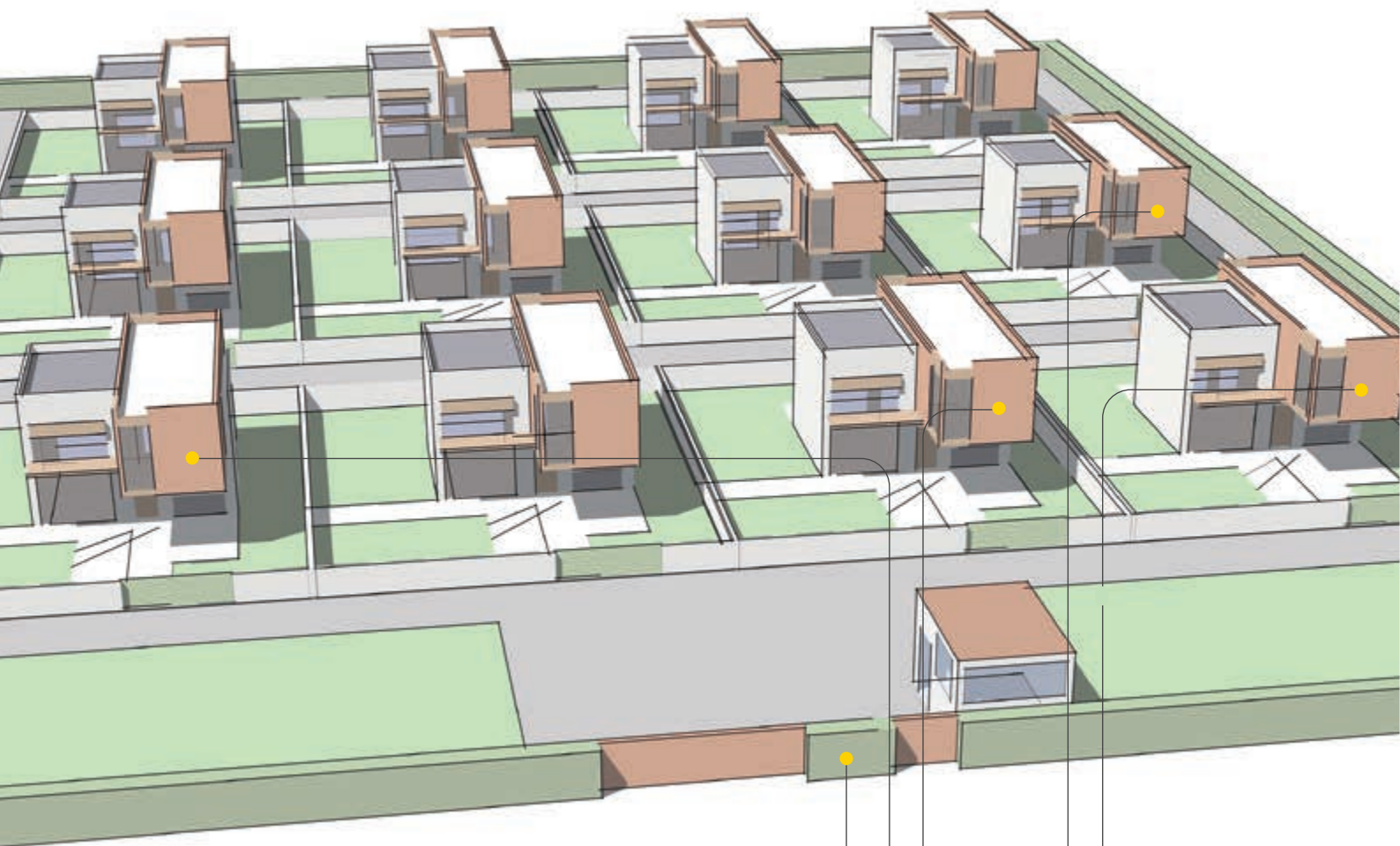
In a system with 200 indoor stations use only the cables indicated in the table.

The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).

* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.

- Key
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.
 - C - Maximum distance between the power supply unit and the furthest indoor station.

Example of a typical system: residential complex with video door entry system with reception switchboard and up to 200 indoor stations.

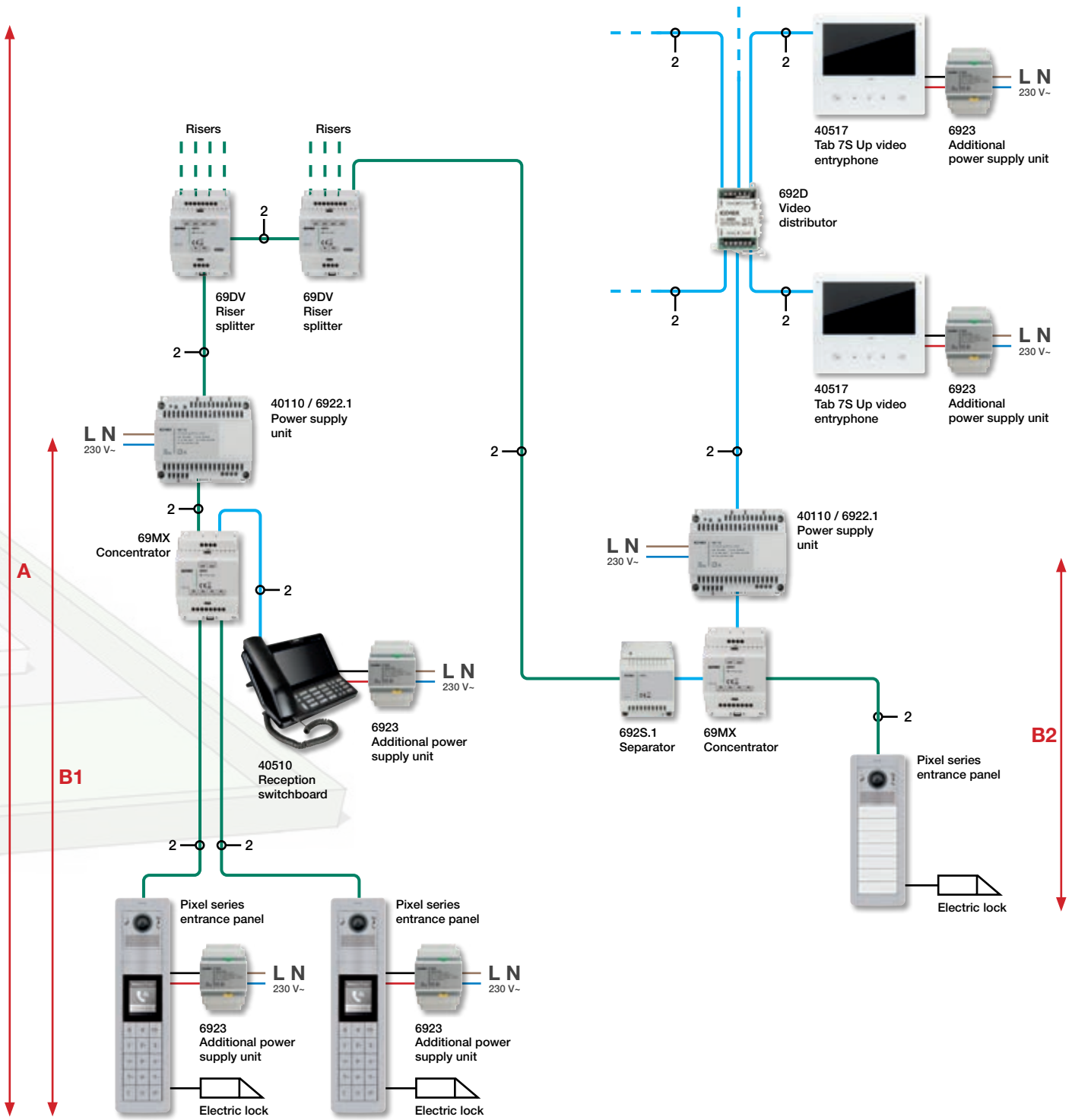


Pixel series entrance panel



Tab 7S Up video entryphone

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Type of cable	Max distance A	Max distance B1	Max distance B2	Max cable run (of the branch in conversation)
732H.E., 732I.E., 732I.C..	840 m	520 m	200 m	2000 m
Cat.5 or Cat.6	710 m	440 m	200 m	2000 m

Maximum number of riser splitters: 2 devices in series. The maximum distance and the extended cable are taken into account for a single riser of the 69DV, from the entrance panel to the last device on the riser.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
In a system with 200 indoor stations use only the cables indicated in the table.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).

Key
A - Maximum distance between the indoor station and the furthest entrance panels.
B - Maximum distance between the entrance panel and the power supply unit.

Video and audio door entry systems: system characteristics

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Example of a typical system: residential complex with video door entry system with reception switchboard and up to 200 connected video entryphones; maximum 14 Tab 7S Up or 16 Tab 5S Up per riser.

The installation of a larger quantity of Tab 7S Up or Tab 5S Up per riser is possible, if you divide the connected video entryphones in several islands, using the separator 692S.1.





Pixel series entrance panel

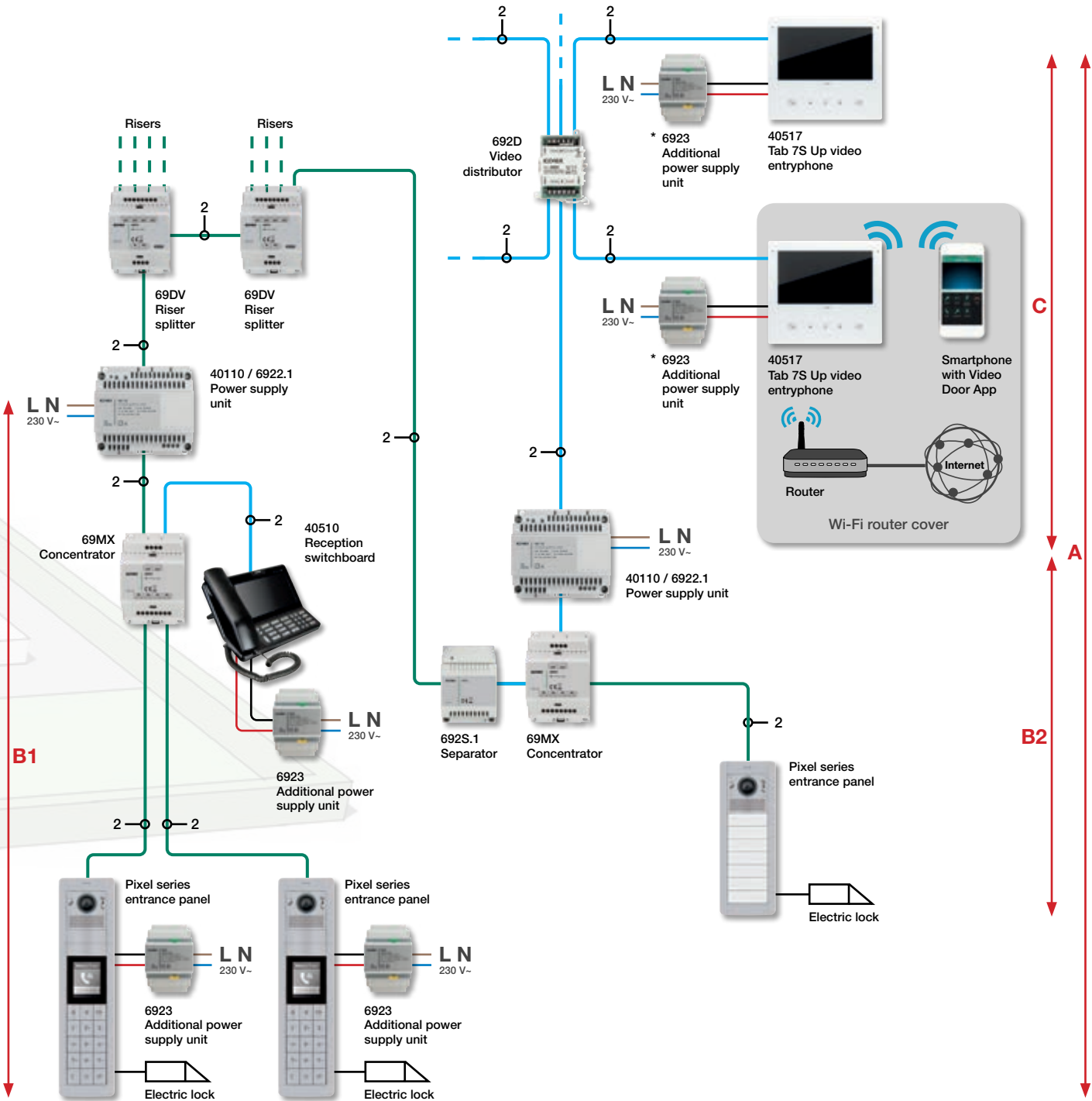


Tab 7S Up video entryphone



Video and audio door entry systems: system characteristics

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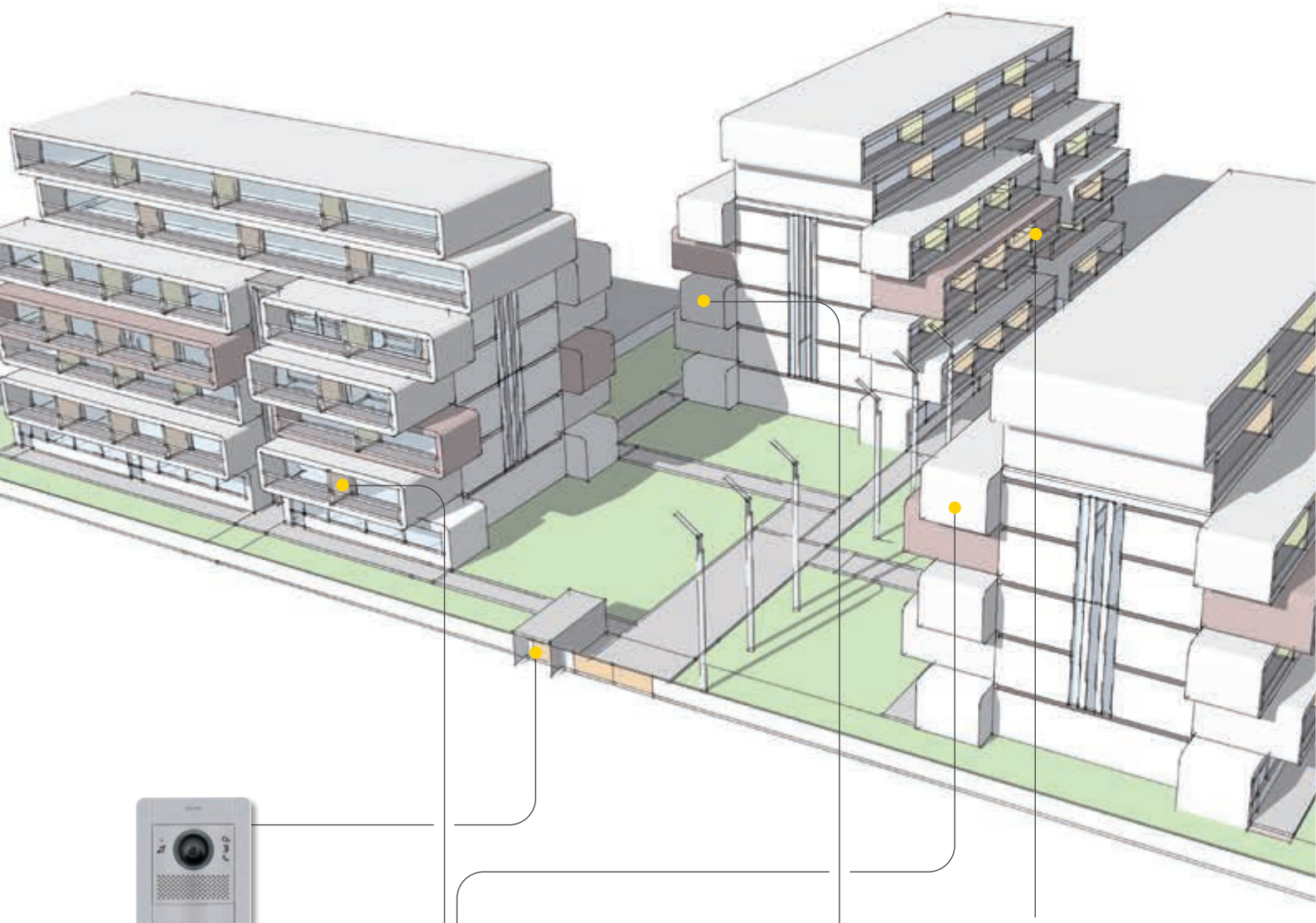


Type of cable	Max distance A	Max distance B1	Max distance B2	Max distance C		Max cable run (of the branch in conversation)
				Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E., 732I.E., 732I.C..	840 m	520 m	200 m	50 m¹	70 m¹	2000 m
Cat.5 or Cat.6	710 m	440 m	200 m	50 m¹	60 m¹	1500 m

Maximum number of riser splitters: 2 devices in series. The maximum distance and the extended cable are taken into account for a single riser of the 69DV, from the entrance panel to the last device on the riser.
1) Energy saving mode active.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
In a system with 200 indoor stations use only the cables indicated in the table.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.

Example of a typical system: residential complex with video door entry system with up to 500 indoor stations.



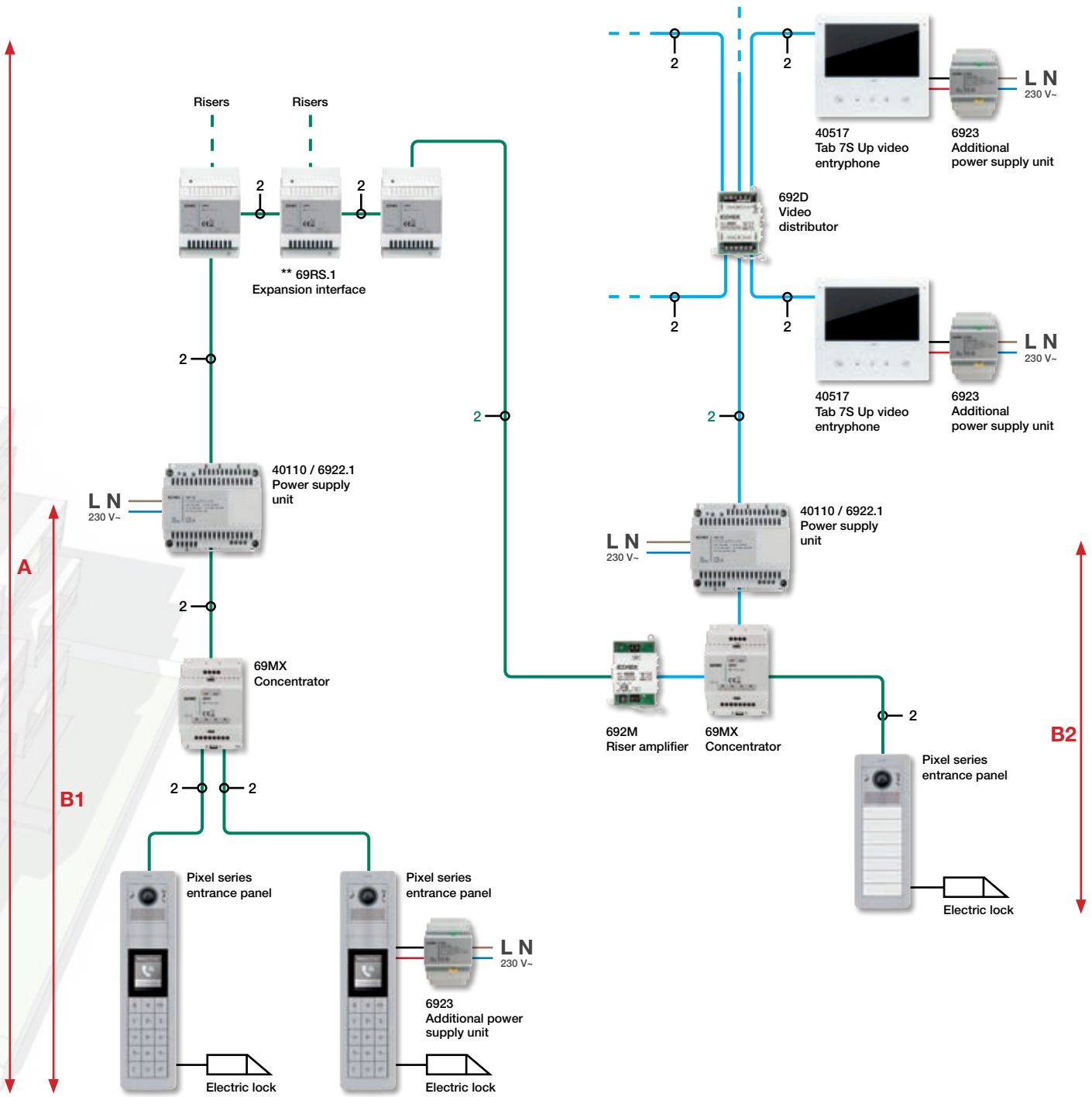
Pixel series entrance panel



Tab 7S Up video entryphone



Tab 7S Up video entryphone



Type of cable	Video amplifiers (692M)	Max distance A	Max distance B1	Max distance B2	Max cable run (of the branch in conversation)
732H.E..., 732I.E..., 732I.C...	1	840 m	520 m	200 m	2000 m
Cat.5 or Cat.6	1	710 m	440 m	200 m	2000 m

Table relating to configuration with 1 outdoor station and individually activated indoor stations. In the system, you can connect up to a maximum of 32 69RS.1 and maximum 10 connected to one another in in-out . The maximum distance and the extended cable are taken into account for a single riser of the 69DV, from the entrance panel to the last device on the riser. Use amplifier 692M for cables 732H.E..., 732I.E... and 732I.C... or 692M/5 for Cat.5 and Cat.6 cables.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
In a system with 500 indoor stations use only the cables indicated in the table.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732I.E and 732I.C).
** Connect a maximum of 8 in/out 69RS.1 devices in the same electrical panel (max total length of the in/out cable: 7 m).

- Key
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.

Video and audio door entry systems: system characteristics

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Example of a typical system: residential complex with video door entry system and up to 500 connected video entryphones; maximum 14 Tab 7S Up or 16 Tab 5S Up per riser.

The installation of a larger quantity of Tab 7S Up or Tab 5S Up per riser is possible, if you divide the connected video entryphones in several islands, using the separator 692S.1.



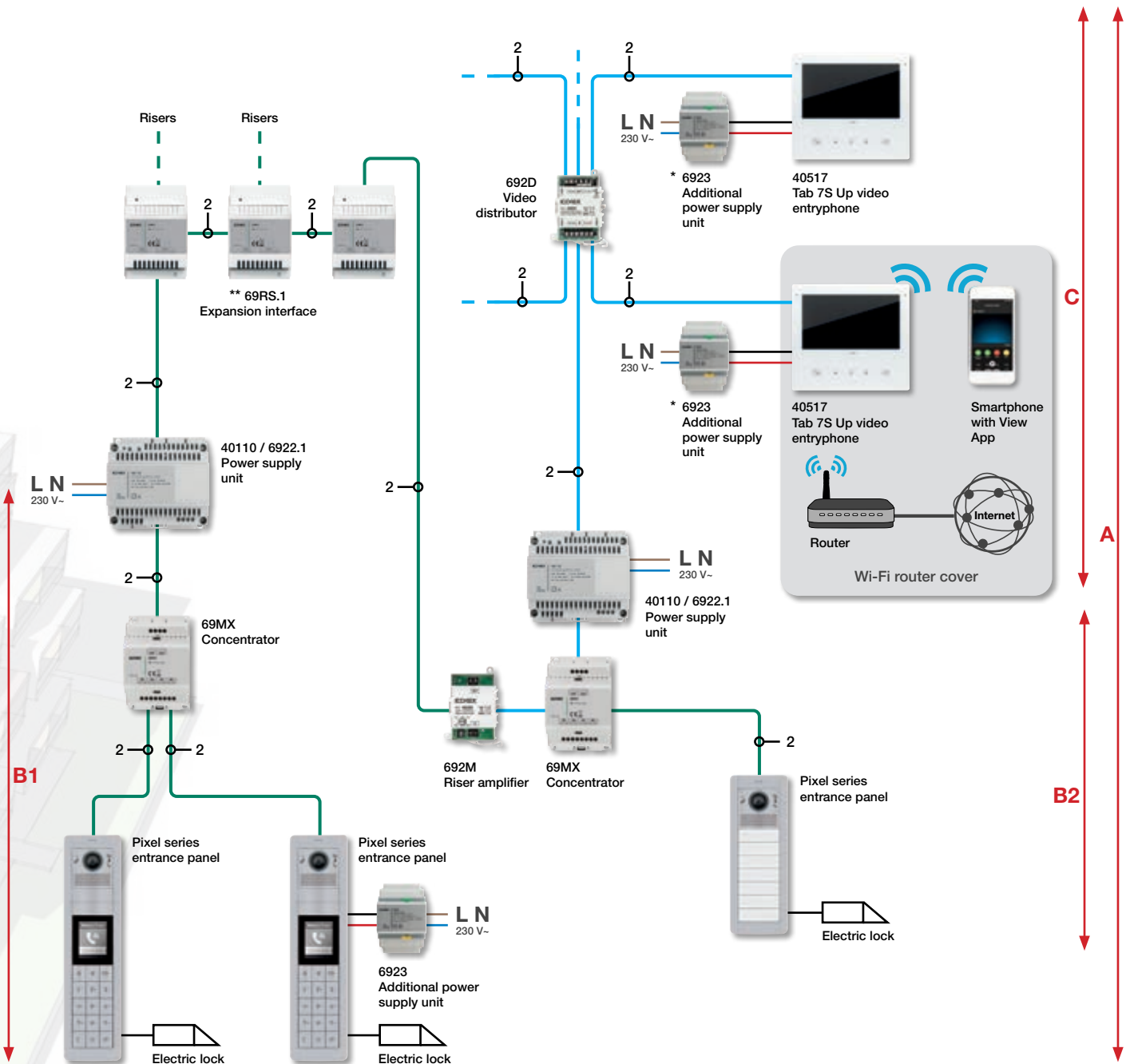
Pixel series entrance panel



Tab 7S Up video entryphone

Video and audio door entry systems: system characteristics

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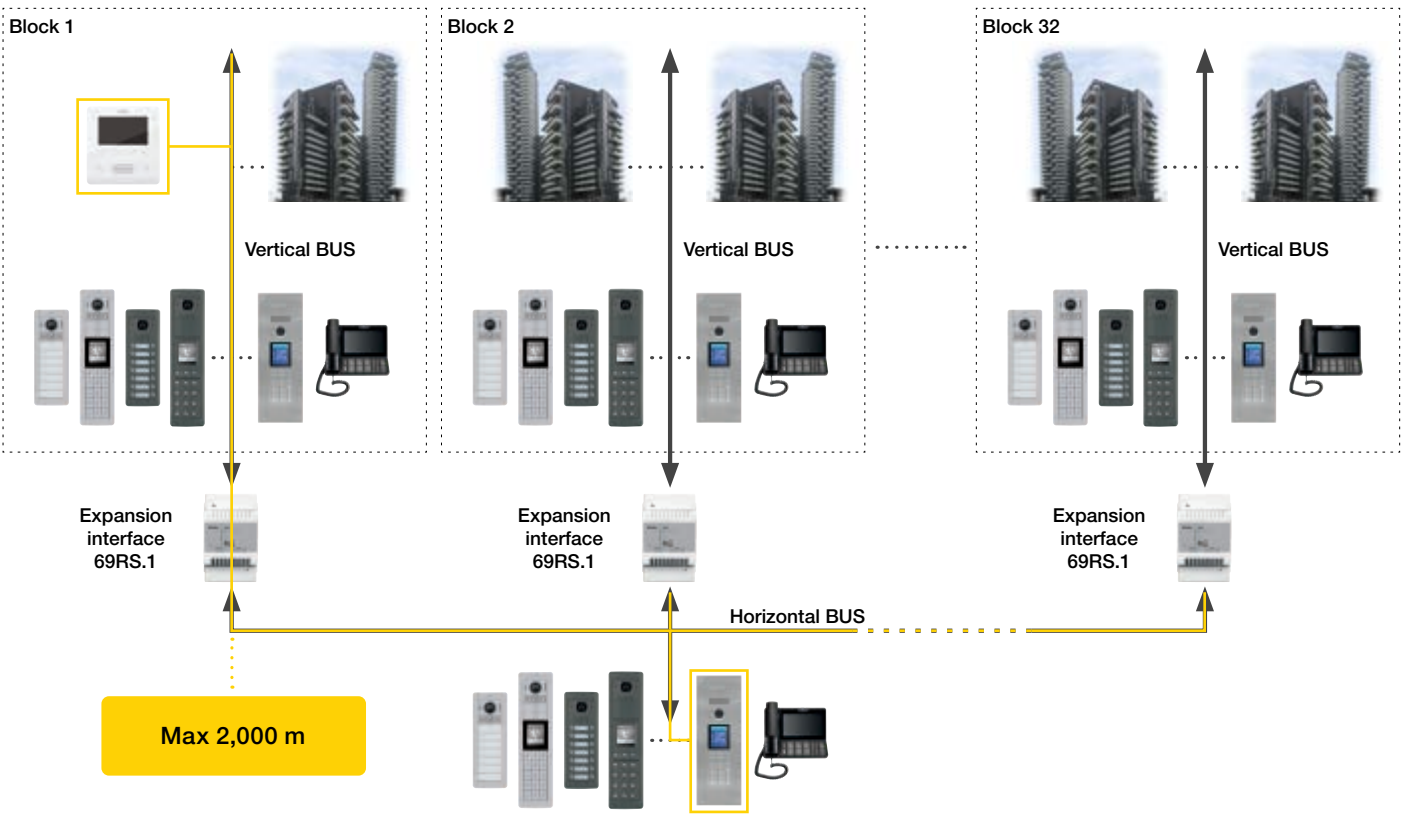
Type of cable	Video amplifiers (692M)	Max distance A	Max distance B1	Max distance B2	Max distance C		Max cable run (of the branch in conversation)
					Tab 7S Up (40517)	Tab 5S Up (40515)	
732H.E., 732L.E., 732L.C.	1	840 m	520 m	200 m	50 m ¹	70 m ¹	2000 m
Cat.5 or Cat.6	1	710 m	440 m	200 m	50 m ¹	60 m ¹	1500 m

Table relating to configuration with 1 outdoor station and individually activated indoor stations. In the system, you can connect up to a maximum of 32 69RS.1 and maximum 10 connected to one another in in-out . The maximum distance and the extended cable are taken into account for a single riser of the 69DV, from the entrance panel to the last device on the riser. Use amplifier 692M for cables 732H.E., 732L.E. and 732L.C. or 692M/5 for Cat.5 and Cat.6 cables.
1) Energy saving mode active.

Notes:
In the event that the use of different video entryphone models is required, check the distances of the applicable cable runs. Whatever the conditions, the supply voltage at the video entryphone input must not be less than 24 VDC for each device.
In a system with 500 indoor stations use only the cables indicated in the table.
The maximum distance between the additional power supply unit 6923 and the locally powered devices (entrance panels, video entryphones, switchboards, etc.) is 10 m with Elvox cable (732H.E, 732L.E and 732L.C).
* Depending on the type of system built, assess whether the use of an additional power supply unit 6923 may be necessary.
** Connect a maximum of 8 in/out 69RS.1 devices in the same electrical panel (max total length of the in/out cable: 7 m).

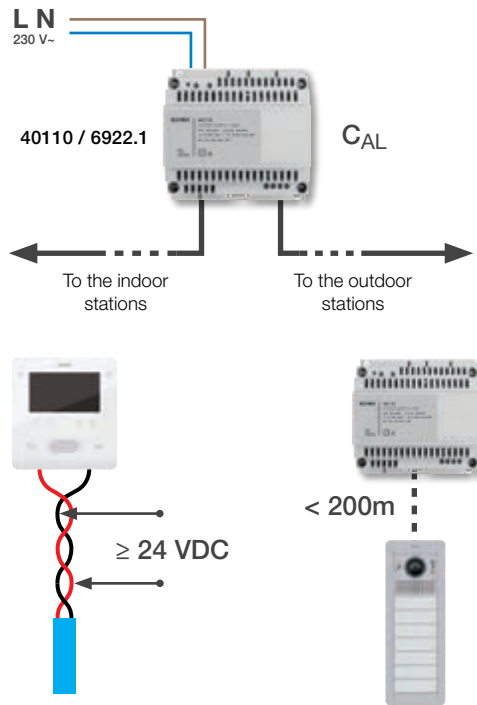
- Key**
- A - Maximum distance between the indoor station and the furthest entrance panels.
 - B - Maximum distance between the entrance panel and the power supply unit.
 - C - Maximum distance between the power supply unit and the furthest indoor station.

Cables to use and maximum distances achievable



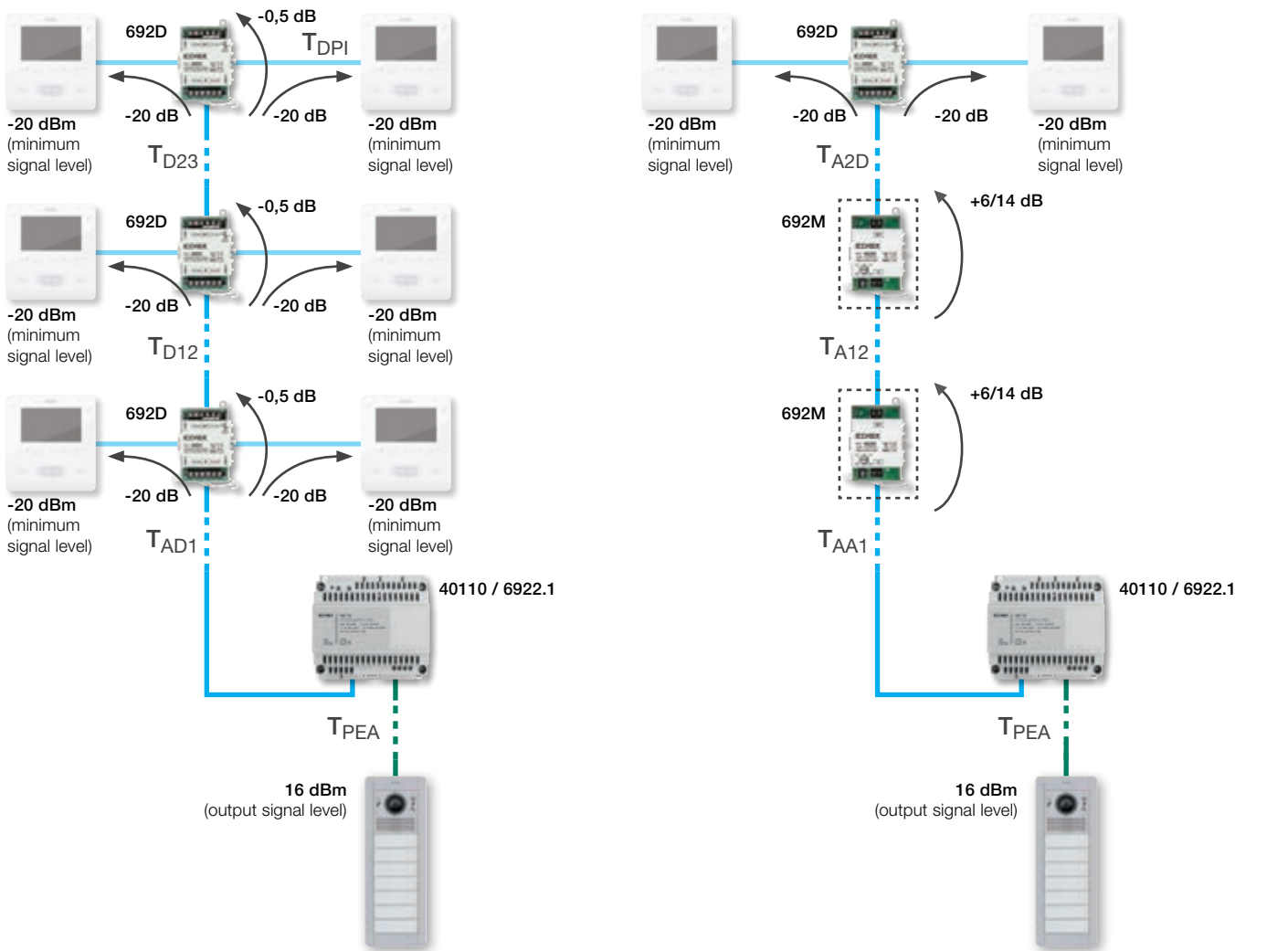
The maximum length of the cable run in the **branch in conversation**, including all shunting, must be less than 2,000 m (using Elvox or CAT5/6 cables with twisted pair cables).

Power supply



- On standby or during a call/conversation, the sum of the consumption of all the devices powered by a single power supply unit 40110 / 6922.1 must not exceed the maximum value of the current it can dispense. Whatever the conditions, it must be: $C_{AL} > C_{PI} + C_{PE}$.
- Whatever the conditions, the supply voltage must not be less than 24 VDC for each device.
- **N.B.:** for 13Fx and Pixel outdoor stations, using Elvox 732... cable entails that the maximum distance between these and the power supply unit should be 200 metres.

Video signal attenuation



The video signal level that reaches any indoor station must not be less than -20 dBm. For the calculation, take into account the level transmitted by the audio/video unit of the outdoor station, the attenuation of the cable calculated on only the direct run and of the effect of all the devices that may be present along the run (see tables on pages 66 and 67).

In the example above, you must check that:
 $16 - 2 \times 0.5 - 20 - (T_{PEA} + T_{AD1} + T_{D12} + T_{D23} + T_{DPI}) \times 5 / 100 > -20$

Therefore, the sum of the cable lengths must be less than 300 metres, using Elvox cables.

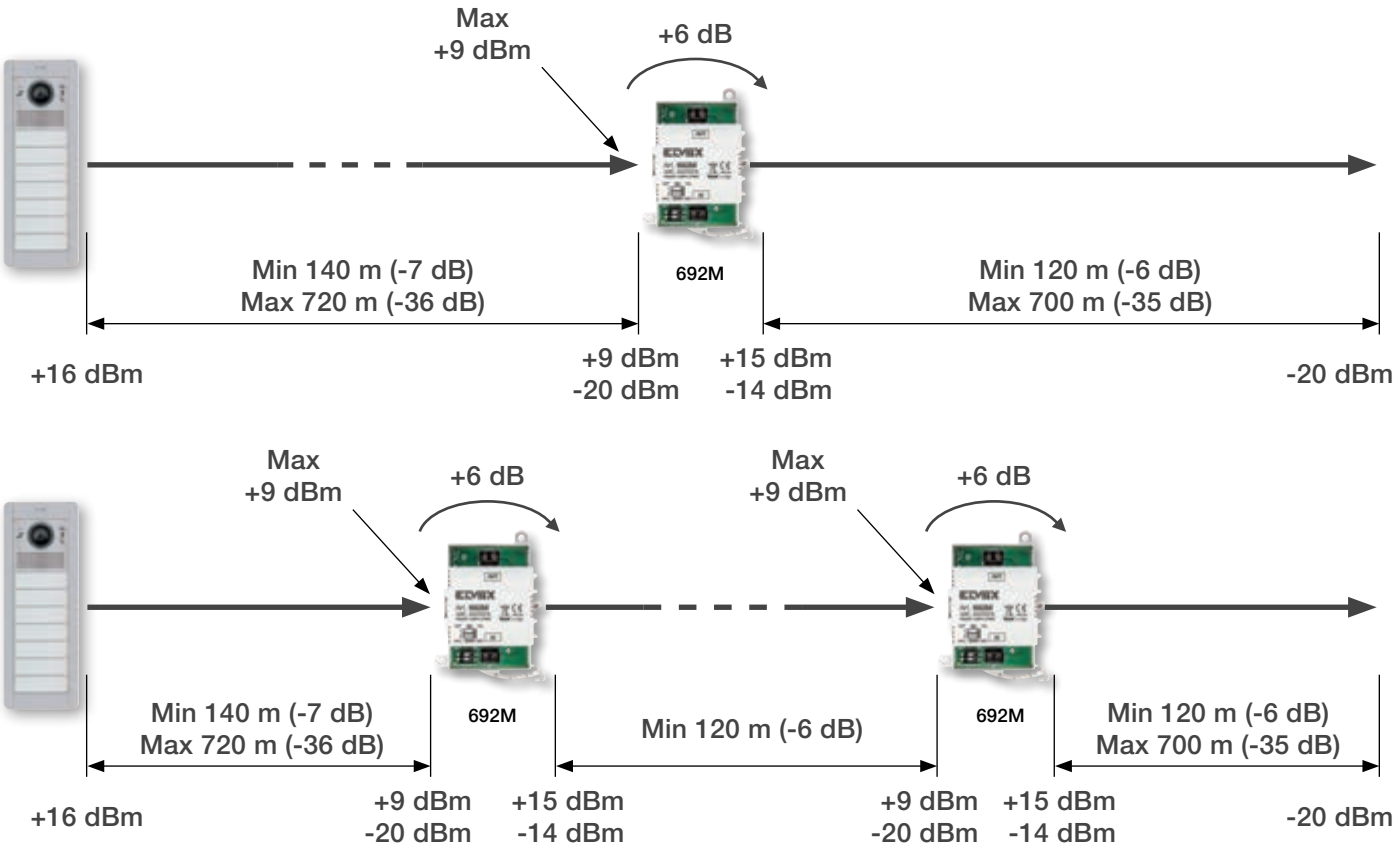
692M - Riser amplifier
Should it be necessary to exceed the maximum cable length permitted, video signal amplifiers 692M can be used to regenerate the video signal, with a gain of +6 or +14 dB programmable.

A maximum of 2 video amplifiers 692M can be inserted on a single video run between an Outdoor Station and an Indoor Station.
The gain of each amplifier must be set in relation to the input level so that the output does not exceed the nominal rating of +16 dBm.

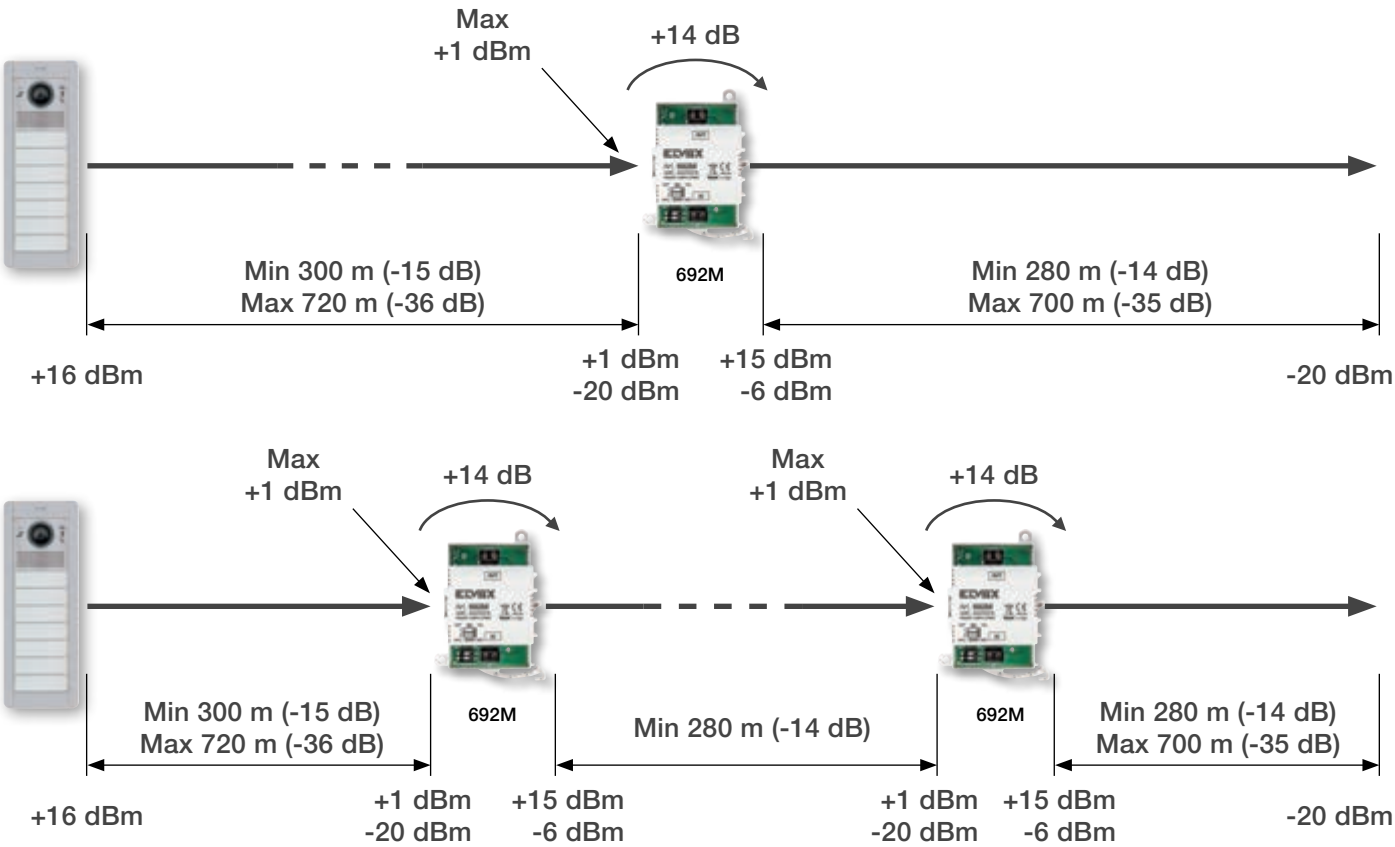
Max level of input signal for amplification 6 dB = **+9 dBm**
Max level of input signal for amplification 14 dB = **+1 dBm**

Video signal attenuation

Using Elvox cable and 2 692M with amplification +6 dB, the maximum theoretical length of the run is 960 m.

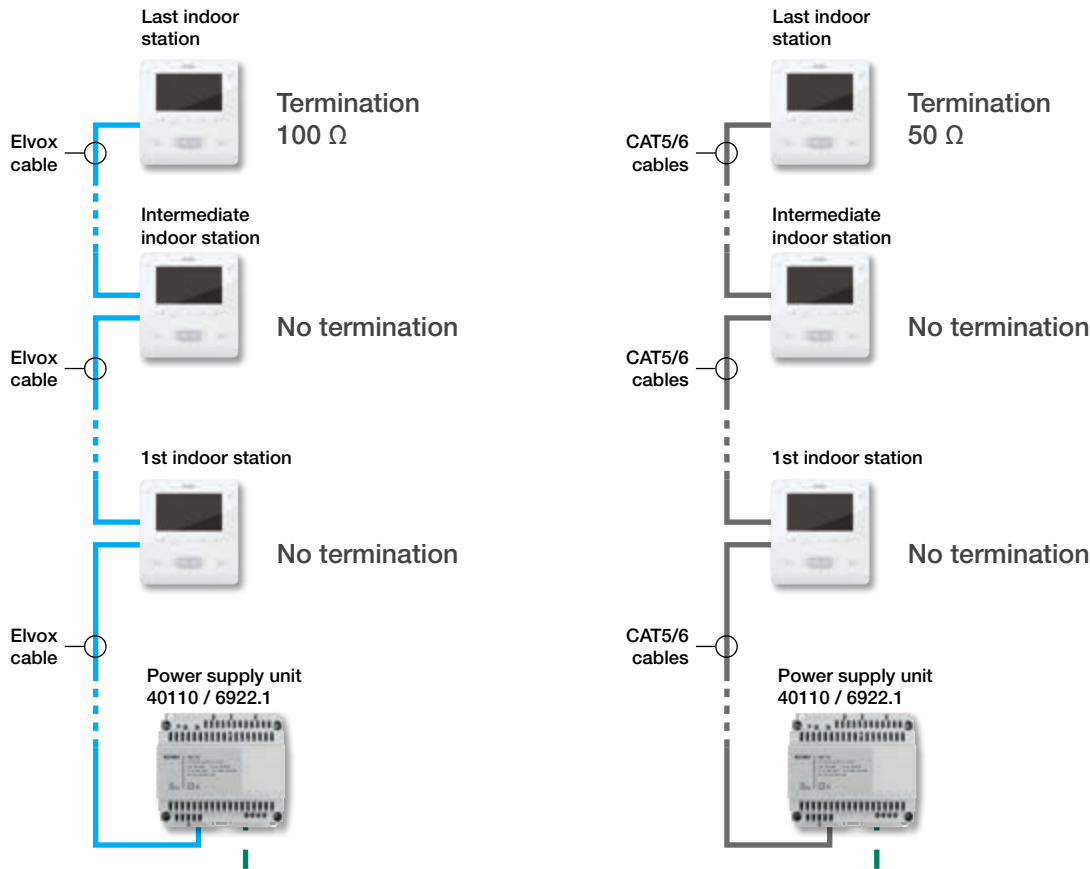


Using Elvox cable and 2 692M with amplification +14 dB, the maximum theoretical length of the run is 1,280 m.



Video signal attenuation

The 1st first indoor station and the intermediate ones in an in-out connection should not be terminated, only the last indoor station in the sequence should be terminated on position 100 Ω if Elvox cables are being used or on position 50 Ω if CAT5/6 twisted pair cables are being used.

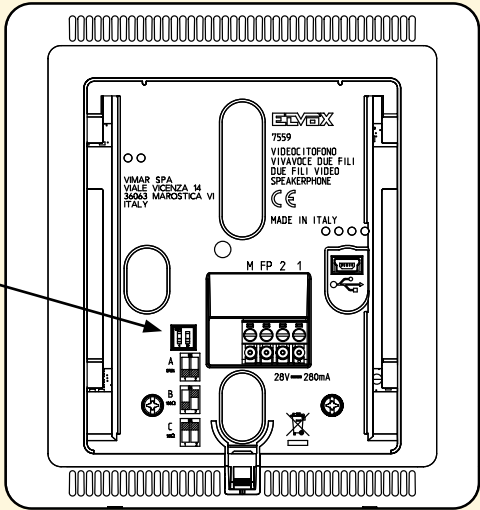
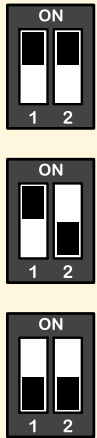


Example of video indoor station termination with dip switch

Both Dip switches OFF:
Pass-through connection

One Dip switch ON:
Termination 100 Ω for Elvox
cables (type 732x...)

Both Dip switches ON:
Termination 50 Ω for CAT5/6
twisted pair cables.



Video signal attenuation

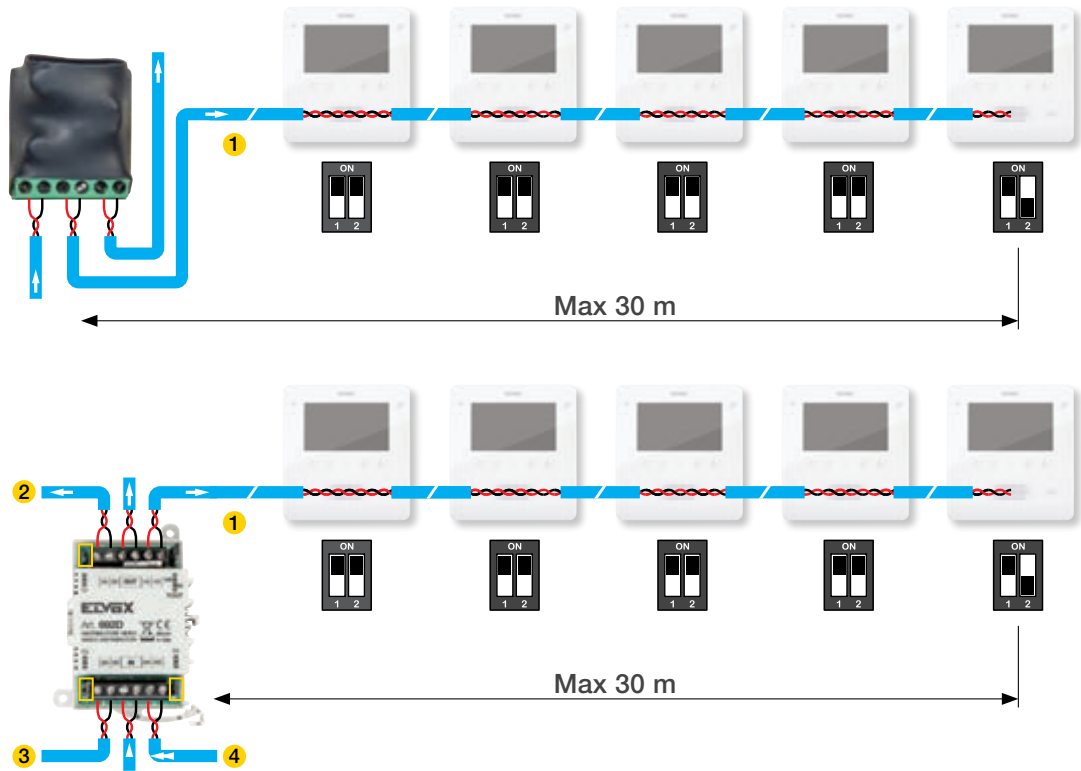
691D - Video signal floor distributor
691D is a passive distributor that allows connection to the riser of 1 single shunting for video indoor stations and is capable of allowing a maximum of 700 mA to pass for the power supply - typically - of 2 video indoor stations in parallel with simultaneous switch-on. The shunting must have a length of less than 30 m.

692D - Video signal floor distributor
692D is a passive distributor that allows connection to the riser of 4 shunts for video indoor stations and is capable of allowing, for each one, a maximum of 700 mA to pass for the power supply - typically - of 2 video indoor stations in parallel with simultaneous switch-on. The shunting must have a length of less than 30 m.

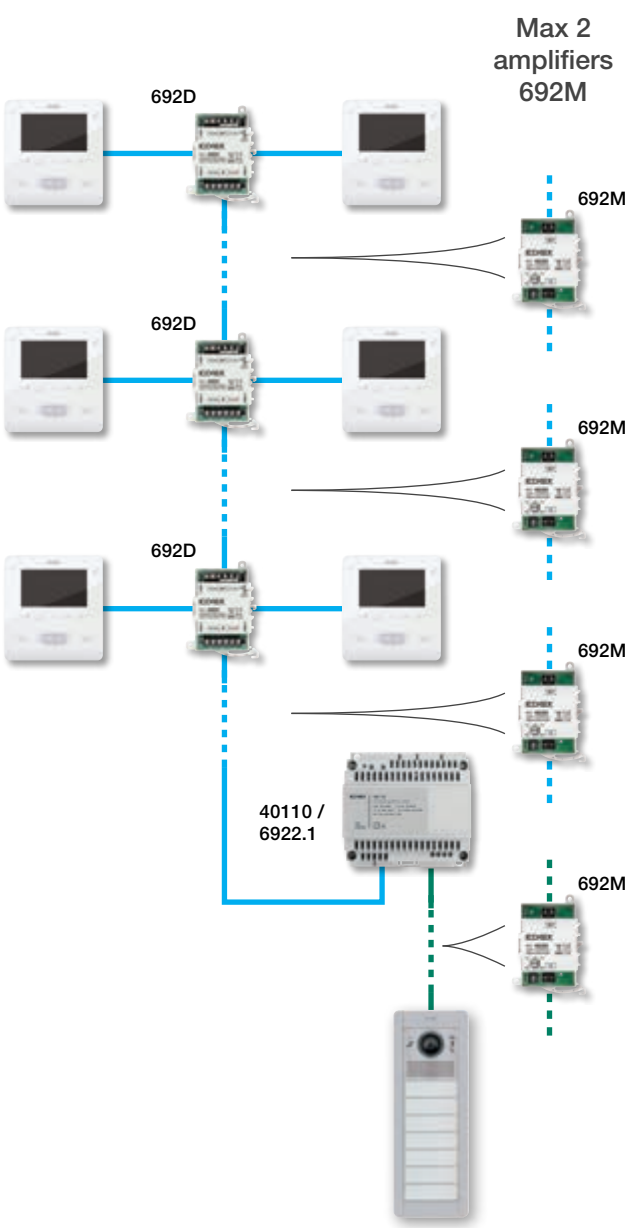
At least one shunting must under all circumstances be connected to output 1A-1B.
For all other outputs: if used, the corresponding jumper must be removed; if not used, you need to leave it in place.

If the riser continues, remove jumper TOUT. Otherwise, move jumper TOUT to position 100 if Elvox cables are being used otherwise to position 50 if CAT5/6 twisted pair cables are being used.

The maximum number of indoor stations that can be connected to the output of each distributor shunting is 5, considering the maximum output current of 691D and 692D. Only the last indoor station of the sequence must be terminated. The limit of the maximum current can be compensated by indoor stations which can be powered locally.



Single-riser systems with single outdoor station



General requirements:
On standby, during a call or a conversation, the sum of the consumption of all the devices powered by a single power supply unit 6922.1 must not exceed the maximum value of the current it can dispense.

Whatever the conditions, the supply voltage must not be less than 24 VDC for each device.
The video signal level that reaches any indoor station must not be less than -20 dBm.

For any connection envisaged, the maximum length of the cable run must be less than 2,000 m (using Elvox or CAT5/6 twisted pair cables) and the number of all devices connected along the cable run must not exceed 50.
All the cable runs concerned by a conversation must be considered (including any separators / closed interfaces) including shunting and converging branches.

Maximum cable lengths (using Elvox cables)
Max Cable Length (Elvox 732H/I) between the two furthest devices, 720 m; extendible up to approximately 1,280 m depending on the type of system and with the use of maximum 2 amplifiers 692M (with programmed gain of +14 dB).

For 13Fx and Pixel outdoor stations, using an Elvox 732H/I cable, the maximum distance between these and the power supply unit is 200 metres.

In the presence of runs without shunting, with in-out connections, the maximum number of indoor stations that can be connected, with one or more in simultaneous switch-on, is 5. Any indoor stations exceeding the consumption limit of 700 mA should be powered locally.

Multi-riser systems with single outdoor station

69DV - Riser splitter

Riser splitters 69DV allow you to separate the system into maximum 4 risers in shunting. Use article 69DV for systems created with Elvox cables or article 69DV/5 for systems created with Cat5/6 twisted pair cables.

ON

OFF

If the "OUT" output is used (see below), the jumper needs to be moved to position OFF.

69DV

69DV

40110 / 6922.1

Max 2 splitters 69DV connected in parallel

69DV

69DV

69DV

69DV

69DV

40110 / 6922.1

Max 4 splitters 69DV connected in cascade to the main 69DV

Riser splitters can be used to obtain up to 8 shunts with 2 69DC connected "in series" (the OUT of the first one connected to the IN of the second, with the minimum possible cable length between the two devices) or up to 16 shunts with 5 69DV connected "in cascade" (OUT1, OUT2, OUT3, OUT4 of the first are connected to the Ins of the others).

In any configuration possible, outputs OUT1, OUT2, OUT3, OUT4 that are not used do not need to be terminated.

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DOOR ENTRY

2 DUE FILI PLUS

Video and audio door entry systems: system characteristics

Systems with several outdoor stations

69MX - Video entrance panel concentrator

Concentrators 69MX allow the connection of several audio/video electronic units or video sources in parallel. With 4 inputs for outdoor stations or video sources and 2 outputs for riser lines. Use article 69MX for systems created with Elvox cables or article 69MX/5 for systems created with Cat5/6 twisted pair cables.

• Minimum level of input signal: - 10 dBm.

• Maximum level of input signal: + 10 dBm.

• Level of output signal: + 16 dBm.

The maximum current which can transit from terminals OUT1 to terminals OUT2 is 1.5 A (towards the riser). The maximum current which can transit from terminals OUT1 to terminals IN1 or IN2 or IN3 or IN4 is 0.8 A (towards the outdoor stations).

69MX

69MX

69MX

69MX

69MX

40110 / 6922.1

692D

1A1B

69MX

69MX

69MX

69MX

40110 / 6922.1

The concentrators can be used to connect up to 16 outdoor stations or video sources with 5 69MX connected "in cascade" (the OUT1 of four concentrators are connected to IN1, IN2, IN3, IN4 of the first one). In any configuration possible, inputs IN1, IN2 and outputs OUT1, OUT2, OUT3, OUT4 that are unused do not need to be terminated.

69MX

69MX

69MX

69MX

1A1B

692D

IN

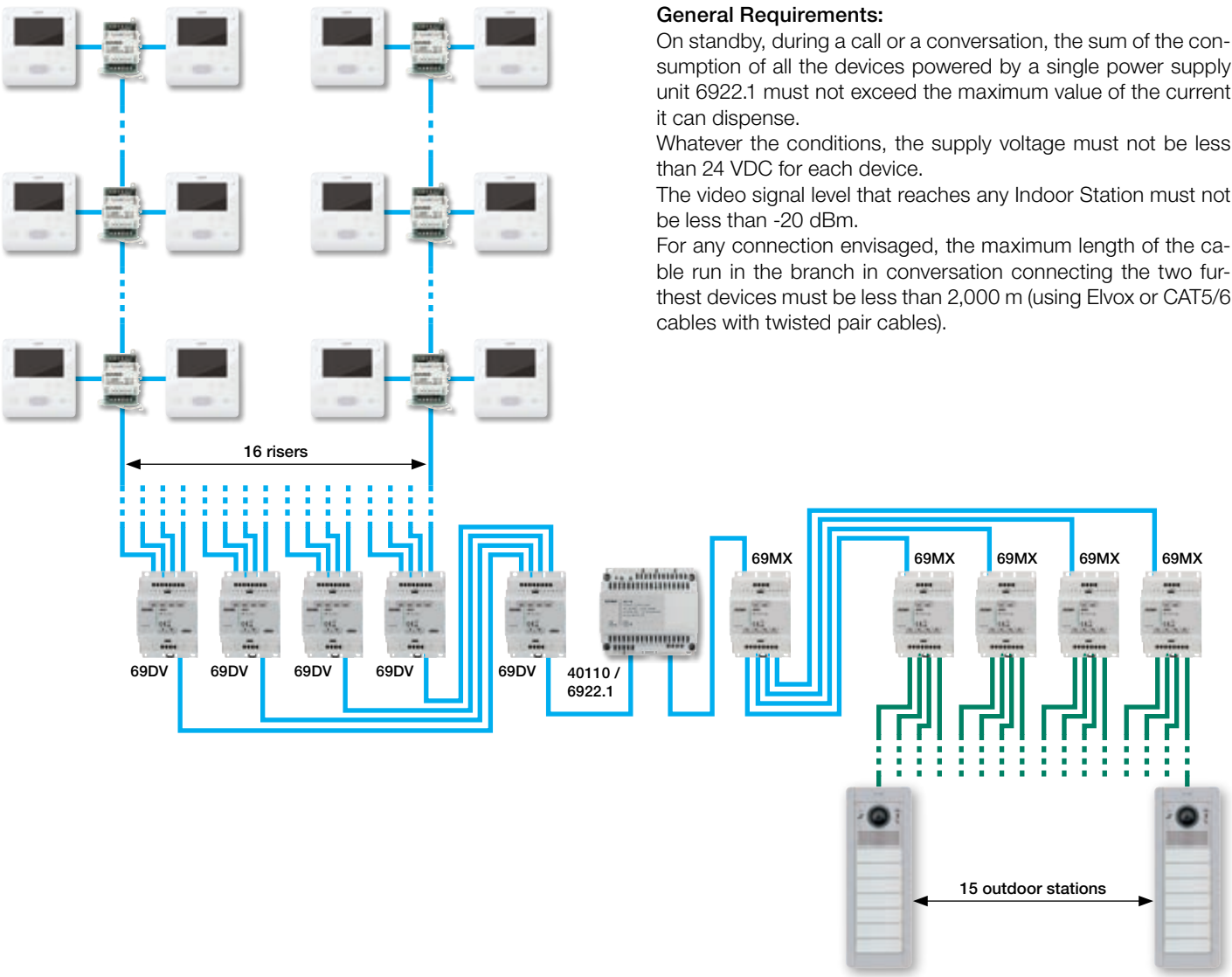
If they need audio outdoor stations, they must under all circumstances be connected to the inputs of the 69MX; for each input a maximum of 3 audio outdoor stations can be connected in parallel.

If the input level is too high (i.e. above +10 dBm), it needs to be attenuated using, for instance, the shunted output of a 692D (attenuation of -20 dB).

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SYSTEM

Systems with multiple risers and multiple outdoor stations



General Requirements:
On standby, during a call or a conversation, the sum of the consumption of all the devices powered by a single power supply unit 6922.1 must not exceed the maximum value of the current it can dispense.
Whatever the conditions, the supply voltage must not be less than 24 VDC for each device.
The video signal level that reaches any Indoor Station must not be less than -20 dBm.
For any connection envisaged, the maximum length of the cable run in the branch in conversation connecting the two furthest devices must be less than 2,000 m (using Elvox or CAT5/6 cables with twisted pair cables).

For this maximum extension too, all the requirements listed for a single-riser system with single outdoor station must be met (both the “General requirements” indicated as well as those concerning the maximum cable lengths).
If one or more of these cannot be met, you need to create multiple “islands” with the use of separators 692S.1 or multiple “blocks” with the use of interfaces 69RS.1, as illustrated below.

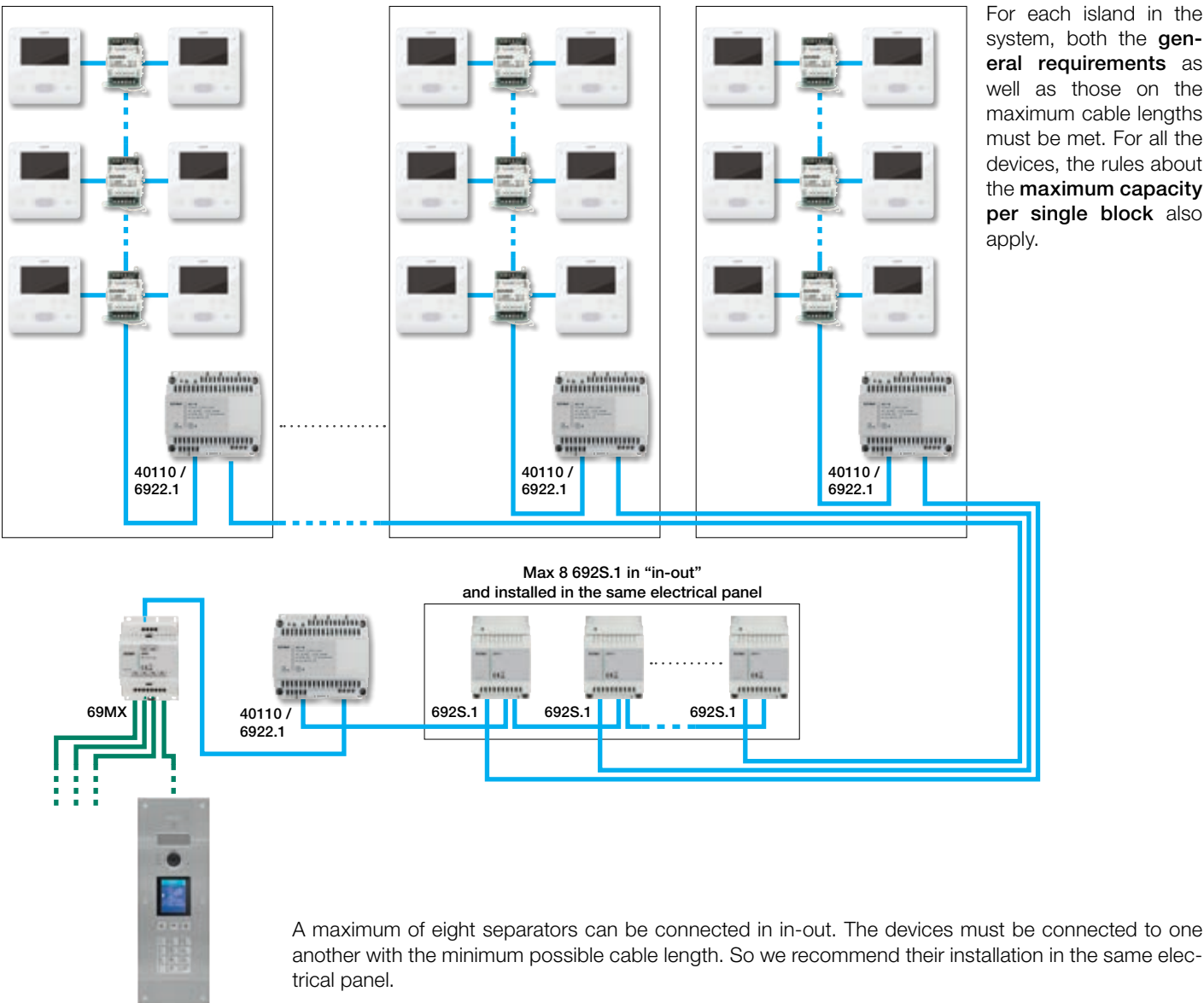
Systems with separators

692S.1 - Separator
Separators 692S.1 are used to create separate communication **Islands** (intercom only between Indoor stations of the same island). In the same **Block** you can connect up to a maximum of 16 separators which should unequivocally be routed via jumpers 0-3. Besides the case of non-fulfilment of the general requirements or of those about the maximum cable lengths, the separators are used to create:

- systems with multiple risers;
- systems comprising one or more buildings with one or more secondary entrance panels, connected to one or more main entrance panels;
- systems with the presence of “landing” outdoor stations;
- systems with entryphones / video entryphones that do not need to engage the communal riser for intercom conversations.

“A” No termination: BUS P enters and exits the device.
“B” 100 Ω termination: BUS P does not exit the device and Elvox cables are used.
“C” 50 Ω termination: BUS P does not exit the device and CAT5/6 twisted pair cables are used.

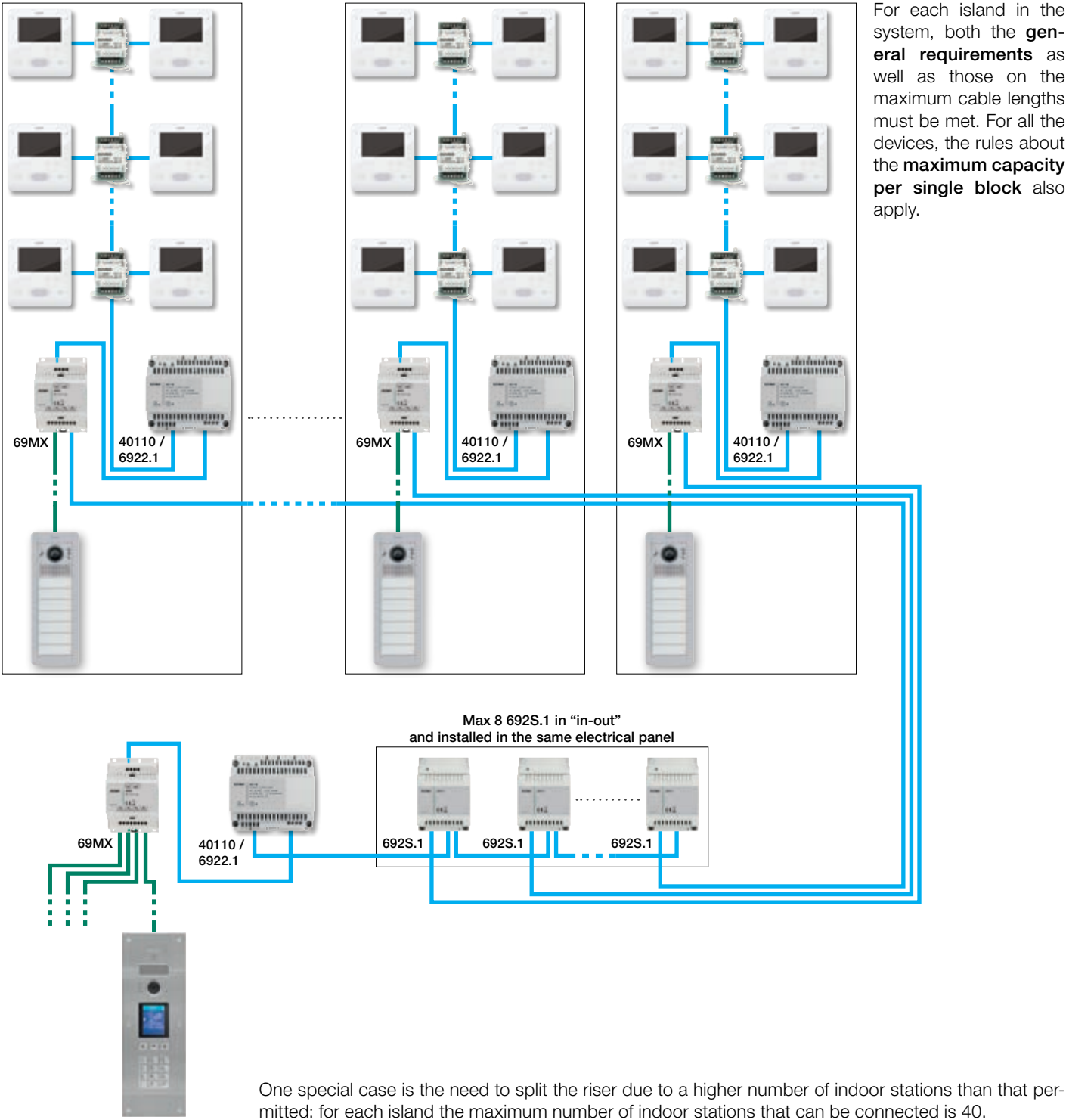
Example 1a - Separators 692S.1 connected in “in-out”.



A maximum of eight separators can be connected in in-out. The devices must be connected to one another with the minimum possible cable length. So we recommend their installation in the same electrical panel.

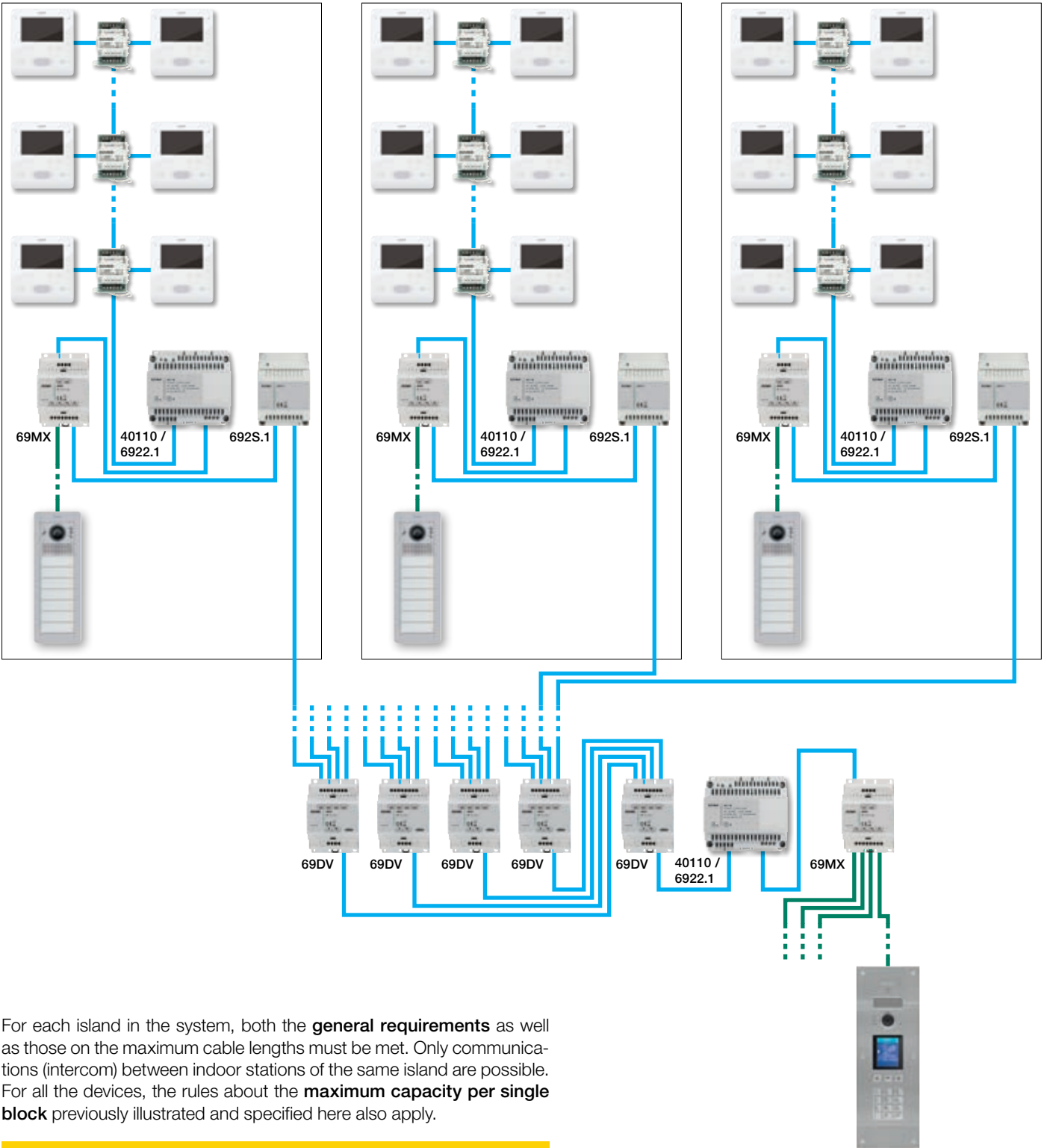
Systems with separators

Example 1b - Separators 692S.1 connected in “in-out”.



Systems with separators

Example 2 - Separators 692S.1 connected “star point” via riser splitters 69DV.

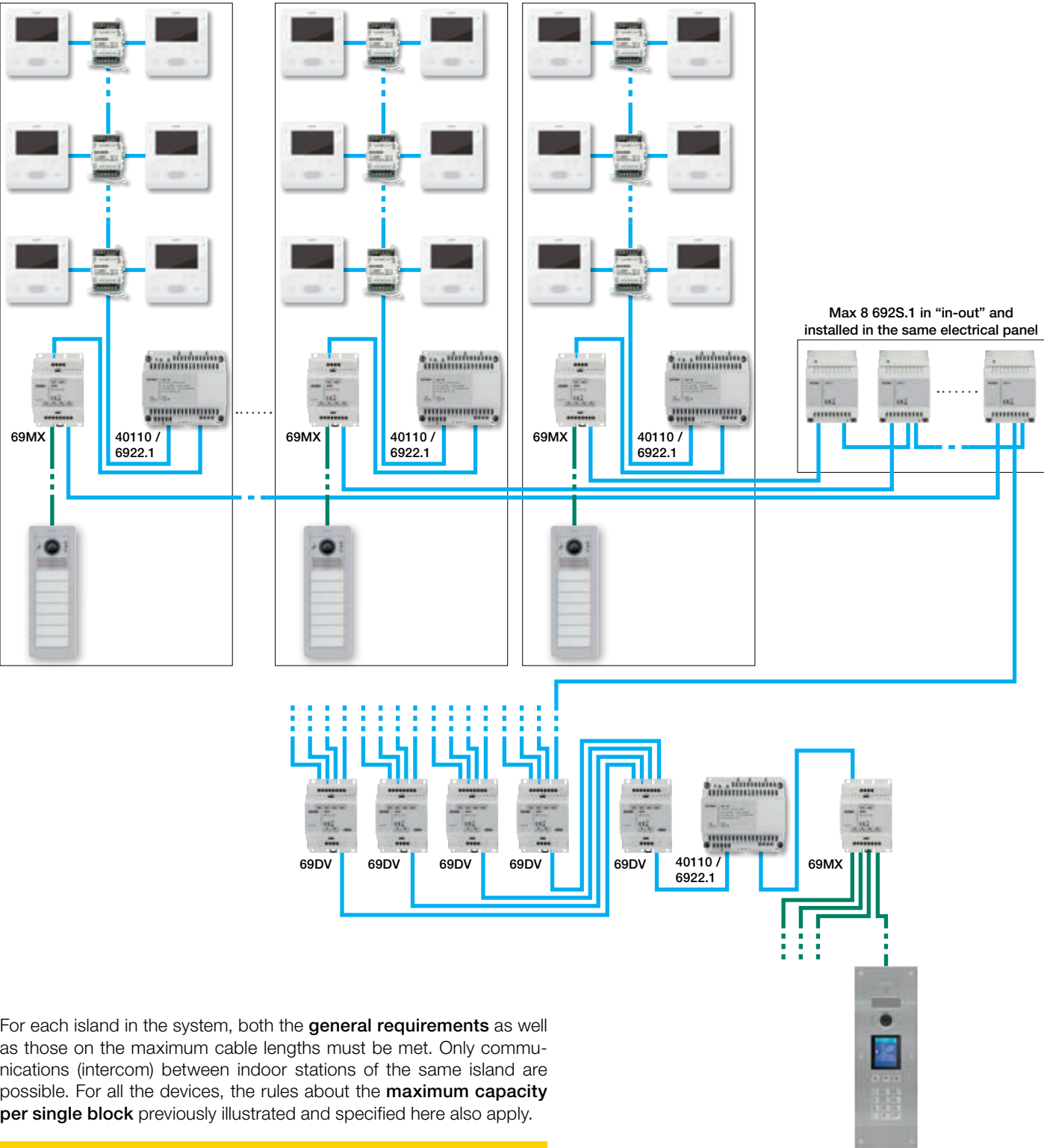


Capacity for vertical system

Max total cable run of the branch in conversation	2,000 m
Max cable length between the two furthest devices, shunting not included	1,200 m
Outdoor stations	15
Indoor stations	200
Switchboards	4
For a vertical system, the system considered has no expansion interfaces 69RS.1.	

Systems with separators

Example 3 - Separators 692S.1 connected “star point” via riser splitters 69DV.



For each island in the system, both the **general requirements** as well as those on the maximum cable lengths must be met. Only communications (intercom) between indoor stations of the same island are possible. For all the devices, the rules about the **maximum capacity per single block** previously illustrated and specified here also apply.

Capacity for vertical system	
Max total cable run of the branch in conversation	2,000 m
Max cable length between the two furthest devices, shunting not included	1,200 m
Outdoor stations	15
Indoor stations	200
Switchboards	4
For a vertical system, the system considered has no expansion interfaces 69RS.1.	

Systems with expansion interfaces

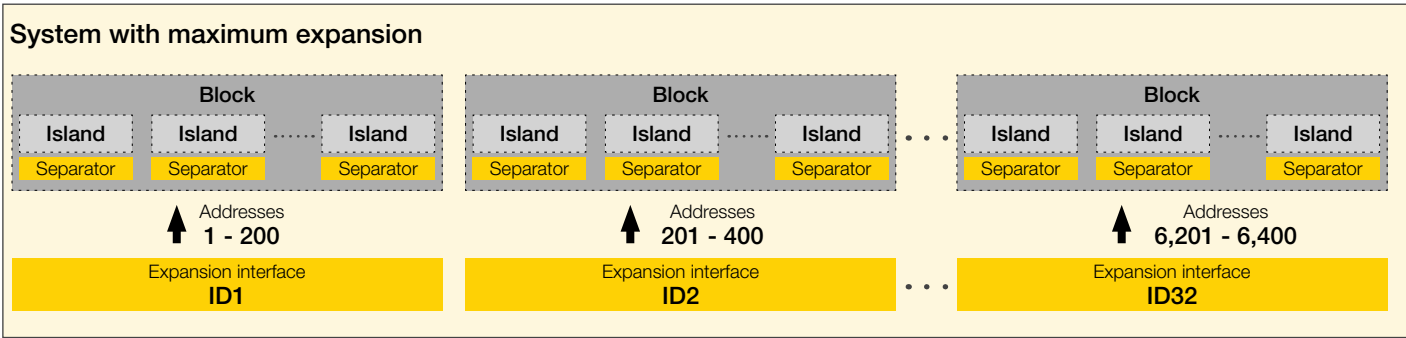
If the maximum capacity per single block is still not sufficient, you can use expansion interfaces 69RS.1 to achieve the maximum system capacity.

69RS.1 - Expansion interface for 200 indoor stations

Interfaces 69RS.1 are used for the expansion of a system up to a maximum of 32 blocks. A maximum of 32 interfaces can be installed in the system, unequivocally routed via jumpers 0-3 (addresses 1-16) or via the SaveProg programming software (Addresses 1-32). Allocation via SaveProg prevails on the possible manual allocation via jumpers. Manual allocation is only enabled if the value ID = 0 is allocated via the programming software (or if the default value = 0 is maintained).

“A” No termination: BUS P enters and exits the device.
“B” 100 Ω termination: BUS P does not exit the device and Elvox cables are used.
“C” 50 Ω termination: BUS P does not exit the device and CAT5/6 twisted pair cables are used.

Expansion interface art. 69RS.1 is a device used in “Due Fili Plus” systems for the connection of the “HORIZONTAL BUS” with the “VERTICAL BUSES”: essentially, it performs the transcoding between the “Absolute Addresses” of the system and the “Relative Addresses” of each block.



Address = Rest [(Absolute Address - 1) / 200] + 1 Block = Quotient [(Absolute Address - 1) / 200] + 1

Example: the absolute address **3741** corresponds to the block address **141** of block **19**.

Address = Rest [(**3741** - 1) / 200] + 1 = Rest [**18,7**] + 1 = **140** + 1 = **141**

0,7 x 200

Block = Quotient [(**3741** - 1) / 200] + 1 = Quotient [**18,7**] + 1 = **18** + 1 = **19**

Systems with expansion interfaces

The following table highlights the ID identifications for the devices connected to the HORIZONTAL BUS according to the ID of the reference router.

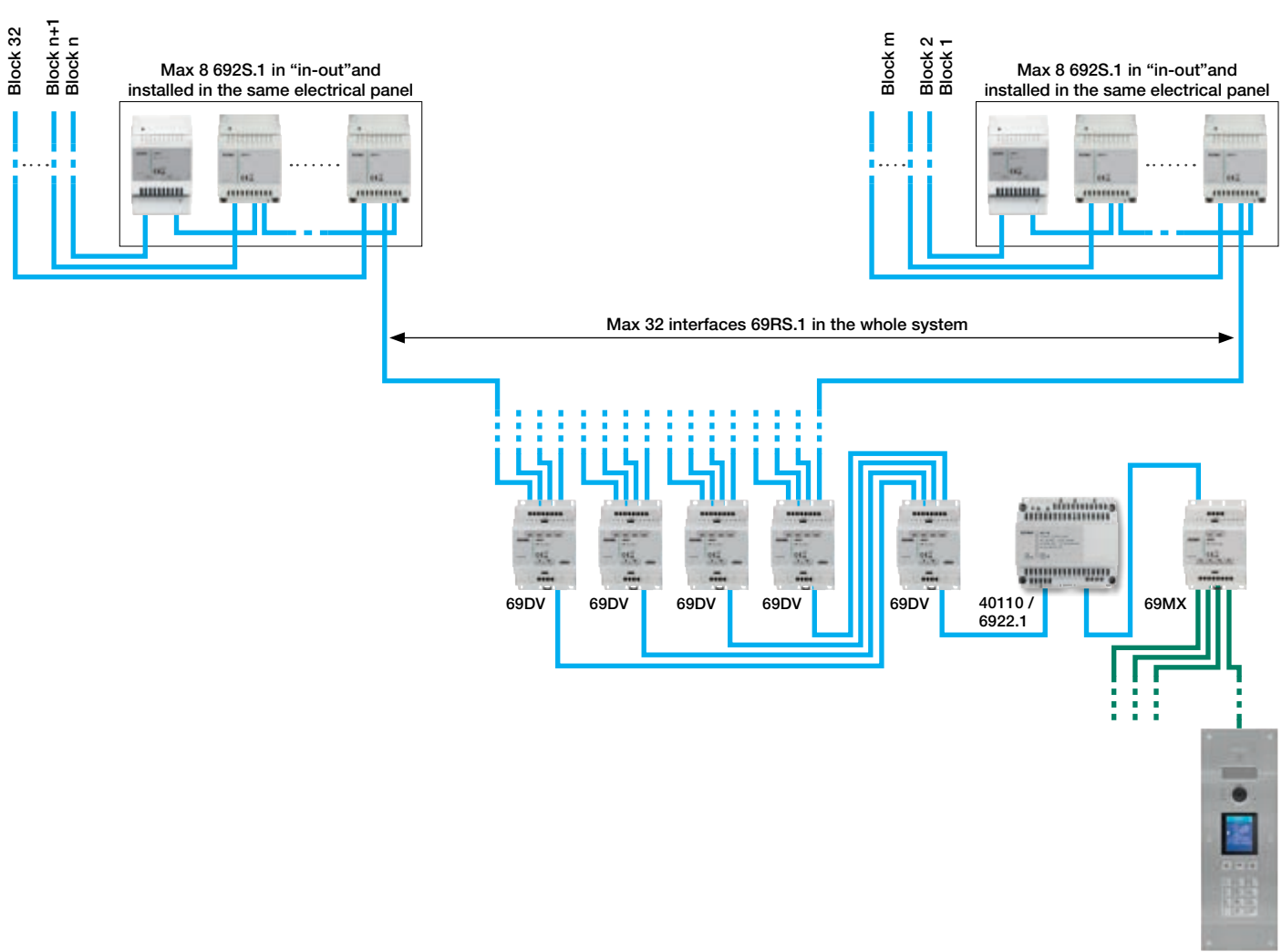
ID 69RS.1	ID Electronic units	ID Indoor stations	ID Relay modules	ID Push button module	ID Switchboards	ID Separators
1	8,248 ... 8,235	1 ... 200	1 ... 8	1 ... 8	1 ... 4	1 ... 16
2	8,234 ... 8,221	201 ... 400	9 ... 16	9 ... 16	5 ... 8	17 ... 32
3	8,220 ... 8,207	401 ... 600	17 ... 24	17 ... 24	9 ... 12	33 ... 48
4	8,206 ... 8,193	601 ... 800	25 ... 32	25 ... 32	13 ... 16	49 ... 64
5	8,192 ... 8,179	801 ... 1,000	33 ... 40	33 ... 40	17 ... 20	65 ... 80
6	8,178 ... 8,165	1,001 ... 1,200	41 ... 48	41 ... 48	21 ... 24	81 ... 96
7	8,164 ... 8,151	1,201 ... 1,400	49 ... 56	49 ... 56	25 ... 28	97 ... 112
8	8,150 ... 8,137	1,401 ... 1,600	57 ... 64	57 ... 64	29 ... 32	113 ... 128
9	8,136 ... 8,123	1,601 ... 1,800	65 ... 72	65 ... 72	33 ... 36	129 ... 144
10	8,122 ... 8,109	1,801 ... 2,000	73 ... 80	73 ... 80	37 ... 40	145 ... 160
11	8,108 ... 8,095	2,001 ... 2,200	81 ... 88	81 ... 88	41 ... 44	161 ... 176
12	8,094 ... 8,081	2,201 ... 2,400	89 ... 96	89 ... 96	45 ... 48	177 ... 192
13	8,080 ... 8,067	2,401 ... 2,600	97 ... 104	97 ... 104	49 ... 52	193 ... 208
14	8,066 ... 8,053	2,601 ... 2,800	105 ... 112	105 ... 112	53 ... 56	209 ... 224
15	8,052 ... 8,039	2,801 ... 3,000	113 ... 120	113 ... 120	57 ... 60	225 ... 240
16	8,038 ... 8,025	3,001 ... 3,200	121 ... 128	121 ... 128	61 ... 64	241 ... 256
17	8,024 ... 8,011	3,201 ... 3,400	129 ... 136	129 ... 136	65 ... 68	257 ... 272
18	8,010 ... 7,997	3,401 ... 3,600	137 ... 144	137 ... 144	69 ... 72	273 ... 288
19	7,996 ... 7,983	3,601 ... 3,800	145 ... 152	145 ... 152	73 ... 76	289 ... 304
20	7,982 ... 7,969	3,801 ... 4,000	153 ... 160	153 ... 160	77 ... 80	305 ... 320
21	7,968 ... 7,955	4,001 ... 4,200	161 ... 168	161 ... 168	81 ... 84	321 ... 336
22	7,954 ... 7,941	4,201 ... 4,400	169 ... 176	169 ... 176	85 ... 88	337 ... 352
23	7,940 ... 7,927	4,401 ... 4,600	177 ... 184	177 ... 184	89 ... 92	353 ... 368
24	7,926 ... 7,913	4,601 ... 4,800	185 ... 192	185 ... 192	93 ... 96	369 ... 384
25	7,912 ... 7,899	4,801 ... 5,000	193 ... 200	193 ... 200	97 ... 100	385 ... 400
26	7,898 ... 7,885	5,001 ... 5,200	201 ... 208	201 ... 208	101 ... 104	401 ... 416
27	7,884 ... 7,871	5,201 ... 5,400	209 ... 216	209 ... 216	105 ... 108	417 ... 432
28	7,870 ... 7,857	5,401 ... 5,600	217 ... 224	217 ... 224	109 ... 112	433 ... 448
29	7,856 ... 7,843	5,601 ... 5,800	225 ... 232	225 ... 232	113 ... 116	449 ... 464
30	7,842 ... 7,829	5,801 ... 6,000	233 ... 240	233 ... 240	117 ... 120	465 ... 480
31	7,828 ... 7,815	6,001 ... 6,200	241 ... 248	241 ... 248	121 ... 124	481 ... 496
32	7,814 ... 7,801	6,201 ... 6,400	249 ... 256	249 ... 256	125 ... 128	497 ... 512

ID attributable to the devices present on the HORIZONTAL BUS.

ID 69RS.1	ID Electronic units	ID Indoor stations	ID Relay modules	ID Push button module	ID Switchboards 40510	ID Separators
-	1 ... 36	-	2,951 ... 3,000	-	129 ... 144	-

In the interface, you can also use **SaveProg** to reallocate the address both to **main outdoor stations** as well as to **relay modules** so that they can receive controls from indoor stations belonging to a block (even in the absence of a conversation). The outdoor stations, to which the address has been reallocated, must be subtracted from the maximum number of outdoor stations per block (14). The relays, to which the address has been reallocated, will be controlled in parallel with the relays of the block with the same address.

Systems with expansion interfaces



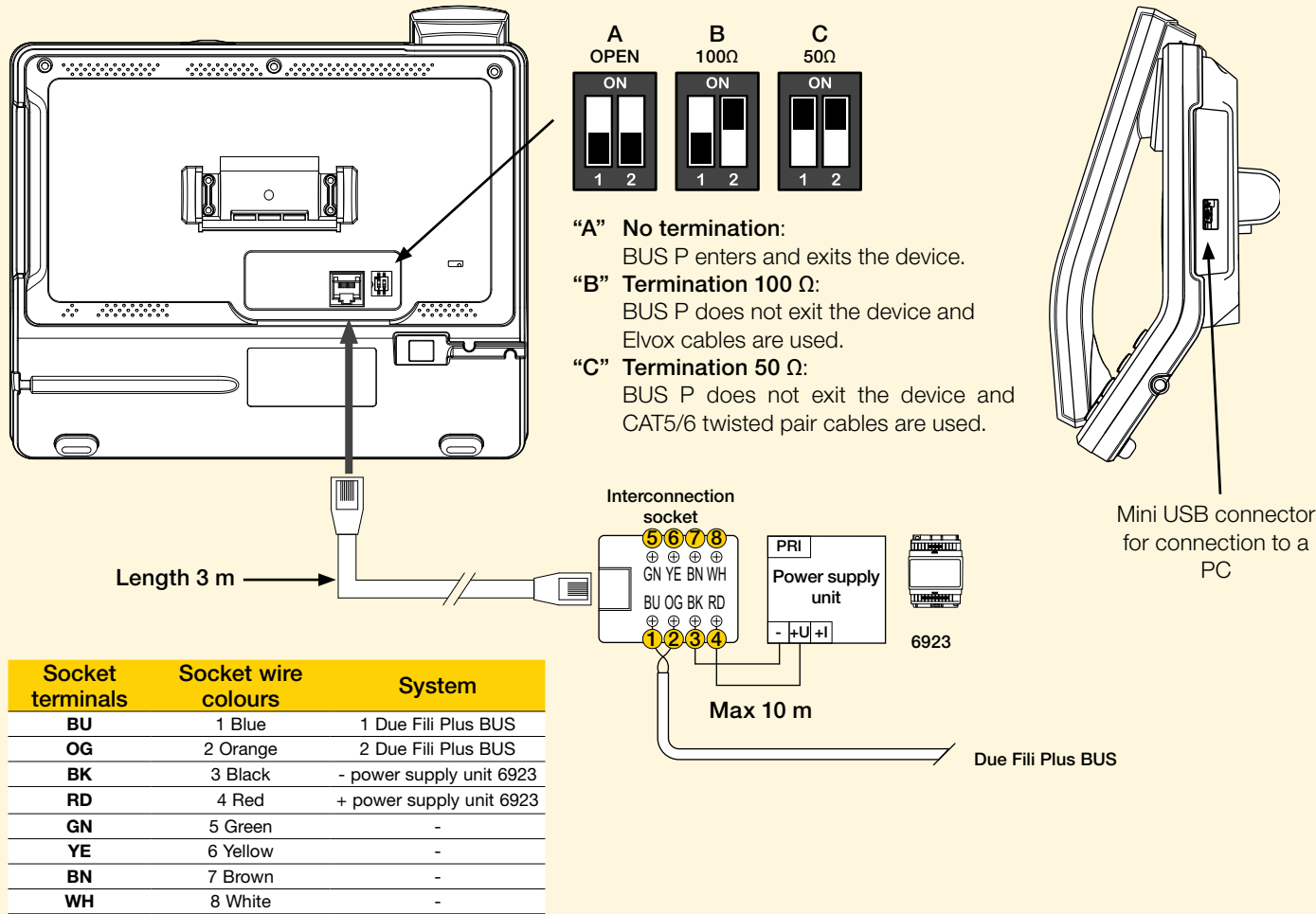
If separators and expansion interfaces are being used, it is advisable to plan the cable runs concerned by a conversation so that they cross the same number of such devices. This will ensure maximum uniformity of audio volumes.

Other system components

40510 - Reception switchboard



- A switchboard 40510 can perform the following functions:
- make and receive audio calls with the indoor stations;
 - receive audio or audio/video calls from the outdoor stations;
 - perform self-starts on the outdoor stations;
 - forward the calls of the outdoor stations to the indoor stations;
 - call another switchboard;
 - manage (alert) warnings from the indoor stations;
 - manage the locks of the outdoor stations, the stair lights and the system relays;
 - activate the CCTV cameras for monitoring;
 - record call data, warnings and actuations.
- In an extended system, a maximum of 128 switchboards can be installed in total (32 risers x 4 switchboards).
A maximum of 4 switchboards can be installed in a block.
A maximum of 16 switchboards can be connected to the horizontal bus in addition to those of the risers.

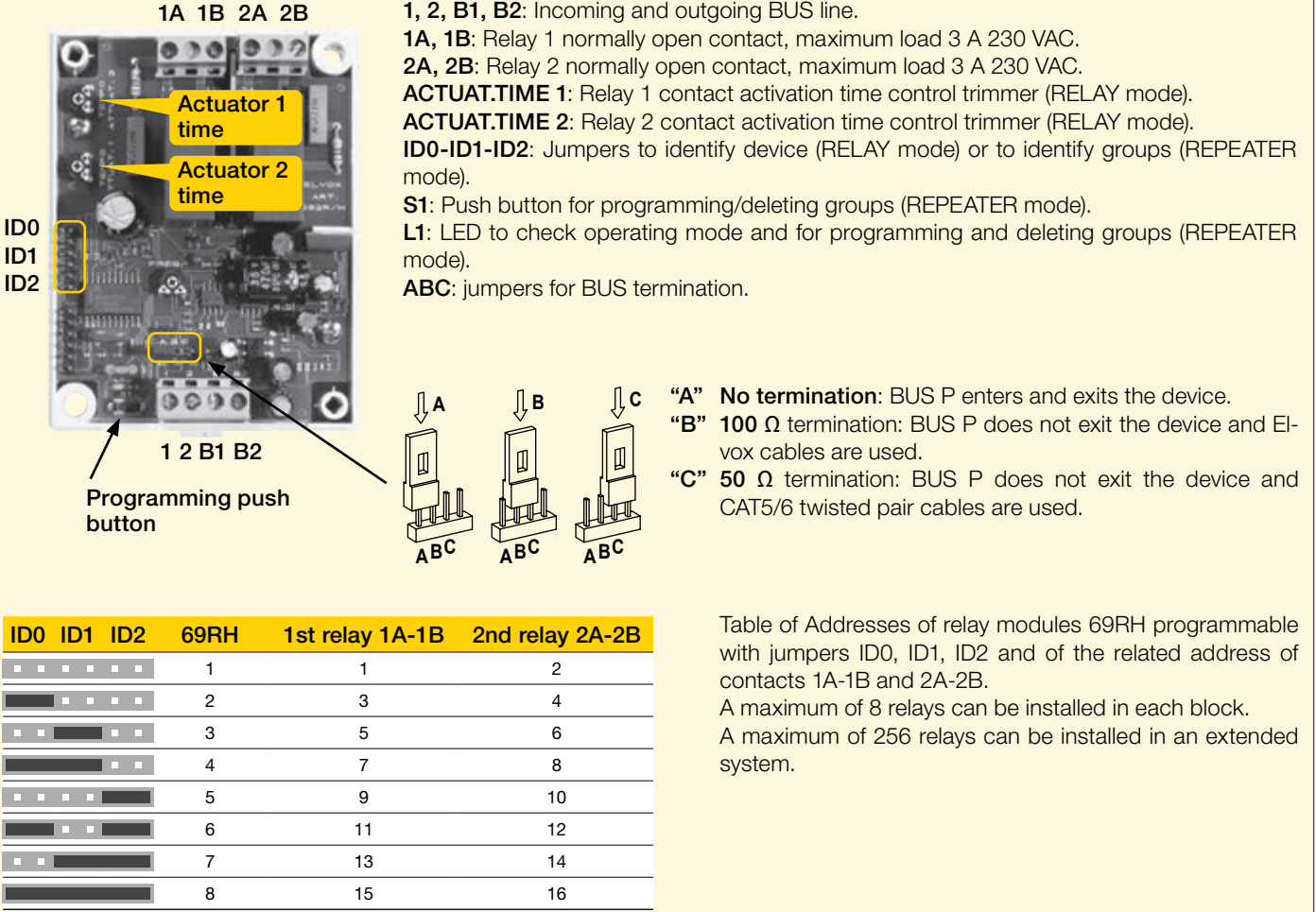


Other system components

69RH - Relay module



- Relay module 69RH is equipped with two relays with normally open contacts, which can operate in two programmable modes:
- 1 - **Relay mode** - auxiliary services (default): the normally open contacts of both are independent and can be timed from 1 to 30 seconds, adjusting the two trimmers located on the printed circuit.
 - 2 - **Repeater mode** - call repeater: the normally open contacts of both are independent and can be connected to a ringtone 860A or a mechanical ringtone. You can repeat the call from an outdoor station or indoor station/switchboard (addressed to one or more entryphone or video entryphone groups up to a maximum of 4 groups), operating two different ringtones.
- Each 69RH should be allocated an address using jumpers ID0-ID1-ID2.



Other system components

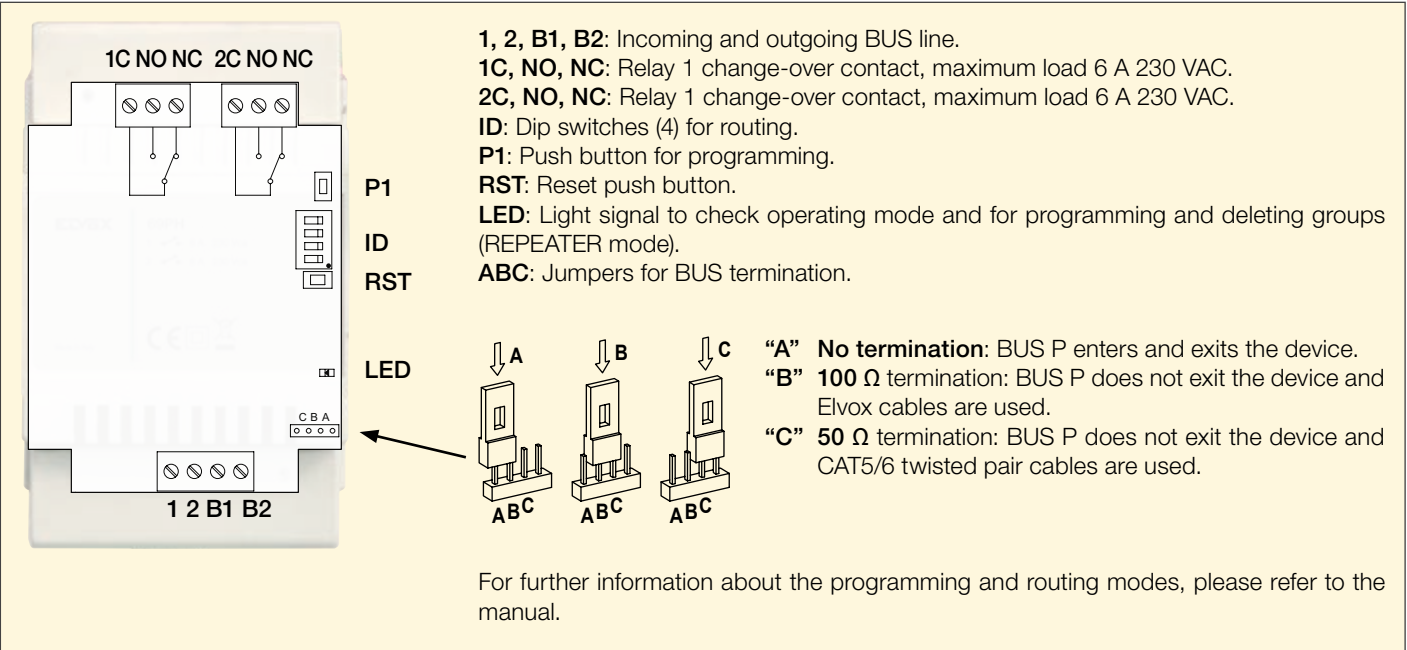
69PH - Relay module



Relay module 69PH is a programmable device equipped with two relays with change-over relay and can be installed on both the Vertical BUS as well as on the Horizontal BUS. If it is installed on the Vertical BUS, it can also be programmed manually with the same modes as relay module 69RH; if on the other hand it is installed on the Horizontal BUS, it can only be programmed using the SaveProg software. It can operate in the following modes:

- one-position stable relay activated by the indoor stations (default);
- one-position stable relay activated by a call (repeater);
- one-position stable relay activated by buttons F1, F2, lock of the indoor stations;
- one-position stable relay activated by attempted call;
- one-position stable relay activated by attempted group call;

- two-position stable relay activated by the indoor stations;
- two-position stable relay activated by a call;
- call repeater (Standard);
- general call repeater;
- call repeater from 6120;
- roller shutter mode;
- Call in progress.

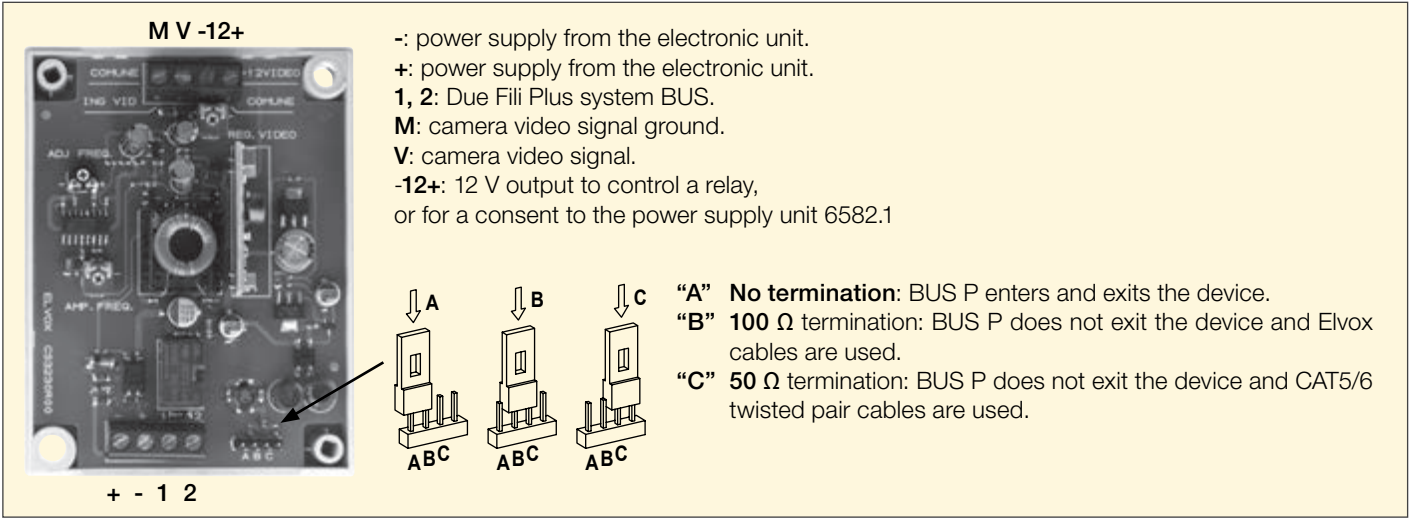


Other system components

693T - Expansion module for 6931 (with PAL output)



The camera interface module 693T allows you to use cameras with a PAL output as video sources or it can be used as a separate video jointly with dedicated audio electronic units.

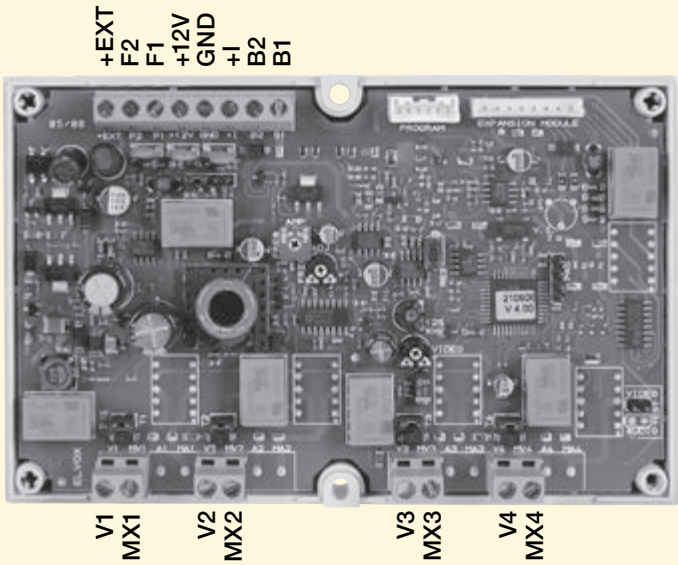


Other system components

69AM/T - Video selector for 4 cameras



The video selector for 4 cameras 69AM/T allows the connection to the Due Fili Plus system of 4 cameras with CVBS output. Camera selection is cyclical by way of the lock release button or a dedicated push button after the self-start phase. The selector can also be connected to two auxiliary functions F1 and F2.



- + EXT: Connection for power supply from 6923, the - must be connected to terminal M.
- F2: Open collector output, max 100 mA/+12 VDC.
- F1: Open collector output, max 100 mA/+12 VDC.
- +12V: Load power supply on F1 and/or F2.
- GND: Reference ground of +I, 12, +E.
- + I: Active positive output max. 100 mA (+12 VDC when a camera is on).
- B1-B2: Due Fili Plus system BUS.

Other system components

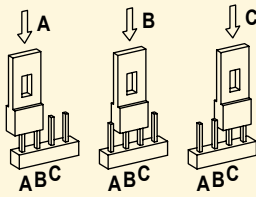
6120 - The interface for 2 push buttons



The Interface for 2 push buttons 6120 allows you to use normal push buttons (normally open) to control, via the (vertical) BUS of the Due Fili Plus system, the activation: of the lock on an outdoor station or the landing call of an indoor station or of a relay 69RH/69PH or of functions F1, F2 towards specific entrance panels.



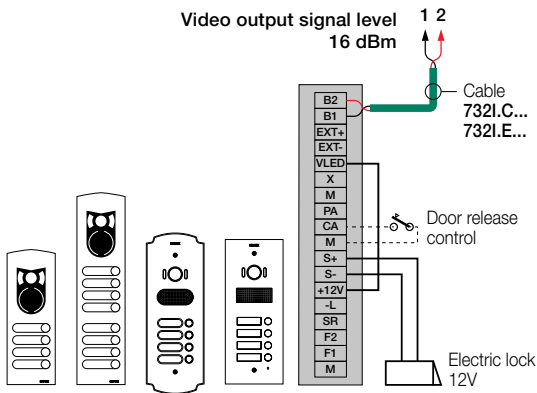
- B1-B2: Pair of terminals for BUS line.
- IN1: Pair of terminals for the connection of the 1st push button.
- IN2: Pair of terminals for the connection of the 2nd push button.
- 1 2 3: Dip switch for routing the device.
- D3: Programming state signalling LED.
- ABC: Jumpers for BUS termination.
- : Push button for programming (association of the function of the push buttons).



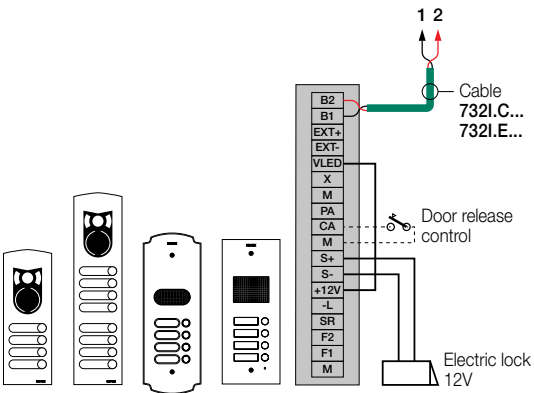
- “A” No termination: BUS P enters and exits the device.
- “B” 100 Ω termination: BUS P does not exit the device and Elvox cables are used.
- “C” 50 Ω termination: BUS P does not exit the device and CAT5/6 twisted pair cables are used.

Audio/video and audio unit connection for the 1300, Steely and Patavium series with push button call

Audio/video unit: 13F5, 13F5/B

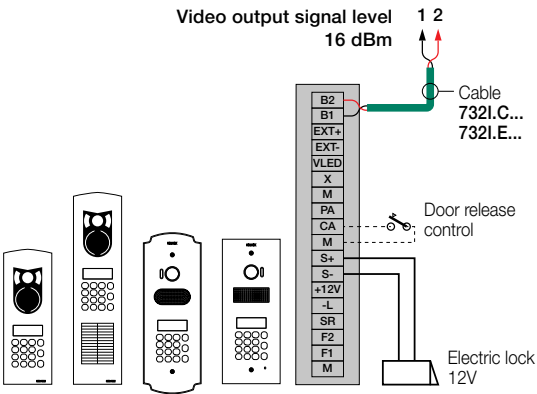


Audio unit: 13F3, 13F3.B

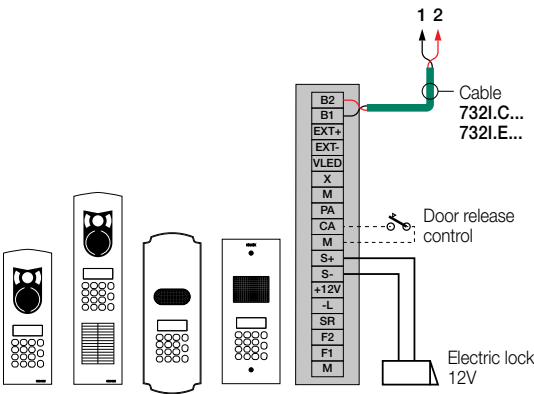


Audio/video and audio unit connection for the 1300, Steely and Patavium series numerical call

Audio/video unit: 13F7, 13F7/B, 13A7.B, 13A7.B.43

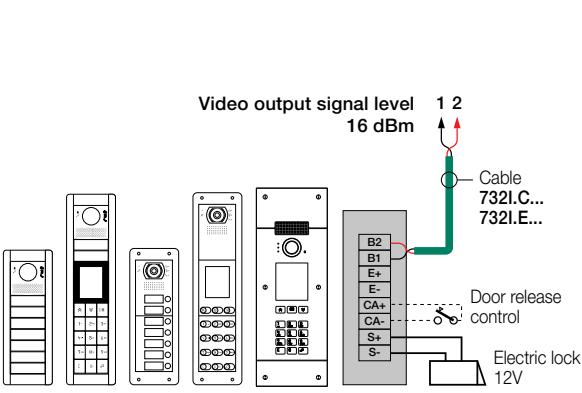


Audio unit: 13F4, 13F4.B, 13A4.B, 13A4.B.43

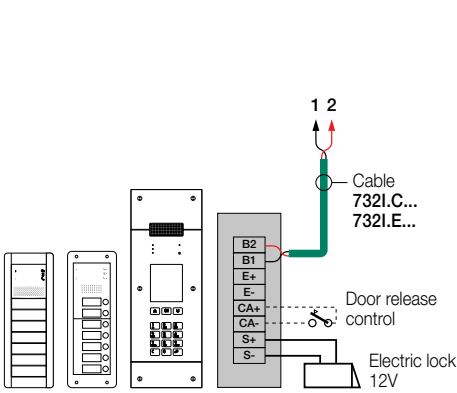


Audio/video and audio unit connection for the Pixel, Pixel Heavy and Pixel Up series

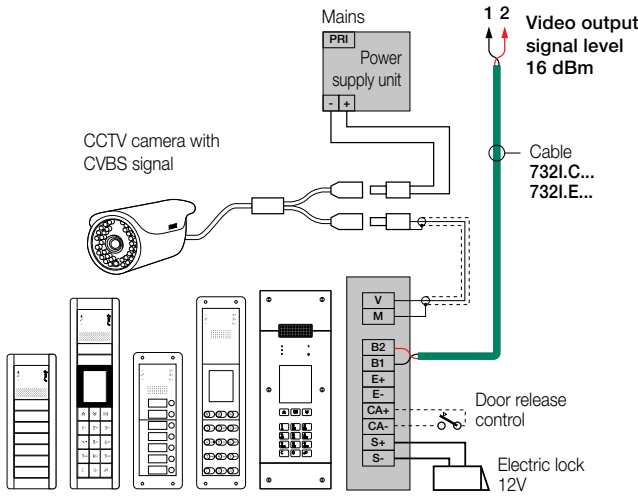
Audio/video unit: 41005 and Pixel Up

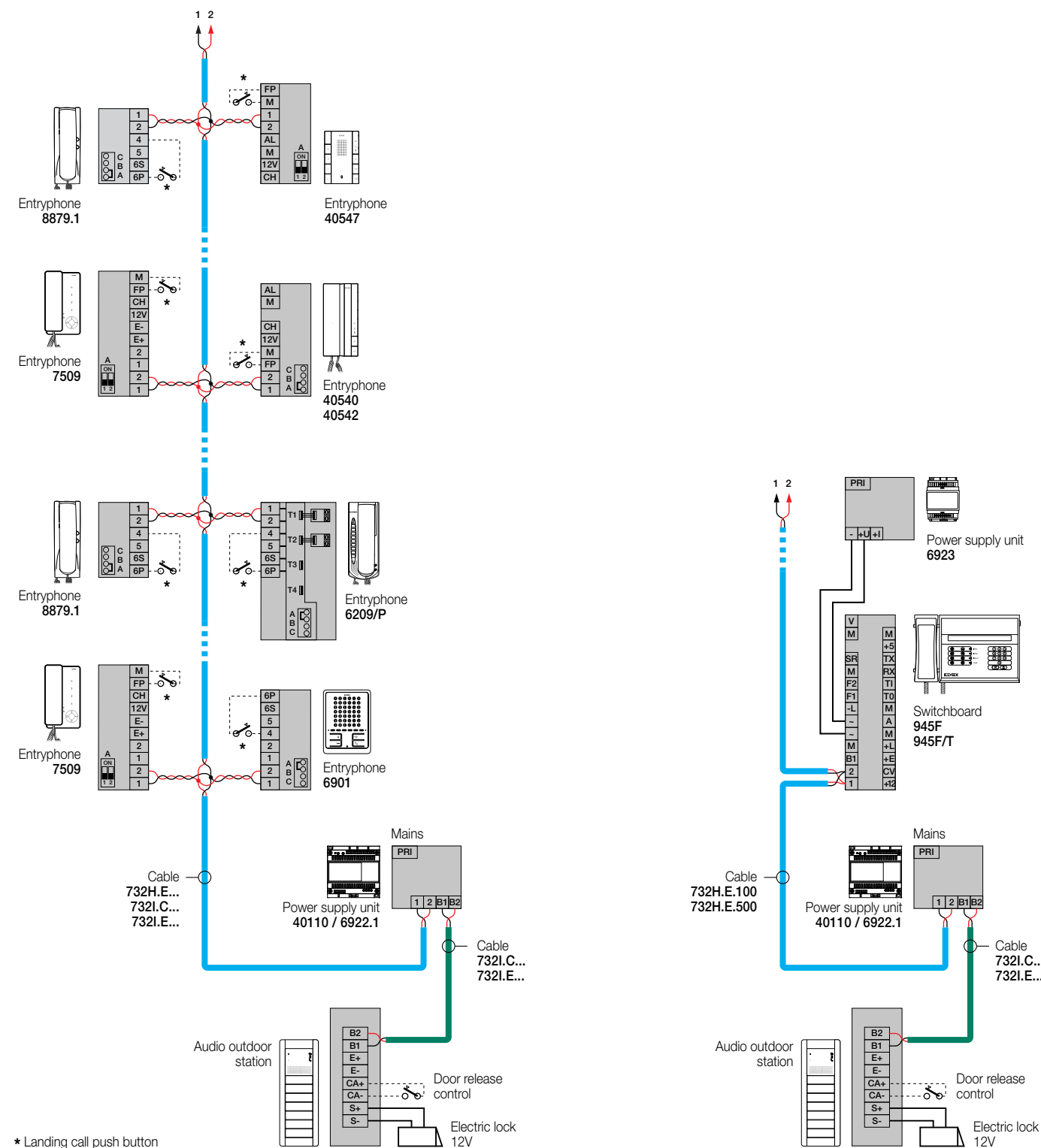


Audio unit: 41000 and Pixel Up



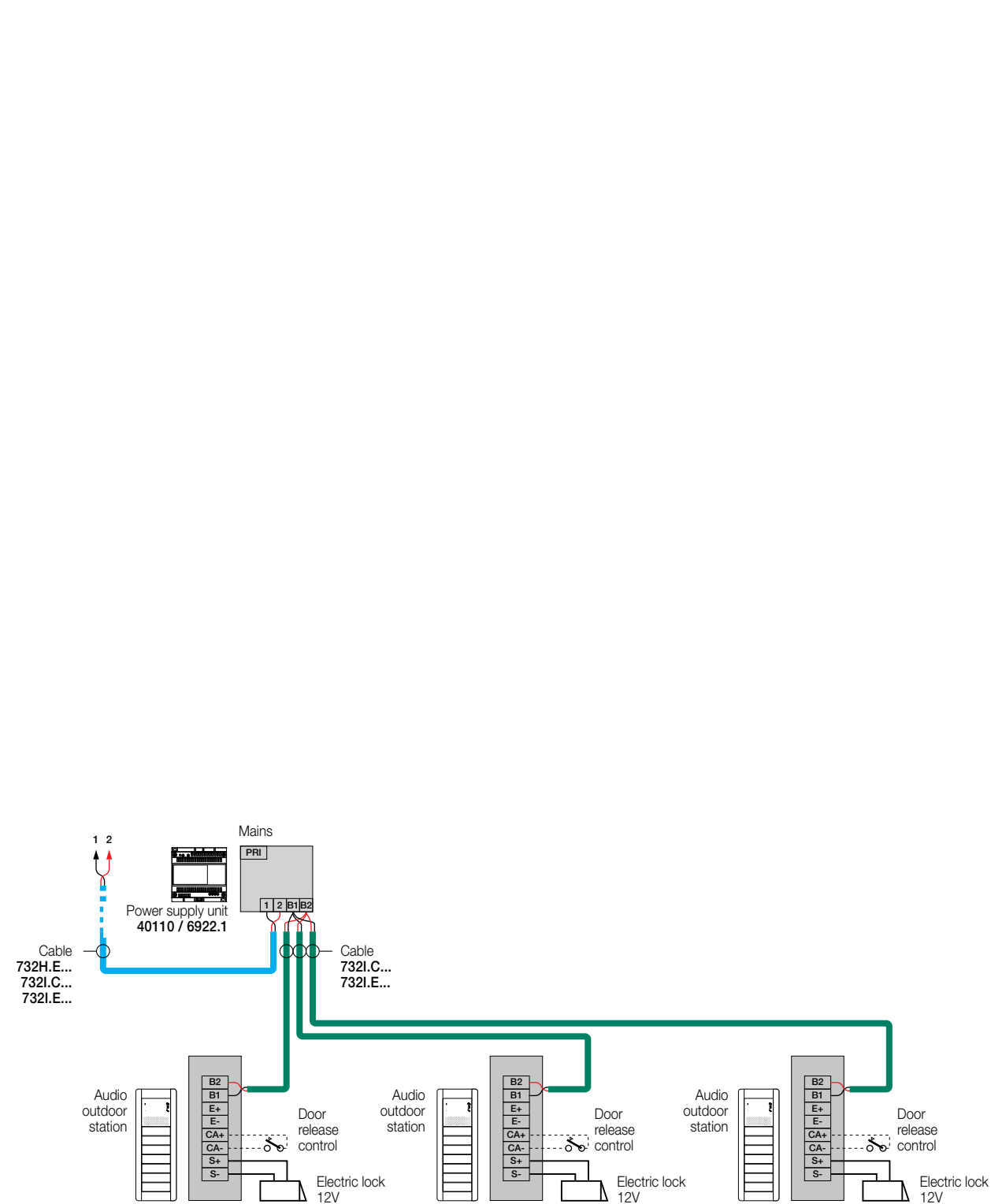
Audio unit with camera input: 41002 and Pixel Up





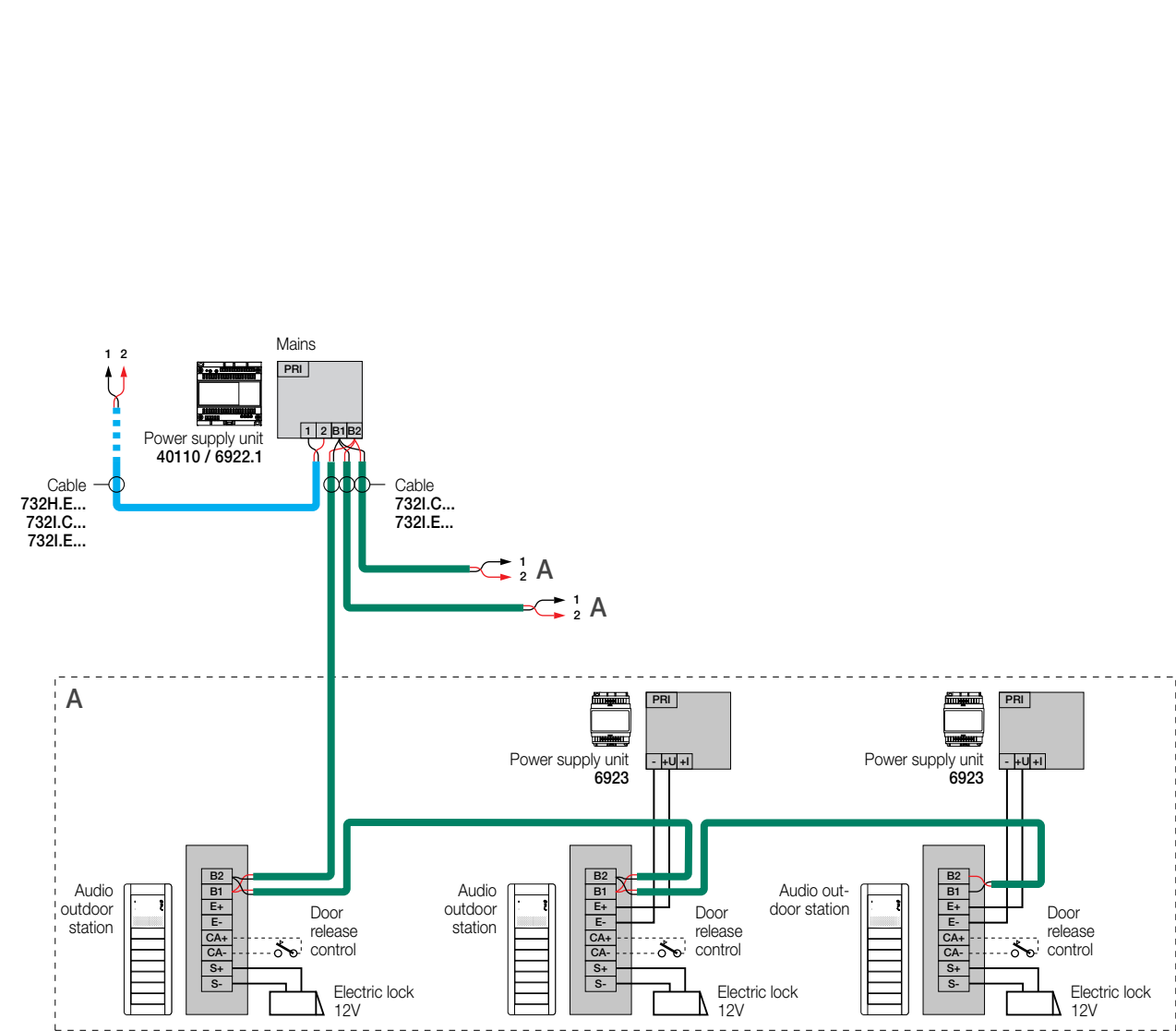
* Landing call push button

Note: In audio only systems, the video terminations of all the devices will be left open.



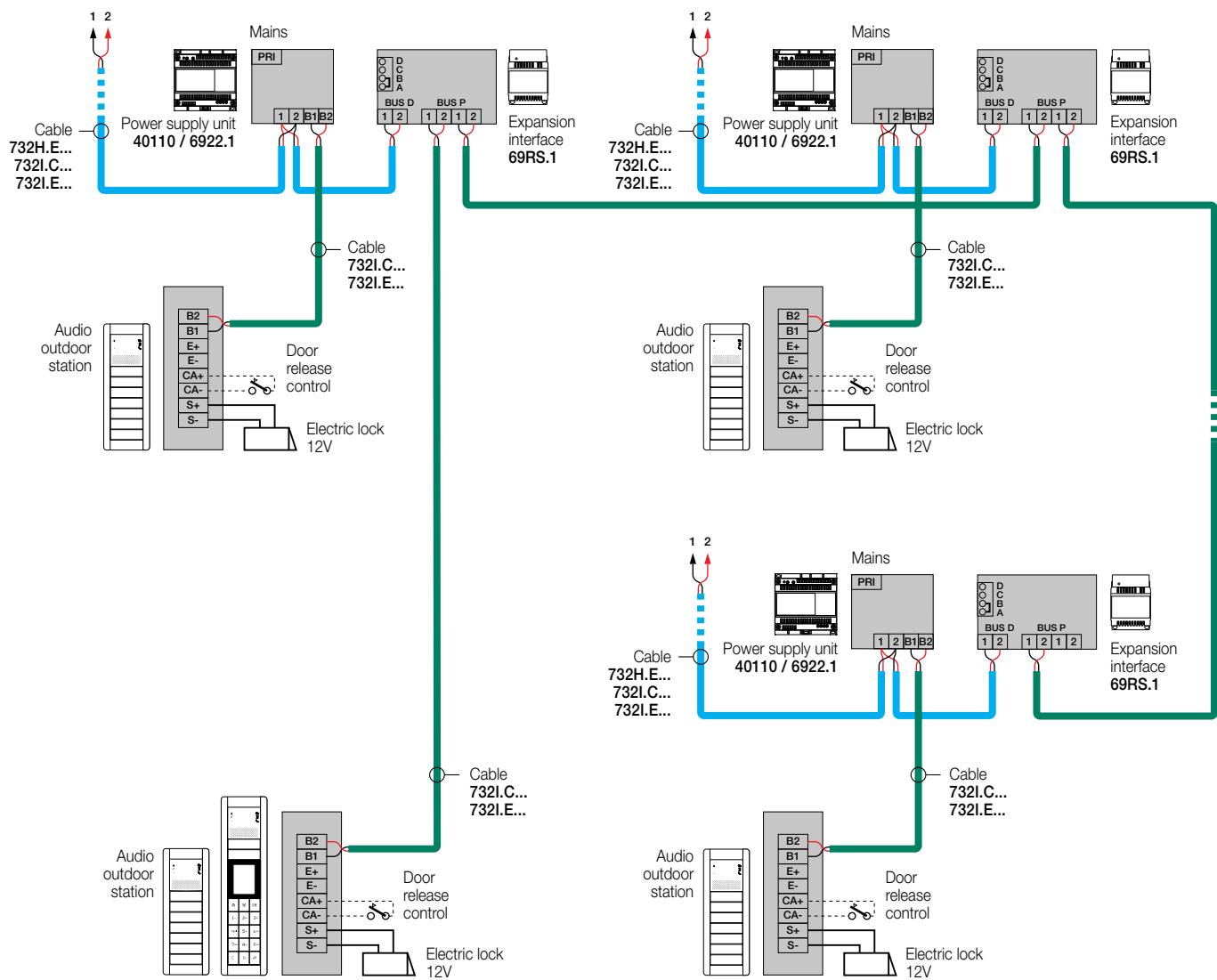
Note: In audio only systems, the video terminations of all the devices will be left open.

Audio system with 9 outdoor stations for the same riser

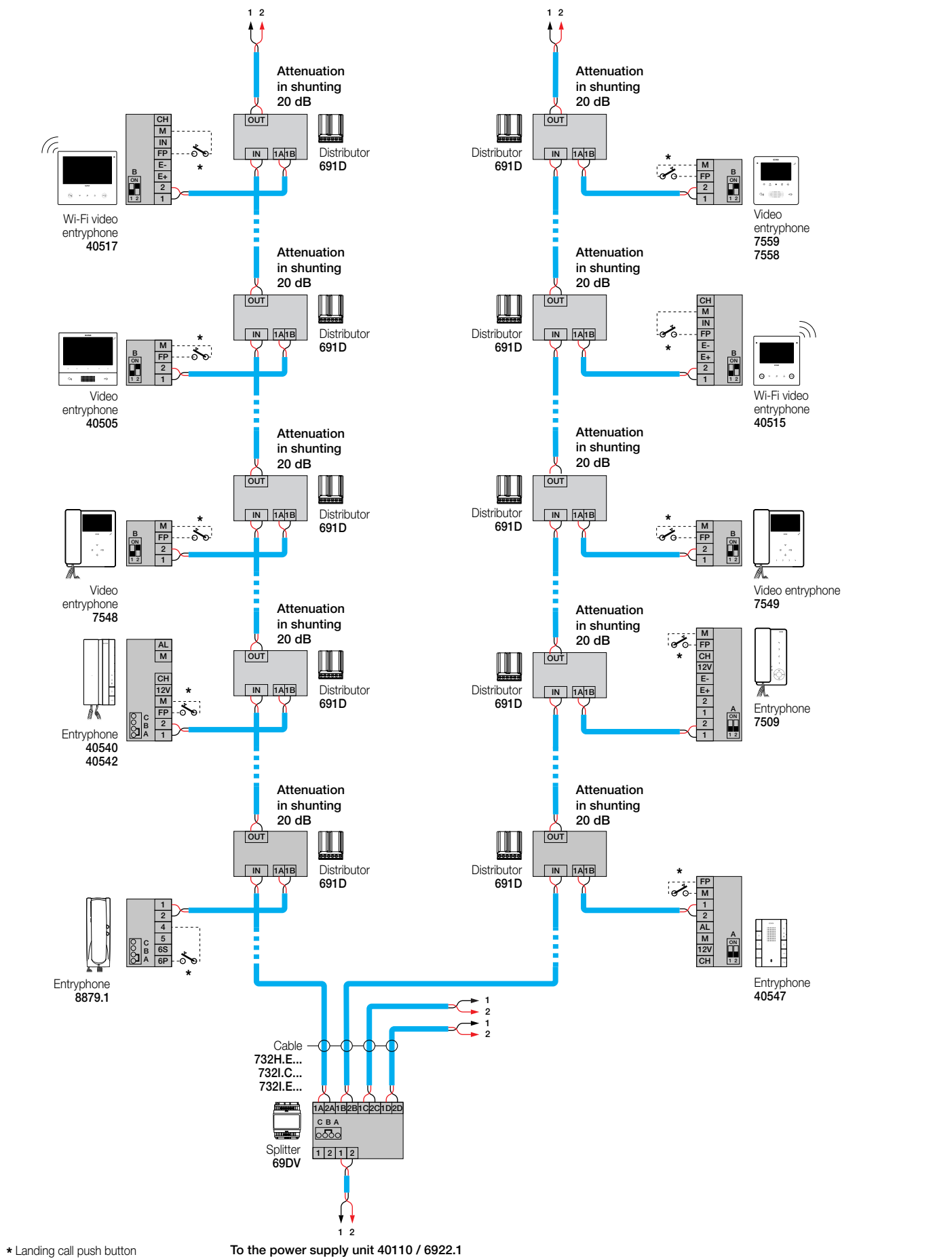
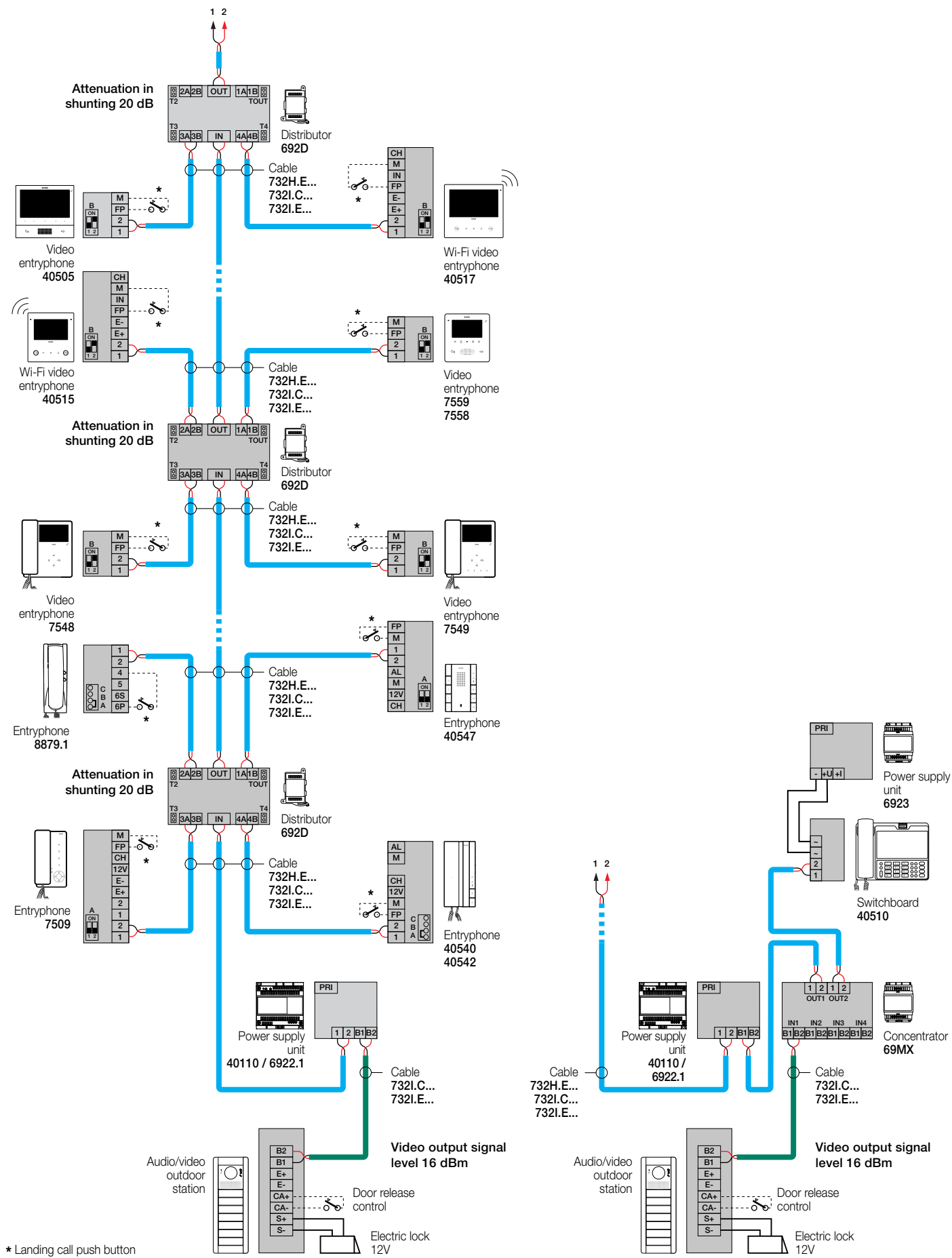


Note: In audio only systems, the video terminations of all the devices will be left open.

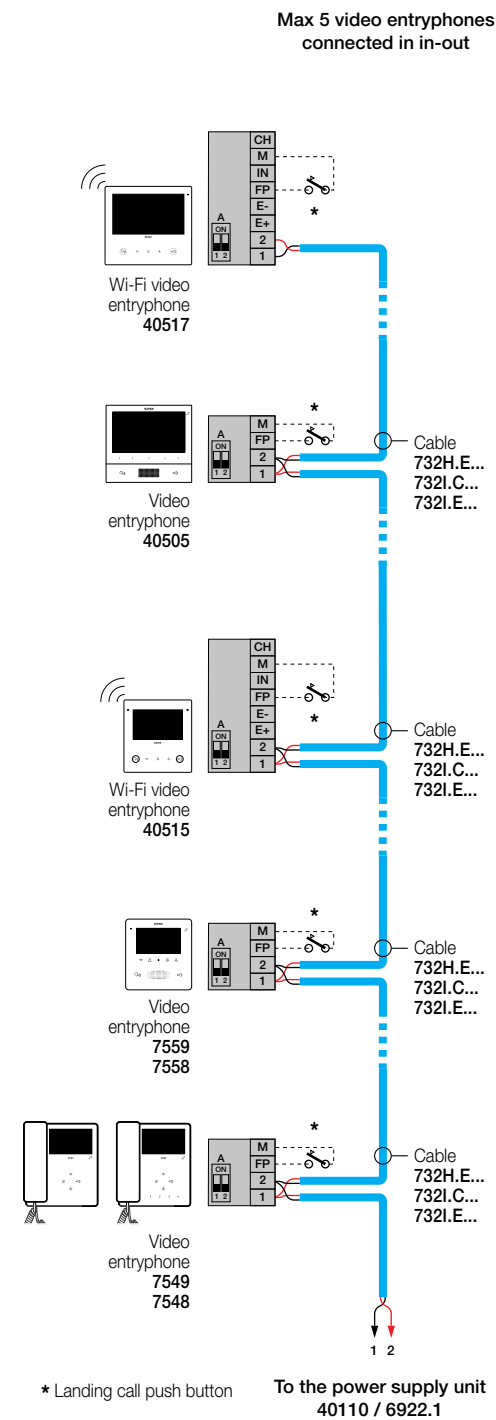
Audio system with main outdoor station and secondary outdoor stations



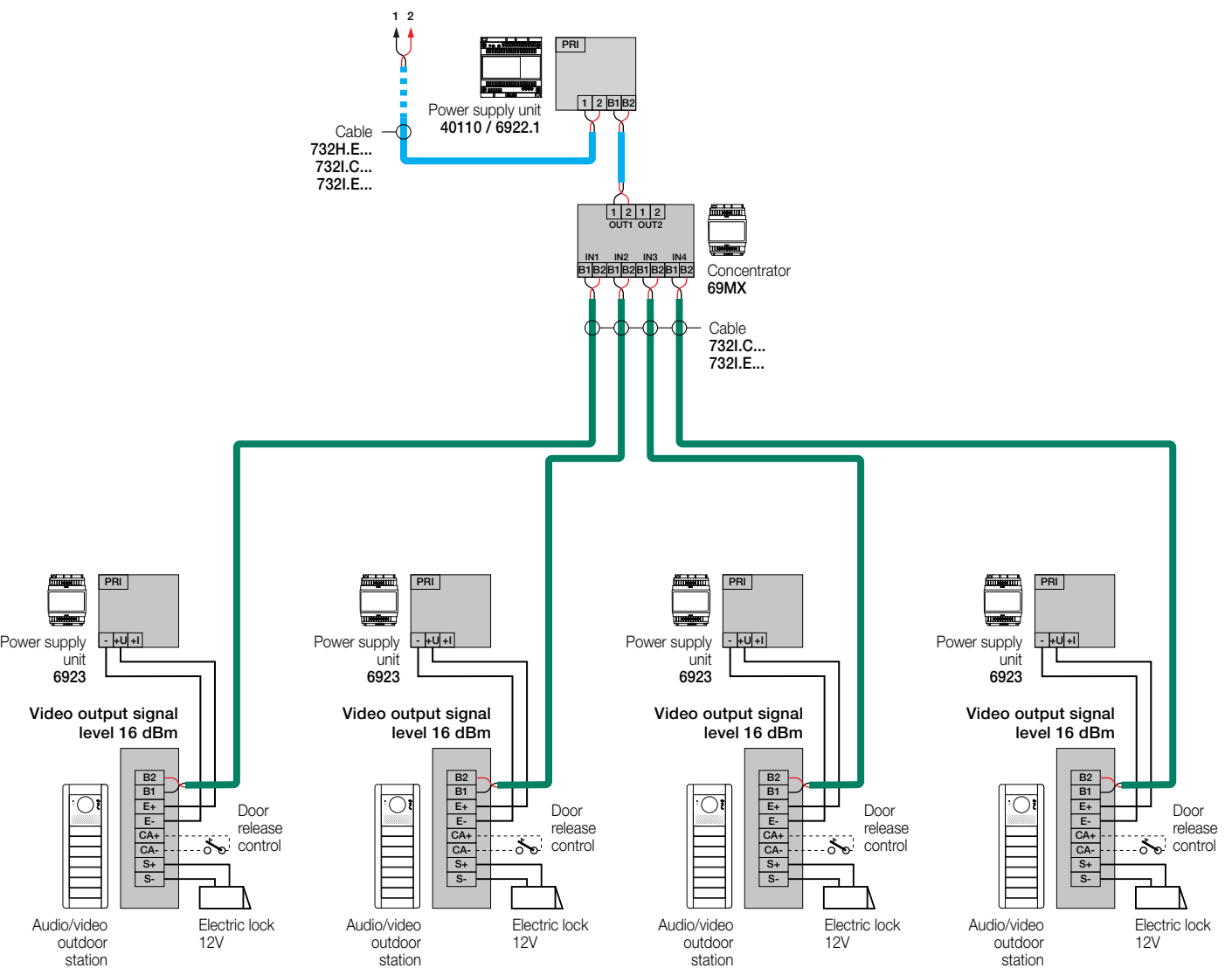
Note: In audio only systems, the video terminations of all the devices will be left open.



System with audio/video riser without distributors (in-out connection)



Video system with several outdoor stations for the same riser



Energia Positiva. Insieme



VIMAR