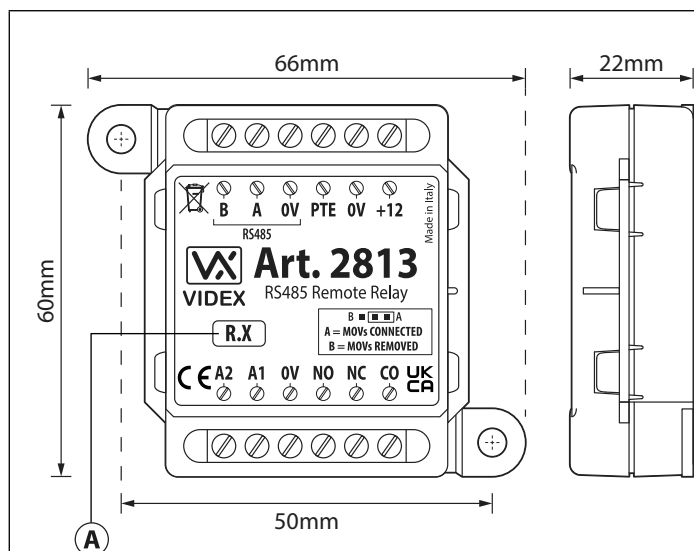
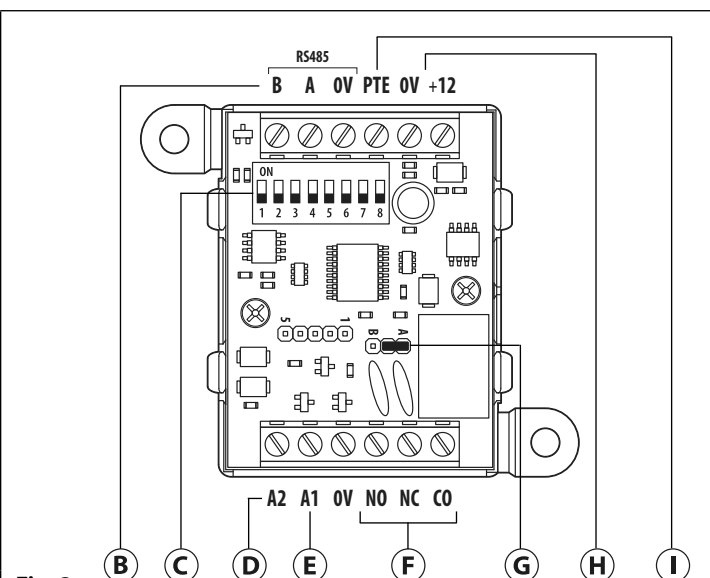


Art. 2813 RS485 Remote Relay - Rev.0.1**Fig. 1****Fig. 2****DESCRIPTION**

The **Art.2813** is a networkable RS485 remote relay, **Fig.1**. It is compatible with other Videx devices which incorporates an RS485 bus connection, for example Videx's 4G GSM intercoms and IP system devices.

When connected via the RS485 bus (**Fig.2, B**) it can be integrated as part of an access control network with other **Art.2813** remote relays or with **4903** keypads and **4850R** proximity readers (also refer to **Fig.9** wiring diagram example).

It has a single onboard relay with normally open (**NO**), normally closed (**NC**) and common (**CO**) connections and two switched **0V** auxiliary outputs **A1** and **A2** (**Fig.2, D** and **E**).

The relay and both auxiliary outputs operating times can be programmed from 1 - 63 seconds or 0 for latch mode by using switches 1 - 6 on the 8 way dip-switch (**Fig.2, C**).

It also includes a switched **0V** push to exit input **PTE** (**Fig.2, I**) that when activated via a push to exit button (configured as a push-to-make switch) will operate the relay for the programmed time. It should be noted that when the relay time has been set for latch mode an exit button, connected across **0V** and **PTE**, will operate as a "toggle" switch to latch the relay open and closed. Similarly both the auxiliary outputs **A1** and **A2**, when set to latch mode, will also operate as a "toggle" switched **0V** output.

PROGRAMMING

Programming of the remote relay is carried out using the 8 way dip-switch (**Fig.2, C**) where up to 64 device ID's (from **ID.00** to **ID.63**) can be set and where relay operating times and auxiliary output times (for **A1** and **A2**) can be set. Further programming notes can be found on pages 2 and 3.

OPERATION

As mentioned above the relay can be activated directly via the **PTE** input. When incorporated as part of a GSM system the relay can be triggered remotely via text message or by using the Videx GSM mobile apps. Also the auxiliary outputs **A1** and **A2** can be activated via text message or by using the Videx GSM mobile apps. Further operational notes can be found in the GSM apps themselves or any of the latest GSM manuals.

The relay and auxiliary outputs **A1** and **A2** can also be remotely activated from a Videx IP system device (e.g. IP audio or video entry panels, IP audiophone or IP videophones. Also refer to **Fig.11** wiring diagram example) after the IP device's output has been configured (further notes on IP system output configuration can be found in any of the IP system manuals).

SECURED BY DESIGN

If the remote relay is setup with the same device ID as one of the 4G GSM intercoms i.e. **ID.1** or setup with the same device ID as a **4903** keypad or **4850R** proximity reader it will then mirror their respective outputs (for the 4G GSM's it will mirror the relay and auxiliary outputs and for the **4903** and **4850R** it will mirror the relay outputs) allowing for a Secured by Design configuration (also refer to **Fig.10** wiring diagram example).

LEGEND

- A** Firmware version - **R.X**
- B** RS485 bus terminals
- C** 8 way programmable dip switches
- D** Auxiliary output **A2**
- E** Auxiliary output **A1**
- F** Relay (**CO/NC/NO**) terminals
- G** Back EMF protection jumper **JP**
- H** +12Vdc power input
- I** PTE input (switched **0V**)

Art. 2813 RS485 Remote Relay

BACK EMF PROTECTION JUMPER JP

The onboard relay contacts **NO** and **NC** have built-in back EMF protection which can be adjusted using the internal MOV jumper **JP** (**Fig.2**, **Ⓒ**).

When set to the **A** position (default) the internal MOV's are connected across the **CO** to **NO** and **CO** to **NC** relay contacts, **Fig.3**.

When set to the **B** position the MOV's are disconnected (removed) from the **NO** and **NC** relay contacts (suitable if connecting the relay to an electric gate input), **Fig.3**.

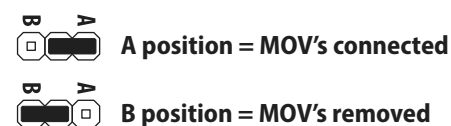


Fig. 3

PROGRAMMING VIA THE DIP-SWITCHES

IMPORTANT NOTE: Please note that the black area represents the dip-switch position: ON =  , OFF = 

Switches 1 to 6 on the 8 way dip-switch (**Fig.2**, **Ⓒ**) are used to setup the device ID (**ID.00** - **ID.63**), the relay time and auxiliary **A1** and **A2** times (in seconds) for the remote relay and is located under the top enclosure cover. Switches 7 and 8 determines which parameter is being set, i.e. 7=ON and 8=OFF would set auxiliary **A1** time.

Each switch corresponds to one bit which can have a value 0 (**OFF**) or 1 (**ON**). Each bit corresponds to a decimal weight depending on the position: switch 1 = decimal 1, 2=2, 3=4, 4=8, 5=16 and 6=32, i.e. to set the device ID to **ID.37**, put switches 1, 3 and 6 **ON** (1+4+32=37), see table below.

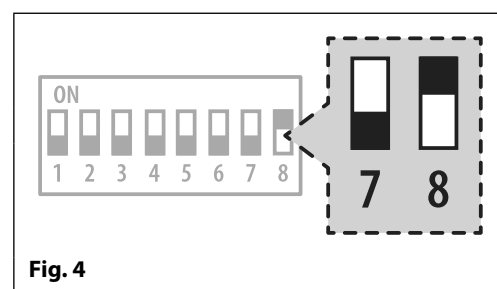
SWITCHES						DECIMAL WEIGHT						RELAY, A1, A2 TIME & DEVICE ID
6	5	4	3	2	1	32	16	8	4	2	1	
OFF	OFF	OFF	OFF	OFF	OFF	0	0	0	0	0	0	0
OFF	OFF	OFF	OFF	OFF	ON	0	0	0	0	0	1	1
OFF	OFF	OFF	OFF	ON	OFF	0	0	0	0	1	0	2
OFF	OFF	OFF	OFF	ON	ON	0	0	0	0	1	1	3
ON	OFF	OFF	ON	OFF	ON	1	0	0	1	0	1	37
ON	ON	ON	ON	ON	ON	1	1	1	1	1	1	63

SETTING THE RELAY TIME (1 - 63 SECS, 0 = LATCH MODE)

The relay time can be set between 1 up to 63 seconds or can be set to latch mode, i.e. the relay time is set to 0, by using the switches 1 to 6 on the 8 way dip-switch (**Fig.2**, **Ⓒ**).

In order to setup the relay time follow the steps below:

1. Disconnect the power to the remote relay.
2. Set dip-switches 7 to the **OFF** position and 8 to the **ON** position, see **Fig.4**.
3. Use dip-switches 1 to 6 to set the relay time, following the same methodology used when setting up the device ID.
4. Once the desired relay time is set reconnect the power to the remote relay.
5. Wait a couple of seconds then power down again. The relay time is saved to the onboard non-volatile memory.

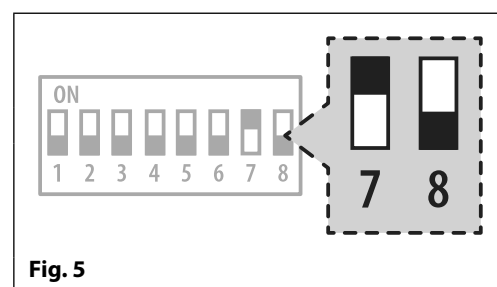


SETTING AUXILIARY A1 TIME (1 - 63 SECS, 0 = LATCH MODE)

Auxiliary **A1** time can be set between 1 up to 63 seconds or can be set to latch mode, i.e. the auxiliary **A1** time is set to 0, by using the switches 1 to 6 on the 8 way dip-switch (**Fig.2**, **Ⓒ**). When auxiliary **A1** is activated remotely it will switch **0V** for the programmed time.

In order to setup auxiliary **A1** time follow the steps below:

1. Disconnect the power to the remote relay.
2. Set dip-switches 7 to the **ON** position and 8 to the **OFF** position, see **Fig.5**.
3. Use dip-switches 1 to 6 to set the relay time, following the same methodology used when setting up the device ID.
4. Once the desired relay time is set reconnect the power to the remote relay.
5. Wait a couple of seconds then power down again. The relay time is saved to the onboard non-volatile memory.

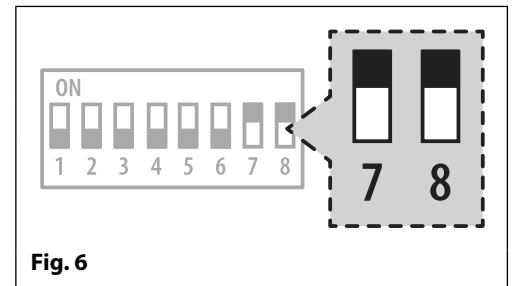


Art. 2813 RS485 Remote Relay**SETTING AUXILIARY A2 TIME (1 - 63 SECS, 0 = LATCH MODE)**

Auxiliary **A2** time can be set between 1 up to 63 seconds or can be set to latch mode, i.e. the auxiliary **A2** time is set to 0, by using the switches 1 to 6 on the 8 way dip-switch (**Fig.2, (C)**). When auxiliary **A2** is activated remotely it will switch **0V** for the programmed time.

In order to setup auxiliary **A2** time follow the steps below:

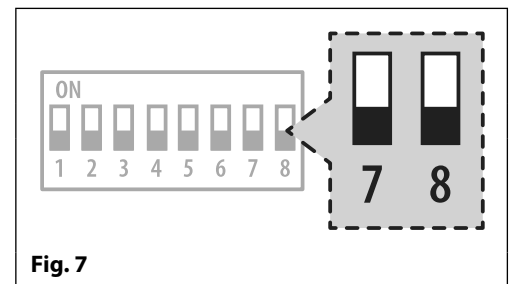
1. Disconnect the power to the remote relay.
2. Set dip-switches 7 and 8 to the **ON** position, see **Fig.6**.
3. Use dip-switches 1 to 6 to set the relay time, following the same methodology used when setting up the device ID.
4. Once the desired relay time is set reconnect the power to the remote relay.
5. Wait a couple of seconds then power down again. The relay time is saved to the onboard non-volatile memory.

**Fig. 6****SETTING THE DEVICE ID (ID.00 - ID.63)**

The relay's device ID can be set between **ID.00** up to **ID.63** by using the switches 1 to 6 on the 8 way dip-switch (**Fig.2, (C)**) and where the ID is addressed in binary. **IMPORTANT NOTE: The device ID should always be setup last.**

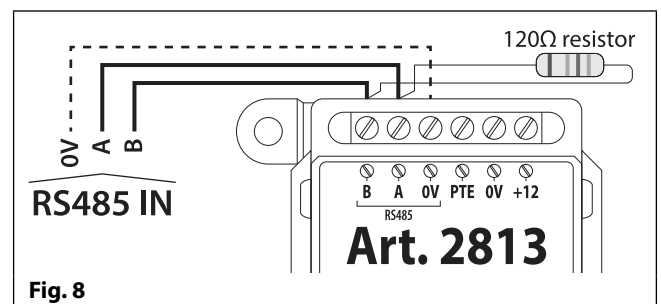
In order to setup the device ID follow the steps below:

1. Disconnect the power to the remote relay.
2. Set dip-switches 7 and 8 to the **OFF** position, see **Fig.7**.
3. Use dip-switches 1 to 6 to set the device ID, following the examples in the table above.
4. Once the desired device ID is set reconnect the power to the remote relay. The device ID is read when the remote relay is powered back up.

**Fig. 7****RS485 BUS TERMINATION**

If the remote relay is the end of line device on the RS485 bus a 120Ω resistor must be fitted across the RS485 bus terminals **A** and **B**, as shown in **Fig.8**, but only over a great distance (up to 500m max.).

Over shorter distances (approximately 100m or so) a 120Ω resistor will not be required.

**Fig. 8****TERMINAL CONNECTIONS**

Connection	Description
B	RS485 bus terminal connections
A	
0V	RS485 0V ground connection
PTE	Push to Exit input (switched 0V)
0V	0V power input
+12	12Vdc power input
A2	Auxiliary output A2
A1	Auxiliary output A1
0V	0V ground connection
NO	Relay normally open connection
NC	Relay normally closed connection
CO	Relay common connection

**3A @
24Vac/dc**

TECHNICAL SPECIFICATION

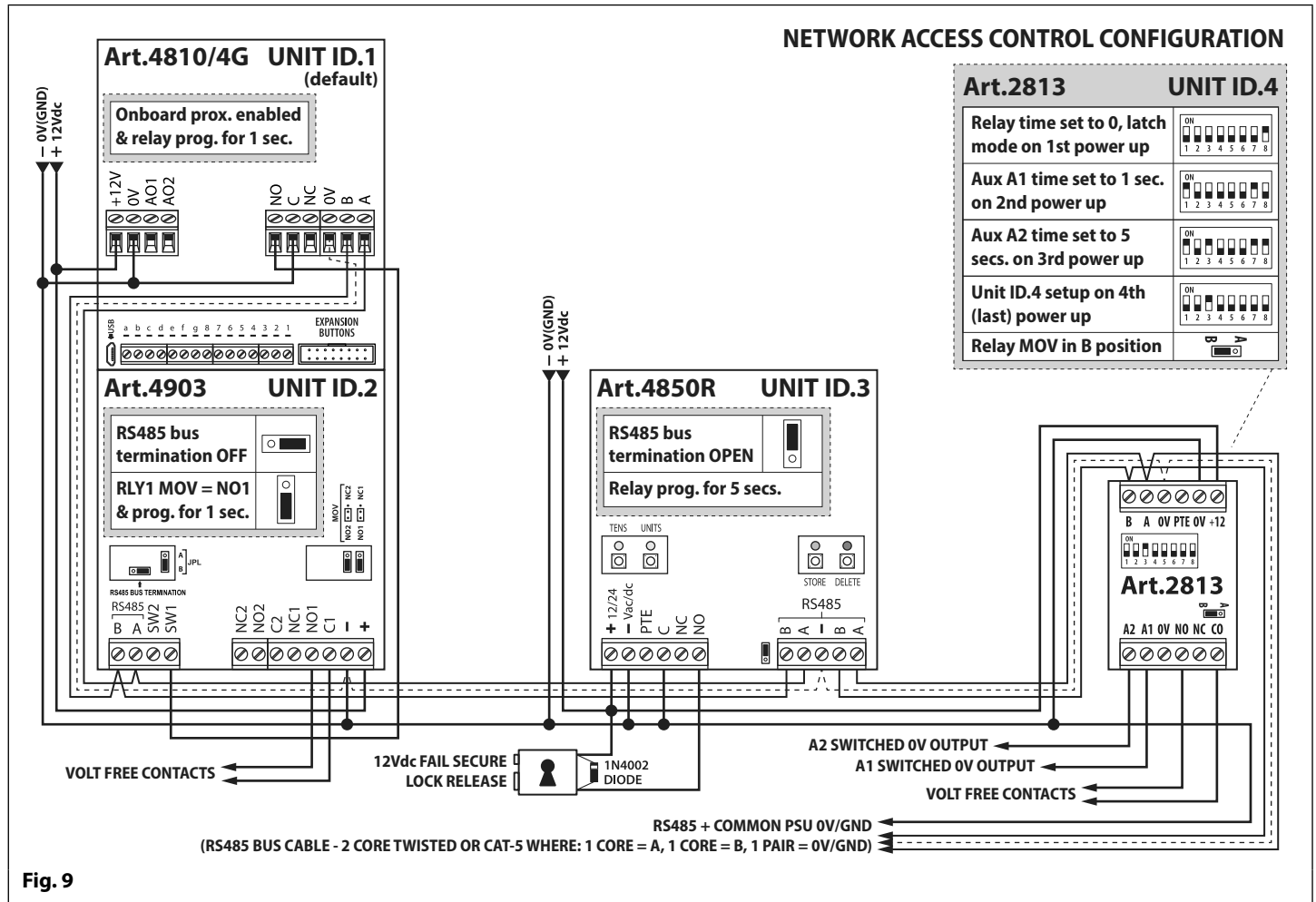
Working voltage:	12Vdc +/- 10%
Current (standby):	5mA
Current (operation):	34mA (max.)
Number of relays:	1x, C, NC and NO
Relay current / voltage:	3A @ 24Vac/dc (max.)
Push to exit input:	PTE for relay only (switched 0V)
Auxiliary outputs:	A1 and A2 (both switched 0V)
Back EMF protection:	Yes, via MOV jumper JP
RS485 bus connections:	A, B and 0V (GND)
Networkable:	via RS485 (up to 64 devices max.)
Programming:	via 8 way internal dip-switches for device ID, relay & aux. times
Working Temperature:	-20 +60°C



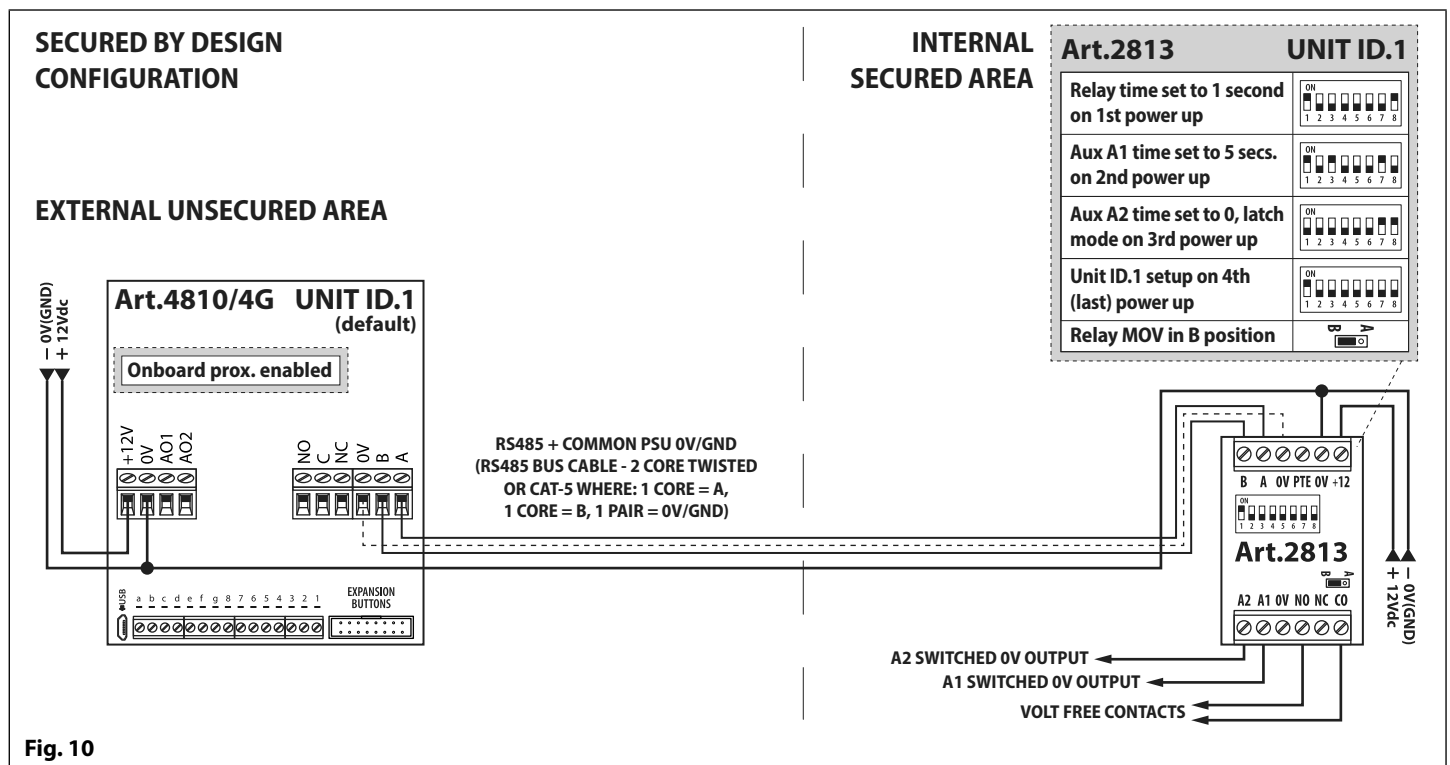
IT IS RECOMMENDED THAT THIS VIDEX PRODUCT IS INSTALLED BY A COMPETENT AND QUALIFIED ELECTRICIAN, SECURITY INSTALLATION SPECIALIST OR COMMUNICATIONS ENGINEER.

WIRING DIAGRAMS

Below **Fig.9** shows how the remote relay can be integrated as part of a **networkable access control** system.

**Fig. 9**

Below **Fig.10** shows how the remote relay can be configured as a **Secured by Design** system with a 4G GSM intercom.

**Fig. 10**

Art. 2813 RS485 Remote Relay

Below **Fig.11** shows how the remote relay can be integrated as part of an IP video system.

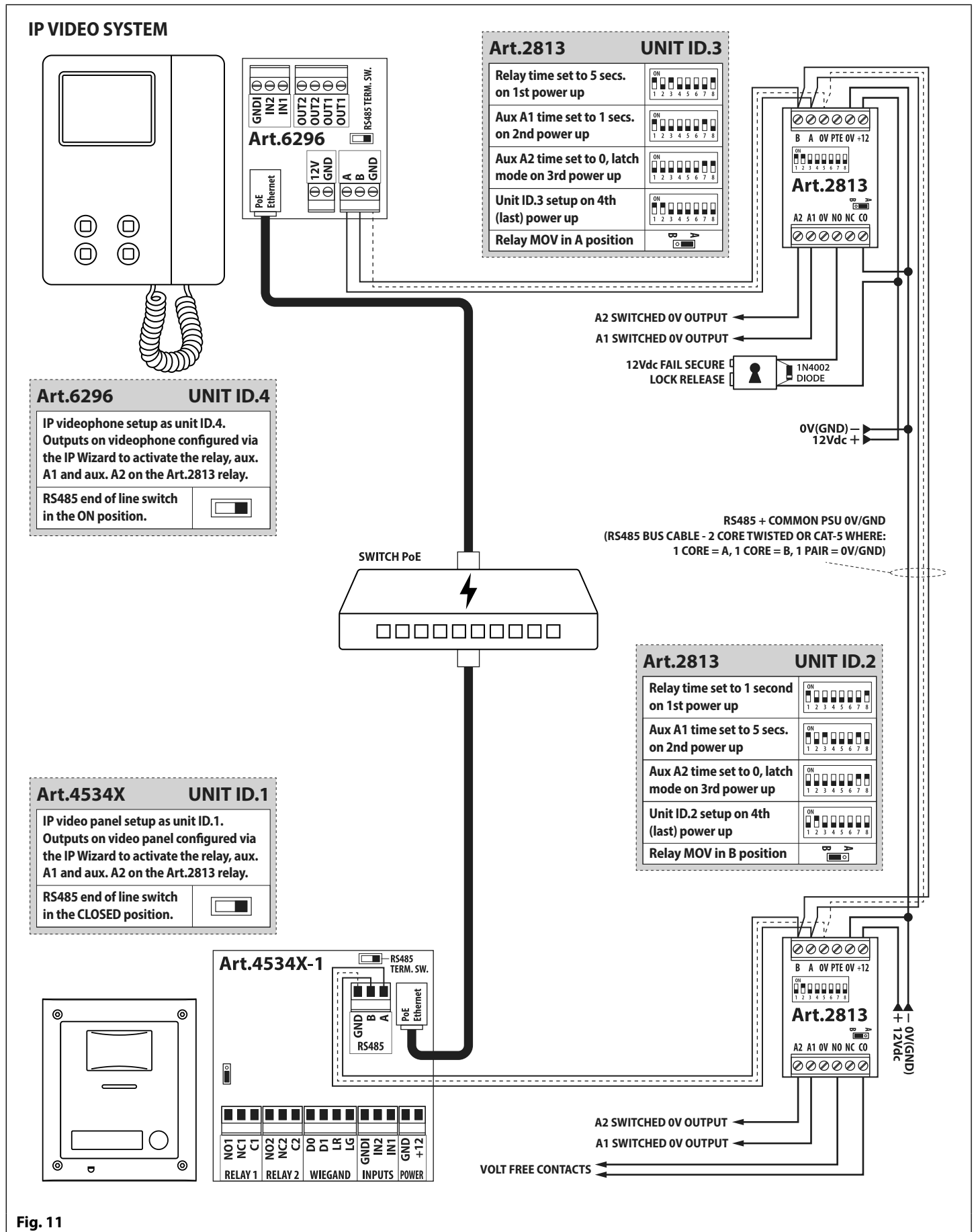


Fig. 11

This image shows a full page of a worksheet designed for handwriting practice. It features 20 evenly spaced, horizontal dashed lines across the entire width of the page. The background is plain white, and there are no margins, text, or other markings present.

ENG DISPOSAL

In accordance with the Legislative Decree no. 49 of 14 March 2014 "Implementation of the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)".

The crossed-out bin symbol on the equipment or on the packaging indicates that when the product reaches the end of its lifetime, it must be collected separately from mixed municipal waste. The user must, therefore, dispose of the equipment at the end of its lifetime in the suitable waste collection centres or bring it to the retailer during the purchase of a new equipment of equivalent type at the ratio of one-to-one. Furthermore, the user is allowed to dispose of the WEEEs of very small size (domestic appliances without any external dimension exceeding 25 cm (9.84 inches) for free to the retailers, without any purchase obligation. The correct waste disposal of the WEEEs contributes to their reuse, recycling and recovery and avoids potential negative effects on the environment and human health due to the possible presence of dangerous substances within them.



ITA SMALTIMENTO

Ai sensi del Decreto Legislativo 14 marzo 2014, n° 49 "Attuazione della direttiva 2012/19/UE sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE)".

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti urbani misti. L'utente dovrà, pertanto, conferire l'apparecchiatura giunta a fine vita presso gli idonei centri di raccolta differenziata oppure riconsegnarla al rivenditore al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente, in ragione di uno a uno. L'utente ha, inoltre, la possibilità di conferire gratuitamente presso i distributori, senza alcun obbligo di acquisto, per i RAEE di piccolissime dimensioni (per le apparecchiature di tipo domestico con nessuna dimensione esterna superiore a 25 cm).

L'adeguata raccolta differenziata dei RAEE contribuisce al loro riutilizzo, riciclaggio e recupero ed evita potenziali effetti negativi sull'ambiente e sulla salute umana dovuti alla eventuale presenza di sostanze pericolose al loro interno.

FRA ÉLIMINATION

Conformément au décret législatif n° 49 du 14 mars 2014 relatif à l'« Application de la directive 2012/19 / UE relative aux déchets d'équipements électriques et électroniques (DEEE) ».

Le symbole de la poubelle barrée sur l'équipement ou sur son emballage indique que le produit en fin de vie utile doit être collecté séparément des autres déchets municipaux en mélange. L'utilisateur doit donc remettre l'équipement en fin de vie aux centres de collecte appropriés ou le restituer au revendeur lors de l'achat d'un nouveau type d'équipement équivalent, dans le rapport de un à un. De plus, l'utilisateur a la possibilité de conférer gratuitement aux distributeurs, sans aucune obligation d'achat, de très petits DEEE (pour les appareils ménagers sans dimensions extérieures supérieures à 25 cm). La collecte séparée adéquate des DEEE contribue à leur réutilisation, leur recyclage et leur valorisation et évite les éventuels effets négatifs sur l'environnement et la santé humaine en raison de la présence possible de substances dangereuses dans ceux-ci.

SPA ELIMINACIÓN

De conformidad con el Decreto legislativo n. 49 de 14 de marzo 2014 "Aplicación de la Directiva 2012/19/UE relativa a residuos de aparatos eléctricos y electrónicos (RAEE)".

El símbolo del contenedor tachado indicado sobre los aparatos o sobre los embalajes señala que el producto al final de su vida útil debe ser recogido separadamente de otros residuos municipales mezclados. Por tanto, el usuario deberá conferir los aparatos al final de su vida útil en los apropiados centros de recogida selectiva o devolverlos al revendedor al momento de la compra de nuevos aparatos equivalentes, en una relación de uno a uno. Además, el usuario tiene la posibilidad de entregar sin cargo a los distribuidores, sin ninguna obligación de compra, los RAEEs muy pequeños (para electrodomésticos sin dimensiones externas superiores a 25 cm).

La recogida selectiva apropiada de los RAEEs contribuye a su reutilización, reciclaje y valorización y evita potenciales impactos negativos sobre el medio ambiente y la salud humana debidos a la posible presencia de sustancias peligrosas dentro de ellos.

NLD VERWIJDERING

In overeenstemming met het Wetsbesluit nr. 49 van 14 maart 2015 "Implementatie van de Richtlijn 2012/19/EU inzake afgedankte elektrische en elektronische apparaten (AEEA)".

Het doorgeslechte vuilnisbaksymbool op het apparaat of de verpakking geeft aan dat het product aan het einde van zijn levensduur niet samen met het gewone huisvuil weggegooid mag worden. De gebruiker moet het apparaat aan het einde van zijn levensduur inleveren bij een gepast inzamelpunt of de winkel waar hij een nieuw apparaat van een gelijksoortig type zal kopen. De gebruiker kan tevens AEEA's van een zeer klein formaat (huishoudapparaten met een buitenafmeting kleiner dan 25 cm (9,84 inch) gratis en zonder enige aankoopverplichting bij handelaars inleveren. Een juiste verwijdering van AEEA's draagt bij tot hergebruik, recycling en terugwinning, en voorkomt potentiële negatieve effecten op het milieu en de menselijke gezondheid door de mogelijke aanwezigheid van gevaarlijke stoffen.

POR ELIMINAÇÃO

De acordo com o Decreto Legislativo n.º 49 de 14 de março de 2014 "Implementação da Diretiva 2012/19/UE relativa aos resíduos de equipamentos elétricos e eletrônicos (REEE)".

O símbolo do caixote do lixo riscado no equipamento ou na embalagem indica que quando o produto atinge o fim da sua vida útil, deve ser recolhido separadamente dos resíduos urbanos mistos. O utilizador deve, portanto, eliminar o equipamento no final da sua vida útil nos centros de recolha de resíduos adequados ou levá-lo ao vendedor durante a compra de um novo equipamento de tipo equivalente, na proporção de um para um. Além disso, o utilizador pode eliminar gratuitamente os REEE de dimensões muito reduzidas aos vendedores, sem qualquer obrigação de compra. (só aparelhos domésticos sem qualquer dimensão externa que exceda 25 cm, ou seja 9,84 polegadas). A correta eliminação dos REEE contribui para a sua reutilização, reciclagem e recuperação e evita potenciais efeitos negativos sobre o ambiente e a saúde humana devido à possível presença de substâncias perigosas no seu interior.

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The product is CE marked demonstrating its conformity and is for distribution within all member states of the EU with no restrictions. This product follows the provisions of the European Directives 2014/30/EU (EMC); 2014/35/EU (LVD); 2011/65/EU (RoHS); CE marking 93/68/EEC.

Le produit est marqué CE à preuve de sa conformité et peut être distribué librement à l'intérieur des pays membres de l'union européenne UE.
 Ce produit est conforme aux directives européennes 2014/30/EU (EMC) ; 2014/35/EU (LVD) ; 2011/65/EU (RoHS): marquage CE 93/68/EEC.

Het product heeft de CE-markering om de conformiteit ervan aan te tonen en is bestemd voor distributie binnen de lidstaten van de EU zonder beperkingen. Dit product volgt de bepalingen van de Europese Richtlijnen 2014/30/EU (EMC); 2014/35/EU (LVD); 2011/65/EU (RoHS): CE-markering 93/68/EEG.

يحمل المنتج علامة التوافق الأوروبي CE لإظهار توافقه مع المواصفات ذات الصلة وإمكانية توزيعه في كافة دول الاتحاد الأوروبي بدون أية قيود. يلبي هذا المنتج جميع متطلبات التوجيهات الأوروبية 2014/30/UE (EMC); 2014/35/UE (LVD); 2011/65/UE (RoHS): علامة المطابقة للمواصفات الأوروبية 93/68/CEE.

Il prodotto è marchiato CE a dimostrazione della sua conformità e può essere distribuito liberamente all'interno dei paesi membri dell'Unione Europea UE.
 Questo prodotto è conforme alle direttive Europee: 2014/30/UE (EMC); 2014/35/UE (LVD); 2011/65/UE (RoHS): marcatura CE 93/68/EEC.

El producto lleva la marca CE que demuestra su conformidad y puede ser distribuido en todos los estados miembros de la unión europea UE.
 Este producto cumple con las Directivas Europeas 2014/30/EU (EMC); 2014/35/EU (LVD); 2011/65/EU (RoHS): marca CE 93/68/EEC.

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