

## BUS2 SYSTEM

## PLACAS DIRECT y DIGITAL

## DIRECT & DIGITAL PANELS

## PLATINES DIRECT ET DIGITAL

## DIRECT UND DIGITAL TÜRSTATIONEN

# MANUAL DE INSTALADOR

# INSTALLER'S MANUAL

# MANUEL D'INSTALLATION

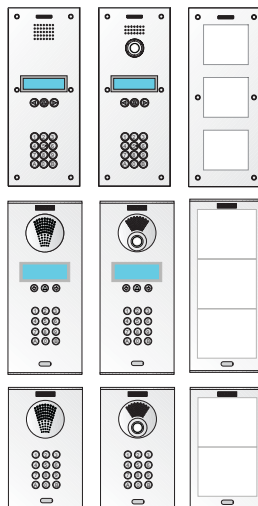
# INSTALLATIONSHANDBUCH

ESPAÑOL

ENGLISH

FRANÇAIS

DEUTSCH



- E** «MANUAL PLACAS BUS2 DIRECT Y DIGITAL»
- EN** «DIRECT & DIGITAL BUS2 PANEL MANUAL»
- F** « MANUEL PLATINES BUS2 DIRECT ET DIGITAL »
- D** «HANDBUCH DIRECT UND DIGITAL BUS2 TÜRSTATIONEN»

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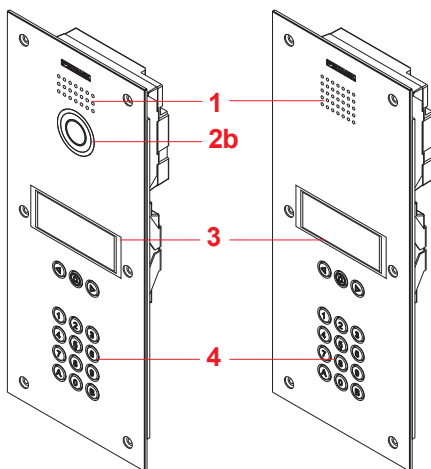
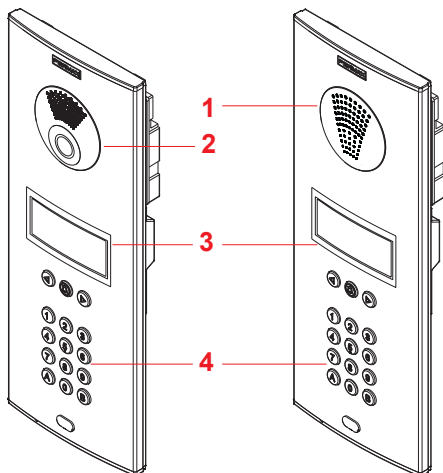
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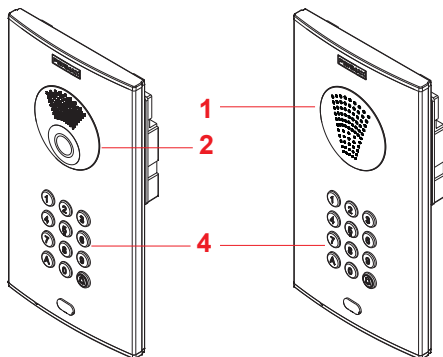
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## DIGITAL

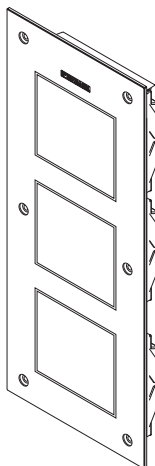
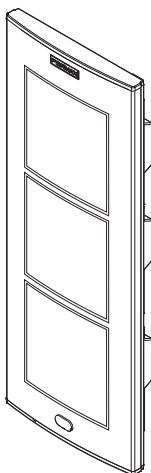


## DIRECT



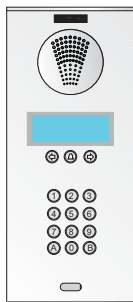
1. Amplificador / Amplifier / Amplificateur / Lautsprecher.
2. Amplificador-Telecámara / Amplifier-Telecamera / Amplificateur-Caméra / Lautsprecher-Kamera.
- 2b. Telecámara / Telecamera / Caméra / Kamera.
3. Display digital / Digital display / Affichage numérique / Bildschirmanzeige
4. Teclado / Keypad / Clavier / Tastatur

## PLACA DIRECTORIO / DIRECTORY PANEL / PLATINE RÉPERTOIRE / NAMENSVERZAICHNIS

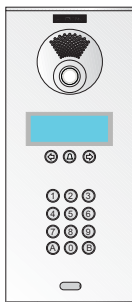


# \* BUS2

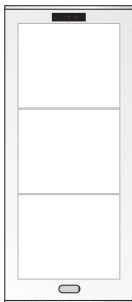
## Digital



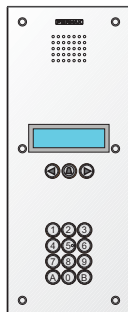
Audio



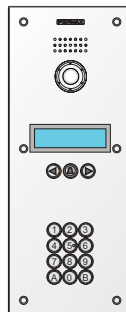
Video



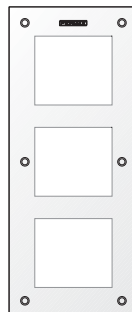
Placa directorio  
Directory panel  
Platine répertoire  
Namensverzeichnis



Audio

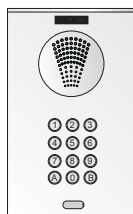


Video

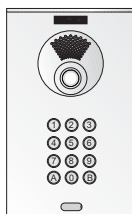


Placa directorio  
Directory panel  
Platine répertoire  
Namensverzeichnis

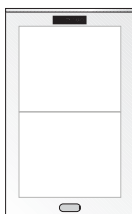
## Direct



Audio



Video



Placa directorio  
Directory panel  
Platine répertoire  
Namensverzeichnis

## E INSTALACIÓN DEL ALIMENTADOR

## F INSTALLATION DE L'ALIMENTATION

## EN POWER SUPPLY INSTALLATION

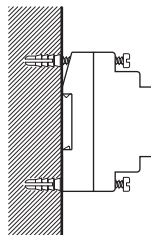
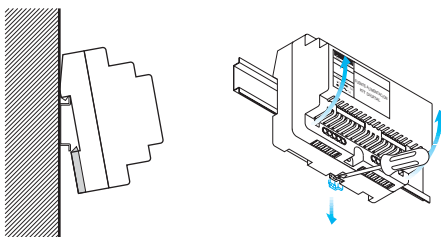
## D INSTALLATION DES NETZGERÄTS

Instalación en carril DIN - DIN rail Installation  
 Installation sur rail DIN - DIN-Schiene Installation

Fijación con tornillos - Fixing with screws  
 Fixation au moyen de vis - Befestigung mit Schrauben

Montaje - Assembly  
 Montage - Einbau

Desmontaje - Disassembly  
 Démontage - Ansbau



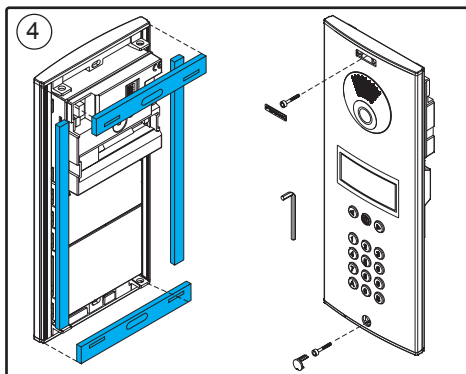
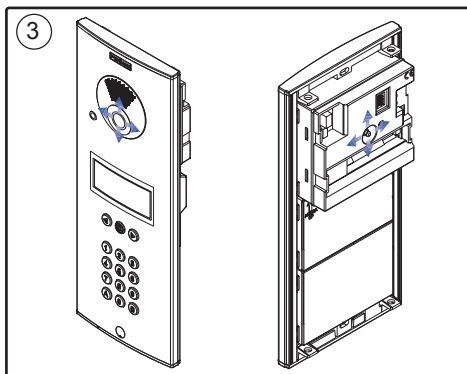
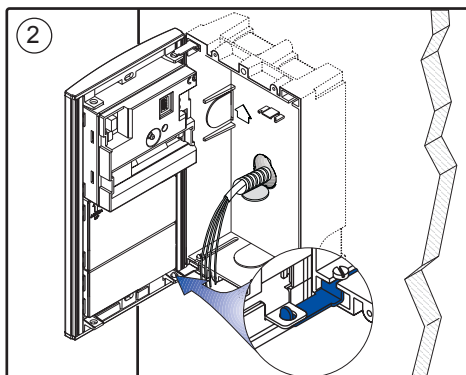
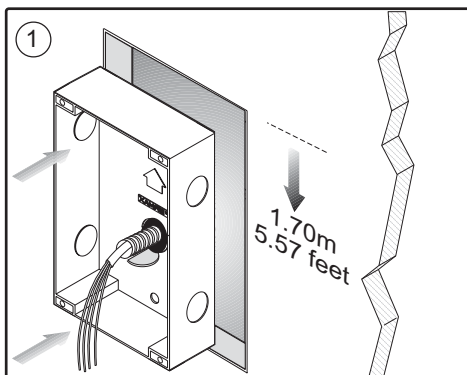
## E INSTALACIÓN PLACA DE CALLE

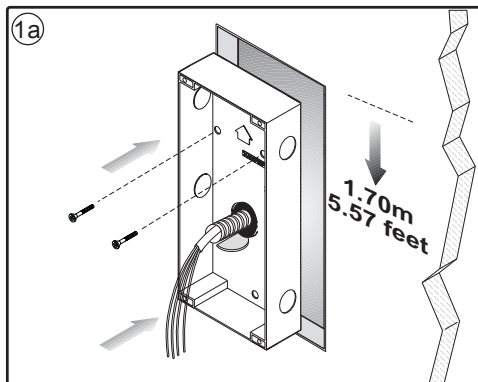
## F INSTALLATION DE LA PLATINE DE RUE

## EN OUTDOOR PANEL INSTALLATION

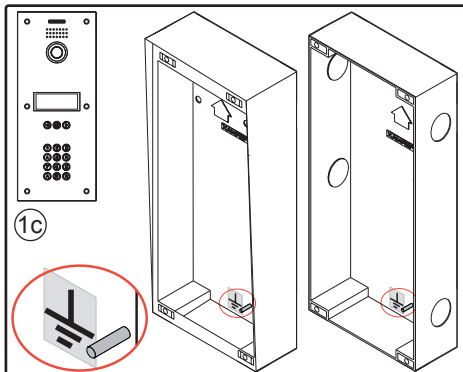
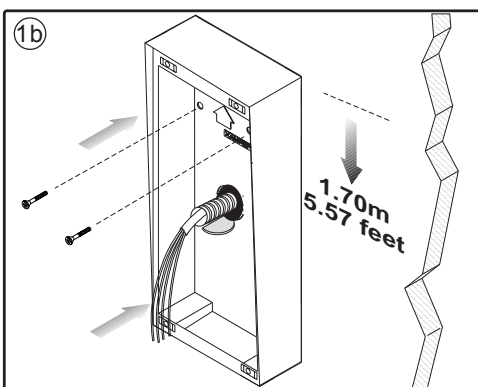
## D INSTALLATION DER TÜRSTATION

### CITYLINE



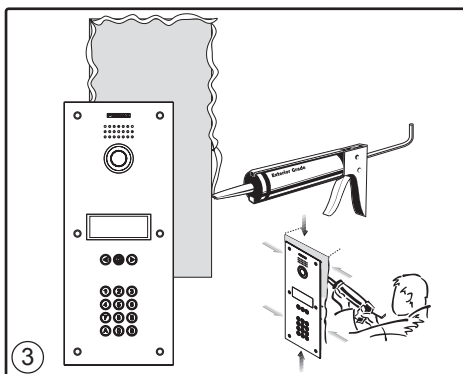
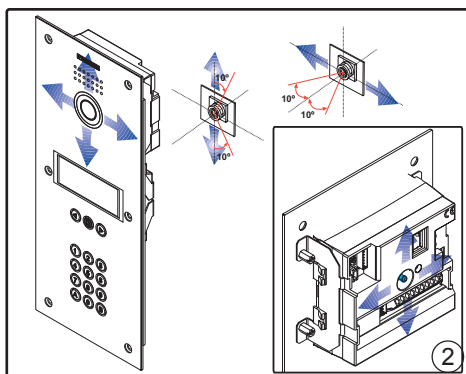
**MARINE**


- Instalación con CAJA de EMPOTRAR
- Installation with FLUSH-MOUNTED BOX
- Installation avec BOÎTIER ENCASTRABLE
- Installation mit UNTERPUTZKASTEN



Conectar a tierra / To connect to ground / Faire la connexion a terre Zur / Erdungsklemme verbinden

- Instalación con CAJA de SUPERFICIE
- Installation with SURFACE-MOUNTED BOX
- Installation avec BOÎTIER EN SAILLIE
- Installation mit AUFPUTZKASTEN

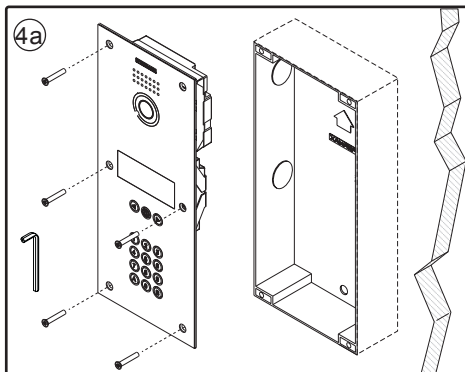


Acosejamos sellar la placa con un cordón de silicona para asegurar una mejor estanqueidad de ésta.

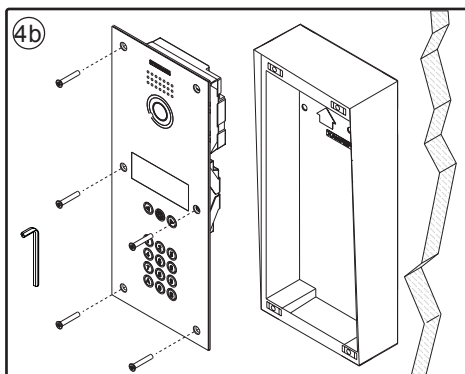
We advise you to seal the panel with silicon to ensure watertightness.

Nous vous conseillons de fixer la platine à l'aide d'un joint de silicone afin d'en garantir la parfaite étanchéité.

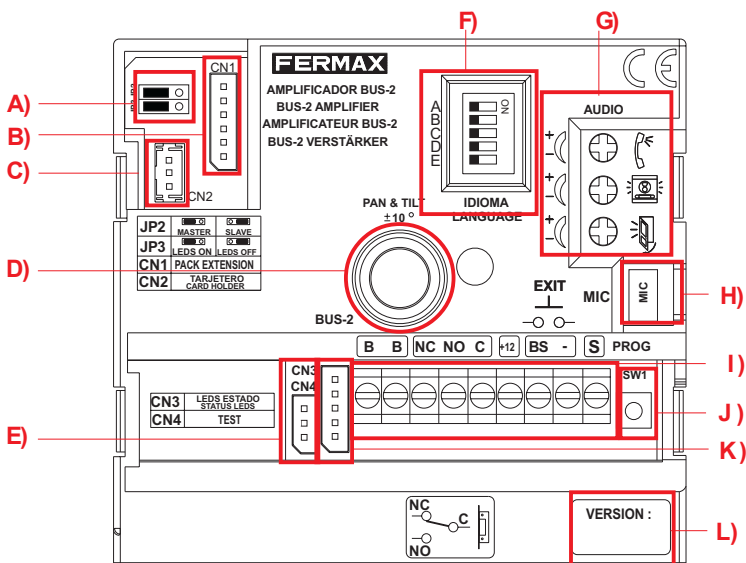
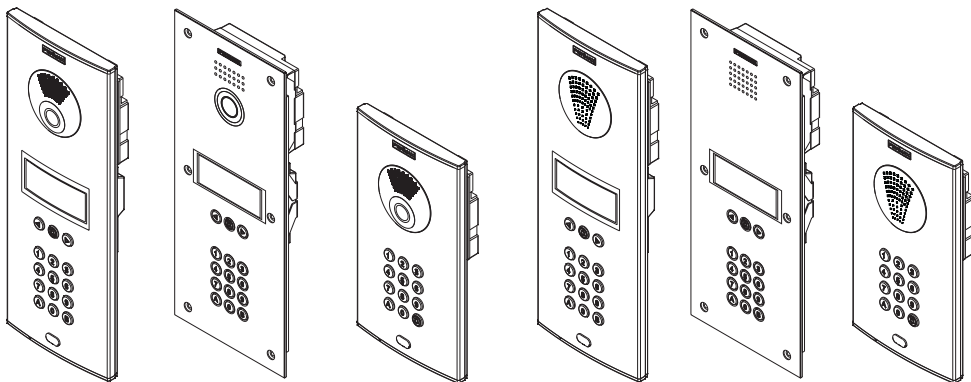
Wir empfehlen, die Türstation mit einem Silikonrand zu versehen, um eine höhere Wasserundurchlässigkeit zu gewährleisten.



- Cierre de placa con CAJA de EMPOTRAR
- Cover for panel with FLUSH-MOUNTED BOX
- Couvercle de platine avec BOÎTIER ENCASTRABLE
- Abdichtung der Türstation mit UNTERPUTZKASTEN
- Fecho de placa com CAIXA de ENCASTRAR



- Cierre de placa con CAJA de SUPERFICIE
- Cover for panel with SURFACE-MOUNTED BOX
- Couvercle de platine avec BOÎTIER EN SAILLIE
- Abdichtung der Türstation mit AUFPUTZKASTEN
- Fecho de placa com CAIXA de SUPERFÍCIE

**E AJUSTES DE LA PLACA**
**EN PANEL ADJUSTMENT**
**F RÉGLAGES DE LA PLATINE**
**D EINSTELLUNGEN DER TÜRSTATION**

**A)**
**JP2**
**E** Selección Placa Principal / Placa Secundaria

**EN** Main Panel/Secondary Panel Selection

**F** Sélection de la platine principale / platine secondaire

**D** Auswahl Haupttürstation / Nebentürstation

☒ ☐ (\*)

☐ ☒

Placa Principal

Placa Secundaria

Main Panel

Secondary Panel

Platine principale

Platine secondaire

Haupttürstation

Nebentürstation

(\*) Configuración por defecto: Placa Principal - Default Configuration: Main Panel - Configuration par défaut : platine principale  
Standardkonfiguration: Haupttürstation

**JP3**
**E** Leds cámara

**EN** Camera LEDs

**F** DEL de la cámara

**D** Leuchtdioden der Kamera

encendidos cuando la cámara está activada

ON when the camera is active

ON quand la caméra est activée

ON wenn die Kamera aktiv ist

apagados siempre

always off

toujours éteintes

immer ausgeschaltet

## B)

### CN1

|           |                                                                                                                                     |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>E</b>  | Conexión Módulo de extensión de llamadas, pulsadores modulares, teclado, display o hasta 3 pulsadores (placa kit)                   |
| <b>EN</b> | Connection call extension module, modular buttons, keypad, display or up to 3 buttons (panel kit)                                   |
| <b>F</b>  | Connexion Module d'extension d'appel, boutons-poussoirs modulaires, clavier, affichage ou jusqu'à 3 boutons-poussoirs (platine kit) |
| <b>D</b>  | Anschluss Ruferweiterungsmodul, Tastenmodule, Tastatur, Display oder bis zu 3 Tasten (Türstation-Set)                               |

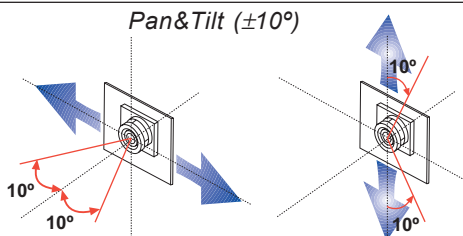
## C)

### CN2

|           | L+ / L-                                                   | CP                                                                                                                         |
|-----------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>E</b>  | Conexión iluminación tarjeteros y pulsadores              | Luz tarjetero pulsador                                                                                                     |
| <b>EN</b> | Connection card holder and button lighting                | Cardholder Backlight                                                                                                       |
| <b>F</b>  | Connexion éclairage boutons-poussoirs et porte-étiquettes | Lumière porte-étiquettes bouton-poussoir                                                                                   |
| <b>D</b>  | Anschluss Tasten- und Infomodul-Beleuchtung               | Beleuchtung Taste Infomodul                                                                                                |
|           |                                                           | Común de pulsadores<br>Common Button Wire<br>Connecteur commun de boutons-poussoirs<br>Gemeinsamer Draht der Klingeltasten |

## D)

- E** Enfoque la telecámara
- EN** Focus the camera
- F** Réglez la caméra vidéo
- D** Richten Sie die Kamera aus

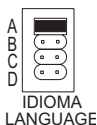


## E)

### CN4

|           |                                                                                                                                                                        |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>E</b>  | <b>CN4. Conector Test:</b> Permite conectar el «Comprobador BUS2» y verificar el estado de la instalación o programar los terminales de vivienda.                      |
| <b>EN</b> | <b>CN4. Test Connector:</b> It allows connecting «BUS2 Tester» and to verify the installationstatus or to program the house terminals.                                 |
| <b>F</b>  | <b>CN4. Connecteur pour le testeur :</b> Il permet de brancher « le Testeur BUS2 » et de vérifier l'état de l'installation ou de programmer les terminaux de logement. |
| <b>D</b>  | <b>CN4. Testanschluss:</b> Zum Anschliessen vom «BUS2 Tester», um Anlagestatus zuüberprüfen oder Telefon-Monitor zu Programmieren.                                     |

## F)

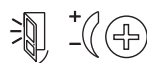
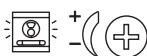
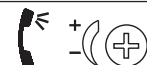


- A: Español
- B: Français
- C: English
- D: Deutsch

- E** Selección del idioma del mensaje de «puerta abierta».
- EN** Select language for «open door» message.
- F** Sélection de la langue du message « porte ouverte ».
- D** Sprachwahl der Meldung «Tür offen».

## G)

- E** Ajuste audio
- EN** Adjust the audio
- F** Réglez le volume
- D** Audioeinstellung



- E** «puerta abierta»
- EN** «open door»
- F** « porte ouverte »
- D** «Tür offen»

**H)**
**MIC**

|           |                                                                               |
|-----------|-------------------------------------------------------------------------------|
| <b>E</b>  | Conexión micrófono (micrófono ubicado en el perfil inferior de la placa)      |
| <b>EN</b> | Microphone connection (microphone located in the lower panel profile)         |
| <b>F</b>  | Connexion microphone (microphone placé sur le profil inférieur de la platine) |
| <b>D</b>  | Mikrofonanschluss (Mikrofon befindet sich am unteren Profil der Türstation)   |

**I)**
**E Conectores Placa:**

**B, B:** Bus de Datos, Audio y Video + alimentación 24 Vdc.

**S:** Señal de activación que entrega un negativo cuando la placa se activa tras una llamada o autoencendido.

**BS, -:** pulsador zaguán.

**+12:** Salida auxiliar de tensión (12Vdc, 0'4A máx).

**C, NO, NC:** Relé abrepuertas libre de potencial. Conexión abrepuertas.

**EN Panel Connectors:**

**B, B:** Data bus, audio and video + 24 Vdc power supply.

**S:** Activation signal which gives a negative result when the panel is activated after a call or autostart.

**BS, -:** entrance hall button.

**+12:** Auxiliary voltage output (12Vdc, 0.4A max).

**C, NO, NC:** Potential-free door lock release relay. Lock-Release connection.

**F Connecteurs de platine :**

**B, B :** bus de données, son et image + alimentation 24 Vcc.

**S :** signal d'activation qui remet un négatif lorsque la platine est activée après un appel ou un allumage automatique.

**BS, - :** bouton-poussoir hall

**+12 :** Sortie auxiliaire de tension (12 V cc, 0,4 A max.)

**C, NO, NC :** relais de la gâche sans potentiel. Raccordement gâche.

**D Anschlüsse Türstation:**

**B, B:** Datenbus,, Audio und Video + Stromversorgung 24 VDC.

**S:** Aktivierungssignal in Form eines Negativstroms, wenn die Türstation durch einen Anruf oder Eigenstart aktiviert wird.

**BS, -:** Drucktaste Flur

**+12:** Hilfsspannungsausgang (12 VDC, max. 0,4 A)

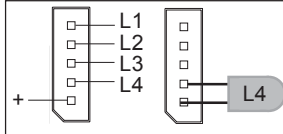
**C, NO, NC:** Türöffner-Relais, spannungsfrei. Anschluss Türöffner.

**J)**
**SW1**

|           |                                                                                                         |
|-----------|---------------------------------------------------------------------------------------------------------|
| <b>E</b>  | <b>Mapeado:</b> botón para entrar en modo programación de pulsadores. Ver manual "Mapeado"              |
| <b>EN</b> | <b>Mapping:</b> button to enter button programming mode. See manual 'Mapping'                           |
| <b>F</b>  | <b>Mappage :</b> bouton pour entrer en mode programmation de boutons-poussoirs. Voir manuel « Mappage » |
| <b>D</b>  | <b>Mapping:</b> Programmiertaste der Klingeltasten Siehe Handbuch "Mapping"                             |

**K)**

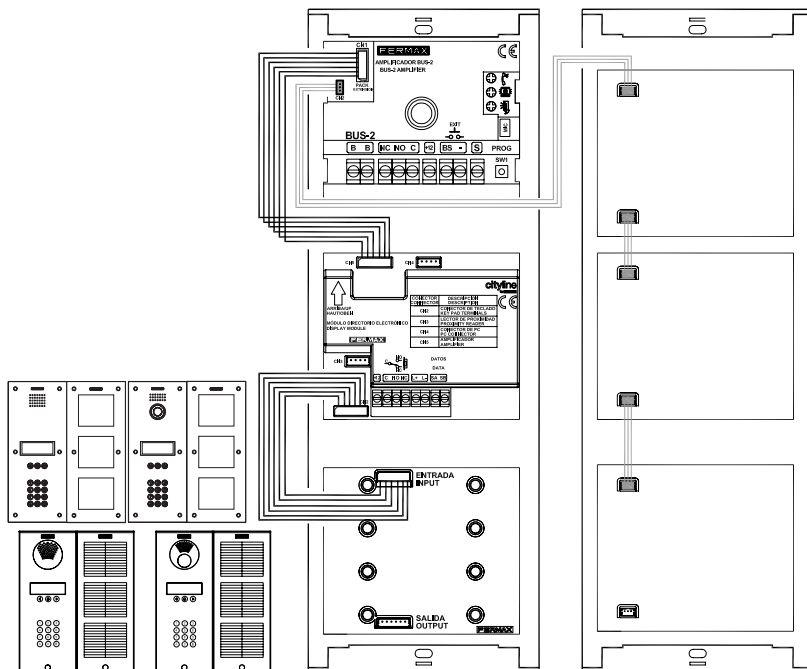
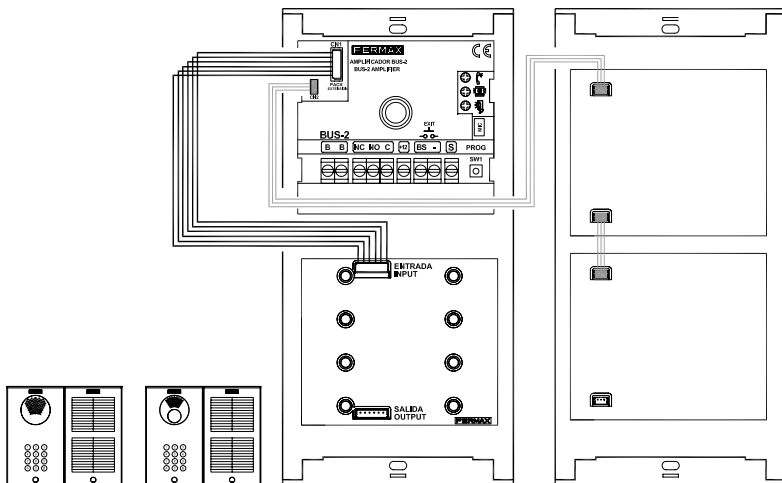
- E CN3:** Conexión leds de estado. De gran utilidad para personas discapacitadas, permite conectar leds que informan del estado de la comunicación.  
L2, L3, L4: entregan un negativo cuando se realiza la acción correspondiente, activando el led conectado entre "Lx" y "+":
- EN CN3:** Connection Status Leds Very useful for disabled people, allowing leds to be connected which provide information on communication status.  
L2, L3, L4: generates a negative signal when the corresponding action is taken, activating the led connected between "Lx" and "+":
- F CN3 :** connexion DEL d'état. Très utile pour les personnes handicapées, il permet de raccorder des DEL indiquant l'état de la communication.  
L2, L3, L4 : transmettent un négatif lorsque l'action correspondante est effectuée, en activant la DEL raccordée entre « Lx » et « + ».
- D CN3:** Anschluss LED-Statusanzeige Von großem Nutzen für behinderte Personen; ermöglicht das Anschließen von LEDs, die über den Zustand der Verbindung informieren.  
L2, L3, L4: übermitteln einen Negativstrom, wenn der entsprechende Vorgang ausgelöst wird, worauf die angeschlossene LED zwischen "Lx" und "+" aktiviert wird:

|                                                                                   | <b>L2</b>      | <b>L3</b>            | <b>L4</b>                |
|-----------------------------------------------------------------------------------|----------------|----------------------|--------------------------|
|  | Led de llamada | Led de comunicación  | Led apertura de puerta   |
|                                                                                   | Call Led       | Communication Led    | Lock Release Led         |
|                                                                                   | DEL d'appel    | DEL de communication | DEL ouverture des portes |
|                                                                                   | LED Anruf      | LED Sprechverbindung | LED Türöffnung           |
|                                                                                   | LED de chamada | LED de comunicação   | LED abertura de porta    |

**L)**

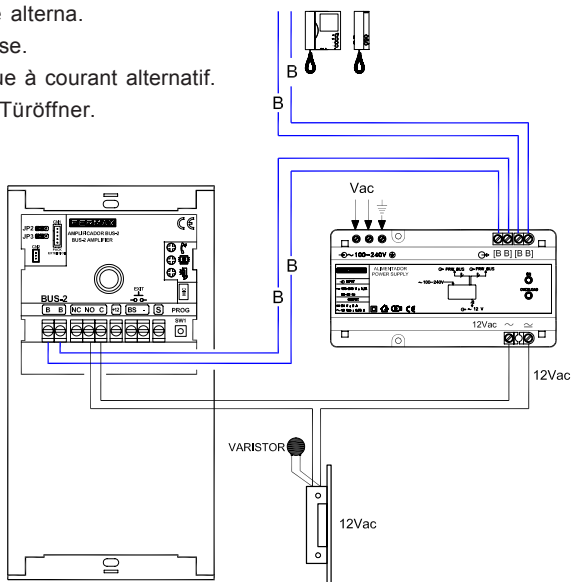
- E** Versión del amplificador
- EN** Amplifier version
- F** Version de l'amplificateur
- D** Lautsprecher version

|                                    |           |
|------------------------------------|-----------|
| <i><b>Esquemas de cableado</b></i> | <b>E</b>  |
| <i><b>Wiring diagrams</b></i>      | <b>EN</b> |
| <i><b>Schémas de câblage</b></i>   | <b>F</b>  |
| <i><b>Verkabelungsschema</b></i>   | <b>D</b>  |

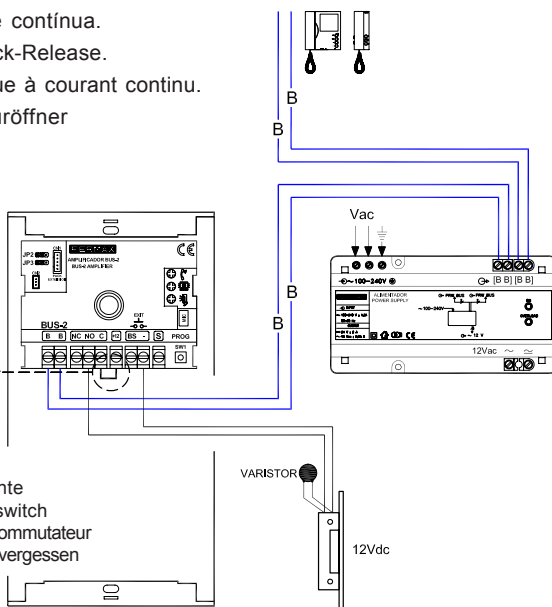


- E** Conexión abrepuertas.
- EN** Lock-Release Connection.
- F** Raccordement gâche.
- D** Anschluss Türöffner.

- E** Abrepuertas de alterna.
- EN** AC Lock-Release.
- F** Gâche électrique à courant alternatif.
- D** Wechselstrom-Türöffner.



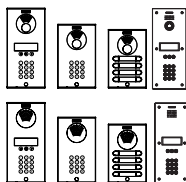
- E** Abrepuertas de continua.
- EN** Continuous Lock-Release.
- F** Gâche électrique à courant continu.
- D** Gleichstrom-Türöffner



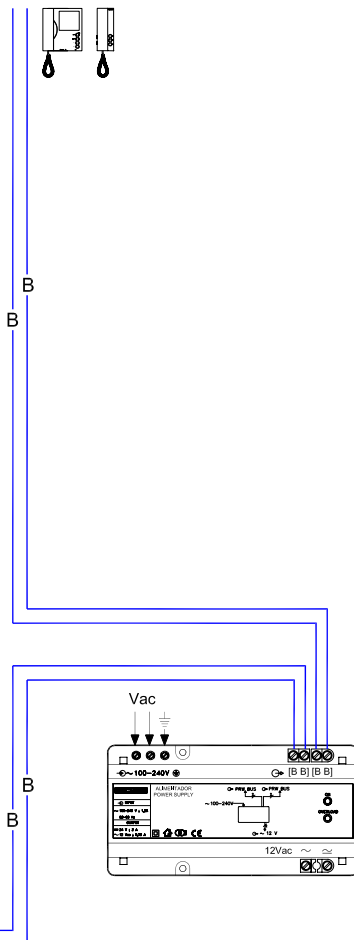
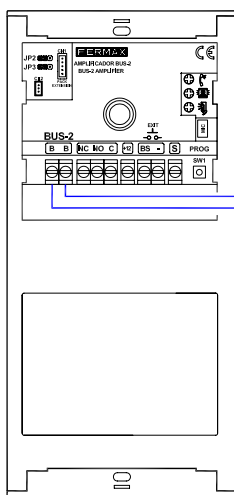
«C, +12»

- E** No olvidar el puente
- EN** Don't forget the switch
- F** Ne pas oublier le commutateur
- D** Steckbrücke nicht vergessen

- E** 1 acceso de audio/video.
- EN** 1 audio/video access point.
- F** 1 accès audio/vidéo.
- D** 1 Zutritt mit Audio-/Videotürstation.



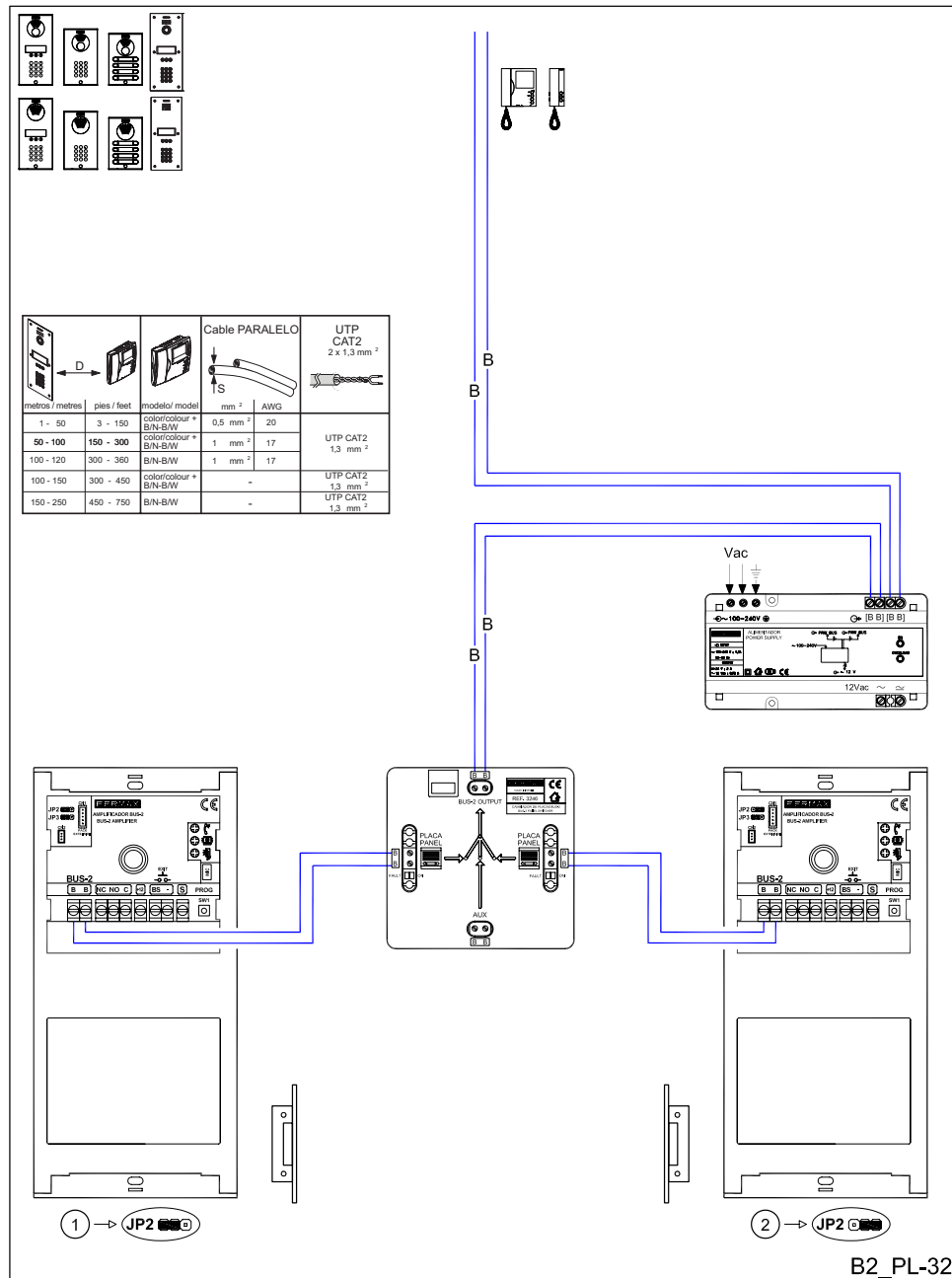
| metros / metres | pies / feet | modelos / model       | Cable PARALELO      | UTP CAT2                |
|-----------------|-------------|-----------------------|---------------------|-------------------------|
| 1 - 50          | 3 - 150     | color/color + B/N-B/W | 0,5 mm <sup>2</sup> | 2 x 1,3 mm <sup>2</sup> |
| 50 - 100        | 150 - 300   | color/color + B/N-B/W | 1 mm <sup>2</sup>   | 1,3 mm <sup>2</sup>     |
| 100 - 120       | 300 - 360   | B/N-B/W               | 1 mm <sup>2</sup>   | 1,3 mm <sup>2</sup>     |
| 100 - 150       | 300 - 450   | color/color + B/N-B/W | -                   | UTP CAT2                |
| 150 - 250       | 450 - 750   | B/N-B/W               | -                   | UTP CAT2                |



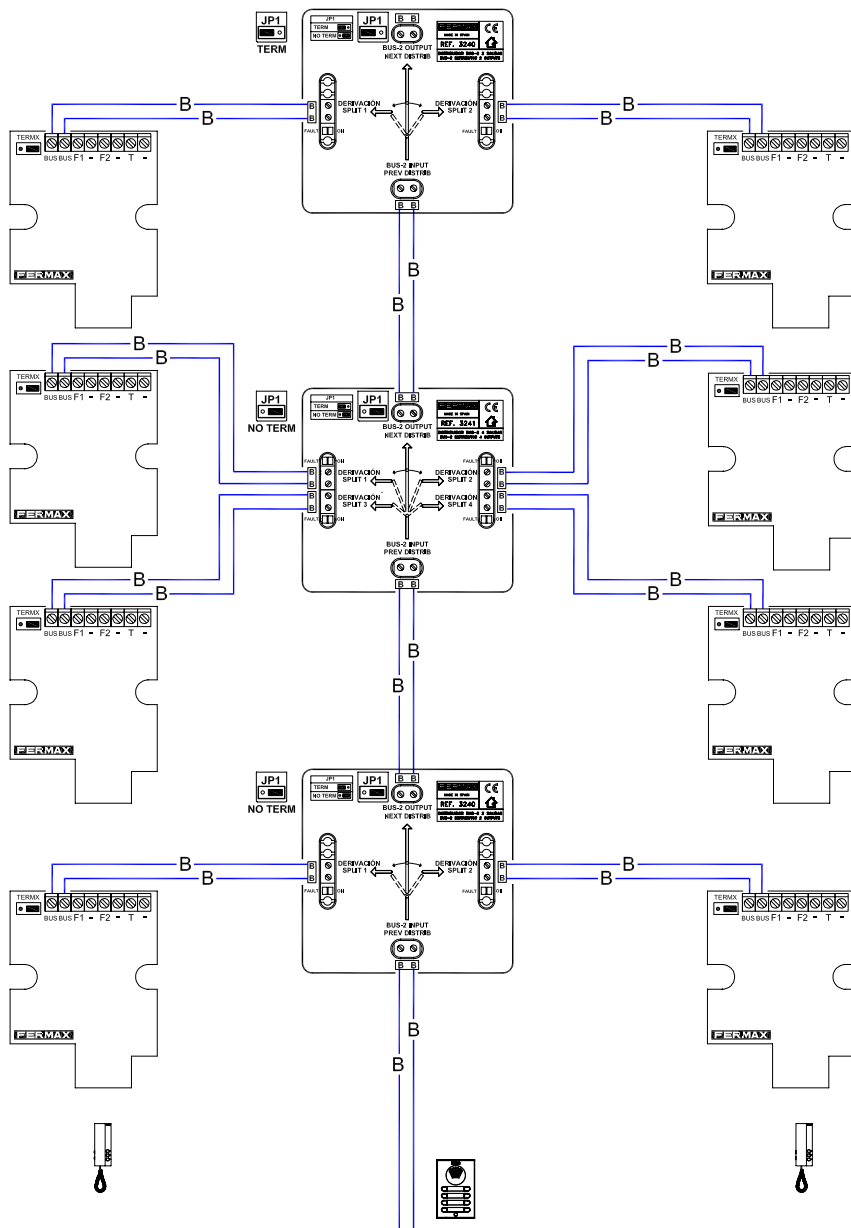
① → JP2

B2\_PL-31

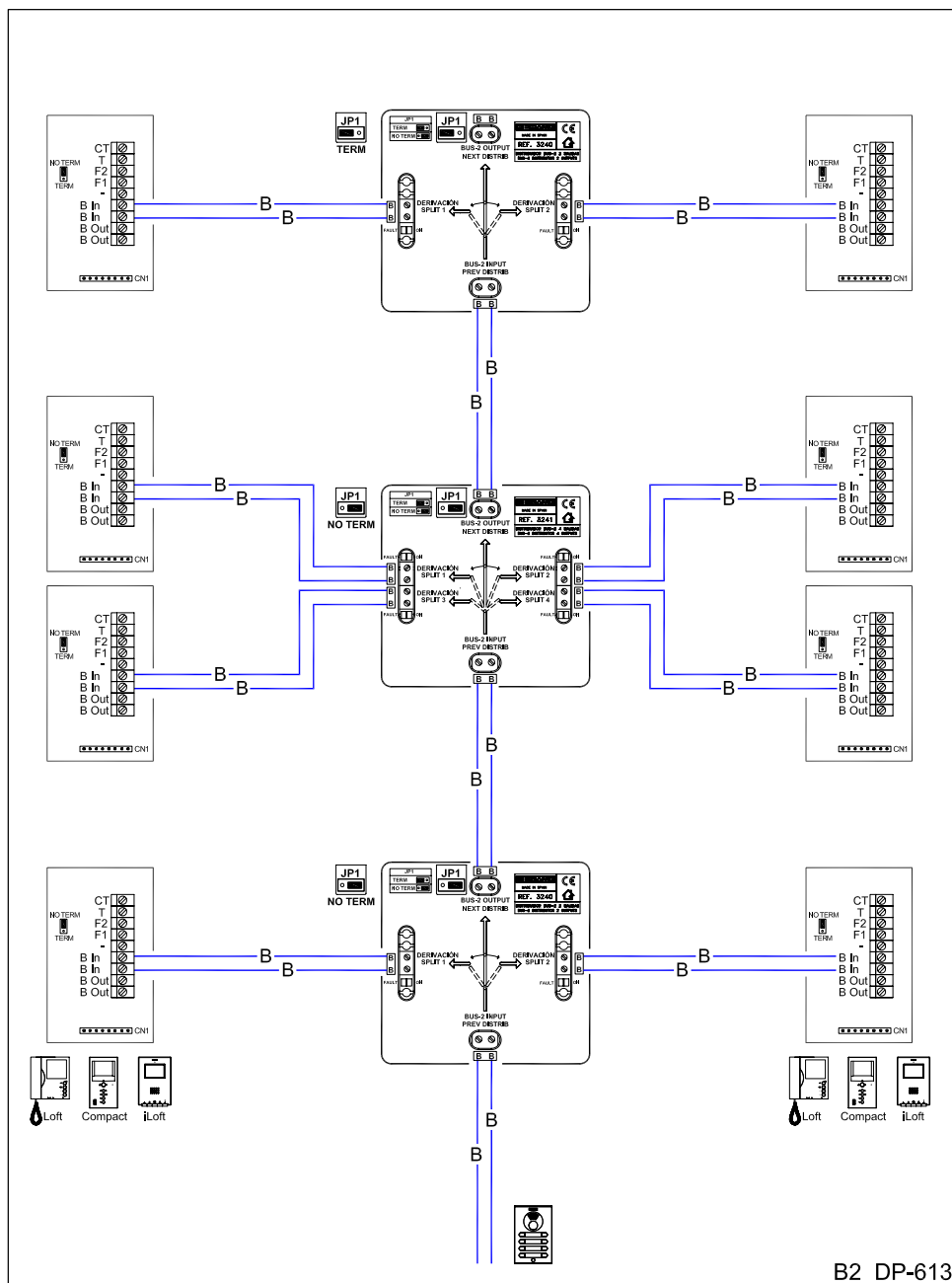
- E** 2 accesos de audio/video.
- EN** 2 audio/video access point.
- F** 2 accès audio/vidéo.
- D** 2 Zutritte mit Audio-/Videotürstation.



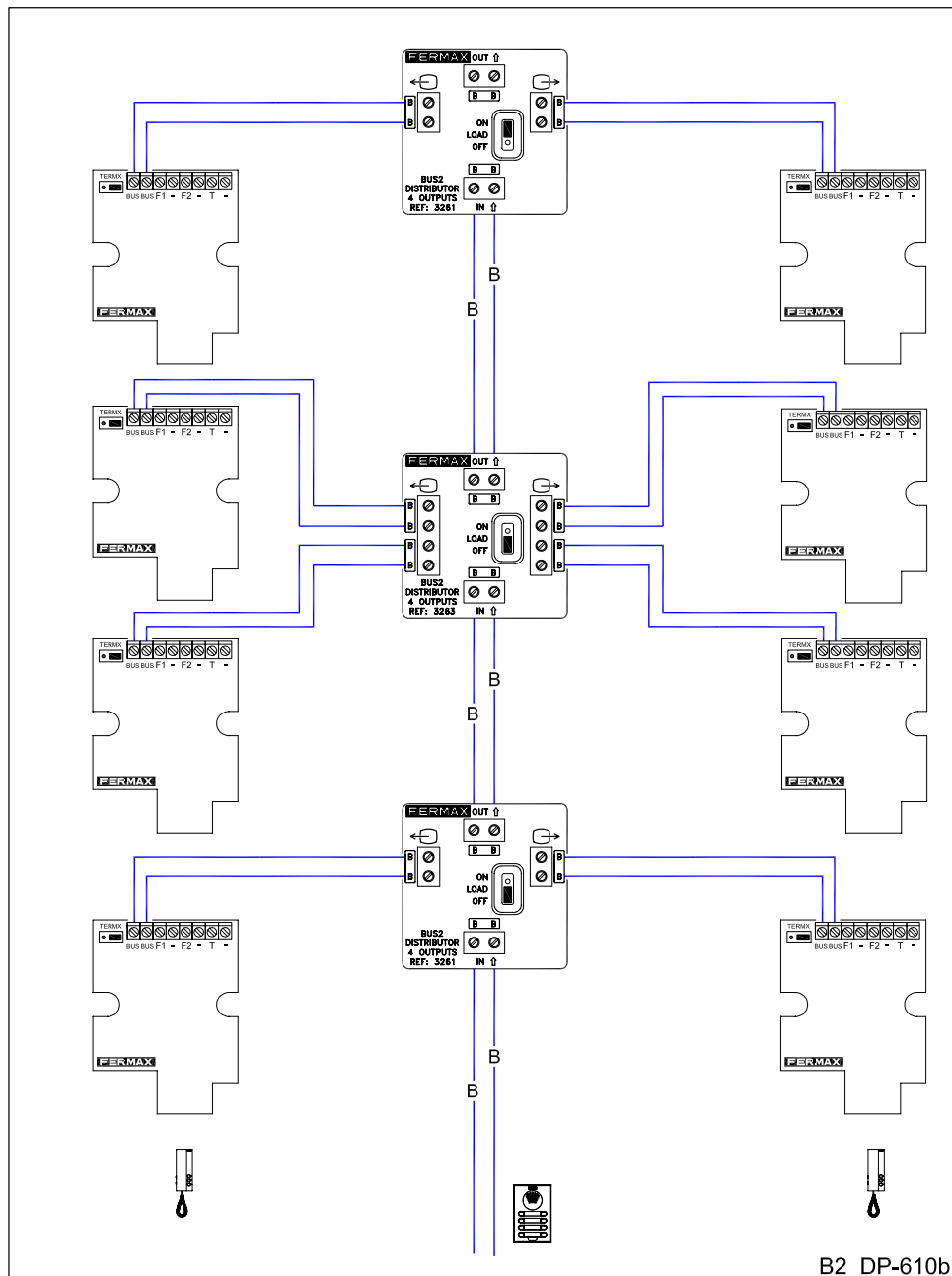
- E** Distribución Plantas de Audio. Distribuidor estándar ref. 3240, 3241.
- EN** Audio Floor Level Distribution. Standard Distributor ref. 3240, 3241.
- F** Distribution étages audio. Distributeur standard réf. 3240, 3241.
- D** Stockverteilung Audio. Standardverteiler, Ref. 3240, 3241.



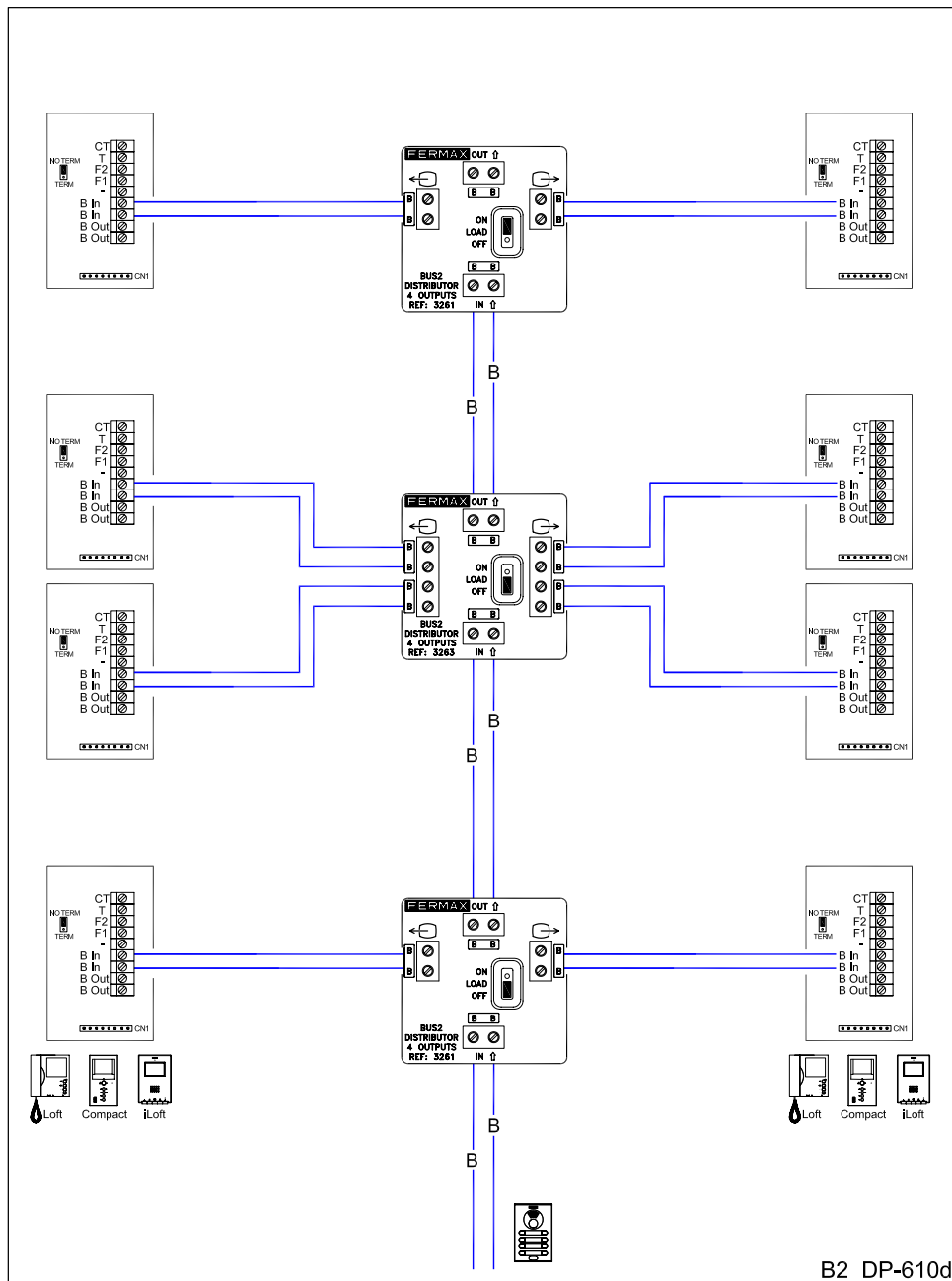
- E** Distribución Plantas de Video. Distribuidor estándar ref. 3240, 3241.
- EN** Video Floor Level Distribution. Standard Distributor ref. 3240, 3241.
- F** Distribution étages vidéo. Distributeur standard réf. 3240, 3241.
- D** Stockwerkverteilung Video. Standardverteiler, Ref. 3240, 3241.

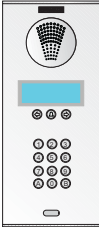
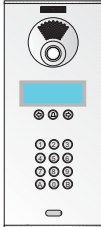


- E** Distribución Plantas de Audio. Distribuidor ref. 3261, 3263.
- EN** Audio Floor Level Distribution. Distributor ref. 3261, 3263.
- F** Distribution étages audio. Distributeur réf. 3261, 3263.
- D** Stockverteilung Audio. Verteiler, Ref. 3261, 3263.



- E** Distribución Plantas de Video. Distribuidor ref. 3261, 3263.
- EN** Video Floor Level Distribution. Distributor ref. 3261, 3263.
- F** Distribution étages vidéo. Distributeur réf. 3261, 3263.
- D** Stockwerkverteilung Video. Verteiler, Ref. 3261, 3263.



**AUDIO****VIDEO**

|                                                                                                                                                                                      |                |                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------|
| Alimentación - <i>Power Supply</i><br>Alimentation - <i>Stromversorgung</i>                                                                                                          | Audio<br>Video | 24 Vdc                        |
| Consumo - <i>Consumption</i><br>Consommation - <i>Stromverbrauch</i><br>en reposo - <i>in standby</i> - au repos - <i>Im Bereitschaftsmodus</i>                                      |                | 250 mA                        |
| audio activo - <i>audio active</i> - avec audio - <i>Audioverbindung</i>                                                                                                             |                | 525 mA                        |
| cámara - <i>camera</i> - caméra - <i>Kamera</i>                                                                                                                                      |                | 80 mA                         |
| Temperatura de funcionamiento - <i>Operating Temperature</i><br>Température de fonctionnement - <i>Betriebstemperatur</i>                                                            |                | [-10 , +60 °C]<br>[14, 140°F] |
| Potencia audio sentido vivienda-calle - <i>Audio power from the apartment to the panel</i><br>Puissance de l'audio sens poste-platine - <i>Audio-Leistung in Richtung Türstation</i> |                | 1 W                           |
| Potencia audio sentido calle-vivienda - <i>Audio power from the panel to the apartment</i><br>Puissance de l'audio sens platine-poste - <i>Audio-Leistung in Richtung Telefon</i>    |                | 0,15 W                        |
| Volumen regulable en ambos sentidos - <i>Adjustable volume both ways</i><br>Volume réglable dans les deux sens - <i>Regulierbare Lautstärke in beiden Richtungen</i>                 |                |                               |

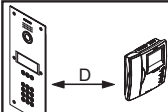
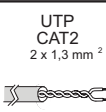
- E** TABLAS SECCIONES DISTANCIAS    **EN** TABLES SECTIONS DISTANCES  
**F** TABLEAUX SECTIONS DISTANCES    **D** TABELLE MIT DEN QUERSCHNITTEN UND DISTANZEN

**E** Instalaciones: **AUDIO / VIDEO**

**EN** Systems: **AUDIO / VIDEO**

**F** Installations : **AUDIO / VIDÉO**

**D** Anlagen: **AUDIO / VIDEO**

|  |             |  | Cable PARALELO      |     |  |
|-----------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|---------------------|-----|-----------------------------------------------------------------------------------|
| metros / metres                                                                   | pies / feet | modelo/ model                                                                     | mm <sup>2</sup>     | AWG | UTP CAT2<br>2 x 1,3 mm <sup>2</sup>                                               |
| 1 - 50                                                                            | 3 - 150     | color/color +<br>B/N-B/W                                                          | 0,5 mm <sup>2</sup> | 20  | UTP CAT2<br>1,3 mm <sup>2</sup>                                                   |
| 50 - 100                                                                          | 150 - 300   | color/color +<br>B/N-B/W                                                          | 1 mm <sup>2</sup>   | 17  |                                                                                   |
| 100 - 120                                                                         | 300 - 360   | B/N-B/W                                                                           | 1 mm <sup>2</sup>   | 17  |                                                                                   |
| 100 - 150                                                                         | 300 - 450   | color/color +<br>B/N-B/W                                                          | -                   |     | UTP CAT2<br>1,3 mm <sup>2</sup>                                                   |
| 150 - 250                                                                         | 450 - 750   | B/N-B/W                                                                           | -                   |     | UTP CAT2<br>1,3 mm <sup>2</sup>                                                   |

**E** SINTETIZADOR DE VOZ

**EN** VOICE SYNTHESIZER

**F** SYNTHETISEUR VOCAL

**D** SPRACHSYNTHESIZER

 **CODIFICACIÓN IDIOMAS (Ver tabla)**  
**LANGUAGE CODING (see table)**  
**CODIFICATION LANGUES (voir tableau)**  
**SPRACHKODIERUNG (siehe Tabelle)**



0



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20



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## FERMAX

| CODE | ESPAÑOL           | ENGLISH       |
|------|-------------------|---------------|
| 0    | castellano        | Spanish       |
| 1    | inglés            | English       |
| 2    | francés           | French        |
| 3    | holandés/flamenco | Dutch/Flemish |
| 4    | alemán            | German        |
| 5    | catalán           | Catalan       |
| 6    | valenciano        | Valencian     |
| 7    | balear            | Balearic      |
| 8    | portugués         | Portuguese    |
| 9    | euskera           | Basque        |
| 10   | gallego           | Galician      |
| 11   | griego            | Greek         |
| 12   | polaco            | Polish        |
| 13   | checo             | Czech         |
| 14   | eslovaco          | Slovak        |
| 15   | turco             | Turkish       |

| CODE | ESPAÑOL     | ENGLISH       |
|------|-------------|---------------|
| 16   | chino       | Chinese       |
| 17   | persa/farsi | Persian/Farsi |
| 18   | árabe       | Arabic        |
| 19   | noruego     | Norwegian     |
| 20   | finés       | Finnish       |
| 21   | sueco       | Swedish       |
| 22   | danés       | Danish        |
| 23   | islandés    | Icelandic     |
| 24   | ruso        | Russian       |
| 25   | italiano    | Italian       |
| 26   | hindi       | Hindi         |
| 27   | húngaro     | Hungarian     |
| 28   | hebreo      | Hebrew        |
| 29   |             |               |
| 30   | Campana     | Bell          |
| 31   | DESACTIVADO | DEACTIVATED   |

### (\*) IMPORTANTE - IMPORTANT - WICHTIG

- E** Futuras actualizaciones de idiomas, consultar web Fermax.
- EN** For Future language updates, consult Fermax web.
- F** Nouvelles mises à jour de langage, consultez la web Fermax.
- D** Für zukünftige Sprachupdate, Fermax web nachzulesen.
- P** Para futuras atualizações de idiomas consultar a web Fermax.



