Cód. 50121600

## Protocol converter

## CD-PLUS/ 90

R. Final Línea/ End of Line R.
? Instructions manual

First of all we would like to thank and congratulate you for the purchase of this product manufactured by G olmar.
The commitment to reach the satisfaction of our customers is stated through the ISO-9001 certification and for the manufacturing of products like this one.
Its advanced technology and exacting quality control will do that customers and users enjoy with the legion of features this system offers. To obtain the maximum profit of these features and a properly wired installation, we kindly recommend you to expend a few minutes of your time to read this manual.

## SYSTEM CHARACTERISTICS

$\square \Rightarrow$ Protocol converter to 90 system which permits the following functions:
PPermits replace a faulty 90 door panel by Plus door panel.
-Permits installation of Plus general door panels with inner access in the 90 system.
PPermits installation of Plus coded door panel with 90 monitors/ telephones.
$\Leftrightarrow$ Up to 250 converters per installation.
$\Leftrightarrow$ Simple configuration through easy access dip switches.
$\llcorner\Rightarrow$ End of line configuration jumperJP1.
$\leftrightarrows$ Autodiagnostic LEDs thatallow detecting operation and programming errors.
$\llcorner\Rightarrow$ The converter is factory set with backbone address "0".
$\curvearrowleft$ Connection block to 90 system (video connection with Coaxial cable).
$\mathrm{c} \Rightarrow$ Connection block to Plus system (video connection with C oaxial cable).
$\Leftrightarrow$ EL564 transceiver to convert video signal from twisted pair to coaxial and from coaxial to twisted pair.
$\mathrm{c} \Rightarrow$ Permits installation of a Plus porter's exchange only in the side Plus system installation.
$\llcorner\Rightarrow$ Specific Power supply not needed for this converter, it takes of the 90 system installation the supplies voltage (24Vdc).

## SAFETY PRECAUTIO NS

$\leftrightarrows$ The installation and handling of the converter must be performed by authorized personnel and in the absence of electrical current.
$\Leftrightarrow$ Do notuse excessive force when tightening the converter connection block screws.
$\llcorner$ The entire installation must be at least 40 cm away from any other installation.
$\Leftrightarrow$ Install the converter in a dry and protected place withoutrisk of drip or water projections.
$\Leftrightarrow$ Avoid placing the converter near sources of heat, in dusty locations or smoky environments.
$\Leftrightarrow$ Do notblock ventilation holes of the unitso that air can circulate freely.
$\mathrm{b} \Rightarrow$ To avoid damage, the converter has to be firmly fixed.

## STARTING RECO MMENDATIO NS

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## Replacement in a 90 system.

Permits replace a faulty $\mathbf{9 0}$ door panel by a Plus door panel, the Plus door panel installed will be connected to the $\mathbf{9 0}$ system through the protocol converter CD-Plus/ $\mathbf{9 0}$. There is an option to place a CE-990 Plus porter's exchange between the converter and the Plus door panel. Installation diagrams on pages 38 to 46 .


For other configurations of replacement contact with your distributor.

## Transceiver module for video signal.

The transceiver module for video signal EL-564 converts a twisted pair to coaxial and vice versa. This module is necessary in a system with 4+TP installation and to convert the twisted pair to coaxial, and therefore connect the video signal in the protocol converter CD-Plus/ 90 of the entrance coaxial. There is an option to place a CE-990 Plus porter's exchange between the converter and the Plus door panel.
Installation diagrams on pages 40, 43, 44 and 46.

## * Terms:

Backbone: Logical address.
Riser: Physical cabling of the installation in the same backbone (logical address).
(M) = M aster.
(S) = Slave .

Lock release


Description of the converter.


## INSTALLATIO N

## D <br> etail of the converter installation.

Install the converter in a dry and protected place without risk of drip or water projections. To avoid damage, the conveter must be firmly fixed.

the converter can be installed on a DIN guide ( 6 elements), pressing it lightly. To extract the converter from the DIN guide, use a plain screwdriver to lever the flange as shown in the picture.

The installation or modification the converter, must be performed in the absence of electrical current. The installation and handling of the converter must be performed by authorized personnel.

To install the converter directly on the wall, drill two holes of $\varnothing 6 \mathrm{~mm}$. and insert the wallplugs. Fix the converter with the specified screws.


Description of the configuration dip switch.

The SW1 configuration dip switch is located on the upper right part of the module.


Set to ON to programme the backbone.
O nce the programming has finished, return the switch
 to the OFF position.


To reset the converter, switch to ON (all leds O ff) and then set to OFF (green led $0 n$ ), after an operation or programming errors.


Set to ON (Master) to charge the installation with a resistance of communications. Only activate this resistance in the converter CDPlus/ 90 or in the 90 door panel closest to the installation riser.
Set to 0 FF (Slave) if the resistance of communications is activated in the 90 door panel closest to the installation riser.

Description of the configuration jumper.

JP1


JP1


End of line resistor.
Switch to 0 n if the converter is connected to the Plus system through distributors or only in the last converter if the connection to the Plus system of the converters does not contain distributors (input/ outputmode)

End of line resistor.
Switch to O ff in all the converters except the last one if the connection to the Plus system of the converters does not contain distributors (input/ outputmode).
*Factory default

Codification of the push-buttons/monitors in a replacement.

To replace a 90 door panel in an installation with Plus door panel, it must be borne in mind the codification of the first push-button of the Plus door panel and the configured address in the monitor linked to this push button, for the reason that 90 door panel has a call code address linked to the first push button as " 00 ", therefore should be set the first push button and the monitor of the apartment with address " 00 " with another free address "XX".


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escription of autodiagnostic LEDs.

## Green Led

Fixed: C orrect operation.
Slow blinking: Programming active (SW 1-1 to ON).
Q uick blinking: Programming finished.

## Red Led

Fixed: Programming error, restart programming from the beginning.
Off: Correct operation.
The autodiagnostic LEDs are placed next to the configuration dip switch.


## PRO G RAM M IN G


rogramming the converter.

The converter must be programmed with a backbone code (see pages 41 to 44), which must be differentfor each converter, following the steps setoutbelow.
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To access the door panel programming mode, press the key button followed by the secret installer code (factory default 1315), just as indicated in the door panel manual.


Introduce the backbone code to program, followed by three zeros, then press the bell button.


To indicate that the equipmenthas been correctly programmed, the door panel will emit a tone and the green LED on the converter will begin to quick blinking.
Exit programming by setting dip switch number 1 to 0 FF and pressing the C "C ancel" button on the door panel.

If there are more converters, repeat the previous steps introducing a different backbone code for each of them.
If during one of these processes the red LED on the converter switches on, restart programming from the beginning.

Replacement in a 90 system mode (audio installation).


IMPORTANT: To configure and to program each equipment see the appropiate instruction book.

Replacement in a 90 system mode (video installation with coaxial cable).


IMPORTANT: To configure and to program each equipment see the appropiate instruction book.

Replacementin a 90 system mode (video installation withoutcoaxial cable).


IMPORTANT: To configure and to program each equipment see the appropiate instruction book.

## INSTALLATIO N DIAG RAMS

B ackbone encoder mode (Plus general door panels with coaxial cable).



B ackbone encoder mode (general door panels without coaxial cable).



Backbone encoder mode (Coded panel and installation with coaxial cable.)


For other configurations of replacement contact with your distributor.

Backbone encoder mode (Coded panel and installation without coaxial cable).


For other configurations of replacement contact with your distributor.

## Repla cement 90 door panel mode

$\mathrm{n} \Rightarrow$ Calls cannotbe made.
e Remember that the system remains inactive for 45 seconds after connecting the power supply.
« Ensure that the backbone for the replacementPlus door panel is configured with address "0". (The converter is factory set with backbone address " 0 ").
« C heck the connection of the converter (page 38 to 40) and its configuration (page 36).
© Check the 90 monitor of the installation with address " 0 " has been configured with another free address (see page 36).
Backbone encoder mode (General door panels)
$\Rightarrow$ Calls cannotbe made from the general door panels.
ع Remember that the system remains inactive for 45 seconds after connecting the power supply.
« Check if calls can be made from the inner door panels (if these exist).
c Ensure that the backbone for the converters has been correctly programmed (page 37) and check their connection (pages 41 to 44) and their configuration (page 36).
© Check the configuration and codification (address) of the monitors (see page 36 and the appropiate instruction book).
© Check that the voltage between "+ "and "-"terminals of the A-490/2 power supply, is 24 Vdc ., if this is not the case, disconnect the power supply from the installation and measure again. If it's correct now, it means there is a short circuit in the installation. Disconnect the power supply from mains and check the installation.
e Check that the voltage between "+ " and "-" terminals of the converter and the different elements of the 90 installation is $24 \mathrm{Vd} . \mathrm{c}$, if this is not the case, check the power supply and its connections.
e Check that the voltage between "+ " and "-" terminals of the FA-Plus/C power supply is from 17,5 to $18,5 \mathrm{Vd}$. .c., if not, check the power supply and its connections.
$\Leftrightarrow$ The converter cannot be programmed.
« Check that the general coded panel is in configuration mode before setting the number 1 dip switch to ON (see page 36) and the programming steps are correctly followed (page 33).
© Check autodiagnostic leds (see page 37).
© C heck that the voltage between "+ "and "-" terminals of the converter is 24 Vdc ., if not, check the power supply and its connections.

## Backbone encoder mode (Coded panel)

$\Rightarrow$ Callscannotbe made.
© Remember that the system remains inactive for 45 seconds after connecting the power supply.
e Ensure that the backbone for the replacement Plus coded panel is configured with address "0". (The converter is factory set with backbone address " 0 ".).
© C heck the converter's connection (page 45-46) and their configuration (page 36).
c Check the configuration and codification (address) of the monitors (see page 36 and the appropiate instruction book).
e C heck that the voltage between "+ "and "-"terminals of the A-490/2 power supply, is 24 Vdc ., if this is not the case, disconnect the power supply from the installation and measure again. If it's correct now, it means there is a short circuit in the installation. Disconnect the power supply from mains and check the installation.
« Check that the voltage between "+ " and "-" terminals of the converter and the different elements of the 90 installation is $24 \mathrm{Vd} . \mathrm{c}$, if this is not the case, check the power supply and its connections.
© Check that the voltage between "+ "and "-" terminals of the FA-Plus/C power supply is from 17,5 to $18,5 \mathrm{Vd} . \mathrm{c}$., if not, check the power supplyand its connections.

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## CONFO RMIDAD/COMPLIANCE/CONFO RMITÉ 51

Este producto es conforme con las disposiciones de las Directivas Europeas aplicables respecto a la Compatibilidad Electromagnética 2004/ 108/CEE, así como con la ampliación en la Directiva del M arcado CE 93/68/ CEE.

This product meets the essentials requirements of applicable European Directives regarding Electromagnetic Compatibility 2004/108/ECC and as amended forCE M arking 93/68/ECC.

NOTA: El funcionamiento de este equipo está sujeto a las siguientes condiciones:
(1) Este dispositivo no puede provocar interferencias dañinas, y (2) debe aceptar cualquier interferencia recibida, incluyendo las que pueden provocar un funcionamiento no deseado.

NOTE: O peration is subject to the following conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any received interference, including the ones that may cause undesired operation.

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[^0]:    $\Leftrightarrow$ Do notuse excessive force when tightening the converter connection block screws.
    $\leftrightarrows$ Before connecting the system, check the connections between door panel, converter, transceiver, monitors, telephones and the power supply connection.
    $\Leftrightarrow$ The entire installation mustbe atleast 40 cm away from any other installation.
    $\mathrm{c} \Rightarrow$ Always follow the instructions of this manual.

