



**CLEMSA**  
a member of the FAAC Group



## e-code

### ADVANCED HIGH SECURITY REMOTE CONTROL SYSTEM



- High security against cloning: encrypted 128 bits, Hopping Code
- High Transmission power (13 dBm)
- Bidirectional RF technology
- Two programming modes: basic and advanced, with Service Transmitters which never lose synchronism
- Long Range wireless programming
- Easy programming and replacement of single users, don't need the installer's displacement

#### General description

**e-code** is an advanced remote control system with high security. It allows an easy management for sites that require ease of use of remote controls but a high quality, advanced management that meets the toughest requirements.

The system allows wireless programming thanks to the high transmission power and bidirectional communication. It allows user management without displacement to the receiver.

The transmitter-receiver communication is guaranteed by GFSK modulation (higher noise immunity and transmission speed) and LBT system (auto-select the appropriate frequency to prevent noise and interference).

e-code is a high security system: IFF system (avoids potential scan copies of the signal) and Code Hopping technology (unique and unrepeatable transmissions) make it virtually impossible to clone.

#### Custom applications

**e-code** has three operating options customized for easy programming and operation according to the requirements of security, control and general characteristics of the installation:

Posiciona Mode: advanced and intuitive management through software installed on a PC.

DSVirtual and CódigoPin mode: Security codes are transmitted to new users by Master Emitters.

#### Main features

- Multi-frequency operation in 868 MHz band
- LBT system (Listen Before Talk). Automatic selection of the appropriate frequency to avoid interference.
- GFSK Modulation (Higher speed and noise immunity Broadcast)
- Long-range reading and programming of transmitters and receivers.
- Transmissions Power 13 dBm.
- Bidirectional IFF identification system
- 4 channel transmitters and multi-voltage receivers with up to 4 channels.



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## TECHNICAL SPECIFICATIONS

	EMISORES	RECEPTORES ENCHUFABLES	RECEPTORES UNIVERSALES	RECEPTOR EXTERIOR	
	e-code	RCO 1	RCO 2U	RO 10	ROB 40 e-code+e-band
Power supply	3 Vdc	12/24 Vac/dc	12/24 Vac/dc	230 VAC, 12/24 Vac/dc	
Frequency	868MHz	868MHz	868MHz	868MHz	
Current Consumption	25mA	40mA	40mA	100mA	
Number of users	-	2048	2048	2048	
Channel number/ouputs	4	1	2	1	4
Relay outputs	-	-	2 X1A	4X1A	
Dimensions	45x45mm	40x65mm	40x65mm	150x100x65 mm	
Protection	-	-	-	IP 54	IP 54
Others	100 m	-	box IP 65	4 channel e-code 2 channel e-band	

## MODES

- **POSITIONAL MODE:** Easy management of users through software installed on a PC. The programmer allows wireless access to the receiver's memory, being able to change the configuration and user data (up to 100 m range). Special service users operate only in IFF mode, providing maximum security and never lose synchronization. The system allows easy programming and erasing of single users without displacement of the installer.
- **DSVirtual and Código Pin MODE:** Management program is not required. The programming code of the emitters is transmitted through master emitters. Transmitters are configurable through the transmitter LED display and pushbuttons.
  - *DSVirtual:* Simple operation. All transmitters have the same security code, which allows easy installation. To unsubscribe a user, the code is changed for all of them.
  - *Código Pin:* The user enters his own security codes in the transmitter, enabling the replacement of individual users.



Maximum protection



Maximum security



Bidirectional



Easy programming and replacement



## ACCESORIOS



Memory card TM 2K



Battery 3V  
CR2032



Software  
PC



Management tool  
Netbook **CLEMSA**

### DELEGACIONES CLEMSA - FAACMATIC

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