A/C Unit control device
ZN1CL - IRSC **Technical Documentation**

CHARACTERISTICS

- Reduced size: 45 x 45 x 14 mm.
- Can be mounted within distribution boxes, junction boxes or wall back boxes.
- Device management through IR codes:
  - Split units (**IRSC Plus** application program)
  - A/V devices (**IRSC Open** application program)
  - Zoning control (**IRSC Zone** application program)
- KNX BCU integrated.
- Total data saving on power failure.
- CE directives compliant.

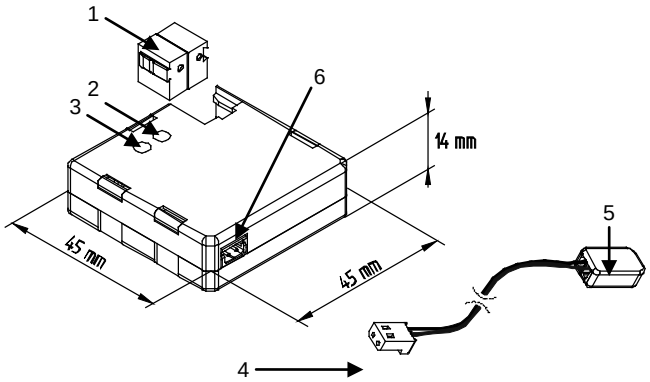


Figure 1: IRSC

1. KNX connector	**2**. Programming LED	**3.** Programming button
4. Air connector	**5**. IR emitter	**6**. Base connector

SOFTWARE FOR ZN1CL-IRSC

- **IRSC Plus**: allows controlling Split A/C units. See "correspondence table" in www.zennio.com.
- **IRSC Open**: allows recording IR codes to later reproduce them. A/V devices.
- **IRSC Zone**: allows controlling ducted cooling/heating machines, with several climate zones. See "correspondence table" in www.zennio.com.

Programming button: a push button to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.

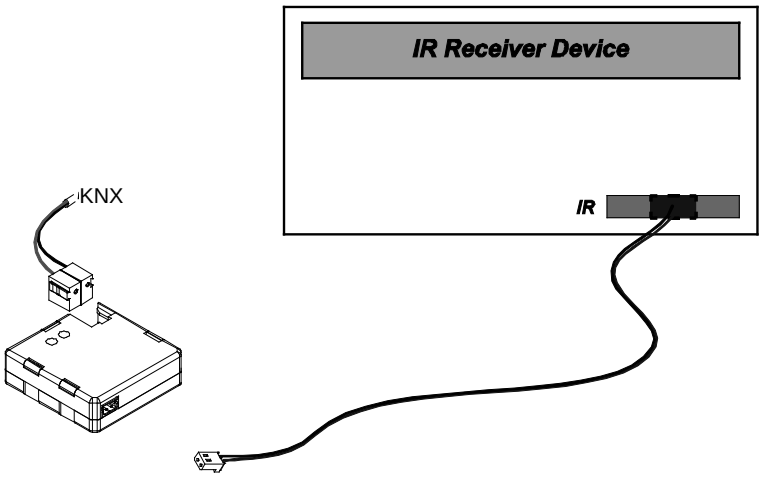
LED: programming mode indicator. When the device goes into safe mode, it blinks every half second.

IR emitter: Infrared flasher diode to send commands to the split.

GENERAL SPECIFICATIONS		
Concept		**Description**
Type of device		Electric operation control device
KNX bus supply	Operation Voltage	29VDC
	Voltage margin	21 to 31VDC
	Consumption	10mA
	Connection type	Typical TP1 KNX bus connector; 0.8 mm² section
Ambient temperature		0ºC to +55ºC
Storage / transport temperature		-20ºC to +70ºC
Ambient humidity (relative)		5 to 95% RH (no condensation)
Storage humidity (relative)		5 to 95% RH (no condensation)
Complementary characteristics		Class B
Safety class		III
Operation type		Continuous operation
Device action type		Type 1
Electrical stress period		Long
Degree of protection		IP20, clean environment
Assembly		Independent device can be mounted inside distribution boxes, junction boxes or wall back boxes
Miminum clearances		Not required
Response to bus voltage failure		Data saving
Response in case of bus voltage recovery		Data recovery and IR commands sending as programmed
Operation indication		LED ON when programming button is pressed
Accessories		IR wired flasher diode with protective capsule
Weight		27g
PCB CTI index		175V
Housing material		PC FR V0 halogen free

CONNECTION DIAGRAM

Connection diagram example: consumer electronic device with IR receiver (*IRSC Open application program*)

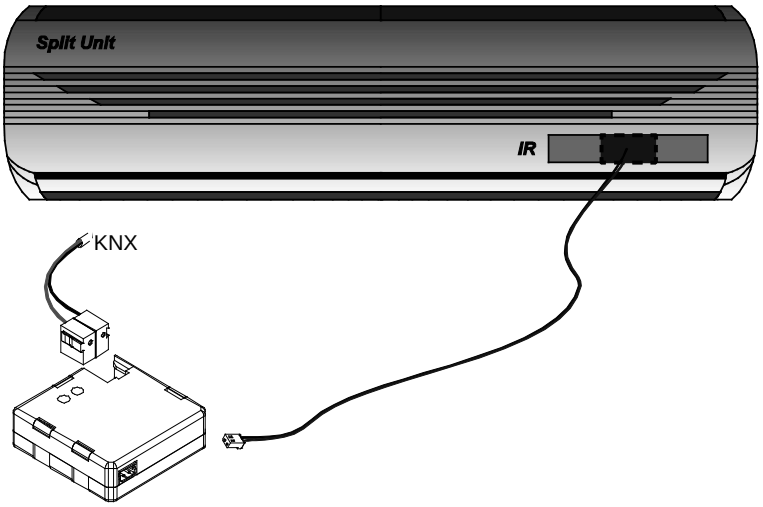


IRSC Open

IR commands must be loaded into the device**.** A specific tool "IRSC Open Capture" downloadable in a Z38i (ZN1VI-Z38i) is available for this purpose.

For further information, please read the IRSC Open user manual available in our website (www.zennio.com).

Connection diagram example: A/C split (*IRSC Plus application program*)



IRSC Plus

IR commands are already preloaded into the device. It will only be necessary to identify the IR remote controller in the "Correspondence Table" provided by Zennio to later set the correct identifier in the ETS parameterization environment.

For further information, please read the IRSC Plus user manual available in our website (www.zennio.com).

IR EMITTER SPECIFICATIONS	
Connection method	Aerial connector
Installation	Stick the IR emitter onto the unit IR receiver
Cable section	0.15mm²
Cable length	2.15m
Peak wave length (λp)	940nm
Radiated emission power (Φe)	2.4mW
Radiated intensity	2.4mW/sr
Emission response time	Parameter option. Recommended 2 seconds, as minimum

SAFETY INSTRUCTIONS

- Do not connect Mains Voltage (230VAC) or any other external voltages to any point of the bus. Connecting an external voltage might put all the KNX system into risk.
- Ensure there is enough insulation between the 230VAC voltage cables and the bus ones.
- The IR emitter must be stuck onto the air conditioning receiver.
- The protective capsule must not be removed.
- The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of http://zennio.com/weee-regulation.