



Scope

R&D departments

1 Purpose

This document describes the main functioning of remote and controlboxes used in Cinema System kit.

2 Terms and abbreviations

- none –

3 Competence

Initiator of creation: [Presepi / PM/I / 15.05.20]
Creator of the instruction: [Presepi / PM/I / 15.05.20]

Initiator of modification: [- / - / -]
Creator of the modified instruction: [- / - / -]

Release (Document no./workflow):

4 Change information

Index	Date	Changing	Workflow	Name
01	15.05.2020	• First Release		Presepi

5 Procedure/method description

- see the following pages -

6 Applicable documents

- documented processes;

7 Documentation

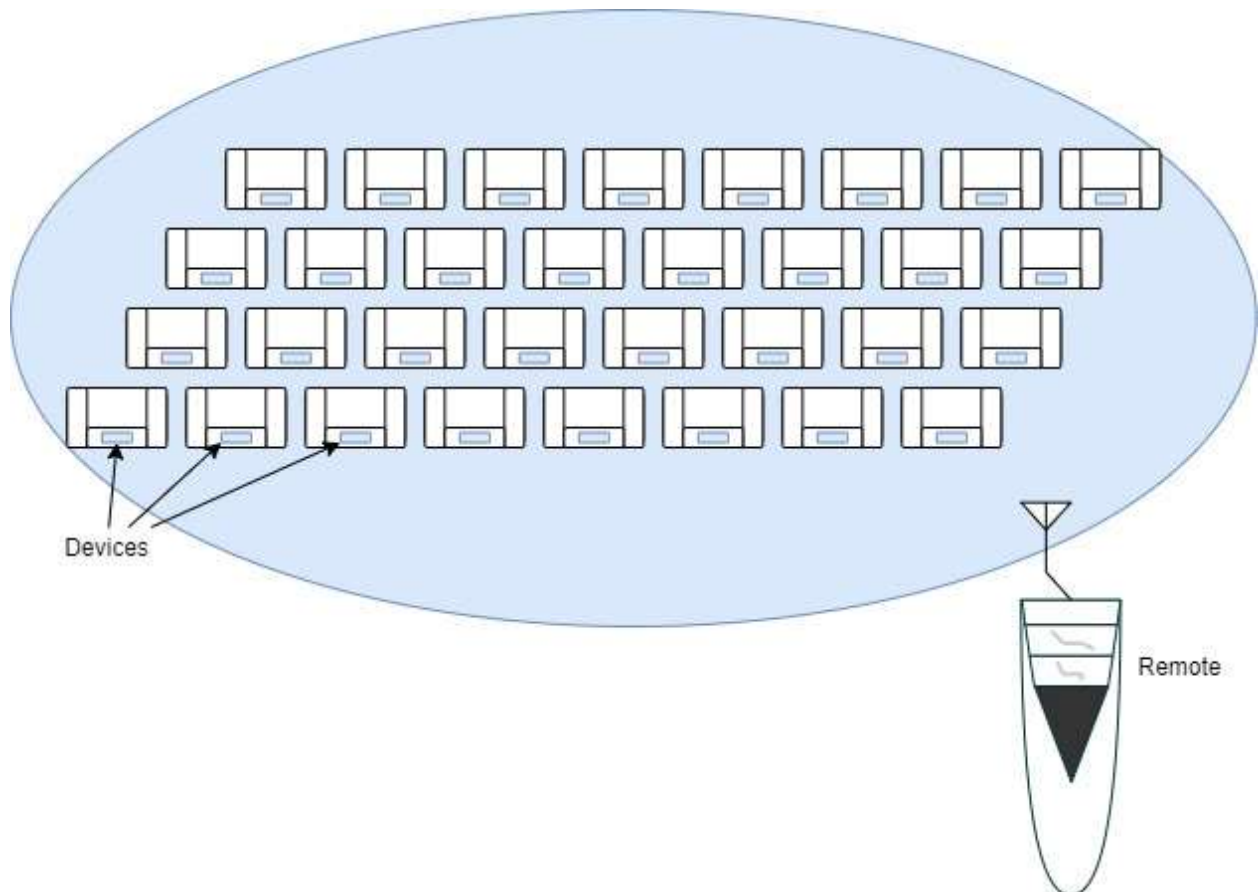
All pictures shown are for illustration purpose only. Actual product may vary.



- **Installation schema**

The typical installation is composed of several seats each one equipped with a Cinema Seating controlbox and at least one remote wireless control.

Every controlbox can manage the seat motors through the local hand control and can receive remote commands wirelessly.



All the controlboxes at the same time can be controlled by a remote (Spaceship JLDK.21.xxxx). The remote can simultaneously: open/close/pair all the chairs present on the same room. Different remotes must be used for different room to avoid the interaction between the chairs.

- **Radio channel used on communication**

The communication happens by sending and receiving radio packets on a specific radio channel defined during the installation of the screen. The radio parameters are compliant with the FCC/IC rules.

Every controlbox must be paired before use. The pairing procedure complain some packet sending one way from remote to the controlboxes that are already in pairing mode.

The pairing mode (see chapters below) put the devices into a special learning mode using a common radio parameters. When the pairing procedure ends all the devices and the remote will have a new radio channel and new addresses configured for communication.



- **Installation procedure for Cinema screens controlled by a remote**

Installation of all the chairs driven by a single remote

All the chairs installed must to be paired by a remote. All the technical installer must do is to follow the standard remote procedure for pairing.

All the controlboxes must be powered off and then powered on at the same time (for example by turning off and on the main switch of the room. If more than one switch are available that operation can be done more than ones for each switch so the room will be all paired step by step.

After the complete pairing, the remote can control the whole room.

Just as reminder, the possible operations with the remote are:

- Blank:** the radio parameters are reset at random values. (billion of combinations grants the remote to control only the paired room)
- Pair:** the radio parameters are sent to all the devices in pairing state and after a timeout all of them will receive and set those parameters. Controlbox and remote are now sharing the same radio parameters and can communicate.
- Sniff:** the remote will query and get the radio parameters already saved into one or more devices. The only requirement is that at least one controlbox is in pairing mode. The procedure will put the remote on the same radio frequency of a room already paired. Is particularly useful when a remote is lost or damaged and has to be replaced with a new one.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment