

USER MANUAL

HAND HELD TRANSCEIVER SR-9E2

WESTINGHOUSE LIGHT MANAGEMENT SYSTEMS



FCC ID : S9R-WCF5BDWPN9

VOID CLAUSE : This is in line with FCC part 15.21 Changes or modifications not expressly approved by the manufacture could void the user's authority to operate the equipment.

COMMERCIAL

ENVIRONMENT : This is in line with FCC part 15.105 "This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."

HAND-HELD TRANSCEIVER (HHT) WITH FIELD ZONE PROGRAMMING

Introduction:

Congratulations on your purchase of Hand-Held Transceiver (HHT) with Field Zone Programming facility.

HHT is a device, in which the Hand-Held Transceiver and Field Zone Programmer are integrated into a single device, which is used to control operation of RF-Cartridges controlling Electronic Dimmable Ballasts for Lighting Control, Occupancy Sensors and Day-Light Harvester (DLH) ambient Light Sensors.

The RF Cartridge receives its operating DC Power from the Ballast and provides it a dimming control signal based on the commands received from the "Lighting Remote Controller" called as a Hand-Held Transceiver (**HHT**).

We introduce you here the concept of Lighting Zone, referred simply as "**Zone**" henceforth.

A Zone is a group of Ballasts that can be simultaneously controlled by a single command from the HHT. Each Zone must be a unique 3 Digit Number in the valid range of 001 to 250.

The Zone Number 000 is reserved for Factory Testing and is also the default Zone Number for its RF Cartridges, unless otherwise decided while ordering and factory programmed.

The Zone Numbers 251 to 255 are again reserved by factory for specific future uses.

The Zone concept now allows the user to "Selectively" control the lights in the specific area.

1] Hand-Held Transceiver (HHT):

Description:

Hand-Held Transceiver (HHT) is used to control RF Cartridge(s) connected to Electronic Dimmable Ballast(s). Its Zone Number identifies each RF Cartridge. RF Cartridge is commanded to a required Light Level by entering its zone number and level number on the HHT and transmitting the command.

The Dimming Controller allows you to set the Lights at any one of the Six working light levels, including off. We plan to introduce in near future controls up to Nine light levels for finer adjustments. The present assignments are as under:

Level 6 = Full Bright (On)

Level 5 = High Bright

Level 4 = Medium Bright

Level 3 = Low Bright

Level 2 = Full Dim

Level 1 = Off

Operation of HHT:

When you power up the HTT+FZP, it shows 2WAY TRANSMITTER”

| Key pressed | LCD Display | Comments |
|--------------------|--------------------|---|
| ENTER | ENTER ZONE 000 | Enter the required |
| ENTER | ENTER LEVEL 1 | Enter the level(different Level i.e. ON to OFF Level or OFF to ON level). |
| ENTER | SENDING COMMAND | Sends the value that you Entered. |
| | RESPONSE ???????? | Waits for the Acknowledgement. |
| After few sec. | COMMAND EXECUTED | If it receives ACK. |

Note: Only Master Cartridge (MC) sends the acknowledgement.

MC: It is the one, which sends the ACK after performing the Ballast dimming control operation.

After few seconds, ACK NOT RECEIVED If it doesn't receives ACK

Note: There are 2 possibilities to get “ACK NOT RECEIVED” on LCD Display.

- 1] If MC is not installed.
- 2] If MC is out of range with
2WAY TRANSMITTER Again comes into
Handheld Transmitter

Note:

In any Zone (group) of RF Cartridges there should be only one and unique “Master” RF Cartridges to respond to HHT with Ack.

2] FIELD ZONE PROGRAMMING FUNCTIONS:

Description:

This field zone program has facility to change:

- Zone of the RF Cartridge (all types).

Press F2 button. HHT displays “2-W FIELDPROGAM” and can be operated as Field Zone Programmer.

Press ENTER button again to select RF Cartridge.

2.1] FIELD ZONE OF CARTRIDGE:

| Key pressed | LCD Display | Comments |
|---|-------------------|---|
| ENTER | OLD ZONE 000 | Enter the old zone of Cartridge. |
| ENTER | NEW ZONE 000 | Enter the new zone for Cartridge. |
| ENTER | ENTER LEVEL 1 | Enter the level(different level i.e. ON to OFF Level or OFF to ON level.) |
| ENTER | SENDING COMMAND | transmits the entered value |
| | RESPONSE ???????? | Waits for the Acknowledgement. |
| | COMMAND EXECUTED | If it receives ACK. |
| Note: Only Master RF Cartridge sends the acknowledgement. | | |
| | ACK NOT RECEIVED | If it doesn't receives ACK |
| | 2WAY TRANSMITTER | default display |