

User Manual of IRS RF Interactive Response Devices

BRAND: IRS

TYPE: RF-11



AClass Learning Technology Inc.

◆ IRS RF hardware components

IRS RF hardware consists two kinds of device, RF-11 handset and RF-15. RF-11 handset looks like a remote control, its function is transmitting button command to RF-15 via RF 2.4G signal. The RF-15 is a receiver, its function is receiving and processing button command from one or many RF-11 handsets and then transfer to PC.



RF-11 Handset

The communication protocol between RF-11 and RF-15 is a smart two way protocol, user just need to push handset button once then the system will handle any possible collision situation. Each RF-15 typically could handle 250 RF-11 handsets in 50 meters range.



RF-15 Receiver

◆ RF-15 installation

Install RF-15 receiver just need two simple steps,

First, plug USB cable connector into socket of RF-15 and

Second, plug another USB cable connector into any USB port of PC.



For better performance, we suggest you place the RF-15 on higher place and, if you can, use standard camera tripod or mounting bracket to fix the RF-15 receiver.

◆ Application Software Installation

Please refer to software manual.

◆ Driver

IRS RF system driver includes two levels. The lower level is “USB to Serial converter” comes from FTDI. The higher level is named “ClickDaemon” comes from AClass to handle response messages, it is as a bridge between IRS application software and hardware. Both two drivers are installed while finishing application software installation.

◆ Use RF-11

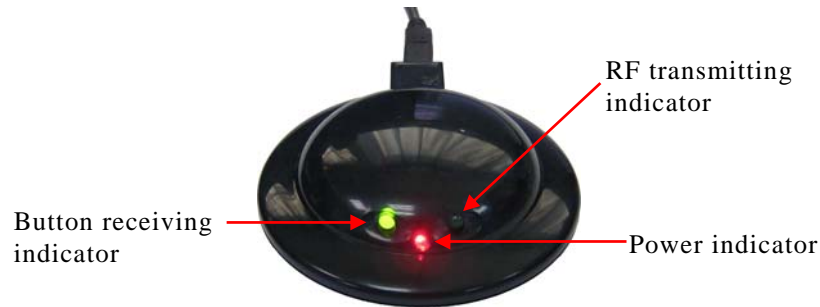
RF-11 is default in deep sleep mode until user presses any button. When user press any button on RF-11, RF-11 will wake up to transmit button data to RF-15 and then deep sleep again.



LED indicator of RF-11

RF-11 has two LED indicators. The left one is signal indicator, it turns on while transmitting and receiving RF signal. The right one is button indicator, it flashes while user pressing button. If the RF-11 is fail to communicate with RF-15, the button indicator will flash quickly and continuously for a while.

LED indicator of RF-15



When RF-11 transmits button command to RF-15, the button receiving indicator of RF-15 will change state (from light to dark or dark to light).


◆ Work with ClickDaemon

ClickDaemon plays the role of communication between the handset and IRS application system. When ClickDaemon is activated, the handset signal will be transmitted to the system through the receiver. The procedures of using ClickDaemon are as

below:

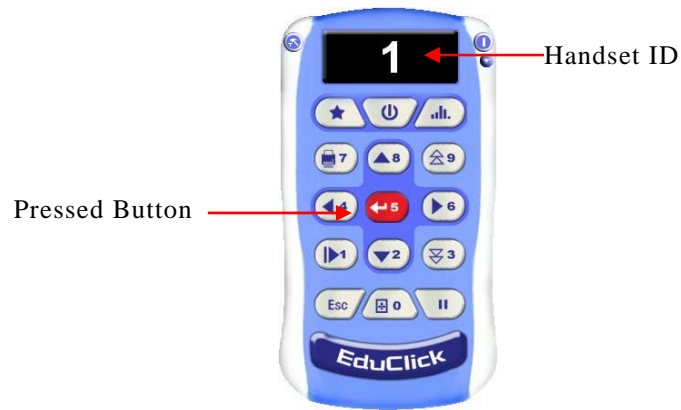
Step 1, Double click  icon on the desktop.

Step 2, When ClickDaemon is started, it will show a splash screen, then minimize to the notification area of taskbar.


To activate the ClickDaemon window, click the  icon on the taskbar, and then select Show form popup menu.



With the ClickDaemon shows, the handset testing can begin. Please pick up a handset and press any button, ClickDaemon will appear handset ID on the black area, and show the reaction of button in changing button's color into red.



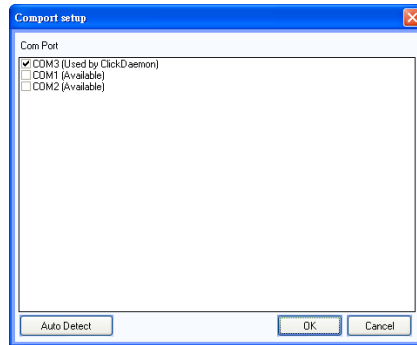
If no reaction occurs when the button of handset is pressed, you need to check the receiver connection to the computer. In addition, the ClickDaemon firstly should be checked to ensure it is set to the correct COM port. To set the COM port properly, follow the procedures below:

Step 1, Click the  Tools button, and select Comport setup from the drop-down menu.



Step 2 Wait for the Comport setup dialog box appears then select COM port to be activated. Alternatively,

click the button to allow the system to detect an available COM port automatically. Then, click to finish COM port setup process.



◆ Maintenance

RF Channel

RF-11 and RF-15 should work on the same channel and the channel is set up by distributor before delivery. You can not change channel by yourself. To avoid possible interference, if you own more than one set of IRS RF system (one RF-15 with many RF-11 handsets) please refer to distributor for channel change service.

Battery Replacement

Step1: Unscrew the screw of battery cover on the back side

Step2: Remove the used batteries from battery compartment.

Step3: Insert two fresh CR-2032 batteries into battery

compartment. Note! keep the + pole on the upper side for both batteries.

Step4: Place the cover back and screw the battery cover.

Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

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 of the device.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.