❶ Introduction

1.1 Overview

This IR Extender has been designed to transmit remote control signal from the viewing room to AV sources through coaxial cables which have embedded in the wall. To take advantage of existing coaxial cables, easily set up a convenient IR network and lessen the cables hassles around your house.

1.2 Main Features

- Apply to existing home cable network
- FSK Modulation
- AGC function, signal can pass through several splitter or coupler
- Easy to install and light weight
- Suitable for RF Modulator

1.3 Application

- IR signal transmitting
- Remote control
- IR wireless keyboard mouse

1.4 Specification

General

Item	Specification
Modulation	FSK
Deviation	5KHz
Center frequency	27.045MHz/27.145MHz
Data rate	5kbps Max.
IR emitting freq.	38KHz.
Operating Temperature	0℃ ~ + 50℃

IR Extender Receiver

Item	Specification
Sensitivity	<-90dBm
Insertion Loss	1.5dB@860MHz 3dB@2.3GHz
IF frequency	455KHz
Current Consumption	20mA Typ.
IR emitting range	5m Typ.

IR Extender Transmitter

Item	Specification
Output power	-15dBm typ.
Insertion Loss	<3dB@860MHz
L.O. Leakage to TV port	<-80dBm
Current Consumption	10mA typ.

◎ Specification subject to change without prior notice.
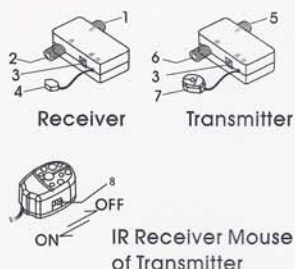
❷ Check package before use

1. IR Extender Receiver   X1
2. IR Extender Transmitter   X1
3. DC Power Adaptor   X2
   (9V/150mA)
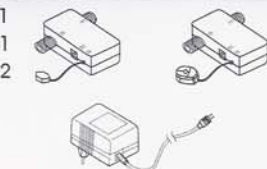
❸ Controls

1. F-Connector(RF in)
2. F-Connector(IR Signal in)
3. DC Jack
4. IR Extender Mouse
5. F-Connector(TO TV)
6. F-Connector(RF In)
7. IR Receiver Mouse
8. Power On/Off Button

Receiver   Transmitter

ON / OFF
IR Receiver Mouse
of Transmitter

❹ Installation and Operation

1. Turn off all AV equipments power.
2. Set up all the RF sources and AV sources rightly.
3. Connect IR Extender to TV by coaxial cables.
4. Plug the 9v/150mA power adaptor into DC jack of IR Extender, then plug the power adaptor into socket outlet.
5. Turn on the AV sources and television.
6. Power on the IR Receiver Mouse.
   Note: Because of the FSK Modulation designed in this IR Extender, the all Transmitters`IR Extenders can not work at the same time. Make sure to power off other IR Extender Mouses and only leave one which you are using in the viewing room.
7. Check the program signal can be properly transmitted from RF Modulator, and received by the TV ends in other rooms.
8. Using Remote Control to check IR function work smoothly. When your are using Remote Control, the IR Extender mouse of Transmitter built-in a LED will flash to indicate the IR signal is received by the Transmitter`s mouse.
9. The entire system installation, please refer to part 6. Figure Illustration.

❺ Trouble Shooting

Badly work on Remote Control

- Check all the cables well and connected rightly.
- Check the adaptor rightly connected and well.
- Make sure the Power Button on IR Extender Mouse of Transmitter at " Power On " mode.
- Make sure other IR Extender mouses have been powered off.
- Check if the remote controller is out of battery.
- Make sure your remote controller is able to align the IR Extender.
- Make sure the range between remote controller and IR Extender Mouse is less than 10m.
- Check if the IR Extender Mouse of Receiver is rightly positioned in front of the AV Sources.

❻ Figure Illustration

Modulate A/V sources mixing with RF sources to send through the coaxial to various RF in A/V Displays,

1. AV Sources:VCD/DVD Plays, Satellite Receives etc..
2. RF Sources: Satellite/Terrestrial/Cable Broadcasting or other RF Sources.
3. RF in AV Displays: RF in TV sets, RF in LCD monitor etc..