IR vs. RF

The clear IR advantage in multiple room and secured transmission applications

Although both RF and IR transmission offer advantages over the other in various ALD uses, IR is the best choice for multiple room and secured transmission applications as the IR signal is contained in the room in which it is transmitted, unlike RF which can penetrate walls. This gives the IR system the clear edge in ease of installation and use in such applications as multi-screen cinemas, since each room can be equipped with one IR System 200 without interference among them. No frequency coordination is required as with radio systems and the same receiver can be used in any theater.

NADY IR SYSTEM 400

Offering 4 channels of independent programming, the IR System 400 is the professional choice for reliable, easy-to-use and affordable multi-language and simultaneous translation applications.

IR-400

IR-410

IR-405

IR-400

IR-400: 4 channel emitter/transmitter
IR-405: Control panel for IR-400
IR-410: 4 channel selectable (A/B/C/D) headphone receiver

- Utiliz es advanced state-of-the-art PPM (Pulse Position Modulation) IR technology (@300-900KHz). The 4-channel signal modulates a sequence pulse code as a sub-carrier which then modulates the infrared carrier directly. This innovative technique offers clearer audio and superior interference-free transmission than earlier narrow-band FM modulated IR systems.
- 4000 sq.ft. (370 sq.m.) coverage. Any number of IR-400 transmitters can be daisy chained together for greater coverage.
- IR-400 can tr ansmit 4 independent channels of speech or music to any number of IR-410 receivers which can all select any of the 4 channels as needed
- The IR-400 can be w all mounted or on optional tripod for table or floor setups.
- IR-400 f eatures: high gain IR-LED (light-emitting diode) emitter panel with built-in amplifier; modulation input: sync output for daisy chaining with up to ten more IR-400 transmitters for extended coverage; and a DC input for powering by an external AC/DC adapter (28V DC @ 1.6A)
- IR-405 f eatures: 4 selectable Audio In or MIC In inputs with volume control; separate Mix Input; built-in ALC; 3 headphone out jacks to allow 3 listeners to monitor the channel 1 signal (e.g., such as interpreters for channels 2, 3 and 4); peak audio level LED indicators for each of the 4 Audio In and MIC In signals; a signal out for modulating the IR-400 transmitter; and a DC input for powering by an external AC/DC adapter (12V DC @ 200mA)
- IR-410 headphone receiv er features: ultra IR light-sensitive diodes for optimum reception and maximum range; 4-channel select switch; individual volume controls for each ear; 2 X AAA battery operation; adjustable headband for comfortable universal fit

Specifications:

IR-400/405 Transmitter:

Operating Voltage	28VDC/12VDC
Current Drain	1500mA/150mA
Pulse Width/Code Period	1.2uS/25uS
Sub-carrier-PPM Spectrum	300~900KHz
Input Impedance(Audio In)	18Kohm
Input Impedance (MIC In)	1.3Kohm
Input Level for Audio In LED on	80mV
Input Level for MIC In LED on	1mV
ALC Range @ +/-3dB (Lower)	120mV
ALC Range @ +/-3dB (Upper)	5V
Carrier wave-length (infrared)	850nm

IR-410 Receiver:

Oper ating Voltage	3V (2XAAA)
Current Dr ain (Max. Signal)	25mA
Batter y life (typical)	40 hours , Alkaline
T .H.D.	<2%
F requency Response	50Hz —5KHz
Maxim um SPL @1.5% THD	115dB

Specifications and design subject to change without prior notice for improvement purposes

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