

### **Applications**

Convert IR to RS-232  
Directly control RS-232 units  
Integrate IR remotes with systems



### **Sales Support**

Planning an application for System Tools? Our Sales Support staff will be happy to work with you, providing expert integration assistance and a complete systems proposal.

### **Tech Support**

Need tech help? Give us a call. Our tech support staff are experts in the integration industry, so we can research solutions in the proposal stage, advise on programming requirements, and resolve installation issues.

Our job is to make our solutions work seamlessly with your system, performing as promised.

### **Related Products**

Video Tools

Contemporary Research AV Tools offer simple solutions to specific systems needs. The IR-232 IR to RS-232 Interface is an intelligent control tool that translates IR remote codes into RS-232 control commands. Able to automatically identify CR, JVC, Mitsubishi, NEC, Philips RC5, Samsung, Sharp, Sony and Tivo IR control codes, the IR-232 serves a wide variety of IR control applications.

For the first time, integrators can easily combine off-the-shelf IR remotes with custom system applications. The process begins by linking the remote's IR codes to native or user-defined RS-232 commands using the included IR ToolKit software. Once a complete list of functions is created, the database can be downloaded to the IR-232, printed, and saved for later use.

To further simplify integration, the IR-232 structures continuous IR remote commands into discrete button push and release codes. When someone holds down the Volume Up button, the IR-232 doesn't send a stream of RS-232 commands, just a single push, then a release code.

The IR-232 can also act as a direct control interface for special control applications. Instead of sending the native commands, the IR-232 can be programmed to send user-defined RS-232 strings to a video projector, plasma display or other RS-232 controlled equipment.

### **Components**

#### **IR-232 IR to RS-232 Interface**

- Automatically identifies CR, JVC, Mitsubishi, NEC, Philips RC5, Samsung, Sharp, Sony and Tivo IR control codes
- Structures continuous IR commands into button press and release
- Translates into custom RS-232 control strings with IR ToolKit
- Custom versions available for OEM applications
- 12-24 VDC power input compatible with most control systems

#### **IR ToolKit Software**

- Captures commands from IR remotes
- Creates native or custom RS-232 control codes
- Saves translation file for future re-use
- Included with IR-232

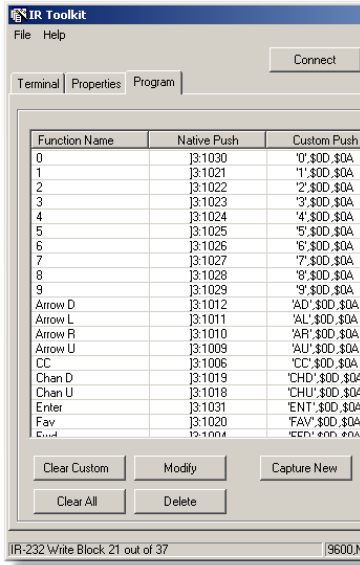
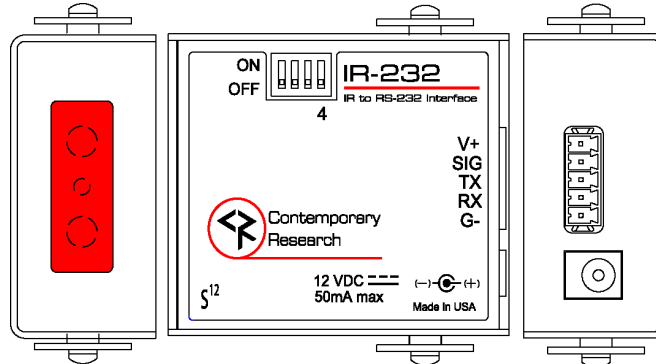
# AV Tools

## IR-232 IR to RS-232 Interface

### Specifications



IR-232



IR ToolKit Software

Feature	Description
<b>Physical</b>	2.35" [60mm] W x 1.125" [29mm] H x 4.95" [126mm] D (w/bracket) 8 oz [226g] All aluminum enclosure with durable black powder coat paint Swivel-mount receiver, attached to any flat surface
<b>Front Panel</b>	<b>IR Sensors:</b> Internal sensors receive 38 KHz and 57 KHz commands Automatically detects CR, JVC, Mitsubishi, NEC, Philips RC5, Samsung, Sony, and Tivo IR codes <b>IR Receive LED:</b> Red LED flashes when receiving IR commands
<b>Back Panel</b>	<b>DIP Switch:</b> Sets RS-232 operation parameters 1 On = Send native RS-232 code, ignore custom commands 2 On = Force 9600 baud rate, 8,N,1 <b>Control:</b> 5-pin captive screw terminal 1 DC Power In (same as Power In) 2 IR Signal In (remote IR sensors) 3 RS-232 TX 4 RS-232 RX 5 GND <b>RS-232:</b> 1,200 to 115,200 baud (9600 default), 8 data bits, no parity, 1 stop bit <b>Power In:</b> 2.1mm coaxial jack (center conductor positive), 50 mA maximum 11.5 to 24 VDC, 12 VDC typical, 50 mA max (may be unregulated)
<b>Includes</b>	12 VDC power supply, 100 mA (North American shipments only) IR-232 Software CD includes IR ToolKit software
<b>Options</b>	CC-IRCOM IR-232 Adapter Cable, DB9 male to screw terminal CC-232 COM cable for programming IR-232 IC-RC IR Remote IR-RXC External IR Sensor Compatible with ChannelPlus, Audioplex, and Xantech remote IR sensors

### Warranty

All CR products feature a full two-year warranty.

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