

# **2012** 2nd Half

# **PRODUCT REFERENCE GUIDE**



**RTiPanel Companion Remote** 

KX-7



Advanced In-wall Controller



**Expansion Modules** 



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The SURFiR companion remote represents a revolutionary new concept in control. The remote allows users to incorporate the Apple® or Android® devices that they already own as the main graphical interface for their control system, while adding the convenience of tactile control with hard buttons, and eliminating the numerous screen swipes needed for control tasks that require frequent interaction. SURFiR allows the user to enjoy the other benefits of their smartphone or tablet device: checking emails, reading news feeds, accessing social media apps, etc. while still having convenient and intuitive control of their electronic systems.

Designed to work with any of RTI's powerful XP control processors, the controller requires minimal programming for installers, lowering overall installation costs and making it simple to integrate into any system.

#### Key Features

- Provides a companion remote for use with the RTiPanel and Virtual Panel apps.
- Tracks page changes to stay in sync with one or more apps.
- Inexpensive and requires no direct programming.
- Includes eight buttons that can be custom labeled.
- Integrated switch to select between 433MHz (one-way) and 2.4GHz (two-way) operation.
- Works with any XP series control processor.
- · Battery low indicator.
- Uses 4 AAA batteries.

NOTE: This remote does not have infrared control capability. A 433MHz antenna or ZM-24 2.4 GHz transceiver module and XP series control processor must be used with this model of remote.

#### Specifications

Power	4 AAA Alkaline batteries
Power Management	Automatic On/Off (tilt switch)
Radio Frequency Control Ra	angeUp to 100 feet (30.5 meters)
Radio Frequency Carrier	
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	
Nominal Run Time	3 hours minimum, continuous use
	(7 days on average use)
Standby Time	
Total System Memory	256K Bytes Flash (non-volatile) memory
Device Capability	otal number of devices is limited only by memory
Macro Capability	Unlimited steps in a single macro
7	otal number of macros is limited only by memory
	Macro capability on every button
Dimensions (L x W x D)	9.5 in (240mm) x 1.8 in (46mm) x .8 in (22mm)
Enclosure	High-impact molded ABS plastic
Weight	7.5 oz. (212g) with batteries
Warranty	One Year (Parts & Labor) / 90 days on the battery

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The T1-B can be completely customized to control virtually any aspect of the home or office. Buttons can be individually programmed to control devices or execute multi-step macros for complex installations involving many components. Source buttons can be custom labeled to match the device being controlled for more intuitive control. The integrated tilt switch, coupled with a Lithium-ion battery and charging dock insure hours of uninterrupted control.

When other RTI devices are employed, the T1-B is capable of RF transmission thru walls and cabinets, RS-232 control, contact closures, power sensing and much more. Whether used as a standalone device or integrated into a complete RTI control solution, the T1-B will provide powerful and intuitive control of any electronics system - from simple to sophisticated.

#### Key Features

- Comfortable ergonomic design permits effortless, one-handed operation.
- Eight source and four general purpose assignable/programmable keypad buttons with interchangeable key caps.
- · Forty assignable/programmable keypad buttons.
- · Capable of transmitting IR and RF.
- · Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and RS-232 control.
- System includes a Lithium-Ion Battery and a docking station.
- USB Programming.

NOTE: A 433MHz antenna must be used with this model of remote. It is not compatible with the ZM-24 2.4 GHz transceiver module.

Power
Power Management
Infrared Control Range
Infrared Frequency Transmission Range15kHz - 460kHz
Radio Frequency Control RangeUp to 100 feet (30.5 meters)
(With optional System Interfaces/Processors)
Radio Frequency Carrier 433 MHz
Operating Temperature
Operating Humidity
Nominal Run Time on Full Charge3 hours minimum, continuous use 
Standby Time on Full Charge 30 Days
Battery Charge Time3-4 Hours
Total System Memory256K Bytes Flash (non-volatile) memory
Device Capability Total number of devices is limited only by memory
Macro CapabilityUnlimited steps in a single macro
Total number of macros is limited only by memory
Macro capability on every button
CommunicationsUSB programming port
Dimensions (L x W x D) 10.0 in (254mm) x 1.9 in (48mm) x .9 in (23mm)
Enclosure High-impact molded ABS plastic
Weight7 oz. (200g) with battery pack
Warranty One Year (Parts & Labor) / 90 days on the battery



The T2-B represents a recharged version of RTI's renowned, award winning T2+ remote control. Most notable is a new contemporary industrial design. The newest T2 maintains the original hybrid configuration of a touchscreen display and hard buttons, while adding many refinements to this amazing device.

Battery life has been extended with the new 1200 mAh power source. The new display and backlight make the graphics extremely sharp and vivid. The revised layout of hard buttons improves convenient access to frequently used functions, such as DVR controls. The T2-B also features a new three-way rocker switch allowing comfortable navigation of on-screen guides and music lists. With its sophisticated new design the T2-B will complement the décor of any environment.

#### Key Features

- Comfortable ergonomic design permits effortless, one-handed operation.
- Easy-to-read LCD to display custom buttons, text, graphics and scrolling lists.
- Three-way rocker switch for scrolling list navigation.
- · Capable of transmitting IR and RF.
- Digital matrix touchscreen never needs calibration.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and RS-232 control.
- System includes a Lithium-Ion Battery and a docking station.
- USB Programming.

NOTE: For RF control, a 433MHz antenna must be used with this model of remote. It is not compatible with the ZM-24 2.4 GHz transceiver module.

Power	200 mAh Lithium-Ion Battery Pack
Power Management	Automatic On/Off (tilt switch)
Infrared Control Range	30 feet (9.1 meters) @ 60 degrees
Infrared Frequency Transmission Range	15kHz - 460kHz
Radio Frequency Control Range	Up to 100 feet (30.5 meters)
(With optio	nal System Interfaces/Processors)
Radio Frequency Carrier	
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	5% to 95% Non-condensing
Touch Panel DisplayHig	h-contrast STN LCD Digital Matrix
64w x 128h pixels (Tou	uchscreen never needs calibrating)
Display Size (H x W)	2.4 in x 1.3 in (61mm x 33mm)
Backlights White LED (Displ	ay), Blue/White/Red LED (Keypad)
Nominal Run Time on Full Charge	.6 hours minimum, continuous use
	(10 to 15 days on average use)
Battery Charge Time	3-4 Hours
Total System Memory256K	Bytes Flash (non-volatile) memory
Device Capability Total number of	f devices is limited only by memory
Macro Capability	
Total number of	f macros is limited only by memory
	Macro capability on every button
Communications	USB programming port
Dimensions (L x W x D) 9.75 in (248mr	
Enclosure	High-impact molded ABS plastic
Weight	
Warranty One Year (Part	s & Labor) / 90 days on the battery



The T2-Cs+ takes command of the media room and eliminates the clutter of unnecessary remotes on the coffee table. The 2.4" color LCD can display custom text and graphics to provide customized, intuitive control. The previous generation T2-Cs, utilized a simplified programming method, which has now been updated to allow further customization if needed. The T2-Cs+ incorporates all of the control in one intuitive user interface - putting the power at your fingertips with the touch of one button.

The T2-Cs+ can function as a stand alone system controller or as part of a larger advanced control system. When used with other RTI automation devices, it is capable of transmission via oneway 433MHz and two-way 2.4GHz Zigbee RF for communication with an RTI processor. Rock-solid one-way control, powerful two-way control and even direct IR...this remote can do it all.

#### **Key Features**

- Dual RF transmission capability uses 433MHz and 2.4GHz (utilizing Zigbee<sup>®</sup> technology).
- Two-way feedback from compatible devices using 2.4GHz (Zigbee<sup>®</sup>) and RTI control components.
- Comfortable ergonomic design permits effortless, one-handed operation.
- Full color TFT LCD to display custom buttons, text and graphics.
- Thirty-seven assignable/programmable keypad buttons.
- Simplified graphics programming.
- Three-way rocker switch for scrolling list navigation.
- · Capable of transmitting IR and RF from a single button press.
- Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and two-way control.
- System includes a Lithium-Ion Battery and a docking station.
- USB Programming.

Dowor 2.6 M	DC 1000 mAb Lithium Ion Pottony Pools
	DC, 1200 mAh Lithium-Ion Battery Pack
<b>U</b>	Automatic On/Off (tilt switch)
·	
	ge15kHz - 460kHz
Radio Frequency Control Range	Up to 100 feet (30.5 meters)
(With	optional System Interfaces/Processors)
Radio Frequency Carrier80	02.15.4 @ 2.4Ghz (Zigbee <sup>®</sup> technology)
Operating Temperature	
Operating Humidity	
Touchscreen Display	High-brightness color TFT LCD
	4 VGA (240x320 pixels) with 65K colors
	Integrated high-resolution touchscreen
Display Size	
Backlights White LED (	Display), Blue/Red/White LED (Keypad)
-	Display), Blue/Red/White LED (Keypad) 2.5 hours minimum, continuous use
Nominal Run Time on Full Charge	
Nominal Run Time on Full Charge	2.5 hours minimum, continuous use
Nominal Run Time on Full Charge Battery Charge Time	2.5 hours minimum, continuous use 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory	2.5 hours minimum, continuous use 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability Total numb	2.5 hours minimum, continuous use 2.5 hours minimum, continuous use (5 to 7 days on average use) 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use (5 to 7 days on average use) 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use (5 to 7 days on average use) 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use 
Nominal Run Time on Full Charge Battery Charge Time Total System Memory Device Capability	2.5 hours minimum, continuous use 

T2-C+ 433MHz & 2.4GHz Zigbee®



Sleek and elegant, the T2-C+ is the fourth generation of RTI's renowned T2 remote control platform. Now featuring a stunning, state-of-the-art OLED color display with an extremely wide viewing angle, superior contrast and excellent brightness control. The amazing T2-C+ Universal System Controller represents a perfect example of style and function, blended seamlessly together. The T2-C+ is loaded with innovations such as a revolutionary dual RF platform to offer communications with RTI central processors either one way at 433MHz or bi-directionally with compatible devices at 2.4GHz. Additional features such as the three-way rocker switch for scrolling list navigation allow the T2-C+ to provide the most satisfying user experience of any remote control in it's class.

When combined with RTI accessory products, the T2-C+ becomes the centerpiece of a powerful control system. Powerful two-way communication with compatible electronic devices lets you see the status of your lights, the volume level or current song information.

#### Key Features

- Dual RF transmission capability uses 433MHz and 2.4GHz (utilizing Zigbee® technology).
- Two-way feedback from compatible devices using 2.4GHz (Zigbee®) and RTI control components.
- Blazing fast 533MHz CPU.
- High contrast, full color OLED display with extremely wide viewing angle and integrated high-resolution touchscreen.
- Transmits IR and RF (or both on a single button press!).
- Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and two-way control.
- · System includes a Lithium-Ion Battery and docking station
- USB Programming.

Power
Power Management Automatic On/Off (tilt switch)
Infrared Control Range
Infrared Frequency Transmission Range 15kHz - 460kHz
Radio Frequency Control RangeUp to 100 feet (30.5 meters)
(With optional System Interfaces/Processors)
Radio Frequency Carrier
Operating Temperature
Operating Humidity
Touchscreen DisplayHigh-brightness color OLED
Integrated high-resolution touchscreen
Display Size 2.8 in (71mm) diagonal
Backlights Blue/Red/White LED (Keypad)
Nominal Run Time on Full Charge2.5 hours minimum, continuous use
Standby Time on Full Charge
Battery Charge Time3-4 Hours
Total System Memory 128M Bytes Flash (non-volatile) memory
Device Capability Total number of devices is limited only by memory
Macro CapabilityUnlimited steps in a single macro
Total number of macros is limited only by memory
Macro capability on every button
CommunicationsUSB 2.0 programming port
CommunicationsUSB 2.0 programming port Dimensions (L x W x D) 10.0 in (254mm) x 2.6 in (66mm) x 1.0 in (25mm)
CommunicationsUSB 2.0 programming port Dimensions (L x W x D) 10.0 in (254mm) x 2.6 in (66mm) x 1.0 in (25mm) EnclosureHigh-impact molded ABS plastic
CommunicationsUSB 2.0 programming port Dimensions (L x W x D) 10.0 in (254mm) x 2.6 in (66mm) x 1.0 in (25mm)



The T3-V+ is a powerhouse controller wrapped in a stylish, ergonomic design that redefines the role of the remote. Building on the original award-winning T3 concept, updated features such as revolutionary dual RF transmission plus wireless Ethernet provide the user with amazing control options. Designed to satisfy the most discriminating user, the T3-V+ delights the eye with custom graphics and web pages that come to life in sizzling color and clarity with a full VGA resolution, high contrast LCD display.

Extending control capabilities to new heights, the T3-V+ uses a cutting-edge dual RF platform, ensuring installation flexibility and reliability. When used with compatible RTI control devices, the T3-V+ can utilize both 433MHz RF for one-way control and 2.4GHz Zigbee® for bi-directional communication from electronics such as music servers, lighting and even web-based RSS feeds for convenient weather updates, etc. Other key features include the integrated 802.11b/g wireless Ethernet and a built-in web browser allow the user to access web pages and IP video from security cameras, etc.

#### **Key Features**

- Dual RF transmission capability uses 433MHz and 2.4GHz (utilizing Zigbee<sup>®</sup> technology).
- Integrated 802.11b/g wireless Ethernet with improved performance.
- Two-way feedback from compatible devices using 2.4GHz (Zigbee<sup>®</sup>) and RTI control accessories.
- Blazing fast 533MHz CPU.
- Full VGA resolution (480x640) color TFT LCD to display custom buttons, text, graphics and animations.
- Integrated high-resolution touchscreen.
- Twenty-four programmable hard buttons, including five buttons with replaceable key caps that can be custom engraved.
- System includes a Lithium-Ion Battery and a docking station.
- USB Programming.

PowerPower
Power ManagementPower Management
nfrared Control Range
nfrared Frequency Transmission Range 15kHz - 460kHz
Radio Frequency Control RangeUp to 100 feet (30.5 meters)
(With optional System Interfaces/Processors)
Radio Frequency Carrier
Nireless Ethernet
Dperating Temperature+32°F to +122°F (0°C to +50°C)
Dperating Humidity5% to 95% Non-condensing
Fouchscreen Display High-brightness color TFT LCD
Full VGA (480x640 pixels) with 65K colors
Integrated high-resolution touchscreen
Display Size 3.5 in (89mm) diagonal
Backlights White LED (Display), Blue/Red/White LED (Keypad)
Nominal Run Time on Full Charge
Nominal Run Time on Full Charge
Nominal Run Time on Full Charge
Nominal Run Time on Full Charge3.5 hours minimum, continuous use 
Nominal Run Time on Full Charge
Nominal Run Time on Full Charge
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use
Nominal Run Time on Full Charge       3.5 hours minimum, continuous use

#### T4 2.4GHz Zigbee<sup>®</sup> or





T4 - 2.4GHz Zigbee® model shown

The T4 is RTI's flagship wireless controller - a culmination of many years of engineering and design experience. Sleek and sophisticated, the T4 is the perfect complement to today's flat panel televisions and high-end home theaters. The highly stylized design, user-friendly ergonomics, and intuitive operation all work together to provide the richest possible experience.

The T4 provides a self-contained control system for controlling audio/video components, lights, and other electronic systems in the home. It also displays wireless video (motion JPEG) and web pages - either full screen or in a window.

When combined with RTI accessory products, the T4 becomes the centerpiece of a powerful control system. One model is capable of 2.4GHz RF (utilizing Zigbee<sup>®</sup> technology) for robust two-way communication including feedback from compatible electronic devices such as security systems, A/V electronics and media servers while another utilizes 433MHz for reliable one-way control.

- ...

#### Key Features

- · Ergonomic design permits effortless operation.
- Full color TFT LCD to display custom buttons, text, graphics, and animations.
- Integrated 802.11 WiFi.
- · Capable of transmitting IR.
- Models capable of RF communication via either 2.4GHz Zigbee<sup>®</sup> or 433MHz.
- · Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and two-way control.
- Includes a Lithium-Polymer battery and docking station.
- · USB and Ethernet programming.

NOTE: For RF control, the correct antenna/processor must be used depending on the model of T4 that is being installed:

- For 2.4GHz Zigbee RF use the ZM-24 Transceiver Module.
- For 433MHz RF use the RM-433 Antenna.

Power 7.2VDC 4000	mAh Lithium-Polymer Battery Pack
Power Management	
Infrared ControlRange	
Infrared Frequency Range	
Radio Frequency Control Range	Up to 100 feet (30.5 meters)
Radio Frequency Carrier	Depends or Model
	z (Zigbee® technology) OR 433MHz
Wireless Ethernet	
Touchscreen Display	High-brightness color TFT LCD
Full VC	GA (640x480 pixels) with 65K colors
Inte	egrated high-resolution touchscreen
Display Size	6.4 in (162mm) diagonal
Backlight	Dual CCFL, 300nit (Display)
	Blue LED (Keypads)
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	
Total System Memory32N	1 Bytes Flash (non-volatile) memory
Device Capability Total number of	of devices is limited only by memory
Macro Capability	Unlimited steps in a single macro
Total number of	of macros is limited only by memory
	Macro capability on every button
Communications	USB programming port
EnclosureHig	h-impact molded ABS plastic, silver
Dimensions (H x W x D) 6.2 in (157mn	n) x 9.4 in (239mm) x 2.6 in (66mm)
Weight	2 lbs (0.91 kg)
Warranty	One Year (Parts & Labor)



The U2 is designed for reliable wireless control of audio/video systems from environments which are too harsh for normal remote controls. It is completely sealed making it weather resistant. The U2 combines the convenience of eight programmable "soft" buttons with an LCD display and the ideal selection of commonly used keypad buttons. The high contrast display can be customized with any combination of text and graphics desired. This provides a simple and flexible interface for operating today's sophisticated electronic systems, regardless of the location. The U2 is a perfect companion for hot tubs, pools, bathrooms, and decks.

#### Key Features

- Comfortable ergonomic design permits effortless, one-handed operation.
- Durable design is weather resistant.
- · Thirty-three assignable/programmable keypad buttons.
- Combines easy-to-read LCD display for custom buttons, text, and graphics with eight programmable keypad buttons.
- Non-volatile Flash memory stores your system configuration even when power is not present.
- Transmits commands using RF for operation through walls, cabinets, etc.
- · Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and RS-232 control.
- Includes four (4) AAA lithium batteries.
- USB Programming.

NOTE: A 433MHz antenna must be used with this model of remote. It is not compatible with the ZM-24 2.4 GHz transceiver module.

Power	4 AAA Lithium batteries
Power Management	Automatic On/Off (tilt switch)
Radio Frequency Control Range	Up to 100 feet (30.5 meters)
	(With system interfaces/processors)
Radio Frequency Carrier	
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Display	High-contrast STN Monochrome LCD
	128h x 64w pixels
Display Size	2.1 in x .94 in (53mm x 24mm)
Total System Memory	256K Bytes Flash (non-volatile) memory
Device Capability Total nur	mber of devices is limited only by memory
Macro Capability	Macro capability on every button
Communications	USB programming port
Dimensions (L x W x D) 9.1in	(231mm) x 2.4 in (61mm) x 1.0 in (25mm)
Enclosure	High-impact molded ABS plastic
Weight	7 oz. (200g) with batteries
Warranty	One Year (Parts & Labor)

# **RKM-1+**



The RKM-1+ is a simple, intuitive keypad designed for multi-room audio control. Eight fullyprogrammable hard buttons and an open architecture provide the flexibility to control almost any multizone receiver or distributed audio system. The RKM-1+ incorporates a customizable LED backlit film which provides two-way feedback of power status, selected source, and volume level when used along with RTI XP processors and supported distributed audio systems. Sized for a single gang electrical box, the RKM-1+ is perfect for flush-mount installations in walls or cabinets and ships with white, black and light almond faceplate and buttons.

#### **Key Features**

- Provides feedback from distributed audio systems (ex. AD-4/AD-8) and multi-zone receivers via any RTI XP series control processor.
- · Includes white, black, and light almond faceplate/buttons.
- Use any standard Decora® type faceplate.
- Fits in a single gang outlet box.
- · Eight selectable sources.
- Backlit volume level indicator.
- · Customizable LED backlit film source indicator.
- Custom laser-etched LED films may be ordered using LaserShark.
- · Open architecture allows control of virtually anything.
- IR output port drives up to 1000 feet of wire.
- · Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and two-way control.
- USB Programming.

#### Specifications

Power	
Backlights	Blue LED - Eight sources
	Blue LED - Nine volume level indicators
Infrared Output Port	
	Drives up to 1000 ft (300 m) of wire
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	
Total System Memory	64K Bytes Flash (non-volatile) memory
Device Capability	Total number of devices is limited only by memory
Macro Capability	Unlimited steps in a single macro
	Total number of macros is limited only by memory
	Macro capability on every button
Communications	USB programming port
Enclosure	Formed Steel, black powder coat
Front Plate	High-impact molded ABS plastic
Mounting	Mounts into single gang box
Dimensions (H x W x D)	4.1 in (104mm) x 1.8 in (46mm) x 1.0 in (25mm)
Installation Cut-Out (H x	W) 2.8 in (71mm) x 1.8in (46mm)
Total Depth in Wall	
Weight	
Warranty	One Year (Parts & Labor)

Decora<sup>®</sup> is a registered trademark of Leviton Manufacturing Co. Inc.

# RK1-2 • RK1-4 • RK1-8



The RK1 is a customizable keypad designed for flush-mount installations in walls or cabinets. It provides a self-contained control system for controlling audio/video components, lights, or other electronic systems in the home. Sized for a single gang electrical box, the RK1 incorporates two, four or eight fully-programmable buttons which can be custom labeled with text and symbols. In addition to custom labels, the backlight for each button can be configured to display almost any desired color. Designed to match any décor, the RK1 is designed to have a clean, neutral style. Compatibility with Decora<sup>®</sup> style wall plates ensures seamless integration into most homes and buildings.

#### **Key Features**

- Use any standard Decora® type faceplate.
- Fits in a single gang outlet box.
- Capable of master/slave configuration, allowing two keypads to work in conjunction.
- Three different cover plate colors available.
- Two, four or eight assignable/programmable buttons.
- User-definable backlight color.
- · Open architecture allows control of virtually anything.
- IR output port drives up to 1000 feet of wire.
- Completely customizable and programmable.
- Optional modules/processors for voltage sensing (to monitor power status of equipment) and two-way control.
- USB Programming.

#### Specifications

Power	+9VDC to +16VDC, 350mA max
Backlights	RGB LED - User-definable color
Infrared Output Port	
	Drives up to 1000 ft (300 m) of wire
Operating Temperature	
Operating Humidity	
Total System Memory	64K Bytes Flash (non-volatile) memory
Device Capability	Total number of devices is limited only by memory
Macro Capability	Unlimited steps in a single macro
	Total number of macros is limited only by memory
	Macro capability on every button
Communications	USB programming port
Enclosure	Formed Steel, black powder coat
Front Plate	High-impact molded ABS plastic, white
Mounting	Mounts into single gang box
Front Plate Dimensions (	H x W) Purchased (Decora® Type)
Dimensions (H x W x D).	
	4.1 in (104mm) x 1.8 in (46mm) x 1.7 in (43mm)
	W x D)
	2.8 in (71mm) x 1.8in (46mm) x 1.37 in (35mm)
	1.7 in (43mm) Plus Cables
,	
	One Year (Parts & Labor)

Decora<sup>®</sup> is a registered trademark of Leviton Manufacturing Co. Inc.



The KX2 in-wall controller's elegant design maintains the perfect balance between programmable hard buttons and display size. At 2.8 inches, the LCD is small enough to blend into any environment, yet it provides the resolution necessary for displaying custom buttons, text, and graphics. When approached by an end user, a proximity sensor automatically brings the unit to life. From there, the KX2's infrared output port provides direct control of almost any A/V component or lighting system up to 1,000 feet away. The controller's twelve hard buttons and graphic interface are fully programmable using RTI's Integration Designer<sup>®</sup> software. The unit's integrated 10/100Base-T Ethernet port with Power-over-Ethernet (POE) provides the flexibility to accommodate any installation.

Available with a gloss white, light almond or black faceplate and buttons, the KX2 can be used as a stand-alone device or as part of an expandable central control system. When used with the available RTI accessory devices, the unit is capable of infrared routing, relay control, power sensing, and advanced two-way communications via Ethernet and RS-232.

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#### **Key Features**

- · Stylish, low-profile design
- Faceplate and buttons available in white, black and light almond, with a glossy finish.
- Fits in a 4"x4" square electrical box (dual gang w/corner screw holes.)
- · Integrated mounting wings for easy installation in retrofit installs.
- Twelve assignable/programmable keys.
- QVGA resolution (240w x 320h) TFT LCD to display custom buttons, text and graphics.
- Integrated 10/100Base-T Ethernet port with Power-over-Ethernet.
- Plasma friendly infrared receiver for command pass-through.
- Open architecture allows control of virtually anything.
- · IR output drives up to 1000 feet of wire.
- Completely customizable and programmable.
- Optional modules/processors for voltage sensing, relays and advanced two-way control.
- USB and Ethernet Programming.

Power
Power Management Adjustable backlight brightness/power down time
ouchscreen Display
Integrated high-resolution resistive touchscreen
Display Size2.8 in (71mm) diagonal
Backlights White LED (Display), Blue LED (Keypad)
Infrared Output Port
Drives up to 1000 ft (300 m) of wire
<i>Operating Temperature</i>
Operating Humidity
Ethernet Port
Total System Memory 32M Bytes Flash (non-volatile) memory
Device Capability Total number of devices is limited only by memory
Macro CapabilityUnlimited steps in a single macro
Total number of macros is limited only by memory
Macro capability on every button
CommunicationsUSB programming port
Enclosure High-impact molded ABS plastic
Front Plate High-impact molded ABS plastic
Mounting Integrated mounting wings, or screws through front bezel
Front Plate Dimensions (H x W) 4.4 in (112mm) x 4.6 in (117mm)
Installation Cut-Out (H x W) 3.7 in (94mm) x 3.7 in (94mm)
Total Depth in Wall 1.4 in (36mm) plus cables
Weight 6.7 oz (190g)
Warranty One Year (Parts & Labor)

# RK3-V



The perfect balance between display size and resolution, a 3.5 inch LCD is small enough to fit in any decor, yet the new RK3-V with its full VGA resolution provides ample room for displaying custom graphics, web pages and CD cover artwork in amazing detail. A fully programmable interface using RTI's Integration Designer<sup>®</sup> software makes it easy to provide simple and intuitive control for the end-user.

The RK3-V can be used as a stand-alone device or as a part of an expandable central control system. It can directly control almost any audio/video component or lighting system up to 1000 feet away using its infrared output port. When used with the available RTI accessory devices, the RK3-V is capable of infrared routing, relay control, power sensing, and two-way RS-232 communications for advanced control. In addition, the built-in Ethernet port allows the RK3-V to display video from network security cameras and access the internet.

#### **Key Features**

- Wide array of stylish low-profile faceplates with snap-on attachment available.
- · Available with white or black front plate and buttons.
- Integrated mounting wings for easy installation.
- Nine assignable/programmable keys.
- Full VGA resolution (480w x 640h) TFT LCD to display custom buttons, text and graphics.
- Powerful 32-bit, 200MHz XScale® processor.
- Integrated 10/100Base-T Ethernet port with Power-over-Ethernet.
- Plasma friendly infrared receiver for command pass-through.
- Completely customizable and programmable.
- · Optional modules/processors provide two-way control.
- USB and Ethernet Programming.

Power+9VDC to +16VDC, .5A max or 802.3af Power-over-Ethernet
Power Management Adjustable backlight brightness/power down time
Touchscreen DisplayHigh-brightness color TFT LCD
VGA (480w x 640h pixels) with 65K colors
Integrated high-resolution resistive touchscreen
Display Size
Backlights White LED (Display), Blue/Amber LED (Keypad)
Infrared Output Port
Drives up to 1000 ft (300 m) of wire
Ethernet PortEthernet 10/100Base-T with Power-over-Ethernet
Operating Temperature
Operating Humidity
Total System Memory 32M Bytes Flash (non-volatile) memory
Device Capability Total number of devices is limited only by memory
Macro CapabilityUnlimited steps in a single macro
Total number of macros is limited only by memory
Macro capability on every button
CommunicationsUSB programming port
Enclosure High-impact molded ABS plastic, black
Front Plate High-impact molded ABS plastic, gray or black
Mounting Integrated mounting wings, or screws through front bezel
Front Plate Dimensions (H x W) 5.75 in (146mm) x 5.5 in (140mm)
Installation Cut-Out (H x W) 5.13 in (130mm) x 4.75 in (120mm)
Total Depth in Wall plus cables
Weight 10 oz (284 g)
WarrantyOne Year (Parts & Labor)

# **RK3/RK3-V Accessories**

#### **Faceplate Bezel**



#### Colors

BZW-RK3V - White	
BZA-RK3V - Almond	
BZI-RK3V - Ivory	
BZS-RK3V - Silver	
BZB-RK3V - Black	

Stylish low-profile faceplate with snap-on attachment.

#### **Premium Faceplate Bezel**



#### Colors

BZGW-RK3V Gloss White	10-210269-21
BZGB-RK3V Gloss Black	10-210270-13
PBBA-RK3V Satin Black with Black Anodized Insert	10-210200-06
PBBR-RK3V Satin Black with Brushed Aluminum Insert	10-210201-07

Assembly includes a paintable bezel and insert.

#### Pre-Construction Bracket PCB-RK3V



The RK3-V pre-construction bracket is designed to be installed before drywall is hung to make it easier for installers to locate and install the RK3-V in-wall touchpanel.

### Key Features

- Flanges located on the side and the bottom for attaching to either a wall stud or a cross member support.
- Steel construction.

#### Pre-Construction Back Box BB-RK3V



The RK3-V pre-construction back box is designed to house the unit and it's wiring for installations with stricter code requirements.

#### Key Features

- Flanges located on the side for attaching to a wall stud.
- Steel construction.
- · Nine pre-punched knockouts for wiring.

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The extraordinary KX7 is packed full of powerful features for complete control of the entertainment, environment and security systems in a wall-mounted color LCD touchpanel. A beautiful 7" WVGA multi-touch capacitive touch screen displays the completely customizable control interface. In addition, composite, S-video and component video inputs provide crystal clear video at up to 576p resolution. Built-in wired and wireless Ethernet provide two-way control, programming, digital video (motion JPEG) and web pages. The KX7 10/100 Base-T connection even supports POE (Power over Ethernet) to reduce cabling requirements.

The KX7 takes touch panel control to new heights with a self contained control system. Direct infrared allows control of devices up to 1000 feet away. A two-way RS-232 port allows RTI one-way and two-way control drivers to run without a separate control processor. When combined with RTI accessory products, the KX7 offers intuitive twoway communication for control and feedback from compatible electronic devices such as music servers, HVAC, lighting, and more.

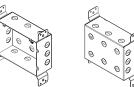
#### Key Features

- 800x480 WVGA LCD with integrated multi-touch capacitive touch screen.
- Composite, S-Video or Component video input at up to 480i, 576i, 480p or 576p.
- Integrated 10/100 Base-T and 802.11 Wireless Ethernet.
- Built-in bi-directional RS-232 port runs RTI one-way and two-way drivers without a separate control processor.
- Built-in high output IR port for direct control.
- Powered using power supply or PoE (Power over Ethernet)
- Optional modules/processors provide additional two-way control.
- USB and Ethernet Programming.
- Stylish low-profile faceplate available in multiple colors (ships with white).
- Integrated mounting wings for easy installation.

Power	+9VDC to +16VDC, 1A max
Power Management	Adjustable backlight brightness/proximity sensor
Touchscreen Display	High-brightness color TFT LCD
	WVGA (800x480 pixels) with 65K colors
	Integrated high-resolution capacitive touchscreen
Display Size	7.0 in (177mm) diagonal
Display Backlight	Dual CCFL, 300nit
Infrared Output	Through control port, 200mA output
	Drives up to 1000 ft (300 m) of wire
Ethernet Port	10/100 Base-T with Power-over-Ethernet
Wireless Ethernet	
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	5% to 95% Non-condensing
Total System Memory	128M Bytes Flash (non-volatile) memory
Device Capability	. Total number of devices is limited only by memory
Macro Capability	Unlimited steps in a single macro
	Total number of macros is limited only by memory
	Macro capability on every button
Communications	USB programming port
Video Input	Three, BNC Connectors
	Composite, S-Video or Component Analog Video
	NTSC/PAL/SECAM
Enclosure	High-impact molded ABS plastic
	High-impact molded ABS plastic
	rated mounting wings, or screws through front plate
•	V) 5.6 in (143mm) x 7.7 in (195mm)
•	ł x W) 5.9 in (151mm) x 8.5 in (217mm)
•	1.4 in (36mm), with video connector 2.1 in(53mm)
0	
Warranty	One Year (Parts & Labor)

# **KX7** Accessories

#### Pre-Construction Back Box BB-KX7



The KX7 pre-construction back box is designed to house the unit and it's wiring for installations with stricter code requirements.

#### Key Features

- Flanges located on the side for attaching to a wall stud.
- Steel construction.
- Pre-punched knockouts for wiring.

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# **RK10**



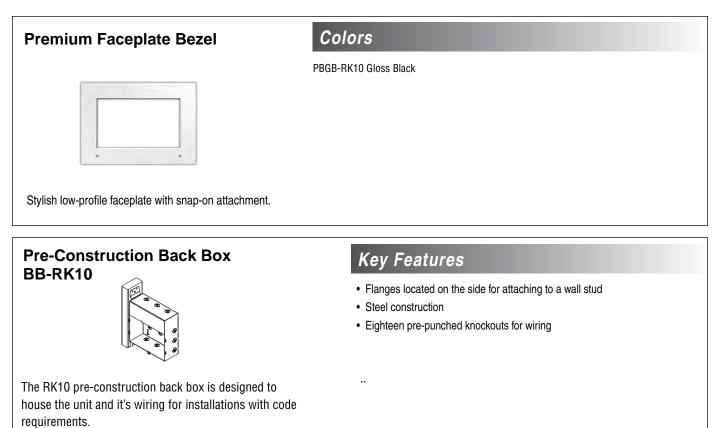
Designed for sophisticated installations that require a touchpanel with the size and power to take command of a room's environmental and information technology, the RK10 also possesses the style and user-friendliness required to fit any type of setting. With a big, beautiful touchscreen display and the horsepower of an Intel® Atom processor, it combines the power of a PC with the reliability and ease-of-use of a control system. Flexible mounting options allow the RK10 to be flush or surface mounted on a wall, as well as attached to standard VESA style display mounts. Extensive control and communication capabilities include two-way communication with devices throughout the environment (lighting, HVAC, security, A/V electronics etc), built-in wired and wireless Ethernet, direct RS-232 control and motion JPEG video viewing.

#### Key Features

- Stylish low-profile faceplate available in black and white with a gloss finish.
- Full color 10.2" TFT LCD (1024x600) with integrated touchscreen.
- Fanless PC architecture incorporating powerful Intel® Atom<sup>™</sup> processor N270 1.6GHz CPU and 1GB of RAM.
- Running Windows® Embedded Standard OS allows multi-tasking.
- Network connectivity via an integrated gigabit Ethernet port and 802.11b/g wireless LAN module.
- May be installed in a wall or rear panel provides VESA compliant screw holes for mounting bracket applications.
- Capable of two-way control when used with RTI accessory devices.

Power	+24VDC, 2A max
Power Management	Adjustable backlight brightness/power down time
Touchscreen Display	High-brightness color TFT LCD
	(1024x600 pixels) with 262K colors
	Integrated high-resolution resistive touchscreen
Display Size	10.2 in (259mm) diagonal
Display Backlight	Dual CCFL, 400nit
Wireless Ethernet	
Ethernet Port	RJ45, Gigabit
Video Output	VGA
COM1 Port	
COM2 Port	
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	5% to 95% Non-condensing
Total System Memory	4GB Flash (non-volatile) memory
	1GB 533MHz DDR2 RAM
Device Capability	. Total number of devices is limited only by memory
Macro Capability	Unlimited steps in a single macro
	Total number of macros is limited only by memory
Programming	USB 2.0 thumb-drive, Ethernet
Enclosure	ABS plastic / Metal
	ABS plastic (Black or White)
Mounting	Screws or VESA standard mounting holes
Dimensions (W x H x D)1	2.3 in (313mm) x 8.7 in (222mm) x 2.0 in (52.5mm)
Installation Cut-Out (W x I	H) 11.0 in (279mm) x 7.5 in (190mm)
Total Depth in wall	1.6 in (41mm)
Weight	2.2 lbs (1kg)
Warranty	One Year (Parts & Labor)

# **RK10** Accessories



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# **RTI Control Apps**

# **RTiPanel App**

#### Apple iPad<sup>®</sup>, iPhone<sup>®</sup>, iPod Touch<sup>®</sup>





#### Android<sup>®</sup> Platform



Fully customizable using RTI's Integration Designer® programming software, the RTiPanel offers the same intuitive control experience RTI remote controls offer, running on an Apple or Android smart phone or tablet device. Providing secure local or remote access to an RTI XP series control processor from any Internet connection, the RTiPanel allows for LAN control via Wi-Fi and WAN control off site. Users can view and adjust thermostats, monitor security systems and turn off lights, in addition to controlling their A/V electronics, from the office, on vacation, or virtually anywhere in between.

Apple Licenses: iPhone/iPod Touch Android Licenses: Android Phone

iPad

Android Tablet

#### Key Features

- Control and receive feedback from audio, video, lighting, security, climate, and more!
- RTiPanel app available through Apple App Store<sup>®</sup>, Google Play<sup>®</sup> and the Amazon App Store<sup>®</sup>
- Fully integrate Apple iPad<sup>®</sup>, iPhone<sup>®</sup>, iPod Touch<sup>®</sup> and Android<sup>®</sup> devices into new or existing RTI control systems utilizing an XP series control processor.
- Completely customizable graphical interface.
- Programmed using same Integration Designer software that is used for all RTI products.
- Supports creation of both portrait and landscape views with minimal extra programming required.
- RTiPanel supports full two-way feedback, including cover art, graphics, text, dynamic scrolling lists, and more!
- Supports local connection via WiFi<sup>®</sup>, and off-site access via WiFi<sup>®</sup> or cellular data (if available), with automatic switching.
- · Highly optimized for fast connection times.
- Control system programming stored on Apple/Android devices and updates automatically when changes are made.

#### System Requirements

#### General

- RTI XP series control processor.
- The device running the RTiPanel App and the XP series control processor must be connected to the Ethernet network.
- Remote access requires a connection to the Internet and either a static IP address from the ISP (Internet Service Provider), or a dynamic DNS account implemented.

#### Apple iOS Devices

- RTiPanel App compatible with Apple iPad, iPod touch and iPhone.
- Apple devices require iOS 3.2 or higher (\* Subject to change without notice.)

#### Android Devices

- RTiPanel App compatible with Android smart phone and tablet devices.
- Android devices with touchscreen displays larger than 5.5" will require a tablet license.
- Android devices require 2.1 or higher (\*Subject to change without notice.)

#### Apps available for download from







Apple iPad, iPhone, iPod Touch

Android Smart Phone and Tablets

# **RTI Control Apps**

# Virtual Panel

#### **PC** Application



Virtual Panel offers the same intuitive control experience as RTI remote controls on desktop and laptop PCs running Microsoft Windows<sup>®</sup>. Providing secure local or remote access to an RTI system from any Internet connection, the Virtual Panel allows for LAN control and WAN control off site. Whether at the office, on vacation, or anywhere in between, users can access the Virtual Panel to adjust thermostats, monitor security systems, turn off lights, and much more, right from their computer.

Fully customizable using RTI's Integration Designer® programming software, the Virtual Panel interface can be customized to accommodate any size laptop or monitor display and provides full two-way feedback using an RTI XP series control processor.

#### Key Features

- Control and monitor your RTI system from any Ethernet-connected PC running Microsoft Windows®.
- Programmed using Integration Designer® software.
- Completely customizable user-interface.
- Use as main control interface or in conjunction with RTI handheld and in-wall controllers.
- Control and receive feedback from lighting, security, climate, and more!
- LAN license for local RTI system control.
- Internet license for system control from virtually anywhere.

#### Licensing

Each Integration Designer system file with an XP series control processor comes with one free Virtual Panel license that will work for locally networked PC's. If you wish to have more than one Virtual Panel "connection" to an XP control processor at one time, or need remote access for control, then a Virtual Panel license must be purchased.

Please visit **www.rticorp.com/dealers** for Virtual Panel license purchasing information and installation instructions.

#### System Requirements

- IBM or compatible personal computer running Microsoft Windows XP, Windows Vista, Windows 7 or higher operating system.
- NOTE: Virtual Panel will not run on Windows 95/98/ME.
- At least 256 Megabytes (MB) of RAM.
- 16 bit color monitor (16 bit color 1024x768 or better recommended, 256 colors not supported).
- PC and XP series control processor must be connected to the Ethernet network.
- Remote access requires a connection to the Internet and either a static IP address from the ISP (Internet Service Provider), or a dynamic DNS account implemented.
- Remote access requires the Virtual Panel license.



The RP-1 Remote Control Processor is a low-cost programmable control system that is designed to automate the operation of audio/video and other electronic systems. It combines many of the capabilities of RTI's more powerful processors with an integrated RF receiver — all in one small, costeffective package. The RP-1 is the perfect control system for single room installations such as home theaters, media centers, and bedrooms.

# Key Features

- Stores all system commands and macros for reliable control.
- Integrated RF receiver.
- High-output infrared port.
- Power sensing input for monitoring equipment status.
- Works with all RTI wireless remote controls.
- IR output port incorporates both short-circuit and overload protection.
- RF signal reception LED.
- Includes power supply and ECB-5 IR Emitter Connecting Block.
- USB Programming.

NOTE: A 433MHz enabled remote control must be used with this model of control processor.

Power Supply	+12VDC, 1A
Number of Output Ports	One (1) High Power IR Port
IR Output Drive	200mA maximum
Infrared Transmission Bandwidth	15kHz - 460kHz
RF Receiver Carrier Frequency	
Power Sense Input Off = 0	0VDC - 2VDC; On = 3VDC - 20VDC
Mounting	Wall-mount or free standing
Dimensions (W x H x D) 5.5in (140	mm) x 3.3in (84mm) x 1.4in (36mm)
(Width dimension does	not include antenna or connectors)
Weight	7.0 oz. (198g)
Warranty	One Year (Parts & Labor)



Boasting a powerful 533MHz CPU and 128MB of nonvolatile flash memory, this processor packs a big punch at a moderate price. With a built-in ZigBee® transceiver and support for wireless bi-directional communications, the XP-3 can provide the user with rock-solid control and feedback from devices such as music servers, lighting, security, and much more. The XP-3 can also be configured to support one-way control via non-Ethernet enabled RTI in-wall products\* (Ex. RK1/RKM-1) and 433MHz remote controls.\*\* For complete control in any room, the XP-3 even allows powerful two-way control with Ethernet enabled RTI in-wall controllers, and full support for the RTiPanel and Virtual Panel Apps.

The XP-3 power really becomes evident when you see the list of features normally reserved for higher-priced processors, such as a built-in astronomical clock, Ethernet, and relay control and sensing. There are also two IR output ports with routing capability and a multi-purpose I/O port will accept an IR emitter or RTI accessory devices for voltage sensing or one-way RS-232.

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#### Key Features

- Supports Virtual Panel and RTiPanel Apps.
- · Supports same two-way drivers used by XP6/XP8.
- Powerful 32bit, 533MHz CPU.
- 128Mb of non-volatile Flash memory stores your system configuration even when power is not present.
- One multi-purpose I/O port supports optional RTI power sensing and communications modules.
- Two IR output ports with variable output.
- Two assignable voltage sense inputs.
- Two programmable relay outputs.
- One two-way RS-232 port for bi-directional communication with supported devices.
- Integrated 10/100Base-T Ethernet port for programming, control and two-way communication with compatible devices.
- Integrated 10/100Base-T Ethernet port supports Power-over-Ethernet (POE) Class 3.
- Built-in astronomical clock for time-based events and sleep timers.
- Built-in 2.4GHz ZigBee® RF transceiver module and removable antenna.
- · Compatible with industry standard IR emitters and blasters.
- Configurable for communication with RTI in-wall products\*\* and 433MHz wireless controllers.\*
- Programmed using the RTI Integration Designer Software.
- USB 2.0 and Ethernet programming.
- Field upgradable firmware.

#### \* NOTE: RK2 Keypad not supported with XP3.

\*\*NOTE: Using a 433MHz RTI remote control requires a separate RM-433 Antenna. Also, while this configuration is possible, it's use should be limited to secondary zones that aren't heavily used (guest rooms, outdoor areas etc). Installations requiring primary control via both Zigbee and 433MHz controllers should use an XP-6 or XP-8 control processor.

Power Supply	
Wireless Networking	IEEE802.15.4 Zigbee© network compliant
RF Frequency Range	2.4Ghz - 2.5Ghz
Multi-Purpose Output Port (Port 1)	One custom 3.5mm 4-conductor jacks
Designed for RTI module	es as well as industry-standard IR emitters.
IR Output Ports (Ports 2 & 3)	Two, 3.5mm jacks
Cor	npatible with industry standard IR emitters
IR Output Drive	100mA maximum (per port, adjustable)
Infrared Frequency Transmission Ra	nge15kHz - 460kHz
RS-232 Port	One, RJ45 Connection
Ethernet Port	One, 10/100Base-T
Relays	Two, 5Amps @ 30 VDC max
Sense Inputs	Two, 3-24VDC
USB Ports	One, Programming
Mounting	Wall-mount or free standing
Dimensions (W x H x D)	7.0" (175mm) x 3.0" (76mm) x 1.0" (25mm)
Warranty	One Year (Parts & Labor)



Packed with an impressive feature set rivaling processors at twice the price, the XP-6 is the wise choice for powerful command of a professionally installed electronic system! Options for control include a highoutput port for supplying IR control to another area of the building, and six addressable multi-purpose output ports for IR emitters and RTI accessory modules for power sensing and one-way RS-232. For more advanced control, the XP-6 features two dedicated RS-232 ports for bi-directional communication with supported thirdparty devices such as music servers, security, lighting, and HVAC systems. This gives the user instant feedback from these devices, delivering important information such as play lists, the status of a security system - even weather forecasts! With its built-in astronomical clock, time-based events can be scheduled and used to automate all aspects of the installed environment. Regardless of the complexity of the installation, an RTI control system with the XP-6 as the backbone, puts complete command at the user's fingertips!

#### Key Features

- Powerful 32bit, 533MHz CPU and 128Mb of non-volatile Flash memory.
- Six multi-purpose I/O ports for infrared and RTI modules for power sensing and one-way RS-232.
- Ethernet support for two-way control and easy programming.
- Three programmable 12VDC trigger outputs.
- Three assignable voltage sense inputs.
- Three programmable relay outputs.
- Two RS-232 ports for bi-directional communication.
- Built-in astronomical clock for time-based events and sleep timers.
- Compatible with all RTI wireless remote controls (when used with RTI RF antennas/Zigbee<sup>®</sup> transceivers) and In-wall controllers.
- Inputs for connection of multiple 433MHz RF receiver modules and one ZM-24 2.4GHz Transceiver.
- Programmed using the Integration Designer® Software.
- Non-volatile Flash memory stores your system configuration even when power is not present.
- Fast USB 2.0 and Ethernet programming.
- Field upgradable firmware.

#### Specifications

Power Supply+12V	′ DC, 1A
IR Output Ports Six 3.5m	nm jacks
Compatible with industry standard IR	emitters
IR Output Drive 100mA maximum (per port, adj	iustable)
200mA maximum (high IR outp	out port)
Infrared Frequency Transmission Range 15kHz -	460kHz
Infrared Input Compatible with industry-standard repeaters and re	eceivers
Trigger Outputs Three, 12 VDC, 100mA m	iax each
Sense Inputs Three, 3	-24VDC
RS-232 Ports Two, Bi-directional RJ45 Con	nections
Ethernet Port 10/100Base-T, RJ45 Cor	nnection
USB Ports One, Progr	amming
Control Port RS-485 / IR / Pwr, RJ45 Cor	nnection
RTI Com Port2.4 GHz Wireless Communication Port, RJ45 Cor	nnection
RelaysThree, 5 Amps @	030VDC
Mounting Wall-mount or free s	standing
Dimensions (W x H x D) 10.3in (262mm) x 5.25in (134mm) x 1.5in	(38mm)
Weight 1 lb. 3oz.	. (543g)
WarrantyOne Year (Parts &	& Labor)

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The XP-8 is a high-end remote control processor for automating the operation of electronic systems in homes and office buildings. The combination of a blazing fast MPU, real-time/multi-tasking operating system, and tremendous expansion possibilities make the XP-8 the perfect solution for large-scale and complex projects.

The XP-8 has been designed to interface seamlessly with all RTI remote controls and touchpanels, providing an abundance of basic control ports such as infrared, contact closures, and power sensors. Offering the next generation of control, the XP-8 opens up advanced interface options, utilizing bi-directional RS-232 communication and Ethernet. RTI in-wall controllers and ZigBee<sup>®</sup> enabled remote controls (when separate RTI 2.4GHz RF transceivers are used) can now display metadata and status feedback from compatible entertainment and environmental electronics such as music servers and lighting. An internet connection to the XP-8 allows webbased services such as weather forecasts to be displayed on the controller as well.

#### Key Features

- Compatible with RTI ZM-24 2.4GHz Transceiver Module (utilizing Zigbee<sup>®</sup> technology), RM-433 Antenna Module and in-wall controllers.
- Eight multi-purpose I/O ports.
- I/O ports are compatible with industry standard IR emitters and repeater systems.
- I/O ports support optional RTI Power Sensing and Communication modules.
- Eight dedicated RS-232 ports allow bi-directional control.
- Eight programmable relay outputs.
- Eight sense inputs allow events to be triggered from either a contact closure or voltage trigger.
- IR input for IR pass-through or control.
- Input for connection of multiple RF Receiver modules.
- All output ports incorporate both short-circuit and overload protection.
- · Variable IR output power on all ports.
- USB or Ethernet Programming.

Multi-Purpose Output Port	+12VDC, 1.0A sEight custom 3.5mm 4-conductor jacks
-	I modules as well as industry-standard IR emitters. 
	nission Range15kHz - 460kHz
Infrared Input Compat	ible with industry-standard repeaters and receivers
Relays	Eight, 3 Amps @ 30 VDC or 12V/100mA Trigger
Sense Inputs	Eight, Analog/Digital/Closure
	Eight, RJ45 Connections
Ethernet Port	10/100Base-T, RJ45 Connection
RTI Com Port	Zigbee® Communication Port, RJ45 Connection
USB Ports	Two Host, 1 Programming
Expansion Port	
Memory Expansion	SD/MM Card Slot
Display	High-contrast STN LCD
Display Size (H x W)	0.7 in x 2.8 in (18mm x 60mm)
Backlights	Blue LED (Display/Keypad)
Mounting	Rack-mount or free standing
Dimensions (W x H x D)	. 17 in (432mm) x 1.7 in (43mm) x 6.4 in (162mm)
Weight	
Warranty	One Year (Parts & Labor)

# System Kits

#### Great savings on these value priced kits!

Pre-packaged kits offer all the power you'll need to crank up system performance while keeping costs down. These packages come complete with everything needed to give your clients the control they desire - right down to the emitters, while staying within their budget.



# T2-B / RP-1 Kit

#### Includes:

- T2-B Remote Control
- RP-1 Control Processor
- ECB-5 IR Connecting Block
- 5 vIRsa Mouse Infrared Emitters



T2-B



RP-1 Control Processor



ECB-5 IR Connecting Block



5 vIRsa Mouse IR Emitters

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# System Kits





The AD-4 is perfect for residential or commercial installations that require music everywhere - without breaking the budget. This compact audio distribution system contains both a matrix switching pre-amp and a built-in power amplifier. The four local source inputs can be augmented with four remote source inputs, making it easy to listen to music from your bedroom CD player, iPod® dock, or PC. A single Cat-5 cable connects the remote source's audio and infrared signals between the remote location and the AD-4.

The AD-4 audio distribution system is designed to be a seamless extension of an RTI control system. The AD-4 provides the audio switching, amplification and distribution functions, while RTI central processors and user interfaces manage the audio source control, user input and status feedback. Information such as the selected source, volume level, and tone control settings are available for each zone. Imagine every aspect of your environment working in complete harmony – from audio and video to lighting, ambience, temperature and more. Thanks to the efficient engineering that defines the AD-4, there is no reason to limit yourself to a system that was designed only for music – with RTI so much more is possible.

#### Key Features

- · Four analog stereo audio output zones.
- · Four analog audio source inputs.
- Independent volume and tone control for all audio zones.
- Accessory wall plate allows source equipment to be connected remotely with a Cat-5 cable.
- Controlled via RS-232 or IR.
- Twenty-five watts per channel in each zone.
- Optional phone and doorbell mute function.
- · Zone power indicator LEDs.
- Compact, low-profile IU design.

Power	115VAC or 240VAC (Switchable), 120W
Power switch	Front Panel On/Off control with LED power indicator
Mounting	Rack mount or free standing
	nt cover) HxWxD
	k ears & front cover)HxWxD
	2.1in(53mm) x 16.9in(430mm) x 13.3in(340mm)
0	
Operating Temperature	C -10 to +40 degrees F +14 to +104 degrees
Local Input Source	
•	Four, RJ-45 jacks
CRTL In	One, 3.5mm jack, for IR control
Remote Source IR Input	One, 3.5mm jack x 4, for IR input
RS-232 Port	One, Bidirectional control
Trigger Output (Status)	One, 12VDC@15mA
Voltage Output	One, 12VDC@500mA
Mute	3.5mm jack
Doorbell Input Sensitivity (PDM1	) AC/DC 3~12V
Phone input sensitivity (PDM1)	AC25~100V/20Hz
Output Zones	Four zones, two channels each
Rated Power / Channel	>20 Watts, 20Hz to 20KHz
	(RMS, 2 channels driven into 8 ohms)
Power/Channel	>25 Watts @1KHz
	(RMS, 2 channels driven into 8 ohms)
Total Harmonic Distortion @20W	l/8 ohm0.5%.
Total Harmonic Distortion @1W/	8 ohm<0.05%.
S/N @ Rated power, IEC A-wtd,	Source input shorted92dB (mute +1)
Frequency Response 20Hz to 20	0KHz @1W/8 ohms1.5+/-0.5dB
Input Overload	
Input Impedance	>22K ohms
Channel separation @1KHz	>60dB
Crosstalk Between Sources @ra	ted power /1KHz>75dB
Crosstalk Between Zones @rate	d power /1KHz 80dB
Treble control @10KHz	
Bass control range @100Hz	
Warranty	One Year (Parts & Labor)

# **AD-8**



The AD-8 Audio Distribution System combines a 16 channel audio amplifier with a matrix-switching preamplifier. Perfect in larger residential and commercial installations where flexibility is important, the ability to listen to eight different audio sources in any zone will keep everyone happy. Up to four of the audio sources can even come from other areas, so sources like an iPod® or PC can be accessed where they are used, away from the rack. Meanwhile, the integrated Cool Power® amplifier keeps the beat with 25 watts per channel of crystal clear sound. Infrared and one-way RS-232 provide independent volume and tone controls in all output zones, while complete control is provided via two-way RS-232 when combined with RTI control solutions.

When the job grows, the AD-8 can expand along with it. The eight zone outputs can easily be expanded by stacking up to eight AD-8's together, for a maximum of 64 zones. The AD-8 from RTI will provide you with clean, stable, reliable power you can count on for years to come.

#### **Key Features**

- Eight audio source inputs and eight audio zone outputs, expandable to 64 zones by stacking additional AD-8's.
- Four remote source inputs devices located away from rack.
- Accessory wall plate allows remote source equipment to be connected and controlled remotely with a Cat-5 cable.
- Independent volume and tone control for all audio zones.
- Controlled via infrared and RS-232 including two-way feedback when installed with RTI control systems.
- Twenty-five watts per channel in all zones.
- Fixed and variable pre-outputs.
- Phone and doorbell mute function.

Power	
	Front Panel On/Off control with LED power indicator
	Rack mount or free standing
•	k ears & front cover)HxWxD
	5.24in(133mm) x 17.0in(432mm) x 14.75in(375mm)
Weight	
Operating Temperature	C -10 to +40 degrees F +14 to +104 degrees
Local Source Audio Inputs	Eight, RCA jacks x 16
Remote Source Input	
CRTL In	One, 3.5mm jack, for IR control
Remote Source IR Input	One, 3.5mm jack x 4, for IR input
RS-232 Port	One, Bidirectional control
Trigger Output (Status)	One, 12VDC@15mA
Voltage Output	One, 12VDC@500mA
Mute	
Doorbell Input Sensitivity (PDM1	) AC/DC 3~12V
Phone input sensitivity (PDM1)	AC25~100V/20Hz
Output Zones	Eight, two channels each, phoenix connector
Pre-amp Output (fixed or variable	e)Eight zones, two channels each, RCA jacks
Rated Power / Channel	>20 Watts, 20Hz to 20KHz
	(RMS, 2 channels driven into 8 ohms)
Power/Channel	
Total Harmonic Distortion @20W	l/8 ohm0.5%.
Total Harmonic Distortion @1W/	8 ohm<0.05%.
	Source input shorted
Frequency Response 20Hz to 20	0KHz @1W/8 ohms1.5+/-0.5dB
Input Overload	
1 1	
Channel separation @1KHz	
Crosstalk Between Sources @ra	ted power /1KHz>75dB
Crosstalk Between Zones @rate	d power /1KHz 80dB
•	
Warranty	One Year (Parts & Labor)

# **AD-4/AD-8 Accessories**

# RSP-1

#### Remote Source Panel



The RSP-1 allows convenient access to an audio source in a remote location, such as an iPod<sup>®</sup> dock. Connected to the back of AD-4 or AD-8 Audio Distribution Systems, the panel has both 3.5mm and RCA jacks for easy wiring of an audio source output, while another 3.5mm jack is compatible with standard IR emitters for control from a control system.

#### Key Features

- Two RCA input jacks for connection to the output (left and right) of a remote audio source (Receiver, CD Player etc).
- A 3.5mm stereo mini jack for connection to the output of a remote audio source (iPod<sup>®</sup>, PC etc).
- A 3.5mm mono mini jack for connection of an IR emitter to control the remote source. IR control delivered from control system.
- Compatible with standard single-gang Decora® style faceplates.
- Standard single-gang electrical box installation.

#### Specifications

Audio Source Inputs (Front) Two RCA jacks (Left/Right channel)
One, 3.5mm Stereo mini jack
IR Output (Front) One, 3.5mm Stereo mini jack, for control of remote source
Audio Source Input & IR Output Connection (Front) One, RJ-45
Audio Source Input & IR Output Connection (Rear) One, RJ-45
For connection to the AD-4
Dimensions (W x L x D) 1.75" (44mm) x 4.1" (104mm) x 1.1" (28mm)
WarrantyOne Year (Parts & Labor)

# PDM-1

# -

**Phone/Doorbell** 

Mute Module

The PDM-1 Phone-Doorbell Mute module is designed to be wired to the back panel of AD-4 or AD-8 Audio Distribution Systems. When the PDM-1 is installed, the system will temporarily mute when the phone or doorbell rings.

#### Key Features

- A 3.5mm non-shorting stereo mini jack allows easy wiring to AD-4 or AD-8 Audio Distribution Systems.
- Connections for two different doorbell chimes.
- RJ-11 connection for convenient wiring to phone system.
- Compatible with standard single-gang Decora® style faceplates.
- Standard single-gang electrical box installation.

Phone/Doorbell Mute (Front)	One, 3.5mm jack
Doorbell Connectors (Back) Two	, Phoenix Terminal, AC or DC voltage
Phone System Input (Back)	One, RJ-11
Dimensions (W x L x D) 1.75" (44mm) x 4.1" (104mm) x 1.1" (28mm)	
Warranty	One Year (Parts & Labor)

# CP-450



The CP-450 is designed to add more power to an audio distribution system, at a moderate price. Equipped with a 50 watt per channel Cool Power<sup>®</sup> Amplifier, the CP-450 is perfect for installations using the AD-8 Audio Distribution System that require a couple extra speakers for those bigger rooms or maybe adding another room to a zone.

With an audio distribution system such as the AD-8 that does all the source switching and volume control, the CP-450 is designed to sit quietly in the rack, offering up additional power to where it's needed. Designed with a slim form factor, only one space is needed in rack installations, while feet are included for free standing installations. Flexible control options include IR, RS-232 or a voltage trigger input to power the unit on, while a 12VDC trigger out and IR passthrough make daisy chaining CP-450 amplifiers a breeze.

#### **Key Features**

- Four channel amplifier utilizes Cool Power® technology.
- Fifty watts per channel.
- Expands AD-8 speaker outputs.
- Voltage trigger (3-30V AC/DC), RS-232 or IR power control.
- Rackmount or free standing installation.
- IR passthrough port

AC Input Voltage 115VA	C or 240VAC (Switchable), 230W	
Power Switch	Front Panel On/Off with LED	
Mounting	Rack mount or free standing	
Dimensions (HxWxD 2.1in(53mm)	)x16.9in(430mm)x13.3in(340mm)	
Weight	14lbs (6.4kg)	
Operating Temperature C -10 to +4	Odegrees, F +14 to +104 degrees	
IR Input	One, 3.5mm, for IR control	
IR Output	One, 3.5mm, for IR Passthrough	
RS232 Port	One, Bidirectional control	
Trigger Output One, 12	VDC, to trigger another CP-1650	
Trigger Input	One, 3-30VDC, for power control	
Speaker Outputs Two stereo outputs, two ch	annels each, phoenix connectors	
Audio Inputs	Two stereo, RCA jacks (4)	
Rated Power/Channel 50 Watts, 20Hz to 20H	KHz (RMS, 2 chan driven 8ohms)	
Rated Power/Channel 70 Watts 20Hz to 20H	KHz (RMS, 2 chan driven 4ohms)	
IHF Dynamic Power	80 Watts/1KHz at 8 ohm load	
	120 Watts/1KHz at 4 ohm load	
Total Harmonic Distortion @5	0W/8 ohms & 70W/4 ohms, 0.5%	
Total Harmonic Distortion @1W/80hm <.05%		
S/N @ Rated Power, IEC A-wtd, Source Input Shorted 100dB		
Frequency Response		
Input Sensitivity	1W/8ohms, 140mV/1V	
Input Impedance		
Channel Separation	@ Rated Power/1KHz, 85dB	
Crosstalk Between Sources	@ Rated Power/1KHz, 100dB	
Crosstalk Between Zones	@ Rated Power/1KHz, 95dB	
Warranty	One Year (parts & labor)	

# **CP-1650**



Utilizing Cool Power technology to expand the capabilities of an AD-8 audio distribution system, the CP-1650 is perfect in residential and commercial installations where larger rooms need more speakers and areas such as an outdoor patio need to be added to an existing zone. Designed to be an easy and cost effective way to double the power of the AD-8 output, having the additional 50 watts per channel solves those installation puzzles. If the power needs even more boost, you can bridge two channels with a simple flip of a switch, for a whopping 100 watts per channel.

The CP-1650 is designed to offer greater flexibility, especially in larger installations. Unique features, including looped audio outputs, a 12VDC trigger out and IR passthrough, make it easy to daisy chain mulitiple units together. Input level adjustments provide a tremendous amount of control over the audio in each room, keeping the big rooms full of sound and the smaller rooms from blaring. Discrete power control options include IR, two-way RS-232 or a voltage trigger input.

#### Key Features

- Sixteen channel amplifier utilizes Cool Power® technology.
- Fifty watts per channel.
- Audio input level adjustment on each channel.
- Bridgeable audio outputs for increased power (Up to 100W).
- Expands AD-8 speaker outputs.
- Voltage trigger (3-30V AC/DC), RS-232 or IR power control.
- Rackmount or free standing installation.

AC Input Voltage	115VAC or 240VAC (Switchable), 230W
, ,	
0	.24in(133mm) x 17.0in(432mm) x 14.75in(375mm)
, ,	
•	
	One, 3.5mm, for IR Passthrough
00 1	to outputs, two channels each, phoenix connectors
Audio 2000 Outputs Audio - 2 Channel Mode	Eight, RCA jacks x 16
	,
	(RMS, 2 channels driven into 4 ohms)
	60 Watts/1KHz at 4 ohm load
	@20W/8ohm, 0.5%
Audio - Bridged Mode	
	100 Watts, 20Hz to 20KHz
	(RMS, 2 channels driven into 8 ohms)
	(100W/8 ohms), 0.5%
	(1W/8 ohms), 0.05%
Audio - General	
	30W/8 ohms & 50W/4 ohms, 0.5%
	@1W/8ohm <.05%
	urce Input shorted 100dB
	20Hz to 20KHz @1W/8ohm, 1.5+/5dB
	1W @ 8 ohms, 170mV/900mV
Input Impedance	
1	@ Rated Power/1KHz, 60dB
	@ Rated Power/1KHz, 100dB
	@ Rated Power/1KHz, 80dB
Warranty	One Year (parts & labor)

# RTiDock



The RTiDock features a host of benefits not found on other iPod<sup>®</sup> docks, such as rack-mount or desktop installation options, and the ability to sync with iTunes over the network using RTiSync technology. For simple, intuitive operation, the device offers a full on-screen GUI (Graphical User Interface) and video output for navigation through a video display. A sliding tray provides easy access and discreet storage of the iPod for added reliability and a clean design.

The RTiDock offers seamless integration with RTI control devices. Access to all transport functions of the iPod is available using infrared commands. For more robust control, the RTiDock also allows bi-directional communication over RS-232 or IP when used with an RTI control system, for navigation through music libraries. The RTiDock is the ultimate iPod accessory for any distributed audio system!

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#### Key Features

- On-screen interface (GUI) for navigation of music on a TV display.
- Sliding tray provides a clean look and improved reliability.
- RTiSync technology allows synching with iTunes over the network.
- Compatible with iPod Classic<sup>®</sup>, iPod Nano<sup>®</sup>, iPod Touch<sup>®</sup>.
- · Analog and digital audio output connectors.
- Built-in IR receiver and 3.5mm mini-jack for IR control.
- Supports, IR/RS-232/Ethernet control.
- Blue LED base emits a cool glow.
- Slim design allows rack mounting, or may be used free standing.
- · Charges ipod battery.
- Screen saver mode shows album art on television display.
- Field-upgradable firmware.

#### Specifications

iPod Charge Power Supplied5VDC, 1A Power IndicatorBi-color Red/Green, LED
iPod Connection Cable with connector overmold
USB Type A, Future use
RS-232 Control One, RJ45
Ethernet One, 10Base-T/100Base TX, RJ45
Analog Audio Output (Stereo) One, RCA x 2
SPDIF Digital Audio Output One, RCA x 2
Component Video Output (Y/Pr/Pb) One, RCA x 3
IR Inputs One, IR sensor window
One, 3.5mm mini-jack
Network Indicator Two, LED (Orange/Green)
Decorative Base LightingBlue LEDs
Reset Switch One, Rear push button
Operating Temperature C -10 to +40 degrees F +14 to +104 degrees
Dimensions HxWxD1.25" (25mm) x 7.5" (150mm) x 7.5" (150mm)
Weight1lb 6.6oz (642g)
Warranty One Year (Parts & Labor)

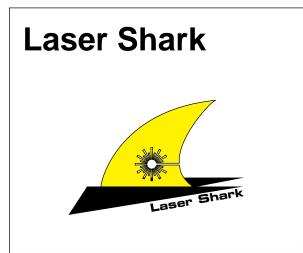
# RTIDOCK RMK Rack Mount Accessory Kit

#### Key Features

- Dual rack mount allows one or two RTiDocks to be hidden away in the rack, yet accessible to everyone.
- A low profile takes minimal space in the rack.

	Dimensions (W x H x D)	17.0" (432mm) x 1.7" (43mm)	x 7.4" (188mm)
Width including mounting wings 19.0" (482)			
	Warranty	One Year	(Parts & Labor)

# **Custom Laser Etching**



RTI is pleased to offer dealers the ability to create their own custom button labels for compatible RTI products. The powerful yet simple to use Laser Shark<sup>®</sup> software allows you to use almost any font or graphic, to insure intuitive control for your clients.

Download the software from the Dealers section of the RTI website for free. (www.rticorp.com/dealers)

Part #: 10-210478-23



- Allows easy customization of button keycap labels on certain RTI products.
- Select from almost any font type, language, symbol or graphic image.
- Compatible with RKM-1+, RK1-2, RK1-4, RK1-8, RK3-V, T1-B, and T3V+.
- Ordering via the Internet.
- Software is free of charge and available to RTI dealers only.

#### Buttons Available for Engraving







T1-B Handheld Remote Control

• Eight "source" button keycaps located at the top of the T1-B. • Four "general purpose" button keycaps below the power button.







T3-V+ Handheld Remote Control • Five "general purpose" button keycaps below the touch screen.

### Accessories

# CB-8 Connecting Block

The CB-8 is an installation accessory designed to provide convenient and reliable power for up to eight\* RTI in-wall system controllers. In addition to providing power, the CB-8 combines and routes the infrared outputs from the system controllers to a single output, for connection to an RTI control processor.

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#### Key Features

- Includes 16VDC, 4.3 Amp power supply capable of powering up to eight RTI in-wall system controllers.\*
- Multiple CB-8 units can be daisy-chained for connecting more in-wall system controllers.
- Standard RJ45 ports for easy connection of touchpanels.

\*NOTE: A maximum of four K4 In-wall Controllers can be used with the CB-8.

#### Specifications

Power	+16VDC, 4.3A
Maximum Current per Port	
Enclosure	Formed steel, black powder coating
Dimensions (H x W)	5.5 in (127mm) x 9.4 in (239mm)
Mounting	Wall-mount or free standing
Weight	12.6oz (359g)
Warranty	One Year (Parts & Labor)



#### Key Features

- Connects to the output ports of the RP-6, ZRP-6, XP-3, XP-6 or XP-8 control processors, or the PCM-8 Control Port Module.
- Offers one-way RS-232 communication with nearly any RS-232 enabled device.
- Software-selectable baud rate up to 115.2K (depending on control system).
- Industry-standard DB-9 male connector.
- No power supply required Power is supplied by the output ports.
- User-definable output strings using Integration Designer® software.

Baud Rate	Software Selectable
	(Depends on attached control system)
Cable Length	12 Feet (3.7 m)
Connector	DB-9 Male
Pins Used	GND, TXD, DTR (tied high)
Dimensions (W x H x D)	1.3" (33mm) x .5" (14mm) x 2" (51mm)
Warranty	One Year (Parts & Labor)

# CPB-1

#### Control Port Connecting Block



The CPB-1 Control Port Connecting Block provides a cost effective solution for installations such as classrooms or boardrooms that require an in-wall controller and both infrared and RS-232 control of local devices. The CPB-1 provides power to one RTI in-wall system controller and has two output ports that allow the connection of up to two single or dual infrared emitters. It also incorporates an RS-232 port for control of devices without the need of an RTI processor.

#### Key Features

- Provides power for one in-wall controller.
- RJ45 DB9 adapter included.
- Two infrared emitter outputs.
- Variable IR output power.
- Allows RTI in-wall controllers to communicate via one-way RS-232 to devices without a processor.
- 12VDC power supply included.

#### Specifications

Power Supply+12VDC, 1A
lumber of IR Output Ports Two
Dutput Ports 3.5mm jacks
Works with industry-standard IR emitters.
R Output Drive 100mA maximum (per port, adjustable)
nfrared Input Compatible with industry-standard repeaters and receivers
RS-232 PortRJ45 Connection
Includes RJ45 to DB9 adapter
Nounting Wall-mount or free standing
Dimensions (W x H x D) 4.0" (102mm) x .3.5" (89mm) x 1.1" (28mm)
Veight
VarrantyOne Year (Parts & Labor)

# ECB-5

#### IR Emitter Connecting Block



The ECB-5 IR Emitter Connecting Block provides expanded infrared signal distribution when used with RTI control processors, in-wall touch panels, third party infrared repeater systems, etc. It has one infrared signal input and five emitter output ports that allow the connection of up to five single or dual infrared emitters.

#### Key Features

- Five infrared emitter outputs.
- incorporates a sense input for monitoring the power status of a switched outlet, current sensor, light sensor, etc.
- Variable IR output power.
- Steel construction.
- No power supply required for operation.

Power Supply (not included)	+9VDC to +16VDC, 1.5A
Number of Output Ports	Five
Output Ports	3.5mm jacks
	Works with industry-standard IR emitters.
IR Output Drive	100mA maximum (per port, adjustable)
Infrared Input Compatible with in	ndustry-standard repeaters and receivers
Mounting	Wall-mount or free standing
Dimensions (W x H x D)	2.6" (66mm) x 2.4" (61mm) x .9" (23mm)
Weight	
Warranty	One Year (Parts & Labor)

Ethernet to Serial Converter



ESC-2

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The ESC-2 Ethernet to Serial Converter provides a convenient way to add two RS-232 ports to an RTI XP series control processor. Wire the ESC-2 to the local Ethernet network with standard cat-5 cable and it will offer full two-way control, as if the device was wired directly to the control processor. Two RJ-45 jacks provide efficient cat-5 cabling between the ESC-2 and the device being controlled.

#### Key Features

- Provides two additional serial ports to an RTI control processor.
- Use multiple ESC-2 modules for virtually unlimited control of serial devices.
- Integrates seamlessly into Integration Designer.
- Can be discovered and configured by Integration Designer over Ethernet.
- Easy wiring to devices using cat-5 cable Includes two RJ-45 to serial adapters

#### Specifications

Power Supply	+5VDC, 1A
Serial (RS-232) Ports	Two, RJ-45
	Includes two RJ-45 to DB9 adapters
Ethernet Port	One, RJ-45
Enclosure	ABS plastic
Mounting	Wall-mount or free standing
Dimensions (W x H x D)	
	. With Tabs 2.8" (71mm) x 1.8" (45mm) x 1.0" (25mm)
Weight	
Warranty	One Year (Parts & Labor)



The IPE-4 IR Port Expander provides convenient infrared signal expansion when used with RTI control processors. It has one 3.5mm infrared signal input jack and four IR emitter output ports that allow the connection of up to four single or dual infrared emitters. No additional power supply is required.

#### Key Features

- $\bullet$  Allows easy expansion of up to four emitters to a control processor IR port.
- Compatible with most industry standard single or dual IR emitters.
- Sturdy steel construction.
- A power supply is not required for the IPE-4 to function.
- A 3'(1m) mono cable with 3.5mm mini-plugs is included for easy connection to RTI processors.

Number of Output Ports	Four
Output Ports	3.5mm jacks
I	Norks with industry-standard IR emitters.
IR Output Drive	100mA maximum (per port)
Infrared Input	
Compatible with RTI processors, ir	ndustry-standard repeaters and receivers
Mounting	Wall-mount or free standing
Dimensions (W x H x D) With tabs	5.1"(130mm) x 1.9"(48mm) x .9"(23mm)
Weight	6.8 oz. (192g)
Warranty	One Year (Parts & Labor)

# **IR-PRO**



**IR Capture** 

System

The IR-PRO is an infrared code capture system that is specifically designed for system integration professionals. Unlike the capture hardware available in universal "learning" remote controls, the IR-PRO incorporates a much more robust and sophisticated circuit design. This, combined with RTI's proprietary software algorithms, allows the IR-PRO to reliably capture almost any infrared code regardless of code format, frequency, output strength etc.

#### Key Features

- Advanced infrared detection circuit ensures accurate code capture under almost any condition.
- Compatible with virtually all brands of A/V equipment and remote controls.
- EMI noise suppression for glitch-free acquisition.
- USB port for programming and power.
- Compact, rugged design.
- · Available only to professional system integrators.
- Includes two (2) USB programming cables and a durable plastic carrying case.
- Two year parts and labor warranty.

#### Specifications

Power Requirements	Powered directly from USB port
IR Carrier Frequency Range	Up to 460 kHz
Operating Temperature	+32°F to +122°F
	(0°C to +50°C)
Operating Humidity	5% to 95% non-condensing
Dimensions 4.5in(1	14mm) x 2.8in(71mm) x 1.3in(33mm)
Weight	6.0 oz. (170 grams)

# PCM-4

Ethernet-enabled Port Control Module

With four multi-purpose output ports and a voltage trigger output (12VDC), the PCM-4 expands the output capabilities of an RTI XP series control processor to accommodate larger projects. Built-in Ethernet allows for convenient control over the local area network (LAN). Each MPIO port provides IR routing capabilities, one-way RS-232 communication\* and power sensing.\*

\* With RTI accessory devices.

#### **Key Features**

- Four multi-purpose I/O ports made available to an RTI XP series control processor.
- Use multiple PCM-4 modules for virtually unlimited control of devices.
- Communication with XP processor over Ethernet for easy expansion to anywhere a LAN connection exists.
- Variable IR output power.
- 12VDC voltage trigger output.

Power Supply+12VDC, 1A
Multi-Purpose Output Ports Four custom 3.5mm 4-conductor jacks
Designed for RTI modules as well as industry-standard IR emitters
IR Output Drive100mA maximum (per port, adjustable)
Infrared Frequency Transmission Range 15kHz - 460kHz
Infrared Input Compatible with industry-standard repeaters and receivers
Ethernet Port One, RJ-45, 10/100 Base-T
Trigger OutputOne, 12 VDC, 100mA max
USB PortOne, Programming
Enclosure Formed steel, black powder coating
MountingWall-mount or free standing
Dimensions (W x H x D) 6.8in (173mm) x 2.9in (74mm) x 1.2in (31mm)
Weight
WarrantyOne Year (Parts & Labor)



#### Key Features

• The PS16-1 is used to power a single in-wall touchpanel, when a CB-8 Touchpanel Connecting Block is not used.

#### Specifications

Power Supplied	
Dimensions (L x W x H)	3.7 in (94mm) x 2.2 in (56) x 1.3 in (34mm)
Weight	10.0oz (290g)
Warranty	One Year

# RCM-4 Ethernet-enabled Relay Control Module

be powered from the included power supply or PoE.

#### Key Features

- · Four individually addressable relays.
- Relays capable of switching up to 28VDC@5A.
- Relays can be used in a normally open or normally closed configuration.
- Relays can be controlled with both IR and Ethernet.
- Powered using power supply or PoE (Power over Ethernet).

Power Supply	+12VDC, 1A
Infrared Input Compatible w	ith industry-standard repeaters and receivers
Relays	Four, capable of switching up to 28VDC@5A
Ethernet Port One, R	J-45, 10/100 Base-T with Power-over-Ethernet
USB Port	One, Programming
Mounting	Wall-mount or free standing
Dimensions (W x H x D)	6.8in(173mm) x 2.9in(74mm) x 1.2in(31mm)
Weight	
Warranty	One Year (Parts & Labor)

# RCM-12



Relay Control

Module

With twelve individually addressable relays and an adjustable device ID, the RCM-12 Relay Control Module provides relay control for projects of any size. An IR input allows the RCM-12 to be triggered from many different sources, including RTI in-wall controllers, control processors or third-party infrared repeater systems. IR commands trigger open and close functions as well as adjustable hold times for momentary relay operation.

#### Key Features

- · Twelve individually addressable relays.
- Relays capable of switching up to 28VDC@5A.
- Discrete set of IR codes and an IR input allows relays to be triggered from virtually any IR programmable system.
- Relays can be used in a normally open or normally closed configuration.
- · Relays create a "dry contact".
- · Programmable momentary relay hold times.
- Adjustable device ID for installations that require more than twelve relays.
- 12VDC power supply included.

#### Specifications

Power Supply	
Infrared Input Compatible with industr	y-standard repeaters and receivers
Relays	Twelve, 28VDC@5A
Control Port	IR/Power
Device IDs	Ten , Rotary switch
Mounting	Wall-mount or free standing
Dimensions (W x H x D) 8.25in (209mi	m) x 5.2in (132mm) x 1.3in (33mm)
Weight	
Warranty	One Year (Parts & Labor)

#### **Key Features**

- Reliable RF reception due to matched antenna, connector, and PCB.
- Modular design that allows multiple RM-433 units to be wired together allowing for nearly any desired coverage area.
- Output signal is compatible with industry standard infrared repeating systems. This allows multiple IR and/or RF receivers to be wired together into an RTI control system.
- No dedicated power supply required. Power is derived directly from the RTI control system.
- A feedback LED confirms operation.

NOTE: A 433MHz enabled remote control must be used with this model of antenna.

#### Specifications

Power Requirements	+9VDC to +16VDC @ 60mA
RF Carrier Frequency	433.92 MHz
Output Drive	200mA maximum
Operating Temperature	+32°F to +122°F
	(0°C to +50°C)
Operating Humidity	5% to 95% non-condensing
Module Dimensions (HxWxD). 3.5in (89mm).	x 3.4in (86mm) x 1.0in (25mm)
Antenna Length	13 in" (330mm)
Weight	4.4 oz. (125 grams)



communicating to RTI control systems and operates at 433MHz. The RM-433 contains a microprocessor that monitors all received signals so that RF noise is filtered out. When valid RF data from an RTI remote is detected, the RM-433 passes the signal through its output driver which allows the data to travel long distances over wire. The output driver is compatible with industry standard infrared repeating systems, and can be wired together with those systems or with additional RM-433 units.

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# VPS-1

#### Voltage Sensor Module



The VPS-1 Voltage Power Sensor monitors the on and off status of almost any electronic component and provides this power status information to RTI control systems such as the XP-6 Remote Control Processor. When the attached component is powered on, the VPS-1 detects the voltage supplied from the component, an attached power supply, or a third-party power sensor, and sends a signal to the RTI control system.

#### Key Features

- Connects to the output ports of the RP-6, ZRP-6, XP-3, XP-6 or XP-8 control processors, or the PCM-8 Control Port Module
- · Detects the on/off status of almost any component.
- No power supply required Power is supplied by the output ports.
- Power sensing circuit is housed in a compact, rugged ABS enclosure.
- LED light indicates the current power status.
- · Control cable can be extended up to 500 feet.

#### **Specifications**

Output	Compatible with industry standard IR emitters
IR Output Drive	100mA maximum
Input Requirements	. 3V to 24VDC -or- 9V to 30V P-P AC (50Hz min)
Maximum Current Consump	otion 0.5mA
Control Cable Length	
Voltage Sensor Cable Lengt	th
Dimensions (W x H x D)	1.75" (44mm) x 3.0" (76mm) x 0.7" (18mm)
Warranty	One Year (Parts & Labor)

# vIRsa<sup>®</sup> Mouse IR Emitter



Designed with the professional integrator in mind, the "versatile" vIRsa Mouse is an IR emitter built to outperform all others. If is loaded with features to make installations go smoother, such as an unobtrusive, lowprofile design, a flexible film adhesive and a separate holder that allows easy removal/replacement of the emitter. Since reliability is of utmost importance, the vIRsa Mouse is engineered with an actual (translucent) PCB to improve the integrity of electrical connections, a built-in resistor protects against over-driving and precision molding ensures consistent quality.

#### Key Features

- Sleek, low-profile and symmetrical design.
- Separate holder allows for easy removal and replacement of emitter.
- Includes two emitter holders (one red, one clear).
- Blue LED flasher can be visible during normal operation or only for troubleshooting.
- Ten foot cable reaches the entire rack.
- Flexible film adhesive conforms to curved surfaces.
- Translucent circuit board.
- Industry standard 3.5mm mini-plug uses precision over-molding to ensure consistency.
- Includes cable management strap.

#### Specifications

Output Compatible with industry standard IR repeater systems		
Infrared Power Requi	irements	12VDC, 100mA maximum
Maximum Current Co	onsumption	30mA
Cable Length		10 feet (3.0 m)
Plug type		3.5mm
Dimensions (W x H x	c D)	0mm) x .5" (13mm) x 0.1" (2.5mm)
Warranty		90 days

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# **ZB-PRO**Professional 2.4GHz Network Management Tool



The ZB-Pro is a Professional Network Management Tool for use with Remote Technologies Inc. 2.4 GHz Zigbee<sup>®</sup> networks. It operates in different modes, which are programmed automatically by the specific Integration Designer<sup>®</sup> function begin used. The ZB-Pro is attached to a standard USB port of a PC and is used for purposes, such as downloading programming and firmware updates into a RTI ZM-24 Transceiver Modules.

# **ZM-24**



The ZM-24 2.4GHz Transceiver Module is capable of more than just receiving signals - it can transmit signals as well. This creates a bi-directional communication link between certain RTI control processors and handheld remote controls. The ZM-24 is easy to install, since only one module needs to be hard-wired to the control processor, while additional "repeater" modules can be added by powering them from any electrical outlet within communication range of other modules. The ZM-24 units will then create a self-healing "mesh" network which adapts to changes or problems with the communication path.

#### Key Features

- Downloads network configuration data into an RTI ZM-24 Transceiver Module.
- Updates the firmware in the RTI ZM-24 Transceiver Module.
- No external power supply is required. Power is derived directly from the USB port.
- Feedback LEDs confirm various operations.
- Compact, rugged design.
- Available only to professional systems integrators.
- Two year parts and labor warranty.

#### **Specifications**

Power Requirements Powered directly from USB port RF Carrier Frequency2.4GHz (Zigbee <sup>®</sup> technology)
Standards IEEE 802.15.4
Operating Temperature +32°F to +122°F
(0°C to +50°C)
Operating Humidity 5% to 95% non-condensing
Dimensions (HxWxD) 4.28in (109mm) x 1.37in (35mm) x .65in (17mm)
Weight 1.1 oz. (32 grams)

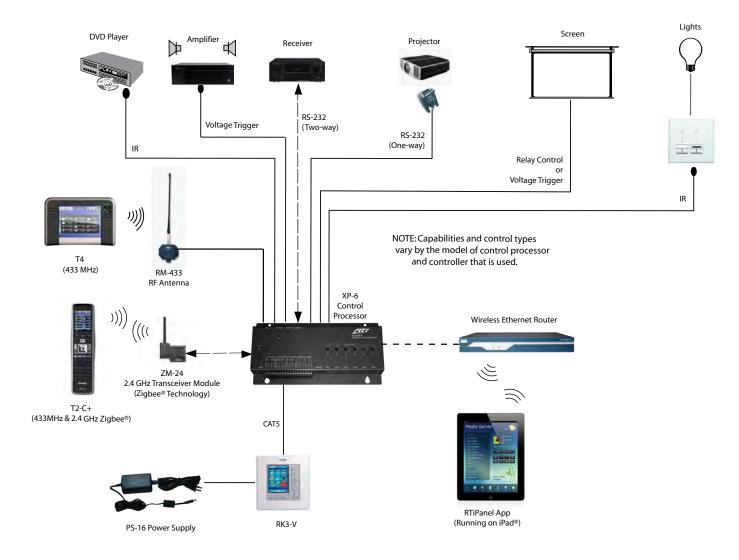
#### **Key Features**

- Enables bi-directional wireless communication.
- Wireless communication range between ZM-24 modules up to 100 feet.
- Connects to a central processor from up to 1000 feet away using standard Cat-5 cable.
- Can be used in "coordinator" mode, or create a self-healing mesh network by adding modules configured in "repeater" mode.
- Utilizes IEEE802.15.4 wireless Zigbee<sup>®</sup> communication at 2.4Ghz.
- Easy mounting with adjustable antenna and detachable wall bracket.
- Receives power from an RTI control processor or the included power supply. or CB8 connecting block

NOTE: A 2.4 GHz Zigbee<sup>®</sup> enabled remote control and processor must be used with this model transceiver. It is not compatible with the 433MHz remote controls.

Power+9VDC to +	-16VDC, 60mA
RTI Com Port Two-way Zigbee® Communication Port, RJ	45 Connection
Drives up to 1000 ft	(300 m) of wire
Wireless NetworkingIEEE802.15.4 Zigbee® net	work compliant
RF Frequency Range2.	4Ghz - 2.5Ghz
Operating Temperature +32°F to +122°F	(0°C to +50°C)
Operating Humidity5% to 95% N	on-condensing
Device Capability Total number of devices is limited o	nly by memory
CommunicationsOTA (Over-the-air)	Programmable
EnclosureHigh-impact molded AB	S plastic, black
MountingDeta	ichable bracket
Dimensions -Ant. Flat (WxHxD)3.5" (89mm) x 4.0" (101mm)	x 1.1" (28mm)
Dimensions -Ant. Ext. (WxHxD). 3.5" (89mm) x 7.25" (184mm)	x 1.1" (28mm)
Weight	4 oz (113g)
WarrantyOne Year (	(Parts & Labor)

#### **Application Diagram - Home Theater**



Access to a room full of entertainment electronics should be easy, and an award-winning RTI handheld remote control is the solution. Combining unlimited customization with a powerful array of accessory devices, RTI controllers simplify any installation and make the most of today's technology.

To control todays home theater, the control system must be able to adapt to any situation. Systems vary from the most basic with just a television and a couple video sources to the ultra-complex environments that surpass the traditional theater experience with everything from motorized screens, specialized lighting and surround sound.

#### **Equipment Considerations**

RTI control systems give you nearly unlimited flexibility when deciding which controller and processor will be used. This allows you to match the controller to the installation needs, budget and the personal preference of the end-user.

In many cases, it is the equipment being controlled that will affect which control processor is chosen. Requirements such as the need for IR routing, RS-232 control or relay controlled devices mean a more powerful processor is going to be needed.

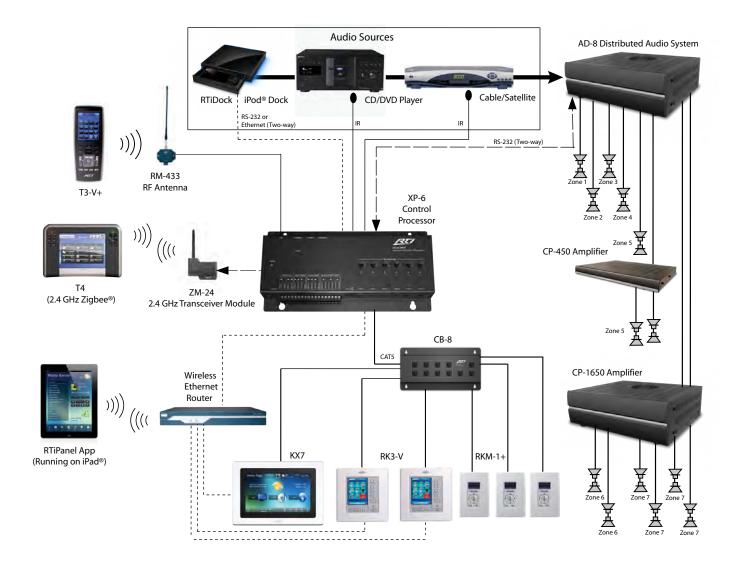
#### Basic System

Remote Controls: T1-B/T2-B/T2-Cs+/T2-C+ In-wall Controllers: RK1/RK-3V Control Processor: RP-1/XP-3/XP-6

#### **Complex System**

Remote Controls: T2-Cs+T2-C+/T3-V+/T4/RTiPanel App In-wall Controllers: RK3-V/KX7/RK10 Control Processor: XP-6/XP-8

### Application Diagram - Multi-Zone Audio



Multi-zone audio challenges the custom installer with a new set of system design issues that need to be transparent to the end-user. Cabling extends to all parts of the home or office, the control system interface must be simple to use and it has to blend into the environment.

With a full line of in-wall products, RTI control systems give you the flexibility to meet rigorous control requirements throughout the home or business, while handheld remote controls and the RTiPanel App can be used in locations that simply cannot be cabled, such as a pool or spa area.

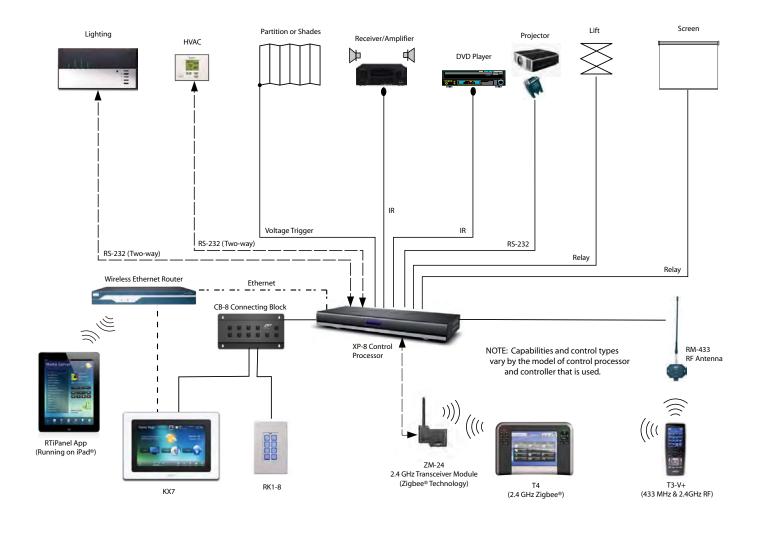
#### **Equipment Considerations**

In the case of multi-zone audio control, which controllers are used around the home/office focuses on functionality at the points of control. It becomes important to know if the end-user only needs audio control, or may enjoy the benefits of a unified control method for lighting, HVAC and security as well. Handheld remotes and the RTiPanel app may also be used for zones that may have other equipment being controlled and a weather resistant remote control works well in special circumstances such as a pool area. A more powerful control processor is going to be required in most cases.

#### Basic System

Remote Controls: T1-B/T2-B/T2-Cs+/T2-C+ In-wall Controllers: RKM-1+/RK1/RK3-V Control Processor: XP-6 *Complex System* Remote Controls: U2/T2-C+/T3-V+/T4/RTiPanel App In-wall Controllers: RK3-V/KX7/RK10 Control Processor: XP-6/XP-8 *Distributed Audio System* AD-4/AD-8 CP-450/CP-1650 Amplifiers RTiDock iPod Dock

#### **Application Diagram - Conference Room**



In the boardroom, time is money and excellence is expected. That's why RTI control systems set the standard for intuitive operation, reliability under pressure, and wide-ranging capabilities. Our technology isn't just a tool you can rely on- it's a business asset you can leverage.

RTI control systems are programmed using Integration Designer<sup>®</sup> software which offers amazing customization possibilities. This allows the installer to create a simple yet powerful control interface along with the ability to get creative with corporate colors and graphics. In addition, a full line of handheld remote controls with robust RF communication, a line of 2.4GHz Zigbee<sup>®</sup> remote controls, the RTiPanel and Virtual Panel Apps, and a full line of in-wall products, gives the installer all the tools necessary to offer reliable control in nearly any environment.

#### **Equipment Considerations**

Any RTI in-wall or handheld controller may be used with any control processor. This allows you to match the controller to the installation needs and the personal preference of the end-user, when deciding what controller is used.

In many cases, it is the equipment being controlled that will affect which control processor is chosen. Requirements such as the need for IR routing, RS-232 control or relay controlled devices mean a more powerful processor is going to be needed.

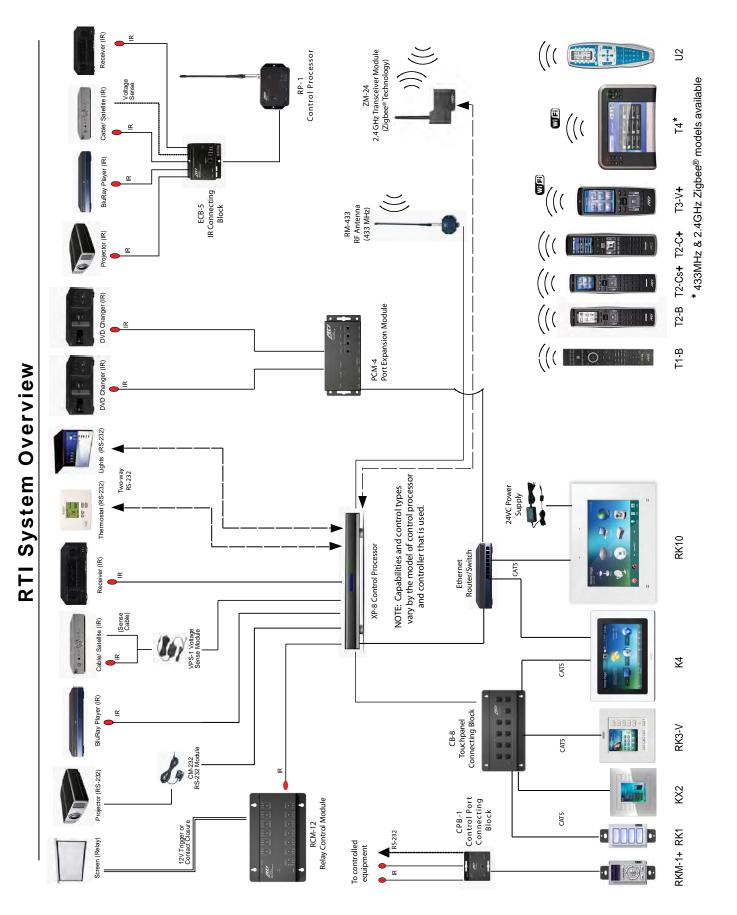
#### Basic System

Remote Controls: T1-B/T2-B/T2-Cs+/T2-C+ In-wall Controllers: RK1/RK3-V Control Processor: RP-1/XP-3/XP-6

#### **Complex System**

Remote Controls: T2-Cs+/T2-C+/T3-V+/T4/RTiPanel App In-wall Controllers: RK3-V/KX7/RK10 Control Processor: XP-6/XP-8

## **RTI System Overview**



The product specifications, designs listed in this price book are subject to change without noticeÈ Unauthorized release of this price book is considered a violation of trade secret laws and may lead to legal action.

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