PRODUCT REFERENCE GUIDE

CONFIDENTIAL

FROM THE PLAYROOM

TO THE BOARDROOM

KX7/CX7

Wired Interfaces

T1-B+/T2i/T2x

Wireless Interfaces

AD-4x/AD-8x

Distributed Audio

RTI

It's Under Control®

Table Of Contents

Contact Information

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Purchasing RTI Products

To ensure easy, reliable sales and service, RTI has a partnership with a network of distributors. Systems integrators interested in selling and installing RTI products should contact their local distributor to obtain a copy of the RTI Dealer Agreement and information on becoming an RTI certified partner. Visit *www.rticorp.com* and click on the "Where to Buy" link for location and contact information.

Training

Learn how to program the entire line of RTI products with the many training options brought to you by RTI Advanced Control University. Training opportunities include:

- On-site trainings at distributor locations.
- Interactive web training seminars - (see Dealer area of the RTI website for schedule).
- Download training videos from the Dealer area of the RTI website.
- Download the Integration Designer® Programming Manual from the Dealer area of the RTI website.

Warranty

NOTE: For complete warranty information please consult the product operation/installation guide.

Remote Technologies Incorporated warrants its products for a period of one (1) year from the date of purchase from an authorized Remote Technologies Incorporated distributor. Rechargeable batteries carry a 90 day warranty. Warranties apply only to those products sold through authorized RTI dealers. Any product found to be defective can be exchanged at an authorized RTI distributor within 30 days of purchase. After 30 days, all products must be returned to RTI for repair, after receiving a Return Authorization from RTI Customer Service.

Service:

RTI products not covered by warranty can be repaired for a fee by obtaining a Return Authorization number from RTI Customer Service. The Return Authorization number should be referenced on the shipping carton and a copy of the Return Authorization form should accompany the product in the shipping carton. Products returned for service may be repaired or replaced at RTI's discretion.

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SURFiR® Companion Remote

The SURFiR companion remote represents a revolutionary new concept in control. The remote allows users to incorporate the Apple® or Android® devices as the main graphical interface for their control system, while adding the convenience of tactile control with hard buttons. The SURFiR actually stays in sync with the RTiPanel app, controlling the same electronics and eliminating the numerous screen swipes needed for control tasks that require frequent interaction.

Part #: 10-210483-19

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.
• Select between 433MHz (one-way) and 2.4GHz (two-way) operation.
• Remote finder wakes up SURFiR and emits loud beeps (must use Zigbee®).
• Includes eight buttons that can be custom labeled.
• Works with any XP series control processor*.
• Battery low indicator.
• Uses 4 AAA batteries.

Installation Notes

• Does NOT have infrared control capability.
• Requires XP series control processor.
• Requires an RM-433 antenna, ZM-24 2.4GHz transceiver module or an RTI control processor with an integrated antenna.
*NOTE: When used with an XP-3 control processor, 2.4GHz Zigbee RF must be used. 433MHz RF is NOT supported with XP-3 via the RM-433.

Specifications

```
Power ....................................................................................  4 AAA Alkaline batteries
Power Management ...........................................................................Automatic On/Off)
Radio Frequency Control Range........................................ Up to 100 feet (30.5 meters)
Radio Frequency Carrier ................................802.15.4 @ 2.4Ghz (Zigbee® technology)
........................................................................................................................433MHz
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 ................................................................................8.0 oz. (228g) with batteries
Warranty ...............................................................................One Year (Parts & Labor)
```

T1-B+ Wireless Interface

The T1-B+ is the third generation of RTI's popular T1 universal system controller, now featuring the RTI dual RF platform and backlit buttons. The T1-B+ allows all other factory remote controls to be combined into one simple, ergonomic user interface providing powerful one-handed system control.

Part #: 10-210503-12

Laser Shark® Compatible

Key Features

• Dual RF transmission capability uses 433MHz and 2.4GHz (utilizing Zigbee technology).
• Comfortable ergonomic design permits effortless, one-handed operation.
• Eight source and four general purpose assignable/programmable keypad buttons with interchangeable key caps (Laser Shark compatible).
• Forty assignable/programmable keypad buttons.
• 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 RS-232 control.
• System includes a Lithium-Ion Battery and a docking station.
• USB Programming.

Installation Notes

• RF control requires an RM-433 433MHz antenna, ZM-24 2.4GHz transceiver module and an RTI control processor, or an RTI control processor with an integrated antenna.

Specifications

```
Power .......................................................  3.6 VDC, 850 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)
Radio Frequency Carrier ................................. 802.15.4 @ 2.4Ghz (Zigbee technology)
..............................................................................................................................433MHz
Battery Charge Time......................................................................................3-4 Hours
Communications..............................................................................USB 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
Weight .............................................................................. 7 oz. (200g) with battery pack
Warranty ........................................... One Year (Parts & Labor) / 90 days on the battery
```

T2-Cs+ Wireless Interface

The second generation of the T2-Cs comes equipped for the modern media room. The customizable 2.4" display and fully programmable hard buttons, along with the RTI dual RF technology provide reliable control of the entire system while remaining easy to use, including two-way feedback from supported devices.

Part #: 10-210447-19

Key Features

• Dual RF transmission capability uses 433MHz and 2.4GHz (utilizing Zigbee technology).
• Two-way feedback from compatible devices using 2.4GHz (Zigbee).
• 2.4" color TFT LCD to display custom buttons, text and graphics.
• Integrated high-resolution touchscreen.
• 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.
• Three-way rocker switch for scrolling list navigation.
• Capable of transmitting IR and RF from a single button press.
• Completely customizable and programmable.
• System includes a Lithium-Ion Battery and a docking station.
• USB Programming.

Installation Notes

• RF control requires an RM-433 433MHz antenna, ZM-24 2.4GHz transceiver module and an RTI control processor, or an RTI control processor with an integrated antenna.

Specifications

Power .... 3.6 VDC, 1200 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)
Radio Frequency Carrier .... 802.15.4 @ 2.4Ghz (Zigbee technology)
....433MHz
Touchscreen Display .... 2.4 in (61mm) diagonal, high-brightness color TFT LCD
.... 1/4 VGA (240x320 pixels) with 65K colors
Battery Charge Time..3-4 Hours
Dimensions (L x W x D)...................... 9.75 in (248mm) x 2.5 in (64mm) x 1.0 in (25mm)
Weight .... 9 oz. (255g) with battery pack
Warranty .... One Year (Parts & Labor) / 90 days on the battery

T2i Wireless Interface

The sleek, ergonomic design of the T2i is combined with cutting edge technologies to provide the powerful control capabilities needed in today's automated home. The T2i control interface is customizable for easy, intuitive control, even displaying feedback from supported electronics on it's 2.8" edge-to-edge color touchscreen.

Part #: 10-210505-14

Key Features

• Dual RF capability uses 433MHz and 2.4GHz (utilizing Zigbee technology).
• Two-way control using 2.4GHz (Zigbee) and RTI control components.
• Flush mounted 2.8" color LCD touchscreen.
• Accelerometer provides instant-on control.
• Forty-seven assignable/programmable keypad buttons.
• Cursor button allows simple scrolling list navigation.
• System includes a Lithium-Ion battery and docking station.

Installation Notes

• RF control requires an RM-433 433MHz antenna, ZM-24 2.4GHz transceiver module and an RTI control processor, or an RTI control processor with an integrated antenna.
• Program updates require a USB cable (USB A to Micro B - *not included*) to be connected between the docking station and a PC, or a proprietary RTI programming cable which is included with new RTI IRPRO programming kit. Contact RTI customer service or your local distributor to purchase this cable if you already own an IRPRO programming kit).

Specifications

Power .... 3.6 VDC, 1800 mAh Lithium-Ion Battery Pack
Power Management ....Automatic On/Off (accelerometer)
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)
Radio Frequency Carrier ....802.15.4 @ 2.4GHz (Zigbee Wireless Mesh Networking)
....433MHz
Touchscreen Display ....2.8 in (71mm) diagonal, High-brightness color TFT LCD
.... 1/4 VGA (240x320 pixels) with 64K colors
Battery Charge Time..3-4 Hours
Communications................................ USB 2.0 programming port (proprietary connector)
Dimensions (L x W x D).............................. 10.0" (254mm) x 2.3" (58mm) x 0.7" (20mm)
Weight .... 8.3 oz. (236g) with battery pack
Warranty .... One Year (Parts & Labor) / 90 days on the battery

T2x Wireless Interface

The remarkable T2x is the fifth generation of RTI's renowned T2 remote control platform. The 2.8" color display delivers vivid custom graphics, including two-way feedback with album art, while the perfect selection of soft-touch buttons provide quick access to common tasks. The T2x also features ground breaking innovations such as grip sensors and an accelerometer for instant-on control, an edge-to-edge touchscreen allows improved gesture control, WiFi®, and more!

Part #: 10-210504-13

Key Features

• Dual RF capability uses 433MHz and 2.4GHz (utilizing Zigbee technology).
• Integrated wireless Ethernet for album art, wireless updating and more.
• Two-way control using 2.4GHz (Zigbee), WiFi and RTI control components.
• Flush mount, edge-to-edge touchscreen for improved gesture support.
• Integrated grip sensors and an accelerometer provide "instant-on" control*.
• Forty-seven assignable/programmable keypad buttons.
• Cursor button allows simple scrolling list navigation.
• System includes a Lithium-Ion battery and docking station.

Installation Notes

• RF control requires an RM-433 433MHz antenna, ZM-24 2.4GHz transceiver module and an RTI control processor, or an RTI control processor with an integrated antenna.
• Initial program updates require a USB cable (USB A to Micro B - *not included*) or a proprietary RTI programming cable which is included with new RTI IRPRO programming kit. Contact RTI customer service or your local distributor to purchase this cable if you already own an IRPRO programming kit. Once a WiFi® connection is established, programming may be updated wirelessly over the LAN (See op guide).
• *Grip sensors and accelerometer cannot be used simultaneously.

Specifications

Power .... 3.6 VDC, 1800 mAh Lithium-Ion Battery Pack
Power Management ....Automatic On/Off (accelerometer)
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)
Radio Frequency Carrier ....802.15.4 @ 2.4GHz (Zigbee Wireless Mesh Networking)
....433MHz
Wireless Ethernet .... 802.11b/g @ 2.4Ghz
Touchscreen Display ....2.8 in (71mm) diagonal, High-brightness color TFT LCD
.... 1/4 VGA (240x320 pixels) with 64K colors
Battery Charge Time...3-4 Hours
Dimensions (L x W x D)............................. 10.0" (254mm) x 2.3" (58mm) x 0.7" (20mm)
Weight .... 8.8 oz. (250g) with battery pack
Warranty .... One Year (Parts & Labor) / 90 days on the battery

T3-V+ Wireless Interface

The pinnacle of elegance, the next generation T3-V+ combines cutting-edge design and limitless customizability with a host of features, including a 3.5" LCD touchscreen with eye-popping color, wireless Ethernet with an integrated web browser and dual RF communication. Use it as a powerful standalone controller or as part of an advanced RTI system for wireless control and feedback from electronic devices such as music servers and environmental controls.

Part #: 10-210434-15

**Laser Shark®
Compatible**

Key Features

• Dual RF capability uses 433MHz and 2.4GHz (utilizing Zigbee technology).
• Integrated 802.11b/g wireless Ethernet with improved performance.
• Two-way feedback from compatible devices using 2.4GHz (Zigbee) and RTI control accessories.
• 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.

Installation Notes

• RF control requires an RM-433 433MHz antenna, ZM-24 2.4GHz transceiver module or an RTI control processor with an integrated antenna.
• WiFi connection required for album art feedback, viewing MJPEG video and wireless updating (future support).

Specifications

Power ....3.6 VDC, 1700 mAh Lithium-Polymer 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)
Radio Frequency Carrier ....802.15.4 @ 2.4Ghz (Zigbee® technology)
....433 MHz
Wireless Ethernet .... 802.11g @ 2.4Ghz
Touchscreen Display .... 3.5 in (89mm) diagonal, high-brightness color TFT LCD
.... Full VGA (480x640 pixels) with 65K colors
Battery Charge Time...3-4 Hours
Dimensions (L x W x D)........................ 7.6 in (193mm) x 3.1 in (79mm) x 1.1 in (28mm)
Weight .... 7.4 oz. (210g) with battery pack
Warranty .... One Year (Parts & Labor) / 90 days on the battery

RKM-1+ Multi-Room Audio Keypad

Perfect for multi-room audio control, the RKM-1+ is designed for ease of use and affordability. It fits into a single gang electrical box and ships with white, black and light almond faceplate and interchangeable buttons, ensuring seamless integration into homes and buildings. When used together with compatible RTI control processors, the RKM-1+ can communicate bidirectionally with many popular multi-zone receivers and distributed audio systems, reflecting current source and volume level on its LED backlit lens.

Part #: 10-210492-19

Laser Shark® Compatible

RKM-1+ shown with Decora® style wall plate (*not included*).

Key Features

• Provides control and feedback from distributed audio systems (ex. AD-4/AD-8) and multi-zone receivers via an RTI XP control processor (XP4/XP6/XP8s only).
• Includes white, black, and light almond faceplate/buttons.
• Use any standard Decora® type wallplate.
• Fits in a single gang electrical outlet box.
• Eight selectable sources.
• Backlit volume level indicator.
• Customizable LED backlit film source indicator.
• Custom laser-etched LED films may be ordered using Laser Shark.
• Open architecture allows control of virtually anything.
• IR output port drives up to 1000 feet of wire.
• Completely customizable and programmable.
• USB Programming.

Installation Notes

• Power supply not included - A separate power supply (PS16 or similar) or an RTI CB8 connecting block is required for power. Directly wiring to an RTI control processor Expansion Port is not recommended.
• Laser Shark compatible for custom engraved source selection lens.

Specifications

Power ....+9VDC to +16VDC, 350mA max
Infrared Output Port...200mA output
....Drives up to 1000 ft (300 m) of wire
Operating Temperature.. +32°F to +122°F (0°C to +50°C)
Operating Humidity...5% to 95% Non-condensing
Total System Memory .... 64K Bytes Flash (non-volatile) memory
Communications..USB programming port
Mounting...Mounts into single gang electrical outlet 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... .75 in (19mm) Plus Cables
Weight .... 4 oz (284 g)
Warranty ....One Year (Parts & Labor)

RK1+ 2/4/8 Button Keypad

Sized for a single gang electrical box, the RK1+ incorporates two, four or eight fully-programmable buttons. For easy integration into any decor, all RK1+ kits include white, black and light almond faceplates and keycap labels. To make the control experience even more intuitive, a certificate for one free Laser Shark engraved button set is also included and the button backlight color can be configured. The RK1+ has a built-in IR control system for direct control of electronic systems, while expanded control capabilities including two-way feedback (via button backlight color) are available when it is part of an RTI control system.

RK1+ Part #
2 Button: 10-210527-18
4 Button: 10-210528-19
8 Button: 10-210529-20

Laser Shark® Compatible

RK1+ shown with custom engraved Laser Shark buttons and Decora style wall plates.
• RK1+ ships with a certificate for one free Laser Shark engraved button set.
• Decora wall plates are *not included* with RK1+.

Key Features

• Two, four or eight assignable/programmable buttons.
• Ships with white, black and light almond faceplate/keycap kits.
• Ships with a certificate for one free Laser Shark engraved button set.
• User-definable backlight color.
• Use any standard Decora® type wallplate.
• Master/slave configuration allows two keypads to work in conjunction.
• IR output port drives up to 1000 feet of wire.
• Completely customizable and programmable.
• Fits in a single gang electrical outlet box.
• Optional modules/processors for voltage sensing (to monitor power status of equipment) and two-way control.
• USB Programming.

Installation Notes

• Power supply not included - A separate power supply (PS16 or similar) or an RTI CB8 connecting block is required for power. Directly wiring to an RTI control processor Expansion Port is not recommended.
• RK1+ ships with a certificate for one free Laser Shark engraved button set.

Specifications

Power .... +9VDC to +16VDC, 350mA max
Backlights .... RGB LED - User-definable color
Infrared Output Port...200mA output
....Drives up to 1000 ft (300 m) of wire
Operating Temperature.. +32°F to +122°F (0°C to +50°C)
Operating Humidity...5% to 95% Non-condensing
Communications..USB programming port
Mounting... Mounts into single gang electrical 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)
Installation Cut-Out (H x W x D) .... 2.8 in (71mm) x 1.8in (46mm) x 1.37 in (35mm)
Total Depth in Wall ....1.7 in (43mm) Plus Cables
Weight .... 4 oz (284 g)
Warranty ....One Year (Parts & Labor)

KX2 Wired Interface

The KX2 in-wall user interface has a clean, sleek design with twelve programmable hard buttons and a 2.8" color touchscreen. The hard buttons and graphic interface are custom programmed using RTI's Integration Designer® software for full control of electronics. A built-in infrared output port allows direct control or get two-way control when used with an RTI XP series control processor. In addition, the unit's integrated 10/100Base-T Ethernet port with Power-over-Ethernet (POE) provides the flexibility to accommodate any installation.

Part #: 10-210486-22

Laser Shark® Compatible

• Ships with stylish, low-profile white bezel - bezels also available in black, light almond and brushed aluminum.
• Faceplate and buttons are black with a glossy finish.
• Fits in a 4"x4" square electrical junction box (See important information below).
• Integrated mounting wings for easy installation in retrofit installs.
• Customizable 2.8" display and twelve assignable/programmable buttons.
• QVGA resolution (240w x 320h) TFT LCD to display custom buttons, text and graphics.
• Integrated 10/100Base-T Ethernet port with Power-over-Ethernet.
• IR output drives up to 1000 feet of wire.
• Optional modules/processors for voltage sensing, relays and advanced two-way control.
• USB and Ethernet Programming.

Installation Notes

• Power supply not included - A separate power supply (PS16 or similar), an RTI CB8 connecting block or a network router with Class2 Power over Ethernet (PoE) is required for power.
• Laser Shark compatible for custom engraved button keycaps.

Specifications

Power ....+9VDC to +16VDC, .5A max or 802.3af Power-over-Ethernet
Touchscreen Display ....2.8" (71mm) diagonal, high-brightness color TFT LCD
....QVGA (240w x 320h pixels) with 65K colors
Infrared Output Port.........................200mA output, Drives up to 1000 ft (300 m) of wire
Operating Temperature.. +32°F to +122°F (0°C to +50°C)
Operating Humidity..5% to 95% Non-condensing
Ethernet Port .... 10/100Base-T with Power-over-Ethernet
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 .... 1.2 in (31mm) plus cables
Weight .... 7.5 oz (212g)
Warranty ....One Year (Parts & Labor)

KX2 Accessories

Standard Bezels

BZLA-KX2 - Light Almond...10-210526-17
BZB-KX2 - Black..10-210524-15

Premium Bezels

PBZBR-KX2 - Brushed Aluminum 10-210518-18

KX2 Installation Notes

The KX2 uses a standard 4"x4" electrical junction box. These should be available at most hardware stores or electrical supply stores online (ex. Granger.com)
NOTES:
• A dual gang outlet box will NOT work.
• The KX2 has .38" thick corner tabs, making the KX2 protrude .38" from the front edge of the junction box. Therefore, the electrical box should be mounted flush with the wall stud. Typically wall sheeting materials like drywall are ½" or thicker, allowing the KX2 to be flush with the wall sheeting. If the wall sheeting is thinner than .38", the junction box will need to be mounted set back.
• Use #8 – 32 flat head screws.
• Box should be 1.5" minimum depth.

Electrical Junction Box
4"h x 4"w x 1.5"d

3.8" (96.5mm)
3.4" (86mm)
1.3" (33mm)
1.2" (30.5mm)
3.8" (96.5mm)
3.4" (86mm)
ETHERNET   CONTROL
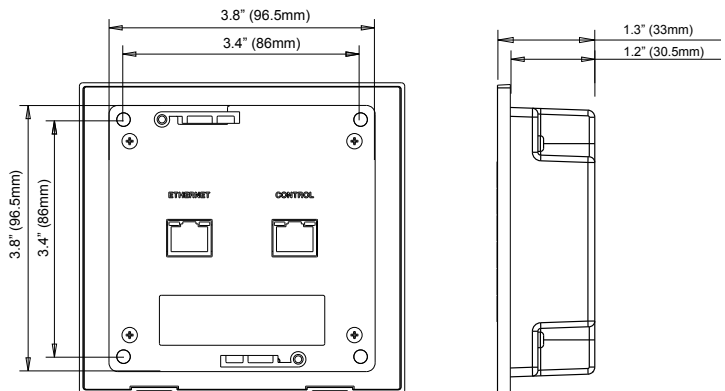
RK3-V Wired Interface

The perfect balance between display size and resolution, a 3.5 inch LCD is small enough to fit in any decor, yet the full VGA (640x480) high resolution touchscreen provides ample room for displaying custom graphics, web pages and CD cover artwork in amazing detail. In addition, the built-in Ethernet port allows the RK3-V to display MJPEG video from network security cameras and access the internet and more.

Part #:
Satin White Face, Buttons & Bezel: 10-210346-17
Gloss White Face, Buttons & Bezel: 10-210347-18
Satin Black Face, Buttons & Bezel: 10-210344-15
Gloss Black Face, Buttons & Bezel: 10-210345-16

Laser Shark® Compatible

Key Features

• Wide array of stylish low-profile bezels with snap-on attachment available.
• Available with white or black faceplate 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.

Installation Notes

• Power supply not included - A separate power supply (PS16 or similar), an RTI CB8 connecting block or a network router with Class3 Power over Ethernet (PoE) is required for power.
• Laser Shark compatible for custom engraved button keycaps.

Specifications

Power ....+9VDC to +16VDC, .5A max or 802.3af Power-over-Ethernet
Power Management ....Adjustable backlight brightness/power down time
Touchscreen Display .... 3.5 in (89mm) diagonal, high-brightness color TFT LCD
....VGA (480w x 640h pixels) with 65K colors
Infrared Output Port.........................200mA output, Drives up to 1000 ft (300 m) of wire
Ethernet Port .... 10/100Base-T with Power-over-Ethernet
Operating Temperature... +32°F to +122°F (0°C to +50°C)
Operating Humidity..5% to 95% Non-condensing
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 .... 1.13 in (29mm) plus cables
Weight .... 10 oz (284 g)
Warranty ....One Year (Parts & Labor)

RK3-V Accessories

Standard Bezels

BZW-RK3V - White..30-210130-10
BZA-RK3V - Almond..30-210132-12
BZI-RK3V - Ivory 30-210133-13
BZS-RK3V - Silver...30-210134-14
BZB-RK3V - Black 30-210131-11

Premium Bezels

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
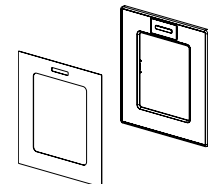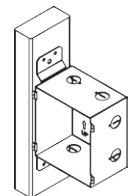
Preconstruction Bracket

• Flanges located on the side and the bottom for attaching to either a wall stud or a cross member support.
• Steel construction.
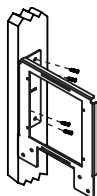
Part #: 40-210294-22

Backbox

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

Part #: 30-210153-15

KX7 Wired Interface

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 bright 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.

Part #: 10-210484-20

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 RS-232 port for one-way control without a separate control processor.
• Built-in high output IR for direct control of electronics.
• Powered via a CB8, a 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.

Installation Notes

• Power supply not included - A separate power supply (PS16 or similar), an RTI CB8 connecting block or an 802.3af compliant Power-over-Ethernet router/switch (Class #3) is required.
  *NOTE: Using a non-compliant PoE device may damage the KX7.

Specifications

Power .... +9VDC to +16VDC, 1A max
Power Management ....Adjustable backlight brightness/proximity sensor
Touchscreen Display ....7.0 in (177mm) diagonal, High-brightness color TFT LCD
.... WVGA (800x480 pixels) with 65K colors, LED Backlit, Projected Capacitive
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 802.11b/g
Operating Temperature... +32°F to +122°F (0°C to +50°C)
Operating Humidity...5% to 95% Non-condensing
Video Input .... Three, BNC Connectors
.... Composite, S-Video or Component Analog Video - NTSC/PAL/SECAM
Mounting.................................Integrated mounting wings, or screws through front plate
Installation Cut-Out (H x W)... 5.6 in (143mm) x 7.7 in (195mm)
Outer Bezel Dimension (H x W) .... 5.9 in (151mm) x 8.5 in (217mm)
Total Depth in Wall .... 1.4 in (36mm), with video connector 2.1 in(53mm)
Weight .... 1.4 lbs (634g)
Warranty ....One Year (Parts & Labor)

KX7 Accessories

Standard Bezels

BZB-KX7LA - Light Almond 10-210500-09
BZB-KX7BL - Black 10-210498-25

Premium Bezels

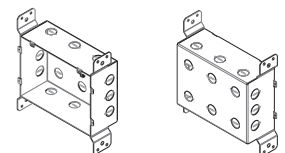BZB-KX7BA - Brushed Aluminum.................................... 10-210499-26

Preconstruction Bracket

NA

Backbox

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

Part #: 10-210482-18

CX7 Wired Interface

From the kitchen countertop to the conference room, the hard-wired CX7 is perfect wherever "always on", intuitive control is required. The 7" multi-touch capacitive LCD has adjustable tilt, allowing the display to be angled straight up to nearly flat. The CX7 can even be mounted inverted under a cabinet. Additional features include wired and wireless Ethernet for two-way control, digital video (motion JPEG) and web browsing, while analog audio/video inputs and stereo speakers provide video viewing from sources such as satellite TV.

Part #: 10-210512-12

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.
• Analog audio input and stereo speakers.
• Integrated 10/100 Base-T and 802.11 Wireless Ethernet.
• Built-in high output IR port for direct control.
• Powered using power supply, CB8 or PoE (Power over Ethernet)
• Optional modules/processors provide additional two-way control.
• USB and Ethernet Programming.
• Adjustable tilt display (from 10°-90°) or unit can be mounted under a cabinet.

Installation Notes

• A12VDC/1A power supply with an RJ45 connector is included for powering the CX7 through the control port. NOTE: DO NOT plug the power supply RJ45 connector into the Ethernet Port or damage to the CX7 may occur.
• Power may also come from a CB8 Connecting Block or Power over Ethernet via an 802.3af compliant Power-over-Ethernet router/switch (Class #3). NOTE: Using a non-compliant PoE device may damage the CX7.

Specifications

Power	+9VDC to +16VDC, 1A max
Power Management	Adjustable backlight brightness/proximity sensor
Touchscreen Display	7.0 in (177mm) diagonal, High-brightness color TFT LCD WVGA (800x480 pixels) with 65K colors, LED Backlit, Projected Capacitive
Infrared Output	Control port, 200mA output drives up to 1000 ft (300 m) of wire
Ethernet Port	10/100 Base-T with Power-over-Ethernet (Class 3)
Wireless Ethernet	802.11b/g
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Operating Humidity	5% to 95% Non-condensing
Video Input	Three, RCA Connectors Composite, S-Video or Component Analog Video - NTSC/PAL/SECAM
Audio Input	3.5mm, Stereo
Mounting	Countertop or inverted using included under-cabinet mounting bracket
Dimensions (LxWxH)	7.5" (190mm) x 7.3" (185mm) x 6.25"(159mm)
Weight	2.0Lbs (934g)
Warranty	One Year (Parts & Labor)

RTiPanel App

Apple iPad®, iPhone®, iPod Touch®

Android® 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
Part#: 10-210469-23

Android Licenses:
Android Phone
Part#: 10-210488-24

iPad - 1 User
Part#: 10-210470-15

Android Tablet
Part#: 10-210490-17

iPad - 5 User
(Electronic version only)
Part#: 10-210501-10

For licensing and installation information, please visit:
www.rticorp.com/dealers

Key Features

- Control and receive feedback from audio, video, lighting, security, climate, and more!
- RTiPanel app available through Apple App Store®, Google Play® and the Amazon App Store®
- Fully integrate Apple iPad®, iPhone®, iPod Touch® and Android® 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®, and off-site access via WiFi® 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

Virtual Panel PC App

Virtual Panel offers the same intuitive control experience as RTI remote controls on desktop and laptop PCs running Microsoft Windows®. 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.

Virtual Panel License
Part#: 10-210453-16

For licensing and installation information, please visit:
www.rticorp.com/dealers

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 wireless and wired interfaces.
• 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, Windows 8 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.

RP-4 Control Processor

The RP-4 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 an integrated RF receiver, four assignable IR ports, sense inputs, support for the RTiPanel App and more — all in one small, cost-effective package.

Part #: 10-210520-11

Key Features

- Stores all system commands and macros for reliable control.
- Integrated 433MHz RF receiver.
- Four infrared ports with routing and output adjustment.
- Supports RTiPanel App for one-way control via Apple iOS smartphones and tablets (Android and Virtual Panel not supported).
- Two voltage sense inputs for monitoring equipment status.
- Two programmable relay outputs
- Works with all RTI 433MHz wireless interfaces.
- RF signal reception LED.
- USB and Ethernet programming.

Installation Notes

- The RP-4 supports 433MHz enabled wireless interfaces, RTiPanel App running on iOS devices (Android and Virtual Panel NOT supported), and Ethernet enabled wired interfaces.
- The RP-4 does not have an IR/RS485 input, therefore RTI keypad controllers that are not Ethernet enabled (ex. RK1+/RKM1+) are not supported.
- RTiPanel App provides one-way control only - no feedback.

Specifications

Power Supply	+12VDC, 1A
RF Receiver Carrier Frequency	433 MHz
Infrared Transmission Bandwidth	15kHz - 460kHz
IR Output Ports	Four (4), 3.5mm jacks
IR Output Drive	100mA maximum (per port, adjustable)
Infrared Frequency Transmission Range	15kHz - 460kHz
Ethernet Port	One, RJ45 Connection, 10/100Base-T
Relays	Two, +30VDC, 5A max
Sense Inputs	Two, 3-24VDC
Mounting	Wall-mount or free standing
Dimensions (W x H x D)	7.0" (175mm) x 3.0" (76mm) x 1.0" (25mm)
	(Dimension does not include antenna or connectors)
Weight	6.7 oz. (190g)
Warranty	One Year (Parts & Labor)

XP-3 Advanced Control Processor

Boasting a powerful 533MHz CPU and 128MB of non-volatile 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. For complete control in any room, the XP-3 even allows powerful two-way control with Ethernet enabled RTI wired user interfaces, and full support for the RTiPanel and Virtual Panel Apps.

Part #: 10-210443-15

Key Features

- Powerful 32bit, 533MHz CPU.and 128Mb of non-volatile Flash memory
- 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. and two programmable relay outputs.
- One two-way RS-232 port for bi-directional communication.
- Integrated 10/100Base-T Ethernet port for programming, control and two-way communication with compatible devices and supports Power over Ethernet (PoE).
- Built-in astronomical clock for time-based events and sleep timers.
- Built-in 2.4GHz ZigBee® RF transceiver module and removable antenna.
- Configurable for communication with RTI in-wall products and 433MHz wireless controllers using a separate RTI RM-433 Antenna. **(See Notes below)**

Installation Notes

- RTI RK2 wired interface and SURFiR remote in 433MHz mode are not supported with the XP-3.
- Using a 433MHz RTI wireless user interface requires a separate RM-433 Antenna connected to the XP-3. 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 433MHz controllers should use an RP-4, XP-6 or XP-8s control processor.

Specifications

Power Supply	+12V DC, 1A
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 modules and industry-standard IR emitters.
IR Output Ports (Ports 2 & 3)	Two, 3.5mm jacks
IR Output Drive	100mA maximum (per port, adjustable)
Infrared Frequency Transmission Range	15kHz - 460kHz
RS-232 Port	One, RJ45 Connection
Ethernet Port	One, 10/100Base-T
Relays	Two, +30VDC, 5A max
Sense Inputs	Two, 3-24VDC
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)

XP-6 Advanced Control Processor

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 IR control, voltage sensing, dedicated RS-232 ports for bi-directional communication, built-in astronomical clock, and more!

Part #: 10-210446-18

Key Features

- Powerful 32bit, 533MHz CPU and 128Mb of non-volatile Flash memory.
- Six multi-purpose I/O ports for infrared and RTI accessory modules for power sensing and one-way RS-232.
- Ethernet support for two-way control and RTiPanel/Virtual Panel support.
- 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 wireless interfaces (when used with RTI RF antennas/Zigbee® transceivers) and wired user interfaces.
- Inputs for connection of multiple 433MHz RF receiver modules and one ZM-24 2.4GHz Transceiver.
- Fast USB 2.0 and Ethernet programming.
- Field upgradable firmware.

Specifications

Power Supply .... +12V DC, 1A
IR Output Ports.............Six 3.5mm jacks, Compatible with industry standard IR emitters
IR Output Drive... 100mA maximum (per port, adjustable)
....200mA maximum (high IR output port)
Infrared Frequency Transmission Range ....15kHz - 460kHz
Trigger Outputs..Three, 12 VDC, 100mA max each
Sense Inputs.. Three, 3-24VDC
RS-232 Ports ....Two, Bi-directional RJ45 Connections
Ethernet Port ....10/100Base-T, RJ45 Connection
USB Ports...One, Programming
Control Port ....RS-485 / IR / Pwr, RJ45 Connection
RTI Com Port......................... 2.4 GHz Wireless Communication Port, RJ45 Connection
Relays... Three, +30VDC, 5A max
Mounting.. Wall-mount or free standing
Dimensions (W x H x D) .... 10.3in (262mm) x 5.25in (134mm) x 1.5in (38mm)
Weight .... 1 lb. 3oz. (543g)
Warranty ....One Year (Parts & Labor)

XP-8s Advanced Control Processor

The XP-8s 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-8s the perfect solution for large-scale and complex projects.

Part #: 10-210506-15

Key Features

- Powerful 32bit, 533MHz CPU and 128Mb of non-volatile Flash memory.
- Comes with 4GB SD flash memory card included.
- Eight multi-purpose I/O ports for infrared and RTI modules for power sensing and one-way RS-232.
- Ethernet port allows two-way control via IP and RTiPanel/Virtual Panel support.
- Eight dedicated RS-232 ports allow bi-directional control.
- Eight programmable relays may be programmed for contact or voltage trigger.
- Eight sense inputs allow events to be triggered from either a contact closure or voltage trigger.
- Compatible with RTI ZM-24 2.4GHz Transceiver Module (utilizing Zigbee® technology), RM-433 Antenna Module and wired user interfaces.
- Variable IR output power on all IR ports.
- USB and Ethernet Programming.

Specifications

Power Supply .... +12VDC, 1.0A
Multi-Purpose Output Ports .... Eight custom 3.5mm 4-conductor jacks
................................Designed for RTI modules as well as industry-standard IR emitters.
IR Output Drive... 100mA maximum (per port, adjustable)
....200mA maximum (high IR output port)
Infrared Frequency Transmission Range ....15kHz - 460kHz
Relays.. Eight, 3 Amps @ 30 VDC or 12V/100mA Trigger
Sense Inputs.. Eight, Analog/Digital/Closure
RS-232 Ports .... 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 .... RS-485 / IR / PWR
Memory Expansion.. SD/MM Card Slot
Display.....................................High-contrast STN LCD, 0.7 in x 2.8 in (18mm x 60mm)
Mounting.................................. Rack-mount or free standing (Wings and feet included)
Dimensions (W x H x D) .... 17 in (432mm) x 1.7 in (43mm) x 6.4 in (162mm)
Weight .... 4 lb. (1814g)
Warranty ....One Year (Parts & Labor)

AD-4x Audio Distribution System

The AD-4x 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-4x.

The second generation of the AD-4 audio distribution system, the AD-4x has added powerful new features, providing more flexibility and quicker installations. Now with pre-outs for each zone, a separate amplifier may be added for additional power and speakers where needed. The addition of Ethernet support allows two-way control via the LAN, while a web interface allows the AD-4x output zones to be tested during installation via a web browser on a smartphone, tablet or PC. This web interface is also used to configure output zones into groups, allowing them to be controlled as a single zone.

Designed to be a seamless extension of an RTI control system, the AD-4x 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.

Part #: 10-210497-24
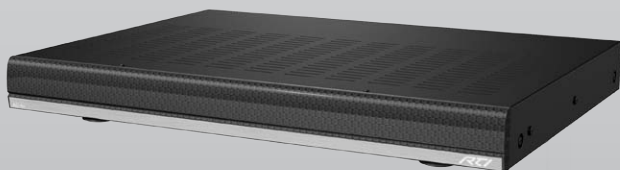
Key Features

- Four analog stereo audio output zones with pre-outs.
- Four analog audio source inputs with independent trim level adjustment.
- Independent volume and tone control for all audio zones.
- Ethernet support and a web interface allows the AD-4x output zones to be tested during installation via a web browser on a smartphone, tablet or PC.
- Configure output zones into groups, allowing them to be controlled as a single zone.
- Accessory wall plate (RSP-1) allows source equipment to be connected remotely with a Cat-5 cable.
- Controlled via IR, or two-way control via RS-232 and IP using RTI control systems.
- Twenty-five watts per channel in each zone.
- Optional phone and doorbell mute function using accessory wall plate (PDM-1).
- Zone power indicator LEDs.
- Compact, low-profile IU design.

Specifications

```
Power ............................................................. 115VAC or 240VAC (Switchable), 120W
Power switch ................................. Front Panel On/Off control with LED power indicator
Mounting ............................................................................ Rack mount or free standing
Dimensions (w/rack ears & cover) HxWxD ..................................................................
................................................................ 2.1in(53mm) x 19in(482mm) x 13.3in(340mm)
Weight ................................................................................................... 11.8 lbs (5.4kg)
Local Input Source ................................................................................. Four, RCA jacks
Remote Input mixed 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
Ethernet Port .................................................................. One, RJ45 Bidirectional control
Trigger Output (Status) ................................................................. One, 12VDC@15mA
Mute .......................................................................................................... 3.5mm jack
Doorbell Input Sensitivity (PDM1) ............................................................. AC/DC 3~12V
Phone input sensitivity (PDM1) ......................................................... AC25~100V/20Hz
Output Zones ................................................................................. Four stereo zones
Pre-amp Output (fixed or variable) .................................... Four stereo zones, RCA jacks
Rated Power / Channel ........................................................... >25 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/8 ohm ................................................................ 0.1%.
Total Harmonic Distortion @1W/8 ohm ................................................................. 0.1%.
S/N @ Rated power, IEC A-wtd, Source input shorted .......................... 82dB (mute +1)
Frequency Response 20Hz to 20KHz @1W/8 ohms .............................. +0.8db / -0.4dB
Input Overload ................................................................................................... 2.5V
Input Impedance ............................................................................................ 11K ohms
Channel separation @1KHz ................................................................................... 75dB
Crosstalk Between Sources @rated power /1KHz ................................................. 75dB
Crosstalk Between Zones @rated power /1KHz .................................................... 75dB
Treble control @10KHz ......................................................................... 10dB +/-0.5dB
Bass control range @100Hz ................................................................. 10dB +/-0.5dB
Warranty ............................................................................. One Year (Parts & Labor)
```

AD-4x Accessories

RSP-1 Remote Source Wallplate

- 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®, 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. (Not Included).
- Standard single-gang electrical box installation.

Part #: 10-210343-14

PDM-1 Phone/Doorbell Mute Wallplate

- A 3.5mm non-shorting stereo mini jack allows easy wiring to AD-4x or AD-8x 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. (Not Included).
- Standard single-gang electrical box installation.

Part#: 10-210342-13

AD-8x Audio Distribution System

Perfect in larger residential and commercial installations where flexibility is important, the AD-8x Audio Distribution System combines a 16 channel audio amplifier with a matrix-switching pre-amplifier. This provides the ability to listen to eight different audio sources in any zone. In addition, up to four of the audio sources can come from other rooms, allowing sources like an iPod or PC to be accessed from other locations, away from the rack. Meanwhile, the integrated Cool Power® amplifier provides 25 watts per channel of crystal clear sound. Control is available via IR, while advanced two-way control is provided via RS-232 and IP when combined with RTI control solutions.

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

The second generation of the AD-8 audio distribution system, the AD-8x has added powerful new features. The addition of Ethernet support allows two-way control via the LAN, while a web interface allows the AD-8x output zones to be tested during installation via a web browser on a smartphone, tablet or PC. This web interface is also used to configure output zones into groups, allowing them to be controlled as a single zone.

Part #: 10-210496-23

Key Features

- Eight analog stereo audio output zones with fixed and variable pre-outs.
- Eight analog audio source inputs with independent trim level adjustment.
- Twenty-five watts per channel in every zone.
- Distribute eight audio source inputs to eight zone, expandable to 64 zones by stacking additional AD-8x units.
- Ethernet support and a web interface allows the AD-8x output zones to be tested during installation via a web browser on a smartphone, tablet or PC.
- Web interface allows zones to be configured into groups, allowing them to be controlled as a single zone.
- Accessory wall plate (RSP-1) allows remote source equipment to be connected and controlled remotely over a Cat-5 cable.
- Controlled via IR, and two-way control with feedback via RS-232 and IP when installed with RTI control systems.
- Optional phone and doorbell mute function using accessory wall plate (PDM-1).

Specifications

Power .... 115VAC or 240VAC (Switchable), 230W
Power switch ....Front Panel On/Off control with LED power indicator
Mounting.. Rack mount or free standing
Dimensions Chassis (without rack ears & front cover)HxWxD..
.... 5.24in(133mm) x 17.0in(432mm) x 14.75in(375mm)
Weight 24.2lbs (11.0kg)
Operating Temperature.............................C -10 to +40 degrees F +14 to +104 degrees
Local Source Audio Inputs.. Eight, RCA jacks x 16
Remote Source Input... 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, DB9 Bidirectional control
Ethernet Port ....One, RJ45 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...Eight, two channels each, phoenix connector
Pre-amp Output (fixed or variable) .... Eight zones, two channels each, RCA jacks
Rated Power / Channel ....>25 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/8 ohm .... 0.1%.
Total Harmonic Distortion @1W/8 ohm .... 0.1%.
S/N @ Rated power, IEC A-wtd, Source input shorted .... 82dB (mute +1)
Frequency Response 20Hz to 20KHz @1W/8 ohms ....+0.8db / -0.4dB
Input Overload..2.5V
Input Impedance.. 11K ohms
Channel separation @1KHz..75dB
Crosstalk Between Sources @rated power /1KHz 75dB
Crosstalk Between Zones @rated power /1KHz ....75dBTreble control @10KHz 10dB +/-0.5dB
Bass control range @100Hz .... .10dB +/-0.5dB
Warranty ....One Year (Parts & Labor)

AD-8x Accessories

RSP-1 Remote Source Wallplate

- 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®, 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. (Not Included).
- Standard single-gang electrical box installation.

Part #: 10-210343-14

PDM-1 Phone/Doorbell Mute Wallplate

- A 3.5mm non-shorting stereo mini jack allows easy wiring to AD-4x or AD-8x 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. (Not Included).
- Standard single-gang electrical box installation.

Part#: 10-210342-13

CP-450 4 Channel Amplifier

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® Amplifier, the CP-450 is perfect for installations using the AD-4x or AD-8x Audio Distribution Systems 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-4x/AD-8x that does all the source switching and volume control, the CP-450 is designed to be mounted in the rack, offering up additional power to where it's needed. 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.

Part #: 10-210455-18

Key Features

• Four channel amplifier utilizes Cool Power® technology.
• Fifty watts per channel.
• Expands AD-4x/AD-8x speaker outputs.
• Voltage trigger (3-30V AC/DC), RS-232 or IR power control.
• Rackmount or free standing installation.
• IR passthrough port

Specifications

AC Input Voltage	115VAC 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 +40degrees, 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, 12VDC, to trigger another CP-1650
Trigger Input	One, 3-30VDC, for power control
Speaker Outputs	Two stereo outputs, two channels each, phoenix connectors
Audio Inputs	Two stereo, RCA jacks (4)
Rated Power/Channel	50 Watts, 20Hz to 20KHz (RMS, 2 chan driven 8ohms)
Rated Power/Channel	70 Watts 20Hz to 20KHz (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	@50W/8 ohms: 0.03% & 70W/4 ohms: 0.8%
Total Harmonic Distortion	@1W/8ohm: .015%
S/N @ Rated Power, IEC A-wtd, Source Input Shorted	100dB
Frequency Response	20Hz to 20KHz @1W/8ohm,+0.4/-0.1dB
Input Sensitivity	1W/50W 8ohms, 135mV/1V
Input Impedance	22KOhms
Channel Separation	@ Rated Power/1KHz, 100dB
Crosstalk Between Sources	@ Rated Power/1KHz, 100dB
Warranty	One Year (parts & labor)

CP-1650 16 Channel Amplifier

Expanding the capabilities of an audio distribution system, the CP-1650 is perfect in residential and commercial installations where larger rooms need more speakers and other areas need to be added to an existing zone. Designed to be an easy and cost effective way to double the power of the AD-4x and AD-8x outputs, 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.

Part #: 10-210456-19

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-4x/AD-8x speaker outputs.
• Voltage trigger (3-30V AC/DC), RS-232 or IR power control.
• Rackmount or free standing installation.

Specifications

AC Input Voltage	115VAC or 240VAC (Switchable), 230W
Power Switch	Front Panel On/Off with LED
Mounting	Rack mount or free standing
Dimensions	(HxWxD) 5.24in(133mm) x 17.0in(432mm) x 14.75in(375mm)
Weight	23.4lbs (10.6kg)
Speaker Outputs	Eight stereo outputs, two channels each, phoenix connectors
Audio Inputs	Eight, RCA jacks x 16
Audio Loop Outputs	Eight, RCA jacks x 16
Audio - 2 Channel Mode	
Rated Power/Channel	30 Watts, 20Hz to 20KHz (RMS, 2 ch driven into 8 ohms)
Power/Channel	50 Watts, 20Hz to 20KHz (RMS, 2 ch driven into 4 ohms)
IHF Dynamic Power	1Khz @ 1% distortion: 35 Watts @ 8 Ohms
	1Khz @ 1% distortion: 70 Watts @ 4 Ohms
Audio - Bridged Mode	
Rated Power/Channel	100 Watts, 20Hz to 20KHz (RMS, 2 ch driven into 8 ohms)
IHF Dynamic Power	1Khz @ 1% distortion: 140 Watts @ 8 Ohms
Total Harmonic Distortion	(1W/8 ohms), 0.03%
	(30W/8 ohms), 0.5%
	(50W/4 ohm), 0.45%
Audio - General	
S/N @ 30W/8 ohm, IEC A-wtd, Source Input shorted	100dB
Frequency Response	20Hz-20Khz @ 1w/8 ohms +2.1/-0.5dB
Input Sensitivity	1W @ 8 ohms, 149mV/800mV
Input Impedance	23KOhms
Channel Separation	@ Rated Power/1KHz, 60dB
Crosstalk Between Ch1L-Ch3L @ Rated Power	1Khz: 75dB
Warranty	One Year (parts & labor)

RTiDock

The RTiDock features a host of benefits not found on other iPod® 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!

Part #: 10-210242-12

iPod® Tray

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®, iPod Nano®, iPod Touch®. - see below
• 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.

Installation Notes

• Apple devices using the "Lightning" connector (ex iPhone 5/iPod Touch 5th generation) require an adapter for connection to the RTiDock. With this adapter in place, the drawer will not shut. This does not affect performance other than not being able to close the drawer.

Specifications

Dock DC Voltage	12VDC
iPod Charge Power Supplied	5VDC, 1A
Power Indicator	Bi-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 Lighting	Blue LEDs
Reset Switch	One, Rear push button
Operating Temperature	C -10 to +40 degrees F +14 to +104 degrees
Dimensions HxWxD	1.25" (25mm) x 7.5" (150mm) x 7.5" (150mm)
Weight	1lb 6.6oz (642g)
Warranty	One Year (Parts & Labor)

RTiDock Accessories

RTiDock RMK - Rack Mount Accessory Kit

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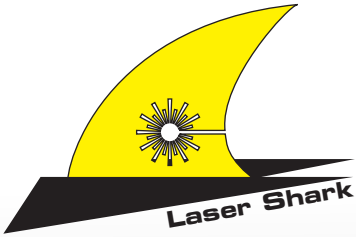• A low profile takes minimal space in the rack.

Part#: 10-210449-21

Specifications

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)

Laser Shark

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® software allows you to use almost any font or graphic, to insure intuitive control for the end-user.

Part #: 10-210478-23

Key Features

- 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/RK1+, KX2, RK3-V, T1-B/T1-B+ and T3V+.
- Ordering via the Internet.
- Software is free of charge and available to RTI dealers only.

Laser Shark Software
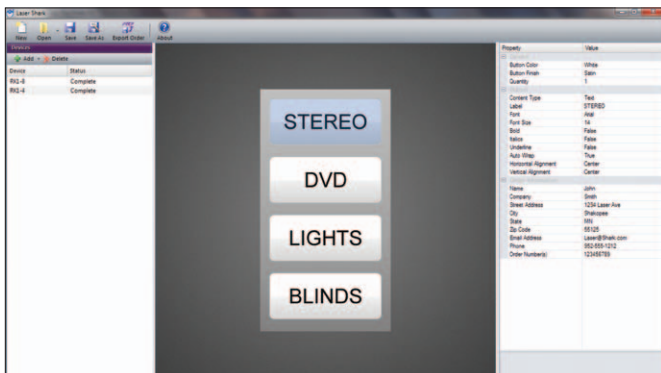
Laser Shark Software available on the dealer section of the RTI website - rticorp.com

Buttons Available for Engraving
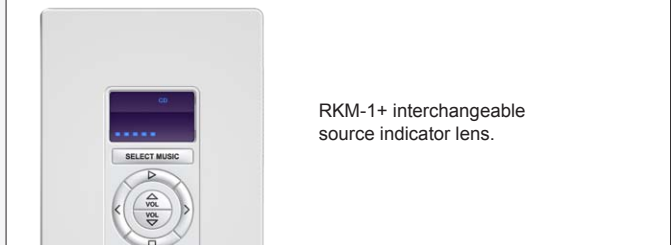
RKM-1+ interchangeable source indicator lens.

RK1+ 2/4/8

KX2 Wired User Interface
• All twelve hard button keycaps.

RK3-V Wired User Interface
• All nine hard button keycaps.
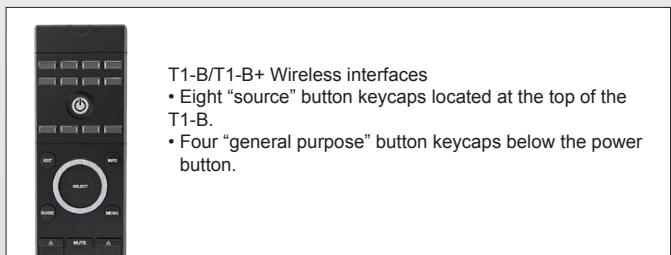
T1-B/T1-B+ Wireless interfaces
• Eight "source" button keycaps located at the top of the T1-B.
• Four "general purpose" button keycaps below the power button.
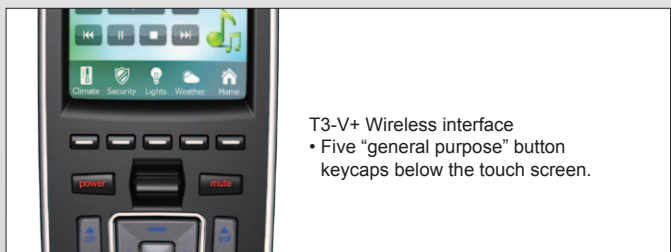
T3-V+ Wireless interface
• Five "general purpose" button keycaps below the touch screen.

CB-8 Connecting Block

The CB-8 is an installation accessory designed to provide convenient and reliable power for up to eight (see installation notes) RTI wired user interfaces. 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.

Part #: 10-210205-11

Key Features

• Includes 16VDC, 4.3 Amp power supply capable of powering up to eight RTI wired user interfaces.*
• Multiple CB-8 units can be daisy-chained.
• Standard RJ45 ports for easy connection of touchpanels.

Installation Notes

• Each CB-8 provides power to the following devices up to the distances listed using IR or Ethernet for control (if available). For control via RS485, the total wired distance for all attached devices should be kept under 1000 ft (300m).
 - KX7, K4 - 4 maximum - Up to 150 feet away.
  - RK3, RK3-V - 8 maximum - Up to 500 feet away.
  - KX2, RK-2, RK-1+, RKM-1+ - 8 maximum - Up to 1000 feet away.
  - Expansion Modules (PCM-8) - 8 maximum - Up to 1000 feet total wired distance to all modules.
• Not compatible with the RK10.

Specifications

Power	+16VDC, 4.3A
Maximum Current per Port	1.5A
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)

CM-232 RS-232 Communication Module

The CM-232 communication module provides an RS-232 interface to almost any RS-232 enabled device. It attaches to supported RTI control processors on one end, and a device's DB-9 serial port connector on the other end. The CM-232 is capable of one-way transmission (no receive function is supported) of user-defined character or binary strings.

Part#: 20-210017-13

Key Features

• Connects to the MPIO ports of RTI control processors (ex. XP-6, XP-8s etc) and expansion modules (ex. PCM-4).
• 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.

Specifications

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 a wired user interface and both infrared and RS-232 control of local devices. The CPB-1 provides power to one RTI wired user interface 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.

Part #: 10-210195-19

Key Features

• Provides power for one wired user interface.
• RJ45 - DB9 adapter included.
• Two infrared emitter outputs.
• Variable IR output power.
• Allows RTI wired user interfaces to communicate via one-way RS-232 to devices without a processor.
• 12VDC power supply included.

Specifications

Power Supply	+12VDC, 1A
Number of IR Output Ports	Two
Output Ports	3.5mm jacks. Works with industry-standard IR emitters.
IR Output Drive	100mA maximum (per port, adjustable)
Infrared Input	Compatible with industry-standard repeaters and receivers
RS-232 Port	RJ45 Connection. Includes RJ45 to DB9 adapter
Mounting	Wall-mount or free standing
Dimensions (W x H x D)	4.0" (102mm) x .3.5" (89mm) x 1.1" (28mm)
Weight	8.4 oz. (238g)
Warranty	One Year (Parts & Labor)

ECB-5 IR Connecting Block

The ECB-5 IR Emitter Connecting Block provides expanded infrared signal distribution when used with RTI control processors, wired user interfaces, 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.

Part #: 10-210076-17

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.

Specifications

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 industry-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 ....4 oz. (108g)
Warranty ....One Year (Parts & Labor)

ESC-2 Ethernet to Serial Converter

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.

Part #: 10-210467-21

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, 10/100 Base-T
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 .... 1.7 oz. (50g)
Warranty ....One Year (Parts & Labor)

IPE-4 IR Port Expander

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.

Part #: 10-210479-24

Key Features

• 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.

Specifications

Number of Output Ports..Four
Output Ports .... 3.5mm jacks
....Works with industry-standard IR emitters.
IR Output Drive..100mA maximum (per port)
Infrared Input ....3.5mm jack
...................Compatible with RTI processors, industry-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.

Part#: 10-210043-11

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, a proprietary programming cable for T2i/T2x/T3x, 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(114mm) x 2.8in(71mm) x 1.3in(33mm)
Weight .... 6.0 oz. (170 grams)

PCM-4 Ethernet Port Control Module

With four multi-purpose I/O 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 (with PoE) 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.

Part#: 10-210493-20

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 network (LAN).
- Powered using power supply or class2 PoE (Power over Ethernet).
- Variable IR output power.
- 12VDC voltage trigger output.

Specifications

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 Drive.. 100mA 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 with Power-over-Ethernet
Trigger Output ....One, 12 VDC, 100mA max
USB Port...One, Programming
Enclosure...Formed steel, black powder coating
Mounting... Wall-mount or free standing
Dimensions (W x H x D) .... 6.8in (173mm) x 2.9in (74mm) x 1.2in (31mm)
Weight 14.3oz (406g)
Warranty ....One Year (Parts & Labor)

PS16-1 Touchpanel Power Supply

The PS16-1 is used to power a single wired user interface, when a CB-8 Touchpanel Connecting Block is not used.

Part #: 40-210285-22

Key Features

- The PS16-1 is used to power a single wired user interface, when a CB-8 Touchpanel Connecting Block is not used.

Specifications

Power Supplied ....+16 VDC, 1.6A, 25W
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 Relay Control Module

The RCM-4 is equipped with four individually addressable relays. Built-in Ethernet enables the convenience of control from an RTI XP series control processor via the LAN. An IR input allows the RCM-4 to be triggered from many different sources, including RTI wired user interfaces, control processors or third-party infrared repeater systems. Commands trigger open and close functions as well as adjustable hold times for momentary relay operation. The RCM-4 can be powered from the included power supply or PoE.

Part#: 10-210480-16

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 class2 PoE (Power over Ethernet).

Specifications

Power Supply .... +12VDC, 1A
Infrared Input .... Compatible with industry-standard repeaters and receivers
Relays.. Four, capable of switching up to 28VDC@5A
Ethernet Port .... One, RJ-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 .... 1.0 lb. (466g)
Warranty .... One Year (Parts & Labor)

RM-433 RF Receiver Module

The RM-433 is a radio frequency receiving device for 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.

Part #: 10-210039-16
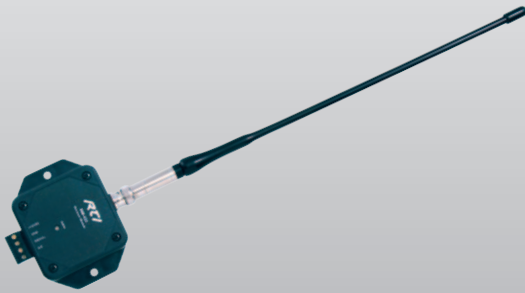
Key Features

• 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.

Installation Notes

• A 433 MHz enabled RTI remote and control processor must be used with the RM433.

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)

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 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.

Part #: 10-210013-08

Key Features

• Connects to the MPIO ports of RTI control processors (ex. XP-6, XP-8s etc) and expansion modules (ex. PCM-4).
• 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 Consumption.. 0.5mA
Control Cable Length.. 12 feet (3.7 m)
Voltage Sensor Cable Length.. 3 feet (.9 m)
Dimensions (W x H x D) .... 1.75" (44mm) x 3.0" (76mm) x 0.7" (18mm)
Warranty .... One Year (Parts & Labor)

vIRsa 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, low-profile 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.

Part #: 10-210268-20

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 - includes cable management strap.
• Flexible film adhesive conforms to curved surfaces.
• Translucent circuit board.
• Industry standard 3.5mm mini-plug uses precision over-molding to ensure consistency.

Specifications

Output.. Compatible with industry standard IR repeater systems
Infrared Power Requirements..12VDC, 100mA maximum
Maximum Current Consumption... 30mA
Cable Length .... 10 feet (3.0 m)
Plug type... 3.5mm
Dimensions (W x H x D) .... .4" (10mm) x .5" (13mm) x 0.1" (2.5mm)
Warranty .... 90 days

ZBPro 2.4GHz Network Mgmt Tool

The ZB-Pro is a Professional Network Management Tool for use with Remote Technologies Inc. 2.4 GHz Zigbee® networks. It operates in different modes, which are programmed automatically by the specific Integration Designer® 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.

Part #: 10-210216-13

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 Frequency...2.4GHz (Zigbee® 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)

ZM-24 2.4GHz Zigbee® Transceiver Module

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 wireless interfaces. 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.

Part #: 10-210178-20

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® 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.
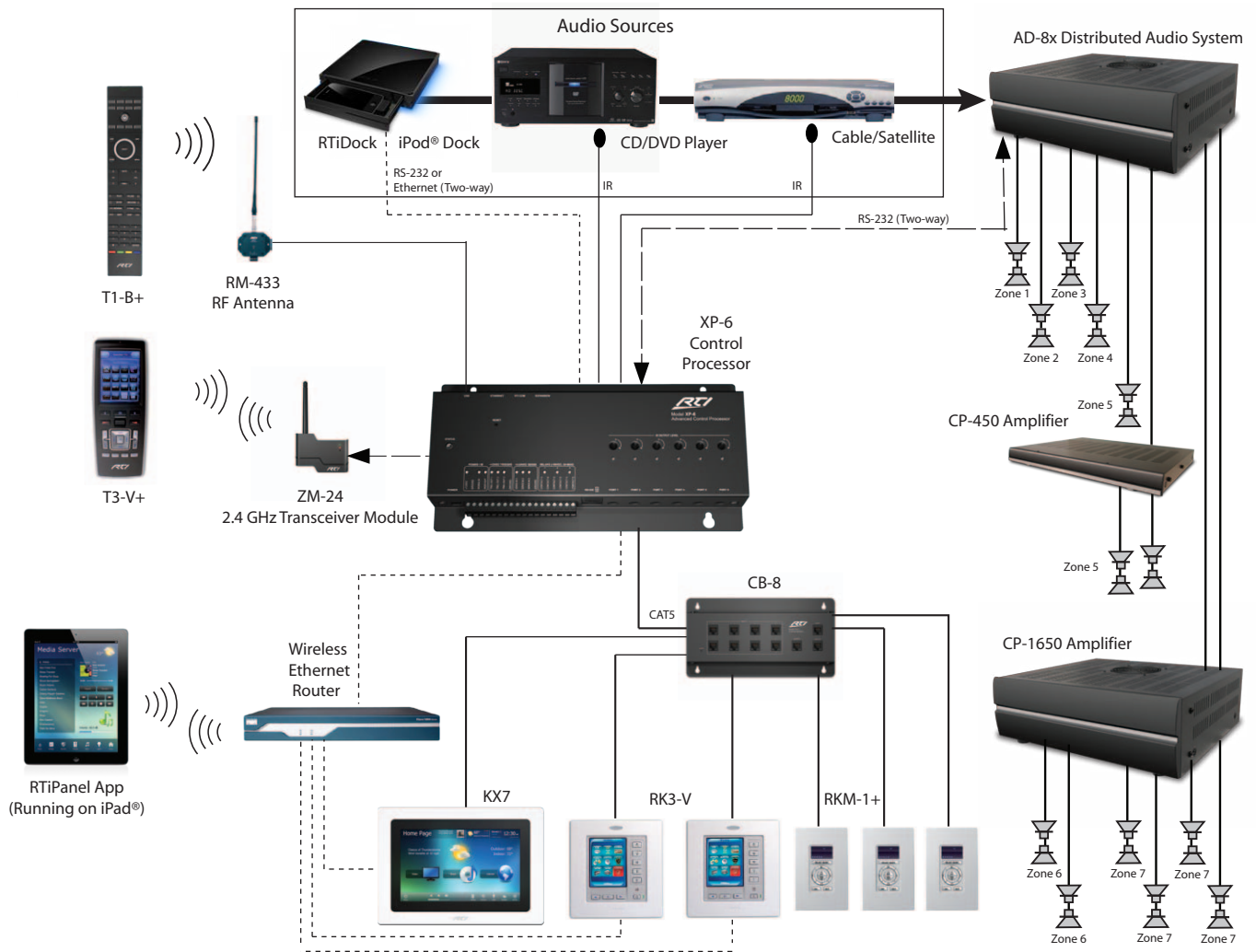
Installation Notes

• A 2.4 GHz Zigbee® enabled remote control and processor must be used with this model transceiver. It is not compatible with the 433MHz wireless interfaces.

Specifications

Power ....+9VDC to +16VDC, 60mA
RTI Com Port........................ Two-way Zigbee® Communication Port, RJ45 Connection
....Drives up to 1000 ft (300 m) of wire
Wireless Networking.......................................IEEE802.15.4 Zigbee® network compliant
RF Frequency Range ....2.4Ghz - 2.5Ghz
Operating Temperature... +32°F to +122°F (0°C to +50°C)
Operating Humidity..5% to 95% Non-condensing
Device Capability...............................Total number of devices is limited only by memory
Communications... OTA (Over-the-air) Programmable
Enclosure...High-impact molded ABS plastic, black
Mounting... Detachable 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)
Warranty ....One Year (Parts & Labor)

RTI System Overview

Receiver (IR)

Cable/Satellite (IR)

Voltage Sense

BluRay Player (IR)

IR

Projector (IR)

IR

RP-4
Control Processor

DVD Changer (IR)

IR

DVD Changer (IR)

IR

Lights (RS-232)

Two-way RS-232

Thermostat (RS-232)

Receiver (IR)

IR

Cable/Satellite (IR)

(Sense Cable)

IR

VPS-1 Voltage Sense Module

BluRay Player (IR)

IR

Projector (RS-232)

CM-232 RS-232 Module

Screen (Relay)

12V Trigger or Contact Closure

RCM4
Relay Control Module

PCM-4
Port Expansion Module

RM-433
RF Antenna
(433 MHz)

ZM-24
2.4 GHz Transceiver Module
(Zigbee® Technology)

XP-8s Control Processor

NOTE: Capabilities and control types vary by the model of control processor and controller that is used.

Ethernet Router/Switch
(PoE Enabled)

CAT5

CB-8
Touchpanel
Connecting Block

CAT5

CPB-1
Control Port
Connecting
Block

CAT5

CAT5

CAT5

To controlled equipment

RS-232

IR

WiFi   T3-V+

WiFi   T2x

T2i

T2-Cs+

T1-B+

SURFiR

WiFi   RTiPanel App

CX7

KX7

RK3-V

KX2

RK1+

RKM-1+

Audio Sources

RTiDock iPod® Dock   CD/DVD Player   Cable/Satellite

AD-8x Distributed Audio System

RS-232 or
Ethernet (Two-way)   IR   IR

RS-232 (Two-way)

T1-B+

RM-433
RF Antenna

XP-6
Control
Processor

Zone 1   Zone 3

Zone 2   Zone 4

Zone 5

CP-450 Amplifier

T3-V+

ZM-24
2.4 GHz Transceiver Module

Zone 5

CB-8

CAT5

CP-1650 Amplifier

Wireless
Ethernet
Router

RTiPanel App
(Running on iPad®)

KX7   RK3-V   RKM-1+

Zone 6   Zone 7   Zone 7

Zone 6   Zone 7   Zone 7

Multi-zone audio challenges the custom installer with a new set of system design issues that need to be transparent to the end-user. The control system interface must be simple to use and it must blend into the environment.

With a full line of wired user interfaces, RTI control systems give you the flexibility to meet rigorous control requirements throughout the home or business, while wireless interfaces and the RTiPanel App can be used in locations that cabling cannot reach.

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. Wireless user interfaces and the RTiPanel app may also be used for zones that may have other equipment being controlled. A more powerful control processor is going to be required in most cases.

Basic System
Wireless Interfaces: T1-B+/T2-Cs+/T2i
Wired Interfaces: RKM-1+/RK1+/KX2
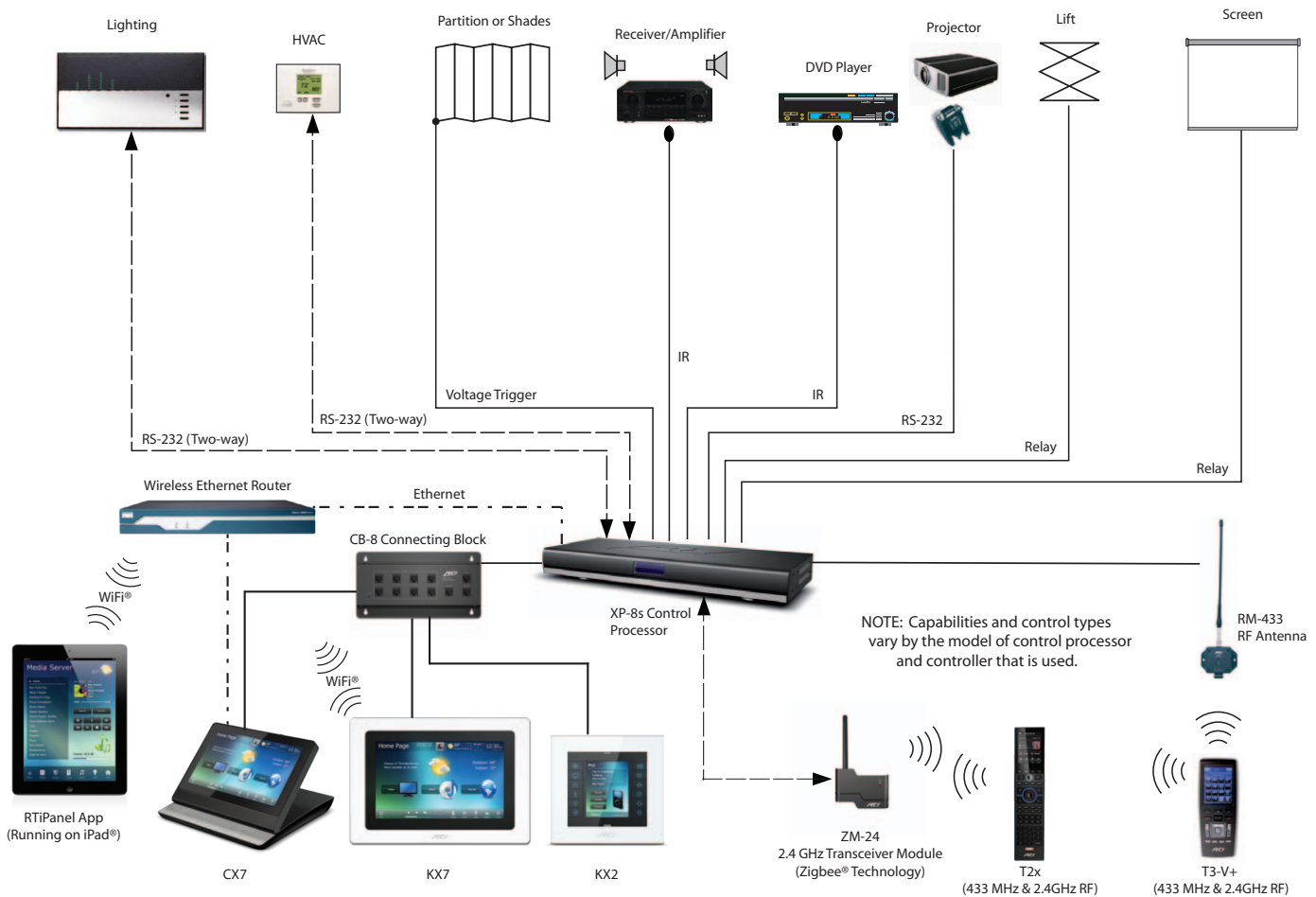Control Processor: XP-6

Complex System
Wireless Interfaces: T2x/T3-V+/RTiPanel App
Wired Interfaces: RK3-V/KX7/CX7
Control Processor: XP-6/XP-8s

Distributed Audio
AD-4x/AD-8x
CP-450/CP-1650 Amplifiers
RTiDock iPod Dock

Lighting

HVAC

Partition or Shades

Receiver/Amplifier

DVD Player

Projector

Lift

Screen

IR

Voltage Trigger

IR

RS-232

RS-232 (Two-way)

RS-232 (Two-way)

Relay

RS-232 (Two-way)

Relay

Wireless Ethernet Router

Ethernet

CB-8 Connecting Block

WiFi®

WiFi®

XP-8s Control Processor

NOTE: Capabilities and control types vary by the model of control processor and controller that is used.

RM-433 RF Antenna

RTiPanel App (Running on iPad®)

CX7

KX7

KX2

ZM-24 2.4 GHz Transceiver Module (Zigbee® Technology)

T2x (433 MHz & 2.4GHz RF)

T3-V+ (433 MHz & 2.4GHz RF)

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® 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 wireless interfaces with robust RF communication, the RTiPanel and Virtual Panel Apps, and a full line of wired user interfaces, gives the installer all the tools necessary to offer reliable control in nearly any environment.

Equipment Considerations
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
Wireless Interfaces: T1-B+/T2-Cs+/T2x
Wired Interfaces: RK1/KX2
Control Processor: RP-4/XP-3/XP-6

Complex System
Wireless Interfaces: T2i/T2x/T3-V+/RTiPanel App
Wired Interfaces: RK3-V/KX7/CX7
Control Processor: XP-6/XP-8s

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