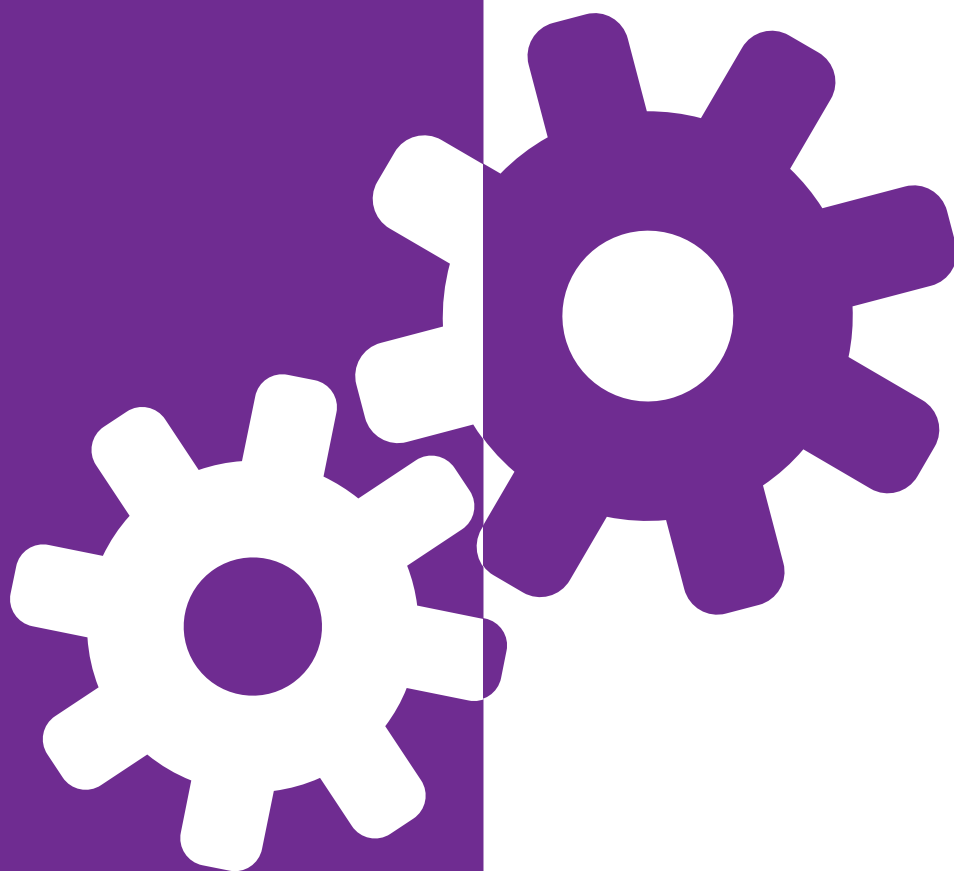


# **CONTROL AND AUTOMATION**

## **PRODUCT GUIDE 2018**



**SUPPLYING TECHNOLOGY  
AND ENTERTAINMENT FOR  
TODAY'S SMART HOME**

# WELCOME TO OUR CONTROL AND AUTOMATION GUIDE



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## PETER BIGGIN

Technical Sales Manager

Having cut my teeth in the electronic security industry, I developed an interest in electronics that made the home more secure and convenient to live in. Later whilst working as a custom installer, I was introduced to RTI by Invision, back then it ticked a lot of boxes and I subsequently installed my first system in a 42m Superyacht using a ZRP6 and T1B remotes.

This guide shows a completely different RTI to the one I first got involved with, it has evolved from a single room solutions to a multi-room home and commercial AV and control platform capable of integrating a high range of 3rd party systems and presenting the user with a concise interface tailored for them. Please read on to discover more about one of the most reliable control systems available.

**Peter Biggin** Technical Sales Manager



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## MARK TAYLOR

Commercial Director

Invision is the UK's fastest growing distributor of market leading systems for today's Smart Home, supplying professional installers with innovative products and integrated solutions.

Our investment in products, training, service and support will continue during 2018, to provide you with one stop access to all the products you need for your next installation. Remember that we stock so you don't have to! All products are available on a next day delivery service to UK mainland destinations.

Our new 2018 product guides, organised by market category, are designed to bring you the very latest information from our exceptional product portfolio and I would welcome your feedback.

**Mark Taylor** Commercial Director



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# ABOUT RTI

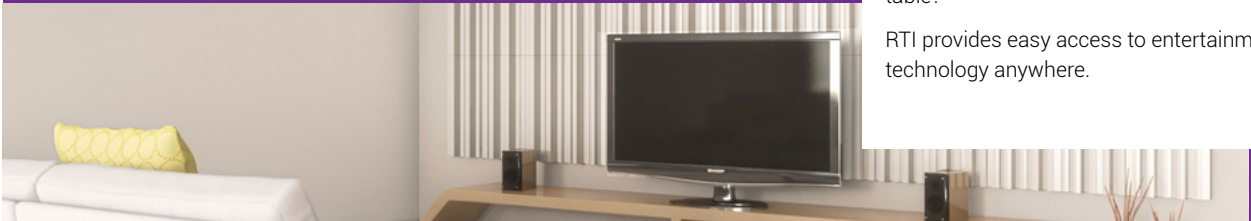
RTI is the leading control system manufacturer offering innovative, sophisticated and user friendly devices for professionally installed electronic systems.

The company's wide array of award winning handheld and in-wall universal controller, central processors, audio distribution systems and accessories are marketed exclusively through a worldwide network of professional integrators.

**MAKE YOUR BUILDING COME ALIVE:** From cinema rooms to whole home automation, RTI control systems fill your world with music, movement and light. Devices adapt to your needs, rather than the home owner adapting to them. A world of pleasures can be summoned - instantly and effortlessly with one simple touch.

**SIMPLICITY AND CONVENIENCE:** The complete line of RTI solutions - custom tailored to meet the client's specific needs - enhance the control experience through simplicity and convenience. From sound and light, to climate and security, all these systems can be instantly accessed and their functions effortlessly choreographed.

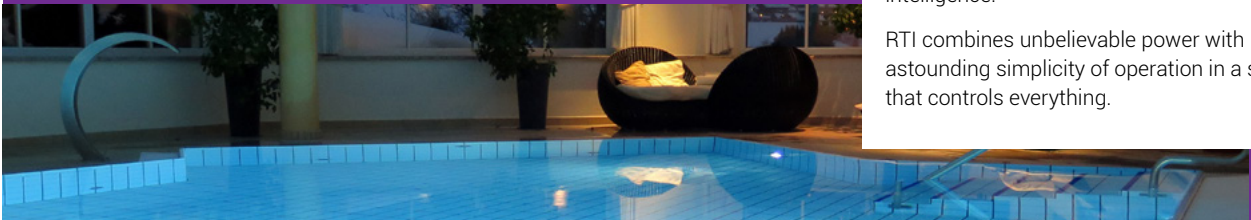
## MASTER THE MEDIA



Tired of the remote control puzzle on the coffee table?

RTI provides easy access to entertainment technology anywhere.

## AUTOMATE THE ENVIRONMENT



Experience the ultimate environment intelligence.

RTI combines unbelievable power with astounding simplicity of operation in a system that controls everything.

## SECURE THE PROPERTY



Take comfort in the knowledge that the house is secure.

With all of the measures in place to keep the family safe and informed, RTI will give peace of mind both home and away.

## CUSTOMISED CONTROL



Stunning RTI interfaces can be completely customised, tailoring it for the home owner, making it simple and intuitive.

Also, allows the system designer to make the interface precisely match the various systems being controlled from AV to lighting and HVAC.



# RTI



## DESIGN FOR YOUR CLIENT

A customised interface is tailored for the user making it simple and intuitive, it also allows the system designer to make the interface precisely match the various systems they are controlling from AV to lighting and HVAC. Extra buttons, new layouts, any background image or colour or build your control interfaces to a theme, the options are only limited by the designer and clients imagination. ■



## BUTTONS THAT SUIT YOU

RTI button only remotes and in-wall keypads can be customised by laser etching custom text and graphics the buttons. There are also customisable hard buttons on many of the touch screens. ■



## SAME ACROSS ALL DEVICES

RTI has one of the broadest range of control interfaces from simple button only keypads to large screen in wall interfaces and handheld tablets where there is an opportunity to create stunning graphics and include all the control options you need on a single page. ■



# 5 YEAR WARRANTY

## EXCLUSIVE 5 YEAR WARRANTY

The UK's 5 year warranty program is available to RTI accredited installers and backs up our belief that RTI is the most stable and reliable control platform available in the CI market.

Technical Sales Manager for RTI, Peter Biggin, explains; *"We have over 10 years experience distributing RTI products under our belt. We believe it to be the most stable and reliable control platform available. We are so confident in this belief we are prepared to back this up by offering our RTI accredited installers with this 5 year replacement warranty program".*

Offering all RTI accredited installers a 5 year replacement warranty service on all projects. For more information on the warranty programme and how to become an accredited dealer, please contact Peter Biggin - [peter.biggin@invisionuk.com](mailto:peter.biggin@invisionuk.com)

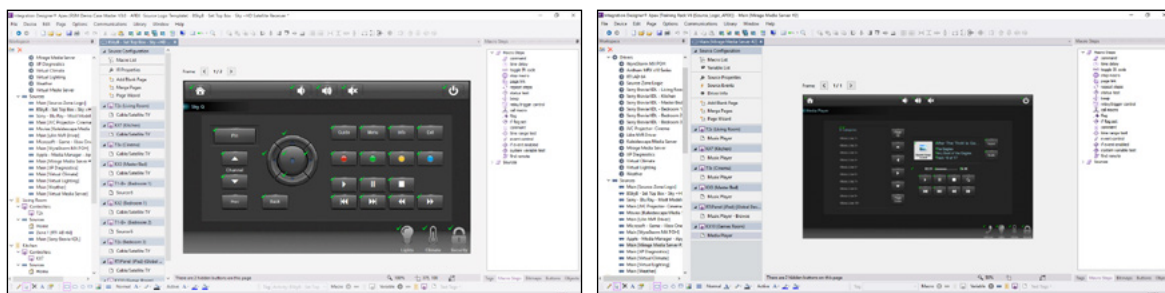


# THE SIMPLICITY YOU CRAVE, WITH THE FREEDOM AND FLEXIBILITY YOU LOVE

With the efficiency and speed of auto-programming, Integration Designer® APEX gives you an enormous head start on every project. Standard buttons and functionality that used to take hours to program can now be done in minutes.

The freedom you need to bring your ideas to life, is now even better. Take advantage of an improved user experience, with features such as resizeable graphics, that makes custom programming easier and more rewarding.

With Integration Designer® APEX, your business now has the scalability to complete in new residential markets, from one-room projects to sophisticated smart homes.



## MORE TIME TO FOCUS ON THE POSSIBILITIES

Help your clients dream of what's possible with an RTI experience in their home or business, and deliver it in a way no one else can. With Integration Designer® APEX, RTI has removed barriers, taking work off your plate so you can focus on the work that will drive your business forward.

The existing ID platform, although powerful, can't support all of the current and upcoming features planned for future software releases. The new 'backbone' of APEX allows for significant future capability, as well as immediate features like graphics resizing and auto-programming. APEX will allow for substantial reductions in programming time for systems of any size, while still allowing complete customisation of control logic and UI design.





RTiQ makes it easy for installers to remotely support any RTI system. With a simple software update to your existing RTI XP series control processor, RTiQ can monitor not only network devices but any device connected to the XP processor. You will be able to see the status of RTI and third party devices that you have configured for remote monitoring, get alerts when failures occur and trigger custom actions remotely to resolve problems.

## PREREQUISITES

- An RTI control system with an XP series control processor
- Internet access for the monitored system
- An RTiQ account
- The latest version of firmware for the XP processor
- The latest version of Integration Designer 9 or Integration Designer APEX 10

## HOW DOES IT WORK?

RTiQ consists of two main parts; the XP series control processor in your system and the RTiQ service in the cloud. You use Integration Designer to enable RTiQ and configure devices to monitor and custom actions to remotely service the system. When RTiQ is enabled, the XP processor continuously reports on the health of the system and any monitored external devices to the RTiQ cloud service. At any time, and from anywhere with an internet connection, you can log into the RTiQ web dashboard to check on the health of the system and remotely trigger actions to resolve problems without having to visit the site. You can also configure text and SMS alerts to keep you informed about the health of the system. The RTiQ cloud also keeps a history of system events to help you track down intermittent problems.

The screenshot shows the RTiQ web dashboard. At the top, there is a navigation bar with the RTiQ logo and links to DASHBOARD, SYSTEMS, USERS, DEALER PROFILE, and SUPPORT. Below the navigation bar, the main content area is divided into two sections. On the left, there is a 'Systems Map' showing a map of the United States with several location pins. On the right, there is a 'Current Issues' table.

System	Status	Uptime
Schmidt Office XP6	Error	6 days 22 hours
Schmidt Office XP8s	Error	2 hours 54 minutes



# WIRELESS INTERFACES



Fully customisable touchscreen on T2i, T2x and T3x handsets



Mains powered charging dock for T1B+, T2i, T2x and T3x handsets



Ergonomic and aesthetic design on all handsets. SURFiR pictured below



# THE CONVENIENCE AND SIMPLICITY OF A DEDICATED WIRELESS CONTROLLER WITH TACTILE BUTTONS IS THE EASIEST WAY TO ENJOY ELECTRONICS.



## T3x

The culmination of over 20 years of award winning engineering and design experience is clearly reflected in the T3x - the flagship controller from RTI. Precision crafted with a 3.5" flush mount high resolution touchscreen and fully programmable soft touch buttons, this handheld beauty has exceptional ergonomics. Building on the technological advancements of its predecessors, the T3x redefines the expectations of what is possible with a remote control.

### FEATURES

- Thin, sleek and ergonomic
- Fully customisable with 35 assignable/programmable buttons
- Flush, edge to edge touchscreen for improved gesture support
- Integrated grip sensors keep the remote awake while in use
- Transmits IR and RF (or both - on a single button press!)
- Dual RF transmission capability uses 433MHz and 2.4GHz
- Integrated 802.11b/g wireless Ethernet
- Two way control using Zigbee® and RTI control components
- Extremely wide IR transmitting frequency range



## T1B+

- Programmable Hard Buttons
- IR/RF/Zigbee
- Backlight Buttons



## Pro24.z

- Programmable Buttons
- IR/RF/Zigbee
- 2.8" Colour Touchscreen



## T2i

- 2.8" Colour Touchscreen
- IR/RF/Zigbee
- 47 hard buttons



## T2x

- 2.8" Colour Touchscreen
- IR/RF/Zigbee/Wifi



## T3x

- 3.5" Colour Touchscreen
- IR/RF/Zigbee/Wifi
- 2-way SIP Audio/Video



## SURFiR

- Interchangeable button labels
- Requires 2 x AA batteries
- Keeps in sync with iPad

# KX WIRED INTERFACES

Stylish stainless steel finish faceplate on all KX controllers



Dedicated in-wall keypad for multi room audio applications



CB8 Connecting Block - Connect up to 8x RTI controllers

The CB-8 is an installation accessory designed to provide convenient and reliable power connections for up to 8 RTI in-wall keypads, touchpanels and other devices.



## KX7

The extraordinary KX7 is packed full of features for complete control of entertainment, environment and security systems in any residential or commercial installation. The wall mounted touchpanel has a slim profile, framing a vivid 7" LCD that can be custom tailored for intuitive control, while the multi touch capacitive touchscreen allows screen swiping for page navigation.

### FEATURES

- Stylish, low profile bezel
- Fully programmable 7" touchscreen
- Integrated multi touch capacitive touch screen that allows screen swiping for page navigation
- Integrated 10/100Base-T Ethernet port with PoE
- Proximity sensor and ambient light sensor adjusts the brightness
- Compatibility for viewing video from IP security cameras, enhanced two way feedback and remote programming updates
- USB and Ethernet programming
- Faceplate available in White, Black or Stainless Steel



### KX1

- 1.2" OLED Display
- PoE
- Backlit Volume Indicator



### KX2

- 2.8" Touchscreen Display
- PoE
- 12 Hard Buttons



### KX3

- 3.5" LED Display
- 2-way SIP Audio/Video
- Integrated XP Processor



### KX7

- 7" LCD Display
- Multitouch Capacitive Display
- 2-way SIP Audio/Video



### KX10

- 10" LCD Display
- HDBT Input
- 2-way SIP Audio/Video

### RK1+ (2,4,8 button) In-wall keypad



Available with two, four or eight fully programmable buttons, the RK1+ can directly control almost any audio/video component or lighting system up to 1000 feet away using its infrared output port.

- Simple Hard Button Control
- Colour change LED backlight
- LaserShark custom buttons

### WK2 Water Resistant In-wall Keypad



The water resistant keypad extends the RTI automation platform to residential and commercial settings such as kitchens, bathrooms, outdoor cinemas, health clubs, yachts, and more.

- OLED Display
- Capacitive touch glass keypad
- Water resistant

### CX7 7-inch Tabletop/Under Cabinet Touchpanel



The 7" LCD touchpanel has adjustable tilt, allowing the display to be angled straight up to nearly flat. The CX7 can even be mounted inverted under a cabinet.

- 7" LCD Display
- Multitouch Capacitive Display
- 2-way SIP Audio/Video

### CX10 10-inch Tabletop/Under Cabinet Touchpanel



From the kitchen countertop to the conference room, the versatile CX10 is perfect wherever 'always on', intuitive control is required. The 10" LCD touchpanel has adjustable tilt, allowing the display to be angled straight up to nearly flat.

- 10" LCD Display
- HDBT Input
- 2-way SIP Audio/Video



# SMART DEVICE INTERFACES

SMARTPHONES, TABLETS AND PCS OFFER THE SAME LEVEL OF CONTROL, FROM VIRTUALLY ANYWHERE... EVEN FROM THE OTHER SIDE OF THE WORLD!



## RTi Panel App

The RTiPanel app is a perfect example of how today's electronics are converging in new and exciting ways. Fully customisable the RTiPanel offers the same intuitive control experience RTi remote controls offer, running on an Apple or Android smart phone or tablet device.

### FEATURES

- Control and receive feedback from audio, video, lighting, security, climate, and more!
- Available through Apple App Store®, Google Play® and the Amazon App Store®
- Fully integrate Apple iPad®, iPhone®, iPod Touch® and Android™ devices into your RTi control systems
- Completely customisable graphical interface
- Programmed using same Integration Designer software
- Supports creation of both portrait and landscape
- Supports full two way feedback, including cover art, graphics, text, dynamic scrolling lists, and more!
- Highly optimised for fast connection times

Completely customisable to suit your client



Custom user interfaces designed by The Sound Gallery, Buckinghamshire

# CONTROL PROCESSORS

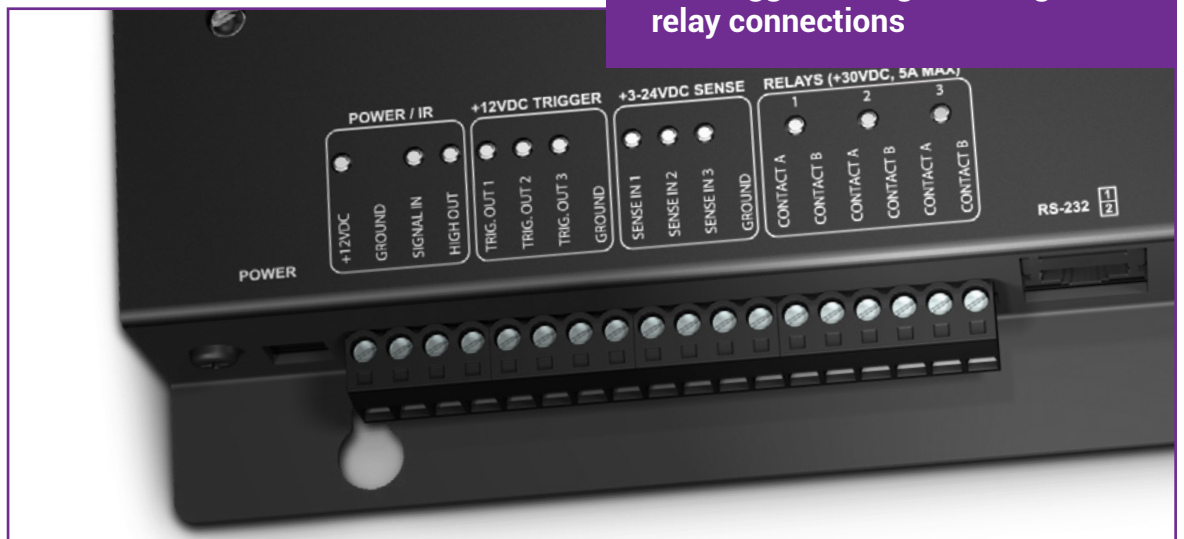
Multi purpose ports for IR, one way, RS232 and sensing



RS232 ports for bi-directional communication



12V trigger, voltage sensing and relay connections







### XP-6s

The XP-6s offers an unmatched value without compromising on performance. Packed with an impressive feature set rivaling processors at twice the price, the XP-6s is the wise choice for powerful command of a professionally installed electronic system. The processor starts with a variety of options for IR control, offering a high output port and six addressable multipurpose IR output ports that accommodate industry standard IR emitters. These ports can also be used with RTI accessory devices to sense voltage to manage the power status of connected devices.

#### FEATURES

- Built in astronomical clock for time based events and sleep timers.
- Compatible with all RTI wireless remote controls (when used with RTI RF antennas/ Zigbee® transceivers) and in-wall controllers.
- Multi-purpose I/O ports are compatible with industry standard IR emitters, blasters, and repeater systems.
- Input for connection of multiple RF receiver modules.
- Variable IR output on all ports.
- Multi purpose I/O ports support all optional RTI power sensing and communications modules.
- Programmed using the Integration Designer® Software.
- Non volatile Flash memory stores your system configuration even when power is not present.
- Fast USB 2.0 and Ethernet programming.
- Field upgradable firmware.



#### RP4

- 4 Assignable IR Outputs
- Inbuilt 433MHz antenna
- One way control via RTI Panel App



#### XP3

- Built-in Zigbee Antenna
- Full 2 way IP, RS232 Control
- Astronomical Clock



#### XP-6s

- 32bit, 533MHz CPU
- 128Mb Flash Memory
- Requires ZM24 or RM433



#### XP-8v

- 19" Rack Mount
- 4GB SD Card Memory
- 532MHz i.MX CPU

# AUDIO DISTRIBUTION

RCA inputs and  
RCA loop outputs



Pre-outs to power  
amplifiers if required



Removable carbon effect faceplate  
on all AD amps and CP power amps



## AD-8x

The AD-8x audio distribution system is designed to be a seamless extension of an RTI control system. The AD-8x 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. Depending on the source equipment used, more advanced information such as song playlists, cover art and metadata may also be available.



### FEATURES

- 8 analogue stereo audio output zones with fixed and variable pre-outs.
- 8 analogue audio source inputs with independent trim level adjustment.
- Integrated 16 channel amplifier utilises Cool Power® technology.
- Provides 25 watts per channel in each zone.
- Distribute 8 audio source inputs to eight zone, expandable to 64 zones by stacking additional AD-8x units.
- Ethernet support and a web interface
- Web interface allows zones to be configured into groups, allowing them to be controlled as a single zone.
- Controlled via IR, and two way control with feedback via RS-232 and IP when installed with RTI control systems.
- Accessory wall plate (RSP-1) allows remote source equipment to be connected and controlled remotely over a Cat-5 cable.



### AD-4x - 4-zone Audio Distribution System

- 4x analogue stereo audio output zones with input switching and pre-outs.
  - 25watts per channel in each zone.
- 4x analogue audio source inputs with independent trim level adjustment.
  - Controlled via infrared, or two way control (with status feedback) via RS-232 and IP using RTI control systems.
- Independent volume and tone control for all audio zones.
  - Zone power indicator LEDs.
- Compact, low profile design allows shelf or rack installation.



### AD-16x - 16x16 Audio Matrix Switch

- Provides routing of 16 stereo audio sources to 16 zones.
- 8x local audio inputs may be augmented with eight remote sources, such as a PC or MP3 player, using an accessory wall plate (RSP-1).
  - 8x AD-16x units may be source looped, for distributing sixteen audio sources up to 128 zones.
  - Preamp outputs allow external amplification.
  - 8x bands of parametric audio equalising in all zones.
- Control via IP, RS-232 or IR via an RTI or other control system.
- Rack mountable (3U rack form factor) or free standing.



### CP-450 - 4 Channel Cool Power Amplifier

- 4-Channel Amplifier, utilising Cool Power Technology
  - 50 watts per channel
- Expands AD-4x and AD-8x audio distribution systems
  - Voltage trigger (3-30V AC/DC), RS232 or IR Control
  - IR Passthru port for cascading IR signal to additional amplifiers



### CP-1650 - 16 Channel Cool Power Amplifier

- 16-Channel Amplifier, utilising Cool Power Technology
  - 50 watts per channel
- Bridgeable audio outputs to increase power to 100w per channel
  - Adjustable audio input
- Expands AD-4x and AD8x audio distribution systems
  - Voltage trigger (3-30V AC/DC), RS232 or IR Control



# MAKE YOUR HOME COME ALIVE

From home theatre to state-of-the-art home automation, RTI control systems fill your world with music, movement and light. Technology that used to complicate, now delights, and life is once again in harmony.

This is the RTI-enabled home: an oasis where your needs are fulfilled through technology. Where devices adapt to your needs, rather than the other way around. And a world of pleasures can be summoned - instantly, effortlessly, with a simple touch.



# MAKE YOUR HOME COME ALIVE

## GOOD MORNING

- With a touch of a button, the shades open... slowly.
- The lights give a soft glow at first, getting brighter to light your way
- Soothing music and a bath? or a morning workout and the news? You choose today...
- The bathroom and dressing room are lit up and ready.



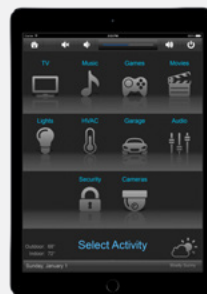
## GETTING READY

- Now it's time to get the rest of the family moving...
- Give the kids a wake up call - a playlist of their favourite tunes... or yours.
- Check the weather... chance of sunshine - better send the kids to school with their hats.
- Time for breakfast and some music to get everyone groovin' on their way.



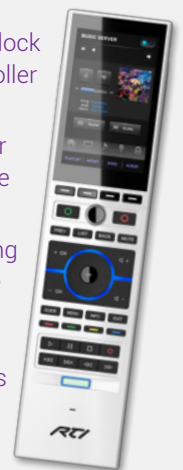
## OUT & ABOUT

- You can check the security cameras, the lights and temperature and even unlock the door for the builder
- The system is making energy saving adjustments and keeping tabs on security
- The shades on the sunny side of the house are closed automatically to keep the home cool.



## ENTERTAINING

- Greet your guests and unlock the door... from the controller in your bedroom
- Fire up the game room for the kids, put games on the TV.
- The system is transitioning your home, by turning the outdoor lights on, blinds have been closed in the bedrooms and bathrooms



## IT'S MOVIE TIME

- Press "Watch Movie" and the cinema will come to life, lights dim, screen drops, projector on and surround sound set.
- You just need to get the drinks and popcorn.
- The system will still be working, by changing the lighting around the house and setting temperatures in the bathrooms and bedrooms.



## GOOD NIGHT

- Say "Alexa, turn system off" and let the system shut down.\*



\*3rd party driver requires license.  
Visit: [mydevices.com.av](http://mydevices.com.av)

# SIMPLE SINGLE ROOM CONTROL

The perfect start to a smart home or office, the C2K1 Custom Control Kit delivers powerful control and automation of AV, lighting, security and more.

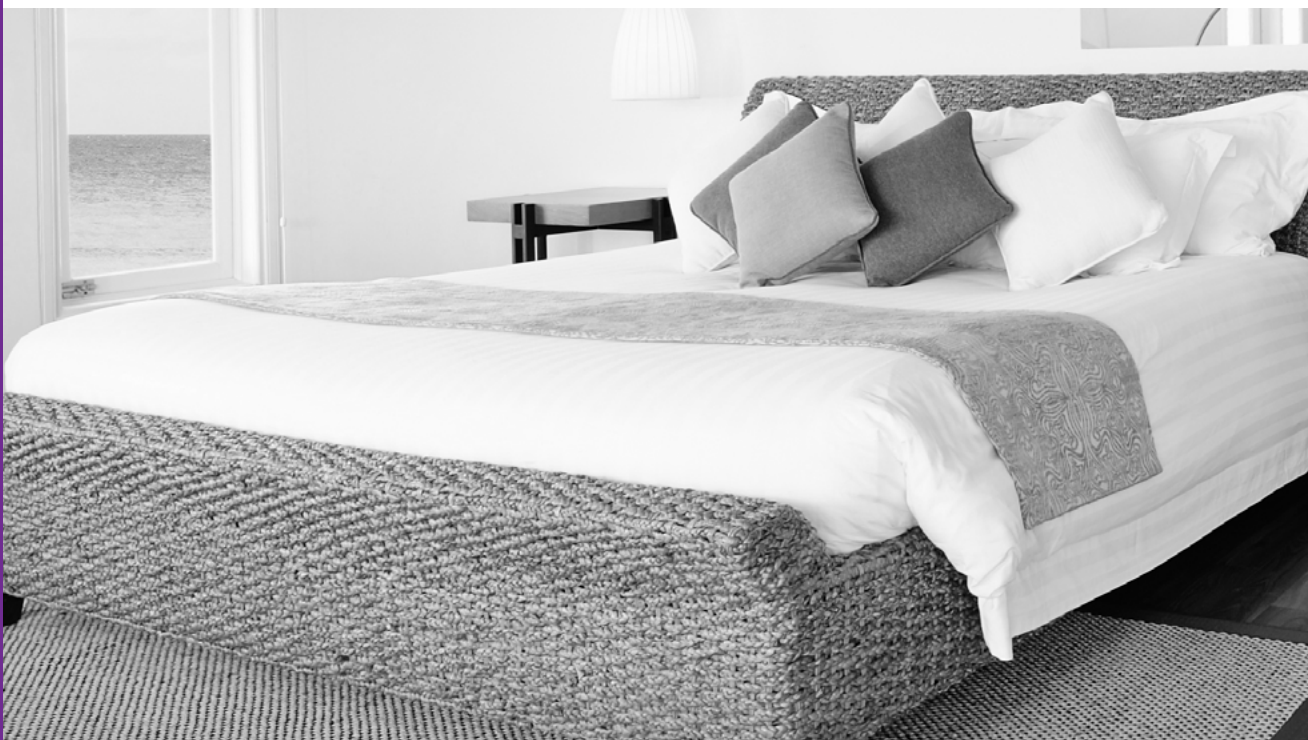
Designed with incredible flexibility, the kit offers full customisation via Integration Designer APEX, to enable simple operation of today's electronics and easy expansion for tomorrow's. ■

## CONTAINS

XP-3 Control Processor

Pro24.z Remote

1x Site License





# GOOD MORNING

When you have a home full of sleepy people, getting yourself ready can be the hardest thing of all. Before tending to them - tend to yourself. Don't worry, the rest of the house is running just fine. With a touch of a button, the shades open slowly, the lights give a soft glow at first, getting brighter to light your way. The music will start or the news will come on - you're all ready to start your day. ■

# EASY ENTERTAINING

Arrive home in a rush - get dinner started and open the wine. Now the easy part - press "Entertain": The lights adjust in all the right places, the "party" playlist is started and music fills the home. ■

# IT'S BEDTIME

What a beautiful day - time spent with family and friends. It's time for bed - press "Good Night" and all lights will dim, shades will close, AV equipment all shuts down. All ready to start the day again tomorrow. ■



SCAN CODE to  
view video on the  
RTI C2K1 Custom  
Control Kit

RTI control systems allow every member of the family to easily operate a media room or even the most sophisticated home cinema.

With one-touch control and automation of audio, video, and lighting systems, RTI can eliminate the clutter and confusion of multiple remotes, so more time can be spent enjoying the home cinema experience. ■



## FEATURES

- 1 x RS232
- 4 x Relay outputs
- 4 x IR via CPB1 or PCM-4
- 1 x Ethernet port/ WiFi
- 6 x Sense inputs
- Integrated Zigbee Antenna

RTI KX3 with  
built-in processor



# VOICE CONTROL

RTI can easily interact with voice control so any connected device or group of devices can be controlled hands free. Amazon Echo with RTI provides custom integrators with a reliable and affordable voice control solution for their clients. ■



# INTEGRATED CONTROL

An ideal media room controller the KX3 rewrites the rule book for price and space utilisation by integrating a fully fledged XP level processor in to the beautifully styled KX3 touchscreen. With a built in zigbee receiver remote controls can be added to the room as well as phone and tablet control. Its control capabilities include IP, IR, RS232 and relays to cover all the media room equipment. ■

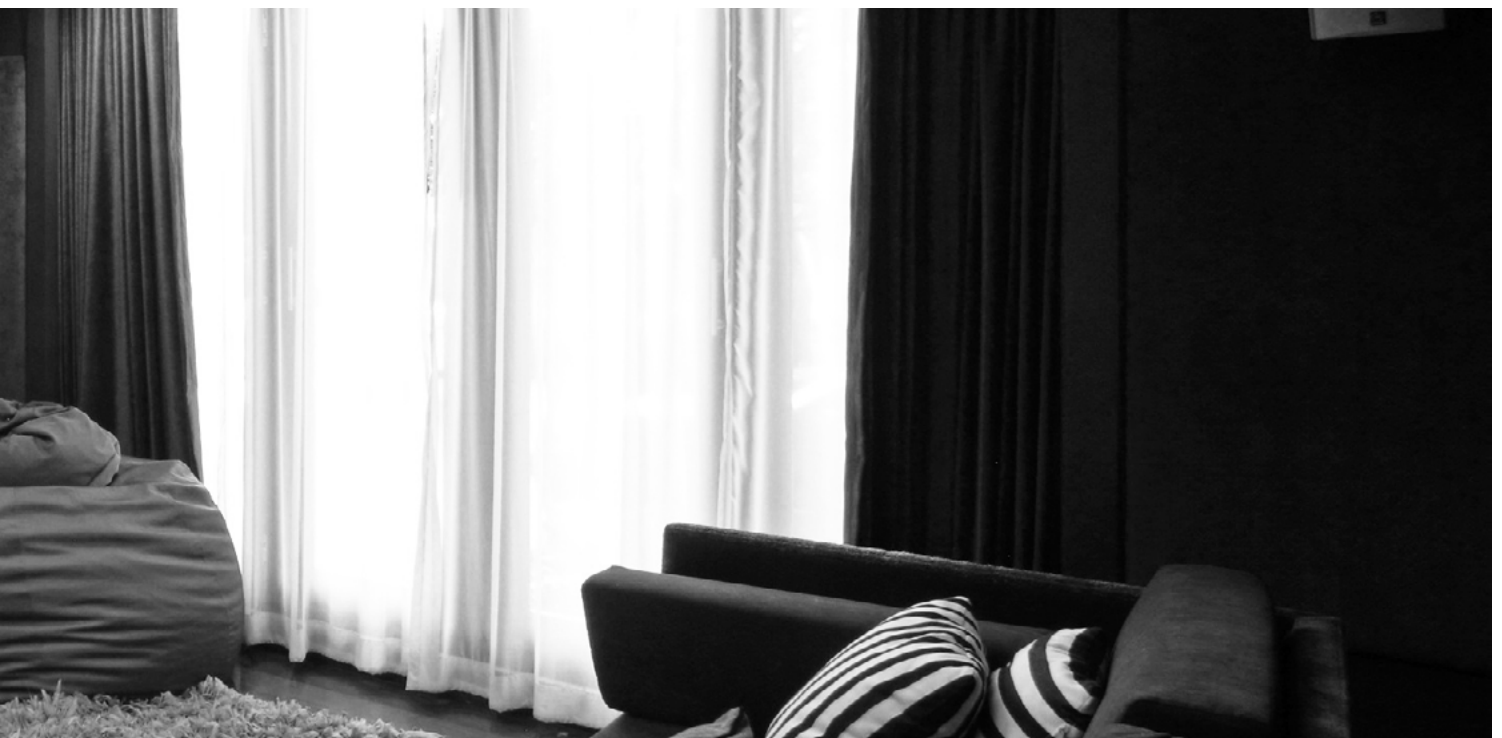


RTI KX3

# DEFYING THE LIMITS

An AVR or Processor is integral to every media room and cinema, using an intelligent remote control with tactile buttons and touchscreen provides the best audio-visual control experience. RTI integrates with most AVR manufacturers, simplifying control of the electronics and in unison controlling the connected displays and sources with one touch. ■

Pioneer SC-LX801

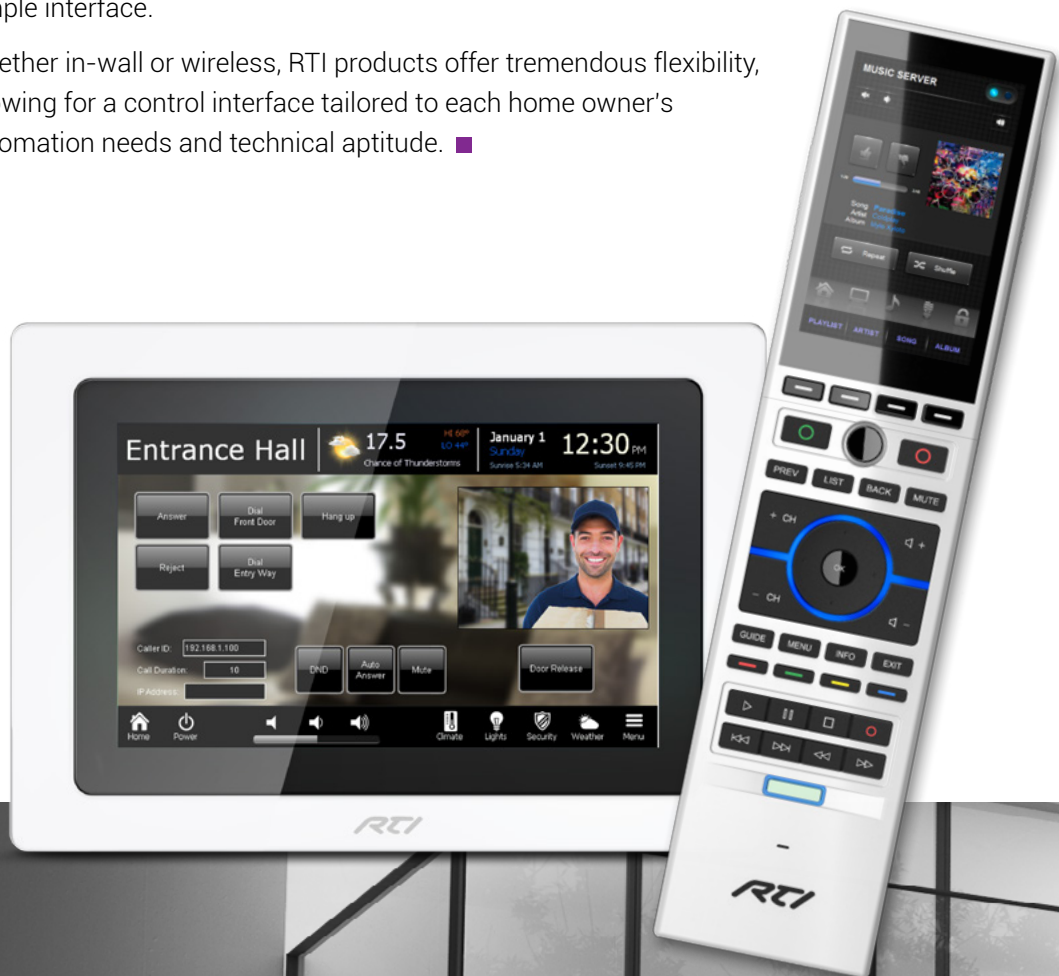




# WHOLE HOME CONTROL

Managing the ever increasing technology options throughout the home can become overwhelming. RTI systems can put the homeowner back in command of these technologies by bringing together control of electronics, whole house audio, lighting, security, and HVAC into one simple interface.

Whether in-wall or wireless, RTI products offer tremendous flexibility, allowing for a control interface tailored to each home owner's automation needs and technical aptitude. ■

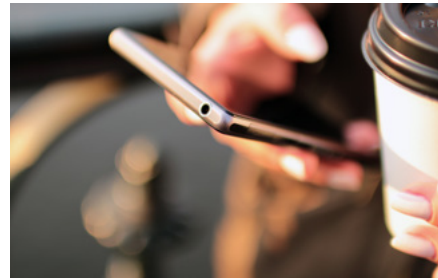


# EVERY ROOM

With RTI the homeowner can get total control back, in every room from one or multiple RTI devices. Control everything from lights to AV equipment, heating to security system and cinema room to door entry, all with a simple touch. ■

# CHECK-IN ANYTIME

From home or the office, even on holiday, you can enjoy the convenience and peace of mind provided by the RTiPanel app. Check the security system, the lights, the temperature - then go about your day. The repairman arrives - unlock the door and watch the security camera until the work is done. Even receive an email notifying you the kids are home. ■



# WHILE YOU SLEEP

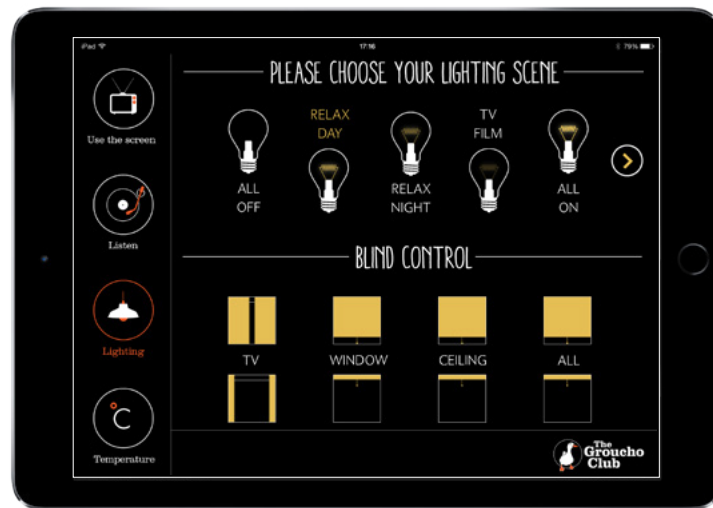
The beauty of the automated home is, even while you sleep, your home is working for you. The RTI control system is able to monitor all of the homes electronics and sensors, ready to trigger events if there is a change. Sleep well, the cycle will start all over again - at sunrise. ■



# LIGHTING & BLIND CONTROL

Whether you're building a home or enhancing an existing residence, RTI offers intelligent lighting and shade control in and around your home. Adjust lighting scenes with one touch or reduce energy costs with fully automated solutions that require no button press at all.

RTI can control lighting in the room you are in and also control lights in any other areas of the house and grounds. The convenience of a whole house off command means RTI helps save energy not only by turning all the lights off but also the AV and heating. ■



Custom user interface designed by Tateside Ltd, London





# EFFICIENT LIGHTING

RTI integrates completely with your choice of intelligent lighting system allowing you to choose the best lighting solution that suits your needs and budget. By building in custom lighting control pages in to the RTI GUI you can easily move from an AV control page to a lighting control page without having to run another app. The control of multiple lighting circuits incorporating a mix of light fittings is simplified by the customisable RTI interface. In addition tactile hard buttons on RTI remote controls can be configured to turn lights on, off or dim them.

Touch panel control of dimmers, relays and blinds not only provide the user with 'armchair' control of their lighting, but also allows RTI to initiate lighting moods, for example 'Watch a Movie' command can dim the lights as well as switching on the home cinema system, with just a single button press. ■



# REMOTELY OPEN BLINDS

RTI blind control can control roller and roman blinds, curtains, venetian and vertical blinds. With a simple touch of a button RTI can open and close blinds or automate this on a schedule for your convenience and security, when you are away. By integrating with third party partners for blind control, seamless RTI control of the environment is achieved along with lighting and climate control. ■



# SEAMLESS INTEGRATION

Security has increasingly converged with home automation and AV, with the advent of high definition IP cameras and network video recorders (NVR) integration just got a lot better.

With RTI simply press the 'view cameras' button and the camera image will be displayed, RTI does all the background work so its simple for the user. Once the cameras are selected RTI allows full or split screen viewing as well as viewing recorded footage. The camera images can also be viewed directly on RTI touchscreens and any pan tilt zoom functions can also be controlled. ■



# SECURITY CONSCIOUS

RTI offers two-way integration for all compatible network cameras, as well as one-way control of DVR/ NVRs. Offering a full complement of pan, tilt and zoom controls, as well as monitoring of video streams on the RTI panel, LILIN provides all the surveillance control functionality the client will need.

For the security conscious, motion and tamper events can be programmed to alert the user, initiate recording, and/or trigger any appropriate action within the RTI system. The ability to save and recall preset camera positions at high speed, and with accuracy is an added bonus. The DVR/NVR driver provides a complete set of one-way commands, providing the user with the ability to easily navigate through the on-screen menus and review recorded camera footage. ■



LILIN NVR3816

# DISCRETE CAMERAS

LILIN offer a wide range of IP security cameras and NVRs. They have a variety of bullet, dome and covert cameras that offer resolutions from 1080p to 4K. All LILIN camera feeds in the system can be viewed and controlled through your RTI touchscreen, as well as through their dedicated app.

LILIN cameras are all designed to blend seamlessly with the home owner's décor whilst offering deep integration with control systems. ■



LILIN MR652





# LET GUESTS IN REMOTELY

Increasingly, intercom systems are a must have for residential installations allowing callers at the door to be screened both for security and convenience. RTI provides seamless integration with door entry systems.

With two way control on compatible RTI devices this makes the user experience easier by having the ability to view their guests at the entrance from controllers in the home and allowing them access to the house. ■



**DoorBird**  
Technology meets Design.

DoorBird D2101V





# INTERCOM SYSTEM INTEGRATION

RTI offers intercom capabilities and two integration with the complete line of DoorBird IP video door stations giving the user convenient and safe door access at home. With RTI you can integrate up to 12 door stations into a system, allowing users to answer the door and control the device conveniently alongside the rest of their smart home.

The integration enables programming of events for connected, disconnected, doorbell, door open, and motion, allowing the RTI control system to execute commands based on these events. For example, using an RTI user interface, users can turn on lights, unlock doors, and adjust microphone and speaker levels. It also provides system status of each station by name. Intercom capabilities between DoorBird and RTI devices can be enabled using the SIP protocol. In addition, RTI's MJPEG Video driver is set to handle video intercom capabilities.

Full integration, including SIP has never been easier. ■



RTI T3x

# INTEGRATED DOOR ENTRY

Whenever the doorbell goes off, the guest can be allowed to gain access to the property with a touch of a button on nearly any RTI controller. Room to room video intercom between compatible RTI in wall touchscreens and remote controls is also possible using their built in speaker, camera and microphone, lets initiate a call on the kitchen KX7 touchscreen to the landing KX3 touchscreen, dinners ready! RTI can also integrate with fingerprint readers and smart wireless Z-Wave locks. ■



RTI KX7



# CONTROL THE CLIMATE

RTI control systems are designed to integrate with many of the industry-leading HVAC companies to combine unbelievable power with astounding simplicity of operation in a system that controls everything – but you. ■



# CLIMATE SYSTEM INTEGRATION

Multi zone heating control has become a minimum standard in new developments, RTI is an ideal integration platform to control multiple heating zones and the associated thermostats.

RTI can integrate with standard IoT thermostats as well as professionally installed multi zone heating control platforms from a number of manufacturers. Integration with ventilation and air conditioning supporting all the major manufacturers is also available. ■



Nest Thermostat

# BMS INTEGRATION

Other building management systems can be integrated through RTI's open development platform which allows the production of bespoke BMS drivers.

The interoperable industry standard KNX is fully supported through RTI's robust KNX gateway. RTI can control all KNX functions from HVAC systems to environmental monitoring and lighting. ■





## RTI FULLY INTEGRATED

AV Receivers • Multi room audio • Media streamers  
Audio processors • Audio Matrix switches



Televisions • DVRs • Media streamers  
Video projectors • Video Matrix switches





# RTI FULLY INTEGRATED

## Lighting • Shade systems • Pool/Spa control • Irrigation

## HVAC • Thermostats • Energy management

## Security cameras/DVRs • Security systems Door locks • Power conditioners

## Paging Systems • Telephone conferencing • Zoning Amplifiers • Networking

# SMART AUTOMATION APPLICATIONS

RTI has so many possibilities, it's not just for single room control or only for residential systems. The applications are endless.

## RESIDENTIAL SYSTEMS

- Home cinema control
- Whole home control
- Outdoor or pool control
- Multi-dwelling systems
- Luxury yacht

## COMMERCIAL SYSTEMS

- Conference rooms
- Lecture halls
- Office suites
- Bars and restaurants
- Hotels

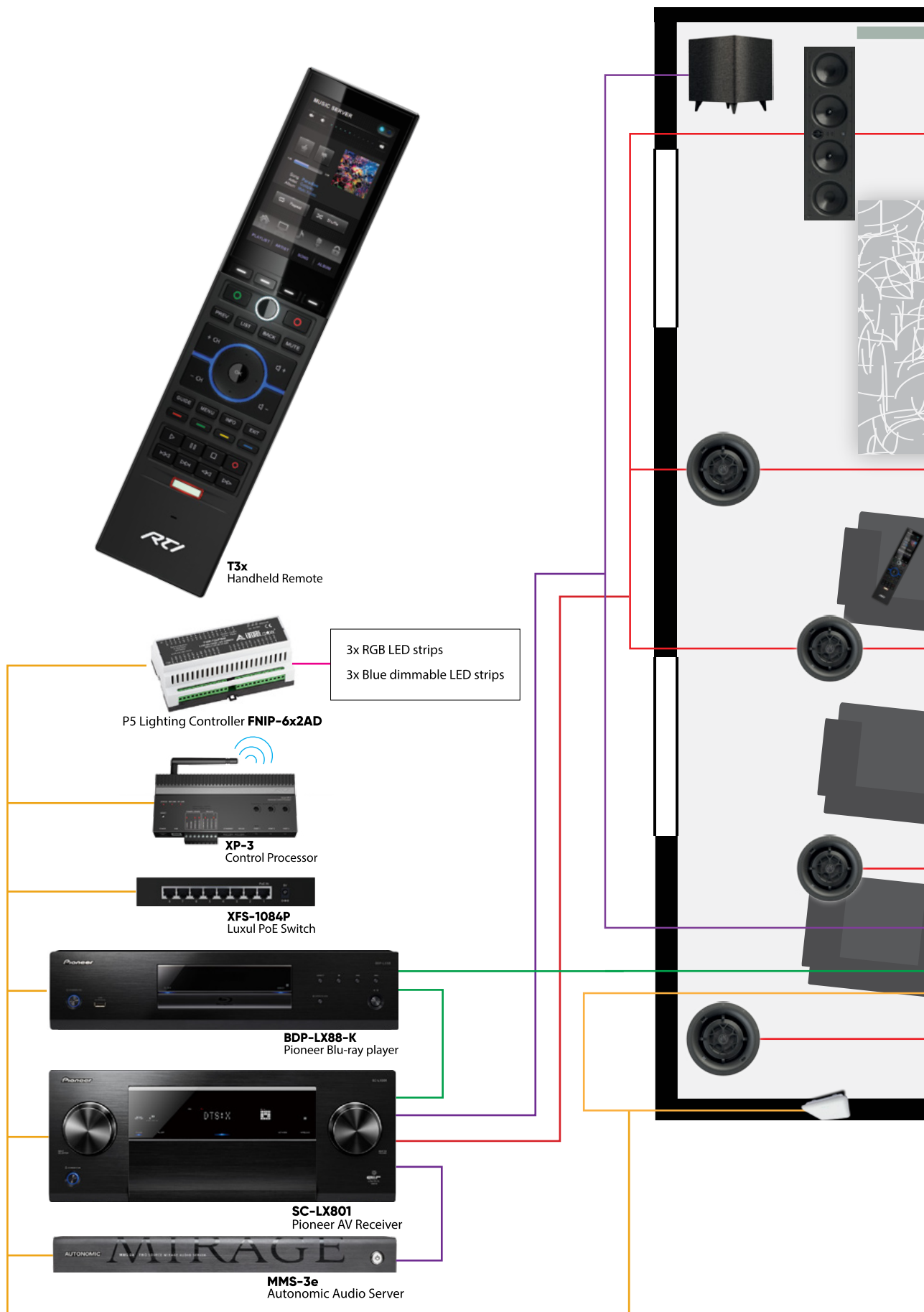
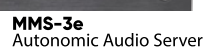
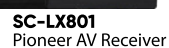
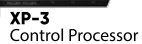


# HOME CINEMA CONTROL

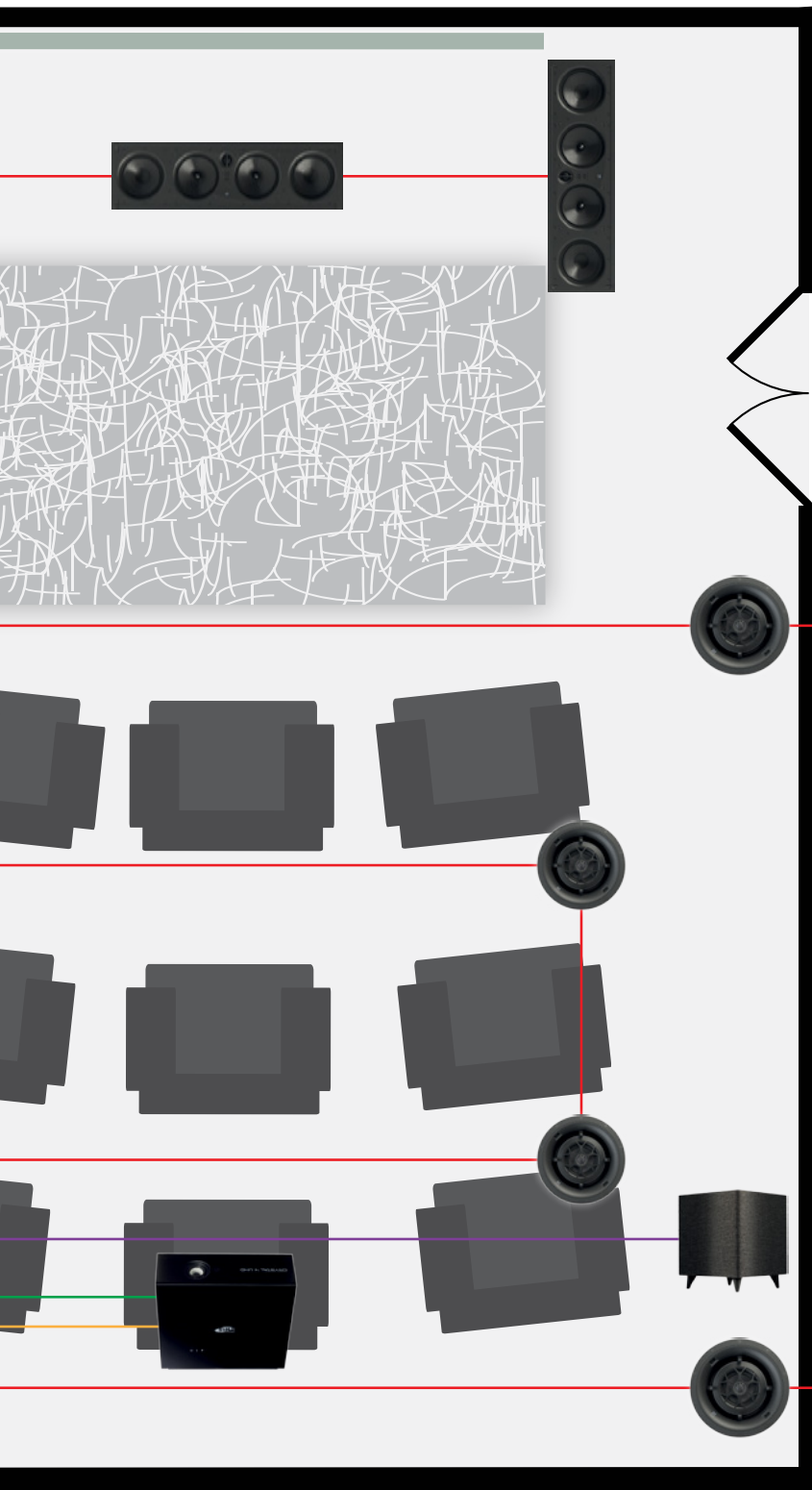


3x RGB LED strips






3x Blue dimmable LED strips







\*Schematic Wiring indicative only. Wiring is all star/radial (never in series). For example, there would be 11x 2 core speaker cable (red) star wired from the AVR.

 SPEAKER	 LINE LEVEL AUDIO	 HDMI
 CAT5/6 (ETHERNET)	 LOW VOLTAGE LIGHTING	 Zigbee®

## TAKING COMMAND OF THE HOME CINEMA

A home cinema is one of the most enjoyable upgrades a home owner can make but even a modest home cinema room will be frustrating to use without proper control. The XP3 processor can control everything in the cinema whether it's with IR control or over the IP network.

The first improvement is eliminating several AV remotes, and replacing them with a single RTI handheld remote with tactile push buttons. The remote is labelled with each source, when pressed not only does it initiate a series of commands to turn everything on in the correct sequence, it then becomes the remote for the source. iPad control can also be used. To overcome its lack of hard buttons RTI have come up with a unique low cost companion remote to work alongside the iPad with a full complement of tactile hard buttons, ideal for AV control.

All the command and control of the cinema equipment and other equipment such as lighting and climate control is handled by the XP3 processor making it a pleasure to control the cinema with RTI. As part of a whole house install the XP3 processor can act as a slave controller to the main house system ensuring the cinema can operate both standalone and integrate with the whole house RTI control system.

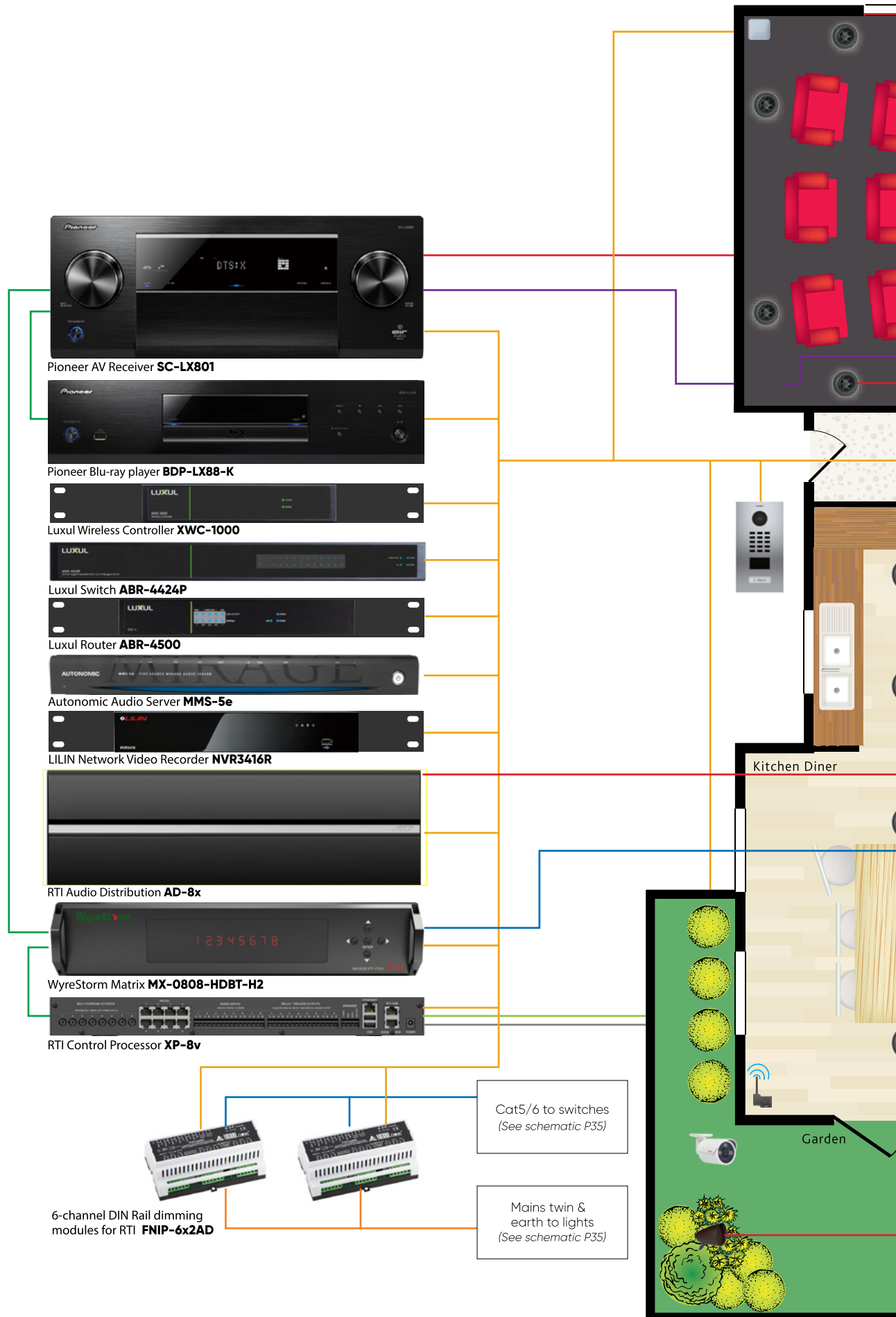
## THE BRAIN OF THE CINEMA SMALL BUT POWERFUL - XP-3

The XP-3 processor packs a big punch and easy expansion capabilities. With a built in RF transceiver and support for wireless bi-directional communications utilising robust ZigBee® technology, the XP-3 can provide the user with real time feedback from supported third party devices such as music servers, lighting, security, and much more. Now, important data from these devices is available to the user with a simple touch - from current song information to the status of a security system - even the weather forecast! The XP-3 is loaded with features normally reserved for higher priced processors, such as a built in astronomical clock and control via Ethernet, RS232, and relays. It is the ultimate choice for powerful bi-directional control and automation at a moderate price!

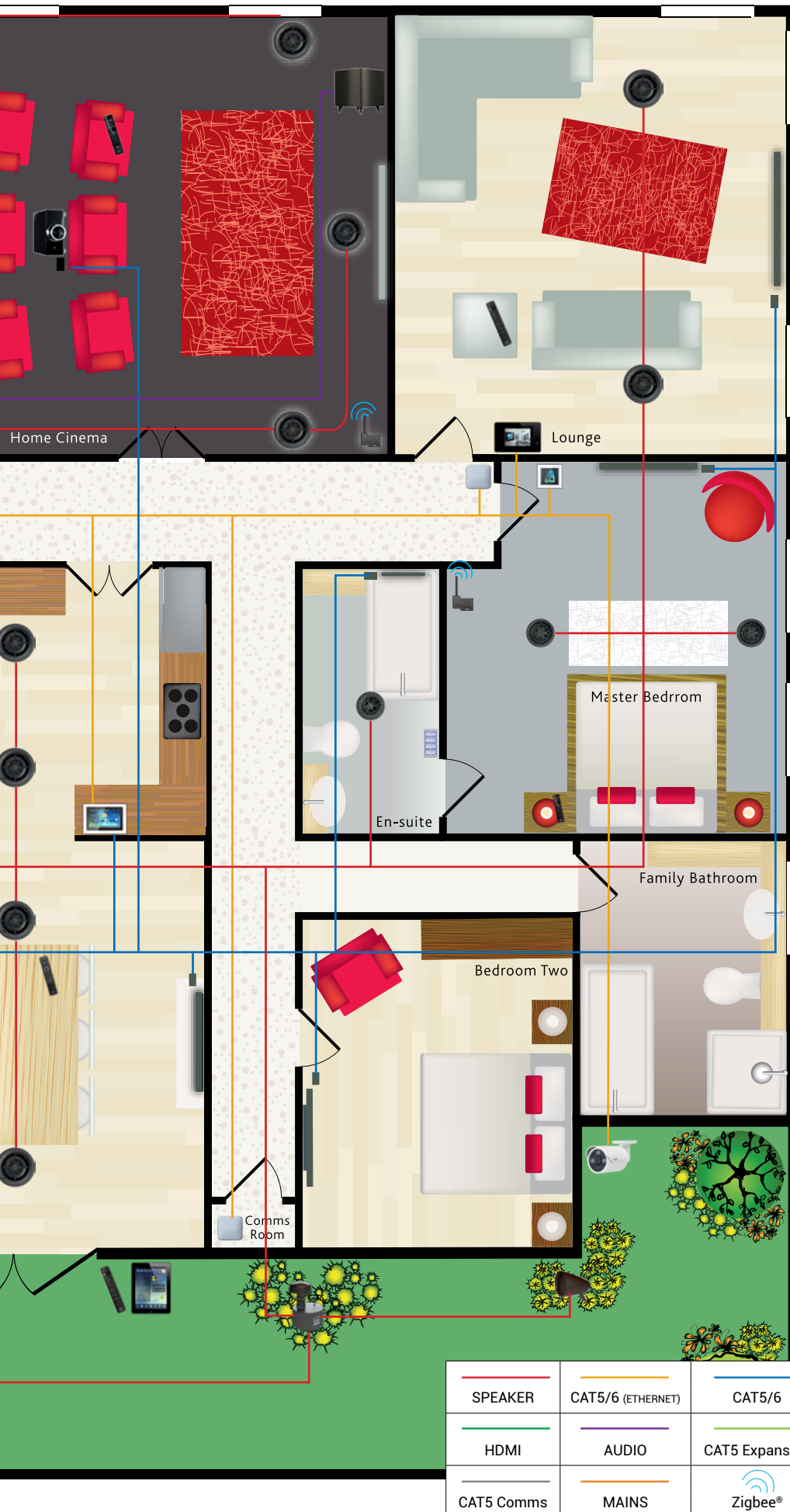
## HOME CINEMA PRODUCT LIST

- Pioneer SC-LX801
- Pioneer BluRay player BDP-LX88-K
- Autonomic Server MMS-3e
- RTI Control Processor XP3
- RTI Handheld Remote T3x
- RTI IR emitter Virsa Mouse
- Luxul PoE switch XFS-1084P
- Luxul XAP-810 Access Point
- P5 FNIP12PWM 12-channel LED/RGB controller
- 4x Origin 8" in-ceiling speakers D87 - Surrounds
- 4x Origin 6" in-ceiling speakers D67 - Overheads
- 3x Origin Cinema speakers THTR67 - LCRs
- 2x Origin 10" subwoofer SUBD10EQ
- SIM2 Crystal4
- Screen Innovations Black Diamond Fixed Frame
- Signature Cinema Seating

# WHOLE HOME CONTROL



\*Schematic Wiring indicative only. Wiring is all star/radial (never in series). For example, there would be 11x 2 core speaker cable (red) star wired from the AVR.



## WHOLE HOME PRODUCT LIST

### Rack

- RTI Control Processor XP8v
- RTI Zigbee Receiver ZM24
- Autonomic Server MMS-5e
- RTI Audio Distribution AD8x
- LILIN Video Recorder NVR3416R
- Luxul Switch ABR-4424P
- Luxul Router ABR-4500
- Luxul Wireless Controll XWC-1000
- WyreStorm MX-0808-HDBT-H2
- Pioneer SC-LX801
- Pioneer BluRay player BDP-LX88-K
- 2x P5 6-channel DIN Rail Dimming module FNIP-6x2AD
- Luxul Access Point XAP-810

### Front Door

- DoorBird IP Video Door Station D2101V

### Lounge

- RTI in-wall controller KX7
- RTI Companion Remote SurfIR
- Sony 50" TV 50X8570C
- WyreStorm Receiver RX-70-4K
- Origin 8" In-ceiling speakers D87
- Luxul Access Point XAP-810

### Cinema

- RTI Handheld Remote T2x
- Luxul PoE switch XFS-1084P
- Luxul Access Point XAP-810
- Origin 8" in-ceiling speakers D87
- Origin 6" in-ceiling speakers D63DT
- Origin SUBD10EQ
- SIM2 Crystal4 Projector
- Screen Innovations Black Diamond
- Moovia Berlin Seating

### Kitchen

- RTI in-wall controller KX10 (HDBT input)
- RTI Handheld Remote T1B+
- Aquavision 32" Nexus TV AVF32L-NLCD
- Origin 6" In-ceiling speakers D67
- RTI Zigbee Receiver ZM24
- WyreStorm RX-70-4K

### Master bedroom

- RTI in-wall controller KX2
- RTI Zigbee Receiver ZM24
- RTI Handheld Remote T1B+
- Origin 6" In-ceiling speakers D67
- LG OLED 55"
- WyreStorm RX-70-4K

### En suite

- Aquavision 22" Nexus TV
- RTI in-wall controller WK2
- Origin 6" in-ceiling D63DT
- WyreStorm RX-70-4K

### Garden

- iOS Device with RTI control
- RTI Companion Remote SurfIR
- Origin outdoor speakers Seasons Landscape LS66
- Origin outdoor subwoofer Seasons Landscape OSSUB8
- LILIN security cameras MR832

# TECHNICAL INFORMATION

With the RTI Integration Partner Program, RTI has reached out to many industry manufacturers (partners) to ensure that the RTI products integrate and play well with others. All RTI products have been designed with a very open architecture; understanding it is critical that these control products interface seamlessly with other integration products on the market. To ensure a successful integration, RTI offers many solutions for control interfaces: RS-232, relay and Ethernet control as well as power sensing modules to monitor and react to the power status of devices in the system. RTI's library of IR codes, RS-232 strings and two way drivers provide further valuable integration resources for the custom installer.





# HANDHELD CONTROLLERS

**SURFIR****T1-B+****Pro24z****T2i****T2X****T3X**

	<b>SURFIR</b>	<b>T1-B+</b>	<b>Pro24z</b>	<b>T2i</b>	<b>T2X</b>	<b>T3X</b>
Communication Type	RF, ZigBee	IR, RF, Zigbee	IR, RF, Zigbee	IR, RF, Zigbee	IR, RF, Zigbee, WiFi	IR, RF, Zigbee, WiFi
Power	4x AAA Alkaline batteries	3.6 VDC, 950mAh (Lithium-Ion battery)	3.6 VDC, 950mAh (Lithium-Ion battery)	3.6 VDC, 900mAh (Lithium-Ion battery)	3.6 VDC, 1800mAh (Lithium-Ion battery)	3.6 VDC, 1800mAh (Lithium-Ion battery)
Charging		Recharging docking station	Recharging docking station	Recharging docking station	Recharging docking station	Recharging docking station
Display Type			Full colour TFT LCD	High contrast colour TFT LCD	High contrast colour TFT LCD	High contrast colour TFT LCD
Display resolution			1/4 VGA (240x320 pixels) with 64K colours	1/4 VGA (240x320 pixels) with 64K colours	1/4 VGA (240x320 pixels) with 64K colours	WVGA (480x800 pixels) with 16.7M colours
Touchscreen			Integrated high resolution	Integrated high resolution	Integrated high resolution	Integrated high resolution
Display size (diagonal)			2.4-inch (61mm)	2.8-inch (71mm)	2.8-inch (71mm)	3.5-inch (88.9mm)
Hard buttons	50	52	48	47	47	35
Customisable buttons	8	12		4	4	4
Backlight (LED)			Keypad: Blue/White	Keypad: Blue/White	Keypad: Blue/White	Keypad: Blue/White
Operating temperature	0°C to +50°C (+32°F to +122°F)		0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)
Operating humidity	5% to 95% non-condensing		5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Continuous run time (fully charged)			Continuous: 3 to 5 hours	Continuous: 3 to 5 hours	Continuous: 4 to 6 hours (Backlight setting dependent)	Continuous: 4 to 6 hours (Backlight setting dependent)
Average run time (fully charged)			Average: 5 to 7 days	Average: 5 to 7 days	Average: 5 to 7 days	Average: 5 to 7 days
Standby time (fully charged)	365 days		30 days	30 days	30 days	30 days
Total system memory	256K Bytes Flash (non-volatile) memory		32 MBytes Flash (non-volatile)	32 MBytes Flash (non-volatile)	128M Bytes Flash (non-volatile)	128M Bytes Flash (non-volatile)
Number of devices	determined in control app (RTiPanel)		limited only by memory	limited only by memory	limited only by memory	limited only by memory
Dimensions (H x W x D)	240 x 46 x 22mm (9.5 x 1.8 x 0.8")	254 x 48 x 23mm (10 x 1.9 x 0.9")	248 x 56 x 23mm (9.79" x 2.23" x 0.9")	254 x 58 x 20mm (10 x 2.3 x 0.7")	254 x 58 x 20mm (10 x 2.3 x 0.7")	254 x 58 x 20mm (10 x 2.3 x 0.7")
Weight	228g (with batteries)	200g (with battery)	210g (with battery)	250g (with battery)	250g (with battery)	250g (with battery)
Warranty	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*
Other features	Companion remote for smart devices	button only	Programmable within APEX software	Accelerometer provides 'instant-on' control	Remotely programmable, complex layered graphics	As T2X + Intercom and IP camera capable. (NO numeric hard buttons)

\*5 year replacement warranty is for all RTI Accredited Dealers. For more information please contact Peter Biggin.

# KX IN-WALL CONTROLLERS



	KX1	KX2	KX3	KX7	KX10
Power	+9VDC to +16VDC, 350mA max	+9VDC to +16VDC, 1A max	+9VDC to +16VDC, 1A max	+9VDC to +16VDC, 1A max	+12VDC to +16VDC, 2A max or PoE+
Power Management		Adjustable backlight brightness, ambient light and proximity sensor	Adjustable backlight brightness, ambient light and proximity sensor	Adjustable backlight brightness/proximity sensor	Adjustable backlight brightness/proximity sensor
Touchscreen		High brightness colour TFT LCD resistive touchscreen. QVGA resolution (W240px x H320px) with 65K colours	High brightness colour TFT LCD WVGA (480x800 pixels) with 16.7M colours.	High brightness colour TFT LCD capacitive touchscreen. Vivid WVGA resolution (W800px x H480px) with 65K colours	High brightness colour TFT LCD. WVGA (1280x800 pixels) with 65K colours. Integrated high-resolution projected capacitive touchscreen
Display size (diagonal)		2.8-inch (71mm)	3.5 in (89mm) diagonal	7-inch	10.1-inch
Backlights	Volume level indicator	LED Backlit display, 200nit	LED Backlit, 200nit	LED backlit display, 310nit	LED Backlit, 305nit
Hard buttons	8	12	5		
Customisable buttons	8	12	5		
Infrared output	Drives up to 30m (1000ft) of wire for standalone control	Through control port, 200mA output. Drives up to 30m of wire	Through control port, 200mA output. Drives up to 300m of wire	Through control port, 200mA output. Drives up to 30m of wire	200mA output. Drives up to 300m of wire
Ethernet port	10/100Base-T (Required for album art)	10/100Base-T with PoE	10/100 Base-T with PoE	10/100Base-T with PoE	10/100 Base-T with PoE+
Control port	Control port enables two-way serial communication and power down a single cat cable for in-wall controllers. Use where PoE networking not available. Requires a CB8 + an XP Processor which can connect up to 8 devices (Star Wired). For single devices use a CBPI for standalone operation without a processor which provides power to the controller and 1 x IR and 1 x RS232 outputs for source equipment all via 1 cat cable.				
Wireless Ethernet			802.11b/g/n	802.11 b/g	802.11b/g/n
Operating Temperature	+0°C to +50°C	+0°C to +50°C	0°C to +50°C	+0°C to +50°C	0°C to +50°C
Operating Humidity	5% to 95% Non-condensing	5% to 95% Non-condensing	5% to 95% Non-condensing	5% to 95% Non-condensing	5% to 95% Non-condensing
Total system memory	64Kb flash non-volatile	32Mb flash non-volatile	128Mb flash non-volatile	128Mb flash non-volatile	128Mb flash non-volatile
Number of devices	limited to memory only	limited to memory only	limited to memory only	limited to memory only	limited to memory only
Dimensions (W x H x D)	46mm x 104mm x 25mm	117mm x 112mm x 31mm	111mm x 149mm x 32mm	217mm x 151mm x 35mm	285mm x 201mm x 31mm
Installation cutout (W x H)	46mm x 71mm	94mm x 94mm	75mm x 132mm	143mm x 195mm	259mm x 187mm
Depth in wall	19mm plus cables	31mm plus cables	41mm with mounting wings	36mm plus cables, 53mm with video connector	31mm plus cables, 53mm with video connector
Mounting	Single gang J back-box	integrated mounting wings or screws through front bezel	Integrated mounting wings, or screws through front plate	integrated mounting wings or screws through front bezel	Integrated mounting wings, or screws through front plate
Warranty	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*
Other features	Designed for multi room audio distribution	fits in standard 4" x 4" back box	Integrated camera, microphone and speakers	Integrated camera, microphone and speakers	Integrated camera, microphone and speakers

\*5 year replacement warranty is for all RTI Accredited Dealers. For more information please contact Peter Biggin.

# WIRED CONTROLLERS

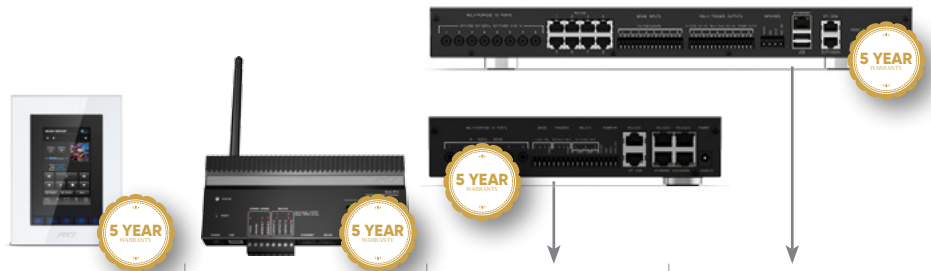


	<b>WK2</b>	<b>RK1+ (2, 4 or 8-button)</b>	<b>CX7</b>	<b>CX10</b>
Power	PoE - 802.3af compliant PoE router/switch	+9VDC to +16VDC, 350mA max	+9VDC to +16VDC, 1A max	+9VDC to +16VDC, 1A max
Power Management			Adjustable backlight brightness, ambient light and proximity sensor	Adjustable backlight brightness, ambient light and proximity sensor
Touchscreen	OLED Monochrome Display, Integrated capacitive touch keypad		High-brightness colour TFT LCD WVGA (800x480 pixels) with 65k colours. Integrated hi-res capacitive touchscreen	High-brightness colour TFT LCD WVGA (800x480 pixels) with 65k colours. Integrated hi-res capacitive touchscreen
Display size (diagonal)	128w x 32h pixels.		7-inch	10.1-inch
Backlights		RGB LED - 16 colours, user defined	Dual CCFL, 300nit	Dual CCFL, 300nit
Hard buttons	15	2, 4 or 8 (depending on model)		
Customisable buttons	15	2, 4 or 8 (depending on model)		
Infrared output		Drives up to 30m (1000ft) of wire for standalone control	Through control port, 200mA output. Drives up to 300m of wire	Through control port, 200mA output. Drives up to 300m of wire
Ethernet port	10/100 Base-T with PoE	Use CB-8 for single cable installation (power and data)	10/100Base-T with PoE	10/100Base-T with PoE+
Control port		Control port enables two-way serial communication and power down a single cat cable for in-wall controllers. Use where PoE networking not available. Requires a CB8 + an XP Processor which can connect up to 8 devices (Star Wired). For single devices use a CBP1 for standalone operation without a processor which provides power to the controller and 1 x IR and 1 x RS232 outputs for source equipment all via 1 cat cable.		
Wireless Ethernet			802.11b/g	802.11b/g
Operating Temperature	+0°C to +50°C	+0°C to +50°C	+0°C to +50°C	+0°C to +50°C
Operating Humidity	5% to 95% Non-condensing	5% to 95% Non-condensing	5% to 95% Non-condensing	5% to 95% Non-condensing
Total system memory		64KB flash non-volatile	256MB flash non-volatile	256MB flash non-volatile
Number of devices		limited to memory only	limited to memory only	limited to memory only
Dimensions (W x H x D)	87mm x 87mm x 60mm (with cables)	46mm x 104mm x 43mm	190mm x 185mm x 159mm	228mm x 252mm x 203mm
Installation cutout (W x H)	75.5mm x 74.5mm	46mm x 71mm		
Depth in wall	60mm plus cables	34mm plus cables		
Mounting	UK back box, Integrated mounting wings, adhesive gasket	Single gang J back box	Tabletop, or screws through mounting bracket (included) for under counter mounting	Tabletop, or screws through mounting bracket (included) for under counter mounting
Warranty	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*
Other features	WK2 must be used with an RTI XP series control processor. It will not function as a standalone controller.	Ships with one LaserShark certificate - for one keypad set	Adjustable tilt display from 10° to 90°	Adjustable tilt display from 10° to 90°

\*5 year replacement warranty is for all RTI Accredited Dealers. For more information please contact Peter Biggin.



# CONTROL PROCESSORS



	<b>KX3</b>	<b>XP-3</b>	<b>XP-6s</b>	<b>XP-8v</b>
Power supply	+12VDC, 1A	+12VDC, 1A	+12VDC, 1A	+12VDC, 1A
Wireless networking	IEEE802.25.4 Zigbee	IEEE802.25.4 Zigbee		
RF Frequency range	433MHz	2.4GHz	Requires ZM-24 or RM433	Requires ZM-24 or RM433
Routable IR ports	1 Via CBPI or Use PCM4 for 4 x Routable Ports	3x 3.5mm jacks	6x 3.5mm jacks	8x 3.5mm jacks
IR Output Drive	100mA maximum per port	100mA maximum per port	100mA maximum per port	100mA maximum per port
IR Frequency Transmission range	15kHz - 460kHz	15kHz - 460kHz	15kHz - 460kHz	15kHz - 460kHz
High IR Output ports			Yes	Yes
Ethernet ports	1x 10/100BaseT with PoE	1x 10/100BaseT with PoE	1x RJ-45, 10/100Base-T	1x RJ-45, 10/100Base-T
MPIO ports		1x custom 3.5mm 4-conductor jack	6x 3.5mm jacks	8x custom 3.5mm 4-conductor jack
RS232 2-way ports	2x bi-directional RJ-45	1x bi-directional RJ-45	3x bi-directional RJ-45	8x RJ-45
Sensing inputs	6x 3-24VDC	2x 3-24VDC	3x 3-24VDC	8x Digital/Closure
RTI Com Port (for ZM-24 Zigbee connectivity)	Yes		Yes	1x RJ-45, 2-way Zigbee communication port
Integrated Zigbee transceiver	Yes	Yes		
Expansion Port (for PCM-8/in-wall connectivity)	Yes		Yes	1x RS-485 / IR / PWR, RJ-45
12Vdc trigger outputs			3x 12VDC, 100mA max each	8x 12VDC
Programmable relays	4x +30VDC, 5A max	2x 5A @ 30VDC or 12V/100mA trigger	3x 3A @ 30VDC	8x 3A @ 30VDC
Programming functionalities	USB & Ethernet	USB & Ethernet	USB & Ethernet	USB & Ethernet
Internal memory	256MB	64MB	512MB	1024MB
Processor	512MHz	512MHz	1GHz	1GHz
RTIPanel and Virtual Panel compatibility	Yes	Yes	Yes	Yes
Mounting	in-wall mount	wall mount or freestanding	rack mount or freestanding	Rack mount or freestanding
Dimensions (W x H x D)	111mm x 149mm x 32mm	177mm x 76mm x 25mm	216mm x 44mm x 152mm	432mm x 43mm x 162mm
Weight	190g	100g	907g	1.8kg
Warranty	5 year warranty*	5 year warranty*	5 year warranty*	5 year warranty*

\*5 year replacement warranty is for all RTI Accredited Dealers. For more information please contact Peter Biggin.

# AUDIO DISTRIBUTION



	AD-4x	AD-8x	AD-16x
AC Input Voltage	115V or 240V - Switchable	115V or 240V - Switchable	115V or 240V - Switchable
Mounting	Rack mount or free standing	Rack mount or free standing	Rack mount or free standing
Chassis dimensions (W x H x D)	430mm x 53mm x 340mm	432mm x 133mm x 375mm	430mm x 133mm x 369mm
Output Zones	4 Zones 2 channels each, Phoenix connectors	8 zones, 2 channels each, Phoenix connectors	16 zones, 2 channels each (non-amplified)
Weight	5kg (11lb)	10.9kg (24lbs)	6.6Kg (14.5lbs)
Operating Temperature	-10°C to +40°C	-10°C to +40°C	0°C to +40°C
Local input source	4x RCA Jacks	8x RCA jacks	16x RCA jacks
Remote input source	4x RJ-45	4x RJ-45	8x RJ-45
CRTL In	1x 3.5mm jack for IR control	1x 3.5mm jack for IR control	1x 3.5mm jack for IR control
Remote source IR input	1x 3.5mm jack for IR input	1x 3.5mm jack for IR input	9x 3.5mm jack for IR input (8x discrete, 1x universal)
RS-232 port	1x bi-directional control	1x bi-directional control	1x bi-directional control
Ethernet port	1x 10/100 BaseT RJ-45	1x 10/100 BaseT RJ-45	1x 10/100 BaseT RJ-45
Trigger output	1x 12VDC @ 15mA	1x 12VDC @ 15mA	1x 12VDC @ 15mA
Voltage output	1x 12VDC @ 500mA	1x 12VDC @ 500mA	1x 12VDC @ 500mA
Doorbell input sensitivity	AC/DC 3 ~ 12V	AC/DC 3 ~ 12V	AC/DC 3-12VDC
Phone input sensitivity	AC25 ~ 100V/20Hz	AC25 ~ 100V/20Hz	AC25V-AC100V, 20Hz
Rated power/channel	>20 Watts, 20Hz to 20kHz	>20 Watts, 20Hz to 20kHz	
Power/channel	>25 Watts @ 1kHz	>25 Watts @ 1kHz	
Total harmonic distortion	@20W/8Ω 0.5% @1W/8Ω <0.05%	@20W/8Ω 0.5% @1W/8Ω <0.05%	<0.03%
Input overload	2.5V	2.5V	2.1V
Input impedance	>22K Ω	>22K Ω	22K Ω
Channel separation @1KHz	>60dB	>60dB	>60dB
Crosstalk between sources	>75dB	>75dB	>90dB
Crosstalk between zones	80dB	80dB	90dB
Treble control @ 10KHz	10dB ±0.5dB	10dB ±0.5dB	8.5dB ± 0.5dB
Bass control range @ 100Hz	10dB ±0.5dB	10dB ±0.5dB	8.5dB ± 0.5dB
Warranty	5 year warranty*	5 year warranty*	5 year warranty*

\*5 year replacement warranty is for all RTI Accredited Dealers. For more information please contact Peter Biggin.

# POWER AMPLIFIERS



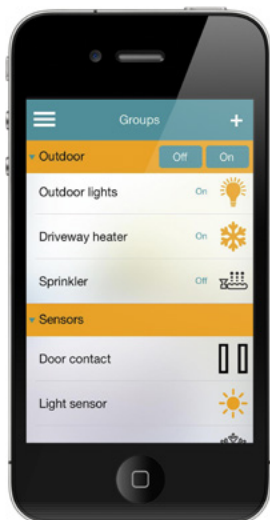
	<b>CP-450</b>	<b>CP-1650</b>
AC Input Voltage	115V or 240V - Switchable	115V or 240V - Switchable
Mounting	Rack mount or free standing	Rack mount or free standing
Chassis dimensions (W x H x D)	430mm x 53mm x 340mm (16.9" x 2.1" x 13.3")	432mm x 133mm x 375mm (17" x 5.24" x 14.75")
Operating Temperature	-10°C to +40°C	-10°C to +40°C
Weight	6.4kg (14lbs)	10.9kg (24lbs)
Speaker Output Zones	2x outputs, 2 channels each. Phoenix connectors	8x stereo outputs, 2 channels each. Phoenix connectors
Audio Inputs	2x stereo, 4x RCA jacks	8x RCA Jacks
Audio Loop Outputs		8x RCA Jacks
IR Input/Output	1x 3.5mm for IR Control / 1x 3.5mm for IR Passthrough	1x 3.5mm for IR Control / 1x 3.5mm for IR Passthrough
RS-232 port	1x bi-directional control	1x bi-directional control
Trigger Input/Output	1x 12VDC to another Amp 1x 3-30VDC for power control	1x 12VDC to another Amp 1x 3-30VDC for power control
<b>AUDIO SPECIFICATIONS</b>		
Rated Power/Channel	50W, 20Hz to 20kHz 70W, 20Hz to 20kHz	<u>2 channel Mode</u> 30W, 20Hz to 20kHz <u>Bridged Mode</u> 100W, 20Hz to 20kHz
Total Harmonic Distortion	@20W/8Ω 0.5% @1W/8Ω <0.05%	<u>2 channel Mode</u> @20W/8Ω 0.5% <u>Bridged Mode</u> @100W/8Ω 0.5% @1W/8Ω <0.05%
S/N @ Rated Power	100dB	100dB
Frequency Response 20Hz to 20kHz @ 1W/8Ω	0db ± 0.5dB	1.5db ± 0.5dB
Input Sensitivity	1W/8Ω, 140mV/1V	1W/8Ω, 170mV/900mV
Input Impedance	22 KΩ	22 KΩ
Channel Separation @ Rated power/1KHz	85dB	85dB
Crosstalk between sources @ Rated Power/1KHz	100dB	100dB
Crosstalk between zones @ Rated Power/1KHz	95dB	80dB
Warranty	5 year warranty*	5 year warranty*

\*5 year replacement warranty is for all RTI Accredited Dealers. For more information please contact Peter Biggin.

# LIGHTING & BLIND CONTROL



	<b>FNIP-8x16A</b>	<b>FNIP-4xSH-24</b>	<b>FNIP-6x2AD</b>	<b>FNIP-12xPWM</b>	<b>FNIP-12xMZT</b>
Module	Lighting	Blinds	Lighting	Lighting	Climate
Power	12-24VDC	12-24VDC	12-24VDC	12-24VDC	12-24VDC
Inputs	8x optically isolated GND digital	4 x 2 optically isolated, GND digital	6x optically isolated GND digital	12x optically isolated GND digital	12x analogue temperature sensors
Outputs	8x SPDT NO, NC dry contacts, 16A relay	4x Up/Down relay outputs for AC blind motors	6x leading and trailing edge mains dimmers	12x Low voltage dimmable outputs	12x SPST NO, dry relays for boiler/heating valve control
Control	TCP	TCP	TCP	TCP	TCP
App	P5 iOS/Adroid App	P5 iOS/Android App	P5 iOS/Android App	P5 iOS/Android App	P5 iOS/Android App
Connections	2.5mm <sup>2</sup> screw terminals	2.5mm <sup>2</sup> screw terminals	2.5mm <sup>2</sup> screw terminals	2.5mm <sup>2</sup> screw terminals	2.5mm <sup>2</sup> screw terminals - outputs 1.5mm <sup>2</sup> screw terminal - analogue inputs
Ethernet	RJ45 Ethernet	RJ45 Ethernet	RJ45 Ethernet	RJ45 Ethernet	RJ45 Ethernet
Operating Temperature	0°C - 40°C	0°C - 40°C	0°C - 40°C	0°C - 40°C	0°C - 40°C
Storage Temperature	-20°C - 60°C	-20°C - 60°C	-20°C - 60°C	-20°C - 60°C	-20°C - 60°C
Installation	Standard DIN Rail Mount	Standard DIN Rail Mount	Standard DIN Rail Mount	Standard DIN Rail Mount	Standard DIN Rail Mount
Dimensions (H x W x D)	157mm x 86mm x 57mm (9 DIN width)	157mm x 86mm x 57mm (9 DIN width)	157mm x 86mm x 57mm (9 DIN width)	157mm x 86mm x 57mm (9 DIN width)	157mm x 86mm x 57mm (9 DIN width)



**P5 FutureNow Home Control App** is made for controlling and monitoring P5 FutureNow multi-channel switch, dimmer and window covering controller modules. Each FutureNow module has multiple outputs and inputs. The outputs are used to control lights, motorised blinds, power outlets and more. The inputs connect to standard low cost retractive switches to manually control the outputs or to monitor the status of different sensors. Due to the distributed intelligence in P5 modules the switches will always work even when the network is down.

- Control your lights, blinds and wall outlets from your phone individually, in groups or by activating preset scenes
- Create your own groups and scenes. Create different lighting scenes for parties, romantic dinner, leaving the house. Dim your bedroom light slowly to simulate sunset.
- Supports P5 FutureNow relay switch, dimmer, window covering control modules
- Automatic discovery of FutureNow modules



# DOOR ENTRY PANELS

**D101****D210x****D203****D21DKV****D21DKH**

	<b>D101</b>	<b>D210x</b>	<b>D203</b>	<b>D21DKV</b>	<b>D21DKH</b>
Housing	Polycarbonate, UV resistant	Stainless steel	Stainless steel with post box	Stainless steel	Stainless steel
Doorbell button	Button with LED back light	Plastic (engraved option sold separately)	Stainless steel button with LED back light	---	---
Number of buttons	1	1, 2 or 3 depends on model	1	16 configurable keys	16 configurable keys
Mounting type	Surface	Flush-mount (surface mount kit available separately)	Flush-mount	Flush-mount (surface mount kit available separately)	Flush-mount (surface mount kit available separately)
Available finishes	White or Silver	Brushed stainless steel or Bronze	Brushed stainless steel	Brushed stainless steel	Brushed stainless steel
Power supply	15v DC or PoE	15v DC or PoE	15v DC or PoE	15v DC or PoE	15v DC or PoE
Connectors	Power, door opener (1A, 24V AC/DC)/strike, door chime, door exit button and network	RJ45 PoE 2x Door opener relays (1A 24V AC/DC) 1x Chime relay Exit button input 15V DC	Power, door opener (1A 24V AC/DC)/strike, door chime, door exit button and network	RJ45 PoE 2x Door opener relays (1A 24V AC/DC) 1x Chime relay Exit button input 15V DC	RJ45 PoE 2x Door opener relays (1A 24V AC/DC) 1x Chime relay Exit button input 15V DC
IP rating	IP65	IP65	IP65	IP65	IP65
Camera	HD 720P Field of view H: 180° V: 90°	HD 720P Field of view H: 180° V: 90°	HD 720P Field of view H: 180° V: 90°	HD 720P Field of view H: 180° V: 90°	HD 720P Field of view H: 180° V: 90°
Night Vision	Automatic IR-cut filter, 12 IR-LEDs	Automatic IR-cut filter, 12 IR-LEDs	Automatic IR-cut filter, 12 IR-LEDs	Automatic IR-cut filter, 12 IR-LEDs	Automatic IR-cut filter, 12 IR-LEDs
Audio	2-way duplex, speaker and microphone	2-way duplex, speaker and microphone	2-way duplex, speaker and microphone	2-way duplex, speaker and microphone	2-way duplex, speaker and microphone
Motion Sensor	PIR	4D multiple integrated sensors	PIR	4D multiple integrated sensors	4D multiple integrated sensors
Detection angle	180°	110°	180°	110°	110°
Motion Range	2-8m depends on environment	1-10m configurable in 1m steps	2-8m depends on environment	1-10m configurable in 1m steps	1-10m configurable in 1m steps
Mobile Device	Latest iOS or Android	Latest iOS or Android	Latest iOS or Android	Latest iOS or Android	Latest iOS or Android
Network	802.11b/g/n 2.4GHz or Ethernet with DHCP	802.11b/g/n 2.4GHz or Ethernet with DHCP	802.11b/g/n 2.4GHz or Ethernet with DHCP	802.11b/g/n 2.4GHz or Ethernet with DHCP	802.11b/g/n 2.4GHz or Ethernet with DHCP
Integrated Wireless Module	2.4 GHz, internal antenna	2.4GHz can be disabled RFID - 125KHz	2.4 GHz, external antenna	2.4GHz can be disabled RFID - 125KHz	2.4GHz can be disabled RFID - 125KHz
Recommended Installation	Minimum height of 1.25m	Minimum height of 1.25m	Minimum height of 1.25m	Minimum height of 1.25m	Minimum height of 1.25m
Dimensions (H x W x D)	157mm x 75mm x 35mm	253mm x 131mm x 48.75mm	350mm x 320mm x 260mm	402mm x 156mm x 48.75mm	256mm x 275.25mm x 48.75mm

# SYSTEM ACCESSORIES

## Zigbee transceiver - ZM24

The ZM-24 Zigbee® Transceiver Module provides bidirectional communication between RTI remote controls and control processors providing feedback from media sources and other devices. The master unit is hard wired directly to a control processor, further ZM-24 can be added as repeater devices to expand the range for the operation of handheld remotes with an ultra reliable, self healing Zigbee® network.

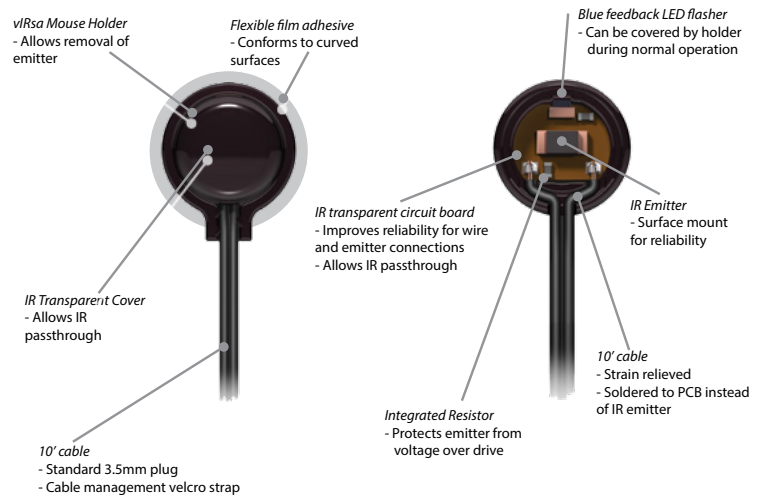
- Wireless Network: IEEE802.15.4 Zigbee network compliant
- RF Frequency Range: 2.4GHz - 2.5GHz
- RTI Com Port: 1x RJ-45 for 2-way Zigbee communication port
- Dimensions without antenna (W x H x D): 89mm x 101mm x 28mm
- Dimension with antenna extended (W x H x D): 89mm x 184mm x 28mm



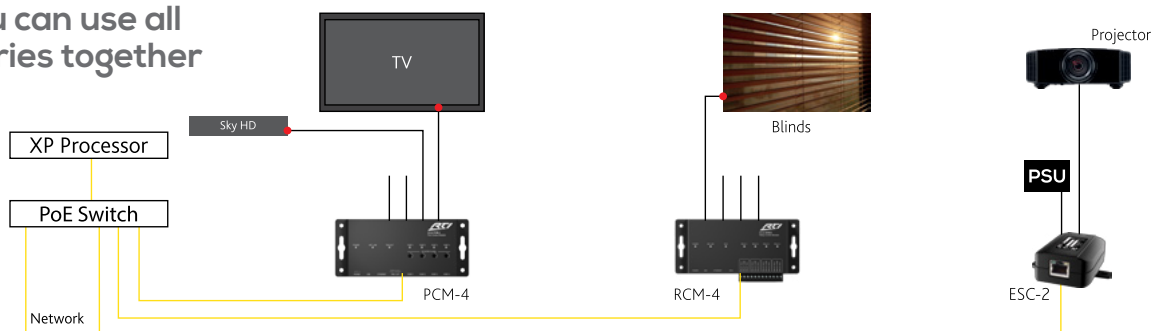
## vIRsa Mouse IR Emitter

Designed with the professional integrator in mind, the "versatile" vIRsa Mouse is an IR emitter built to outperform all others. Featuring a clip-in holder allowing the emitter to clip out when equipment is removed for maintenance, reducing system failures due to emitters falling off.

- Heavy duty cable
- Flexible film adhesive conforms to curved surfaces.
- Blue LED flasher can be visible during normal operation or only for troubleshooting.
- Translucent circuit board allows IR pass through.
- Industry standard 3.5mm mini plug uses precision over moulding to ensure consistency.



## How you can use all accessories together



## Z-WAVE® Interface Module - ZW-9

The ZW-9 is a Z-Wave+ controller utilising the Z-Wave+ wireless protocol to provide the communication link between RTI systems and 3rd party Z-Wave and Z-Wave+ enabled devices. Eliminating the need for a different app for each device, the ZW-9 combined with an RTI XP processor provides users with unified control and monitoring over all devices.

The RTI ZW9 is compatible with the majority of Z-Wave and Z-Wave+ certified devices such as:

- Lighting mains dimmers / LED Lighting RGBW
- Relay switches
- Flood sensors
- PIR
- Door / window contacts
- Thermostats and TRV
- Smart locks



## Relay Control Module - RCM-4

This unit adds four individually addressable relays to an XP processor. It's an IP device so can expand the relay outputs in the rack or anywhere remotely on the network. Relay control is useful to operate projection screens, blind control and even basic light switching functions. An IR input allows the RCM-4 to be triggered from many different sources, including RTI in-wall controllers, control processors or third party infrared repeater systems.

- 4 Relays capable of switching up to 28VDC@5A.
- Relays can be controlled with both IR and Ethernet.
- Discrete IR codes for control from other systems
- PoE



## Ethernet to Serial Converter - ESC-2+

The ESC-2 Ethernet to Serial Converter provides a convenient way to add two RS232 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.

- Provides two additional serial ports to an RTI control processor.
- Use multiple ESC-2 modules for virtually unlimited control of serial devices.
- Capable of two way serial communication.
- Can be discovered and configured by Integration Designer over Ethernet.
- Easy wiring to devices using cat-5 cable.



## Port Control Module - PCM-4

The PCM-4 expands the output capabilities of an XP series control processor to accommodate larger projects. Four multi purpose I/O ports can output IR or 1 way RS232 (RS232 requires an extra adapter) and a voltage trigger output provide convenient control anywhere a local area network connection exists.

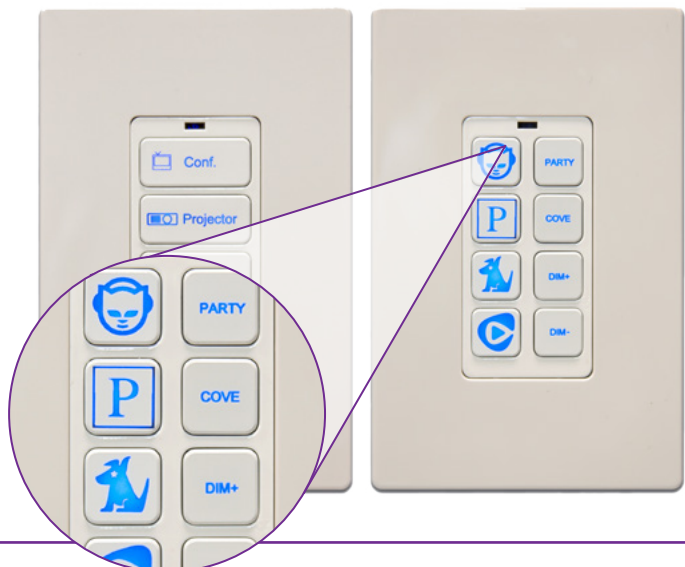
- Adds four multi purpose I/O ports to an RTI XP series control processor.
- Use multiple PCM-4 modules for virtually unlimited control of devices.
- Communication with XP processor over Ethernet for easy expansion to anywhere a LAN connection exists.
- Variable IR output power
- PoE



## Custom Button Engraving with LaserShark

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

- Allows easy customisation of button keycap labels on certain RTI products.
- Select from almost any font type, language, symbol or graphic image.
- Compatible with KX2, RK1+ 2, 4 and 8 Button, RKM-1+, TI-B+, T2i, T2x and T3x
- Ordering via the Invision UK - [lasershark@invisionuk.com](mailto:lasershark@invisionuk.com)
- Software is free of charge and available to RTI dealers only.

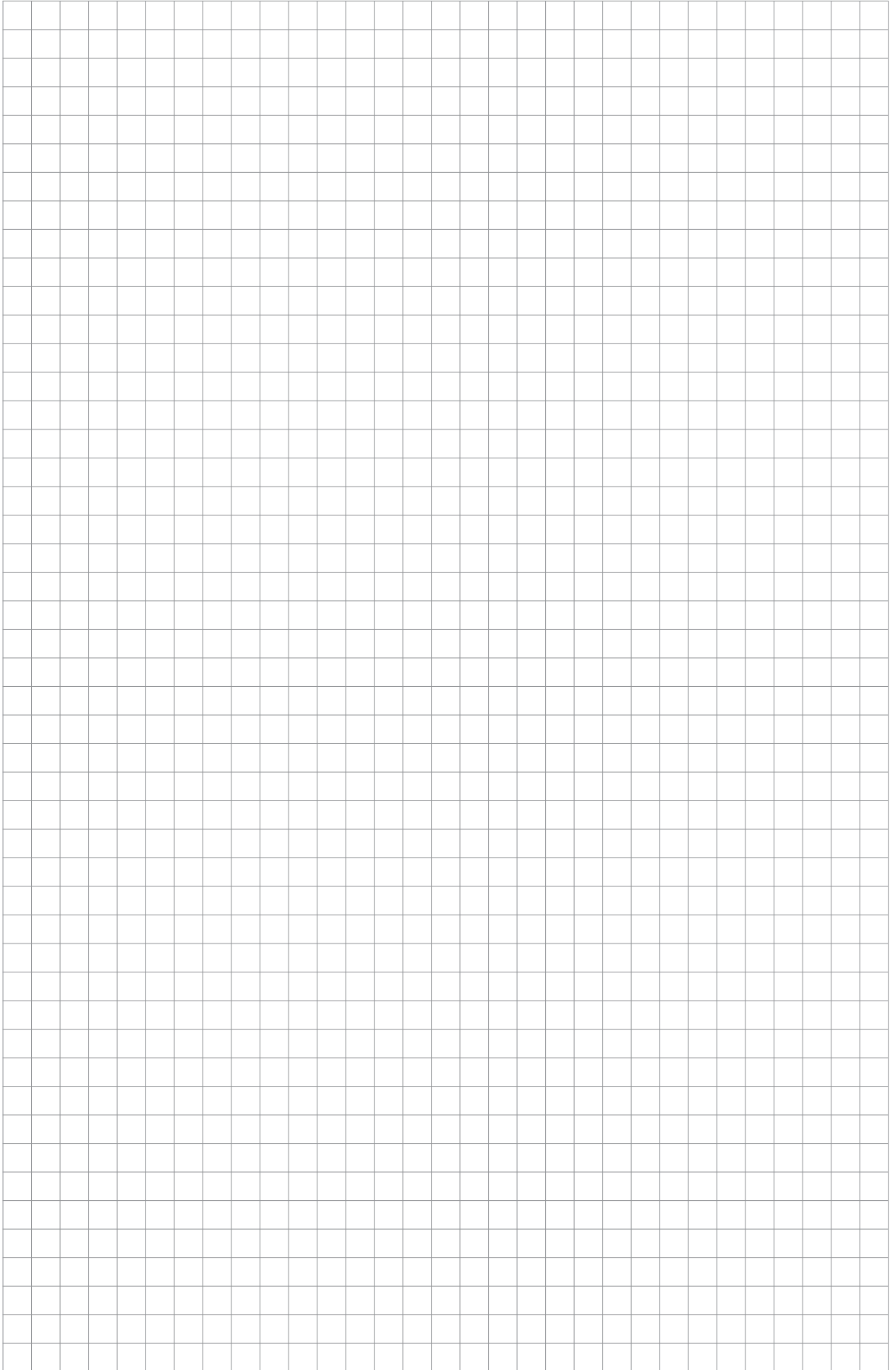


# NOTES





# NOTES





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