



RTI PROGRAMMING & DESIGN CONSIDERATIONS

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A. CLIENT INFORMATION

- Name of Client
- Address (include Zip)
- Square footage of home
- Cable or Satellite Provider

B. RTI PROCESSOR

- Primary Processor Model
- Communication Type (ZigBee, 433Mhz, RS-485, Ethernet)¹

C. EXPANSION DEVICES

- Expansion Processors (Model and Location)
- Other Expansion Devices (Model and Location)
- Provide IP or MAC address for each expansion

D. ROOM OR ZONE NAMES

- Indicate the exact name of the room
- Indicate if each room is used for video, audio, or both²

E. CONTROLLERS

- Keypad, Handheld, or RTIPanel
- Indicate if Controller requires multiroom control
- If Controller is isolated to a single room, indicate the room name³
- If RTIPanels or WAN Virtual Panels exist, provide a license file
- Indicate if any rooms should not be accessible for any multiroom controller

¹ Controllers that support Wi-Fi will be automatically added for feedback purposes unless indicated otherwise.

² If a room is designed for audio and video control, multiple volume scenarios should be considered.

³ Controllers designated to a single room will be able to control devices in that room and shared devices (global)

F. VIDEO DEVICES

- Per room, specify the Television or Projector brand and model
- Indicate control protocol (IP, RS-232, IR, Relay, or Line of Sight)⁴
- If IR or RS-232, provide the port number on the processor or expansion device.
- Indicate if a user interface is required for the video device (Smart TV or Settings.)

G. AUDIO DEVICES

- Per room, specify the AVR, Amplifier, Processor, or Audio Matrix brand and model
- Indicate control protocol (IP, Serial, IR, Relay, or Line of Sight)
- If IR or RS-232, provide the port number on the processor or expansion device.
- If the device has multiple zones, provide the room name and zone name of the device
- Indicate if a user interface is required for the audio device and on which Controller

H. VIDEO AND AUDIO SOURCE DEVICES (LOCAL)

- Per room, indicate the brand and model of any devices confined to that room only.
- If there are multiple source devices of the same brand and model, indicate a unique name for the device (Cable Living Room or Cable #1)
- Include any TV lifts, projector screens, motorized mounts, etc.
- Indicate any source devices that are not needed for control (game ports, settings, etc.)
- Indicate control protocol (IP, RS-232, IR, Relay, or Line of Sight)
- If IR or RS-232, provide the port number on the processor or expansion device.
- Besides this room's local and global controllers, are there other local room controllers that require a user interface for this device?
- Indicate **the video and audio inputs** required to switch for this device.
- Include any favorite channels and numbers, fixed presets, or favorites

I. SHARED DEVICES (GLOBAL)

- Per room, indicate the brand and model of any shared devices. These devices may include lighting, climate, security, shades, or any shared source device.
- Indicate any controllers in the project that do not require a user interface for this device.
- Indicate control protocol (IP, RS-232, IR, Relay, or Line of Sight)
- If IR or RS-232, provide the port number on the processor or expansion device.

⁴ RS-232 can be one-way or two-way, depending on the driver or method for adding the source device

J. RELAY & SENSE INPUTS

- Indicate the Relay Name and Relay port for each device
- Indicate if the Relay is normally open or closed
- Indicate if the Relay is using contact closure or voltage
- Indicate the Sense Input name and port and what it is sensing
- Indicate if sensing contact closure or voltage

K. ACTIVITIES

- Indicate for each room which activities are required on the Controller. Do not include any multiroom controllers.
- For multiroom controllers, indicate if any activities are to be excluded.
- Indicate any special macro instructions

L. DRIVER & NETWORK INFORMATION

- Indicate if the driver is RTI-certified or third-party
- Include any utility driver, intent, and configuration options
- Provide applicable driver information
 - IP Address/RS-232 Port
 - Discovery Protocol "Friendly Name"
 - MAC Addresses
 - Serial Numbers
 - Dynamic Naming
 - Other
- Provide Wireless Network Information (if required)
 - SSID (case sensitive)
 - Authentication
 - Encryption
- Remote access
 - Indicate if remote access is required and on which controllers
 - Indicate DNS address (must forward port 4110)

M. ZIGBEE PROFILE

- Indicate any requirement to report ZigBee internal variables on the user interface

SEPARATED NETWORKS

- Indicate the name and location of each ZigBee network
- Specify the controllers and name of the ZigBee parent

REPEATER-BASED NETWORKS

- Specify the name and location of each repeater
- Specify the controllers and name of the ZigBee parent

N. DESIGN CONSIDERATIONS

- Indicate if a controller is using a list menu or button menu
- Indicate if the driver is using auto-discovery or auto-configuration options
- Indicate the type of dashboard required (lights, climate, security, music, custom, etc.)
- Specify any specific aesthetic request (backgrounds, splash screen, custom requirements.)
- Specify any custom buttons or user interface requests that are outside of the base template
- Indicate if any additional layers required
- If any two-way feedback is required on the interface and where it is located
- If custom or commercial, indicate if a floorplan is being used and how the UI is presented

O. DRIVER EVENTS

- Indicate processor event and description
- Indicate driver event and description
- Indicate any relay or sense input event and description

P. FLAGS OR SENSE PORTS

- Indicate the flag name, purpose, and if the flag is local or processor-based.
- Indicate any flag triggers or events
- Identify any MPIO ports that are sensing signal
- Indicate if a driver utility is controlling flags

Q. SYSTEM MANAGER

- Indicate if using the following in any context:
 - Room Sources On or Off
 - Room Video On or Off
 - Room Source Selected
 - Room Source Return is Visible
 - Room Source in Use
 - Room Selection Criteria
 - Date/Time Criteria
- Note (These items can trigger events, layers, system variable checks, and other features.)

R. RTIQ MONITORING

- Add XP Diagnostics to every project file
- Indicate if the project is monitored via RTIQ
- Indicate Monitored Devices and monitor type:
 - Ping
 - IP (Port Communication)
 - System Variable Check
 - Indicate if error reporting should be enabled or disabled
- Indicate Actions:
 - Name of the Action
 - Macro Instructions

S. SURVEILLANCE & INTERCOM

- If camera images are required, please provide the following:
 - RTSP or MJPEG
 - URL of RTSP or MJPEG image
 - Account Information
 - Designated camera names, numbers, and location
 - NVR/Camera IP address or DNS account information
- If an intercom is required:
 - Indicate controllers utilizing the intercom and IP address
 - Indicate if a video image is required and the underlying URL
 - Indicate settings such as DND, Auto Answer, Auto Receive, etc.
 - If a SIP server is used, please indicate the following information:
 - SIP Address
 - Port (Default is 5060)
 - Authentication (user and password)
 - Indicate any driver events that are needed for the doorbell, if applicable.

T. LIGHTING/SHADE CONTROL

- Provide information on how the user interface will access lighting/shade. It may be done per room or with a dedicated lighting/shade page with room selections.
- Model and Brand of Lighting System
- Communication Protocol used to communicate with the devices
- Names of lighting/shade loads, type of load, along with the location
- For each lighting/shade load and keypad, specify the integration ID, node, or information required for communication purposes
- Indicate any scenes required on the interface if not emulating the keypad scenes
- Indicate any Lutron Phantom Buttons by ID and scene name
- Provide any driver events needed for the lighting or shades if applicable