

KX3 In-Wall Touchpanel AND Control Processor

KX3 OVERVIEW:

With the release of RTI Integration Designer Apex 10.1 and Integration Designer 9.11, now the KX3 in-wall touchpanel can also serve as a control processor. It can also act as an expansion processor for systems using an XP series control processor, or even another KX3. The incredibly flexible touchpanel also includes a built-in ZigBee transceiver, making for an all-in-one solution for a single or multiple room system. Once the control processor feature has been activated in the software, the KX3 can route IR, deliver 2-way serial control, and can run any driver written for the XP processor platform.

Powered by POE, local power supply, or CB8 connecting block, the keypad has a 3.5" WVGA (480x800) screen with five engravable hard buttons to maximize real estate on the screen. It also has integrated 10/100 Base-T and 802.11g wireless Ethernet for viewing video from network cameras, and powerful 2-way feedback. A built-in camera, microphone and speaker allow for video intercom sessions, and stylish faceplates can be added in white, black or brushed aluminum to match any décor.

As a processor, or used in conjunction with a processor, direct control of devices can be achieved via IR, IP, RS-232, sense ports, relays and built in astronomical clock for time-based event control. Due to its hybrid design, the KX3 offers excellent value and a powerful control option in commercial and residential settings.

APPLICATIONS



The Commercial Side

Since the KX3 is a touchpanel and processor in one, the powerful unit is perfect in a classroom, lecture hall, huddle space, conference room or just about any setting where intuitive and cost-effective control is required. Since the KX3 can run two-way drivers via IP and RS-232 without any need for additional equipment, it can serve as an all-in-one interface and processor for control over the AV, climate, scene-based lighting and shades, security, and more. If additional control is required, expansion devices like the PCM-4 or ESC-2 can be easily implemented. If the project calls for additional user interfaces, the KX3 built-in ZigBee and Ethernet

options allow the addition of a hand-held remote, countertop or in-wall touchpanels and even a mobile device running the RTiPanel app. These features make it an ideal candidate for an all-in-one solution in just about any commercial environment.



Residential

While the KX3 can serve as the processor to facilitate media streaming, surveillance, lighting and more, the unit is ideally used as an expansion device to an XP processor in a residence. If installed in a remote location in the home, ZigBee based controllers can be utilized and communicate with the main XP control processor over the network. This makes it easy to provide a control solution in residences where creating a large ZigBee network is challenging. If there is local equipment, a KX3 can control devices directly or communicate with other expansion devices, such as the PCM-4, ESC-2, RCM-4, and other KX3 keypads in the residence.



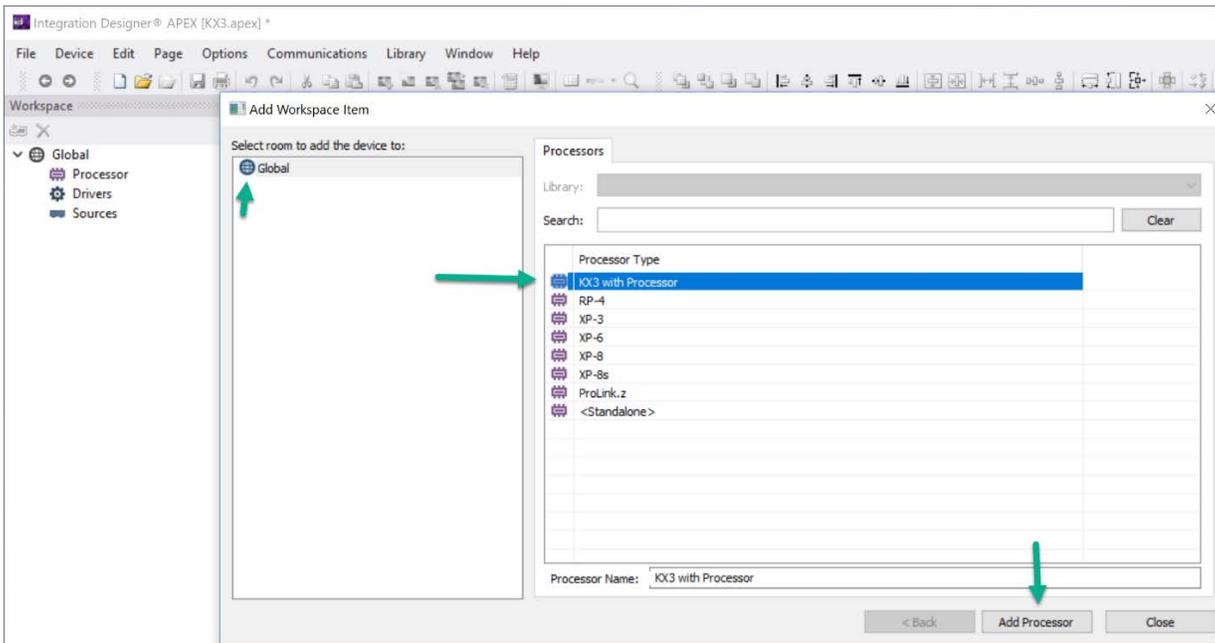
Doing Triple Duty

In large projects that require many intensive two-way IP drivers that may bog down an XP processor, a KX3 can even be used as an expansion device in processor mode to handle some of the burden. In this situation, drivers can be set to run on the KX3 instead of the XP processor. This solution is recommended for dealers who are utilizing many resource-hogging drivers and are finding issues with latency and low memory.

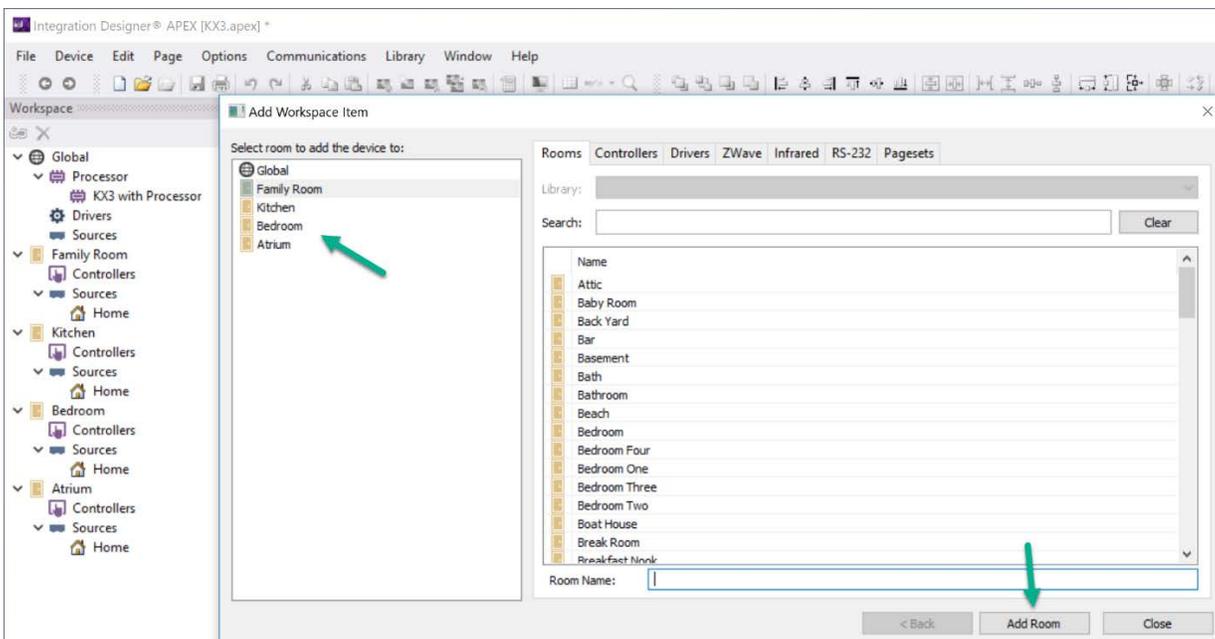
SETTING UP A KX3 AS A MASTER PROCESSOR

Using Integration Designer APEX 10.1 or higher

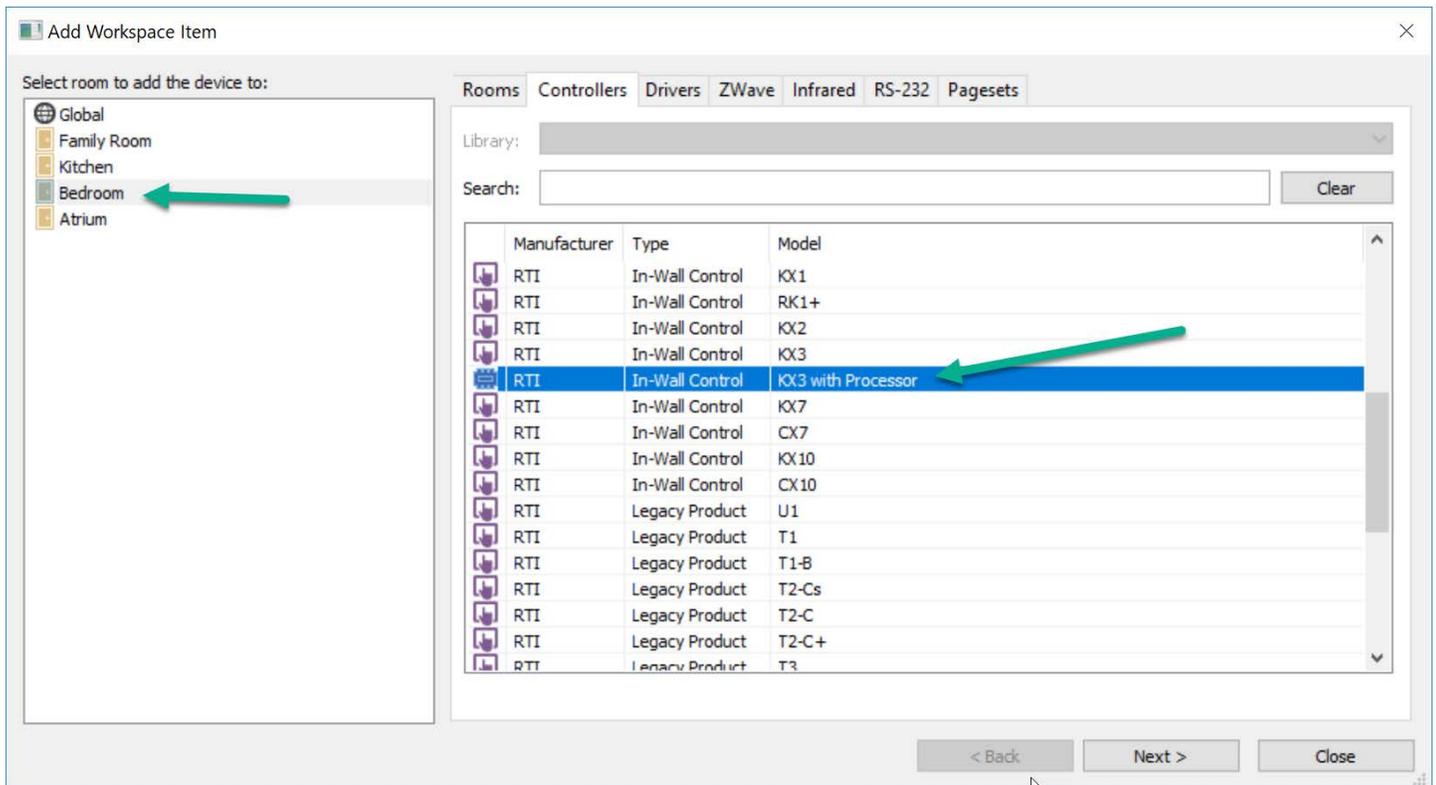
Start by adding your KX3 with processor to the global area which will serve as a main controller.



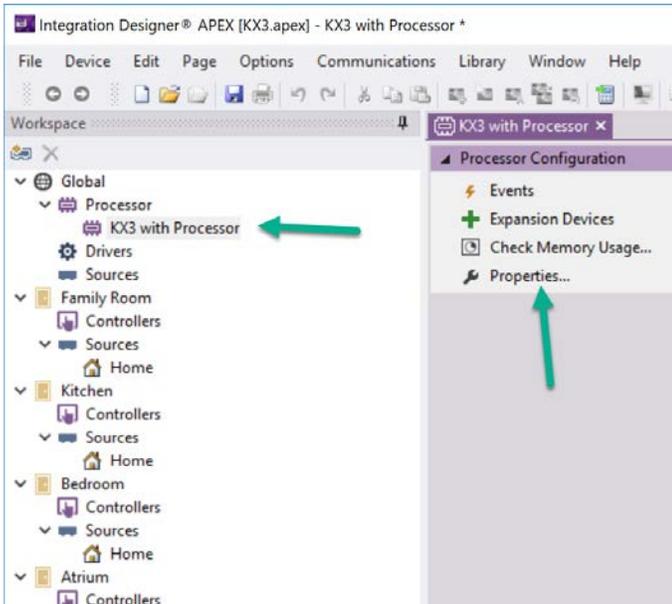
Next, add the room or rooms that will be present in your project.



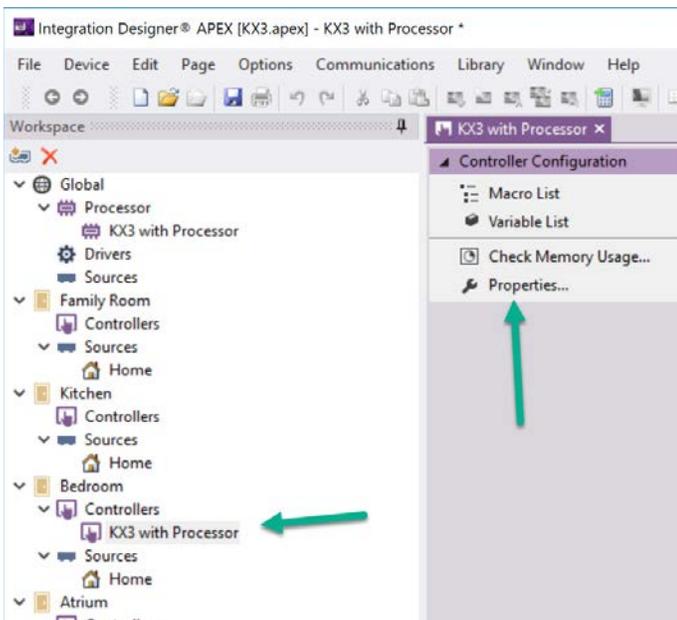
Now, tie the KX3 with processor that was added to the global area to the room where the actual touchpanel is installed in the project. This tells the system that the KX3 with processor will serve as the main system processor **and** act as a touchpanel, residing in a room. Notice that when you perform this step you have the option to add a KX3 touchpanel as well. If you choose to add the KX3 now or at any time, it will be set up as a regular touchpanel on the system and may be used as an expansion device. However, you must add the KX3 with processor to the system file in a room to complete the connection to the KX3 processor, which should be done first.



Typical processor settings can be set by clicking on the KX3 with Processor in the global area properties, as well as setting events, adding expansion devices, etc.



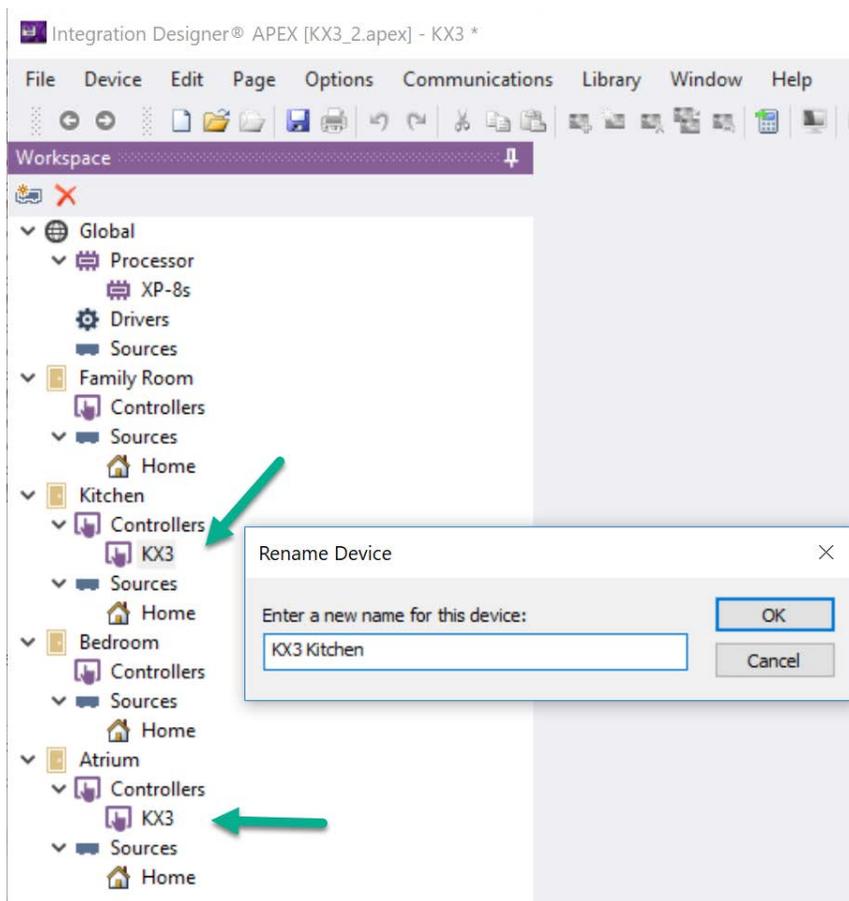
The properties available on the KX3 assigned to a room will be consistent with typical controller settings. Note: If you rename the touchpanel in a room, the “KX3 with Processor” in the global area will change as well, and if the global name is altered, the corresponding touchpanel name in the room will change as well.



Please note, if you wish to add additional KX3 controllers that reside as keypads, they must exist in the project. Any KX3 that has been added to the project file will appear if you choose the “Expansion Devices” option in the processor settings.

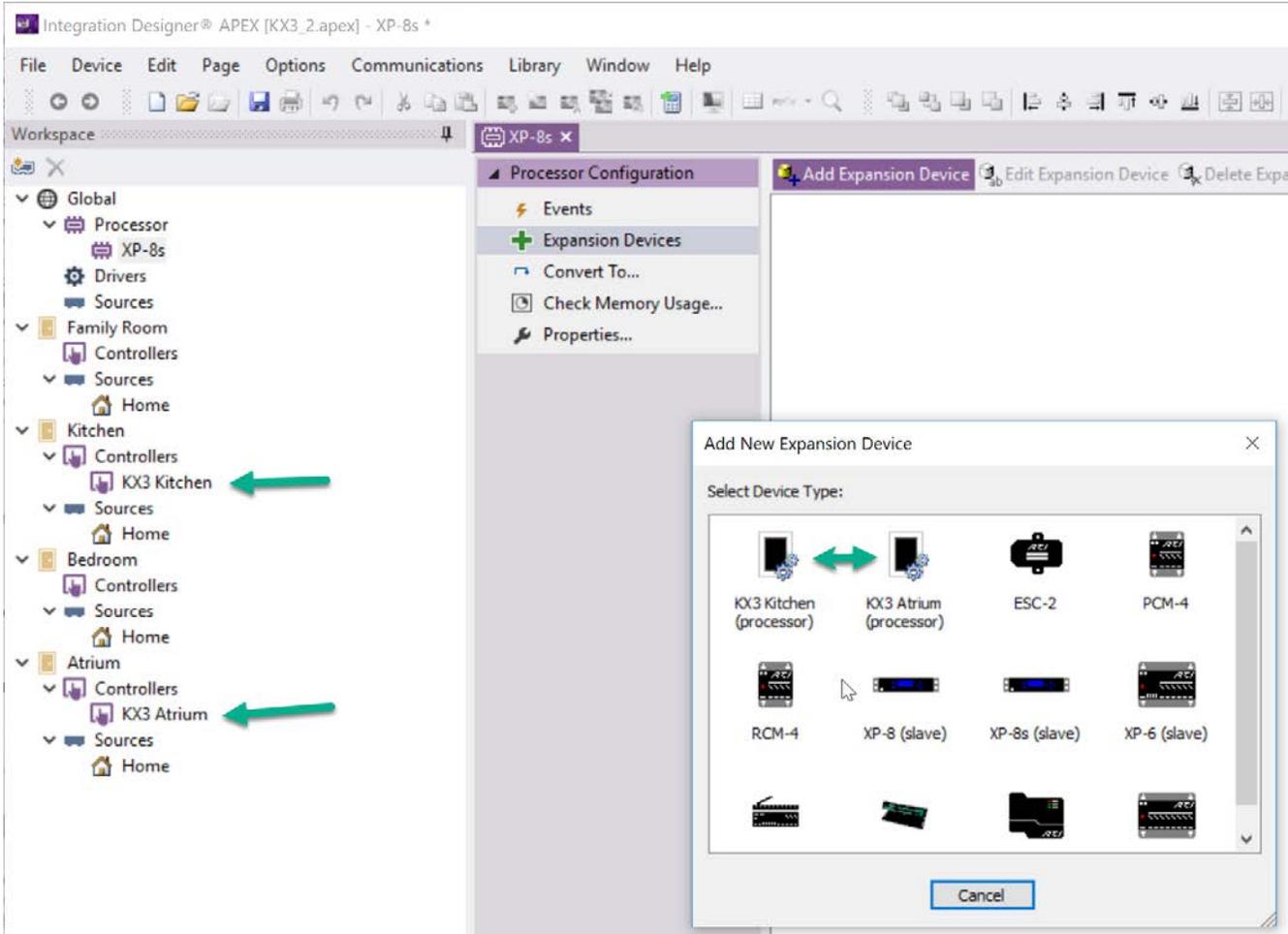
ADDING A KX3 AS AN EXPANSION DEVICE TO AN XP PROCESSOR

If you have a project and need to add one or more KX3 touchpanels to your system file, start by adding your XP processor to global, and the KX3’s to the individual rooms they reside in. It is best to rename your KX3’s to the room they reside in, so you can tell them apart when you are adding them as expansion device, or configuring a ZigBee network.

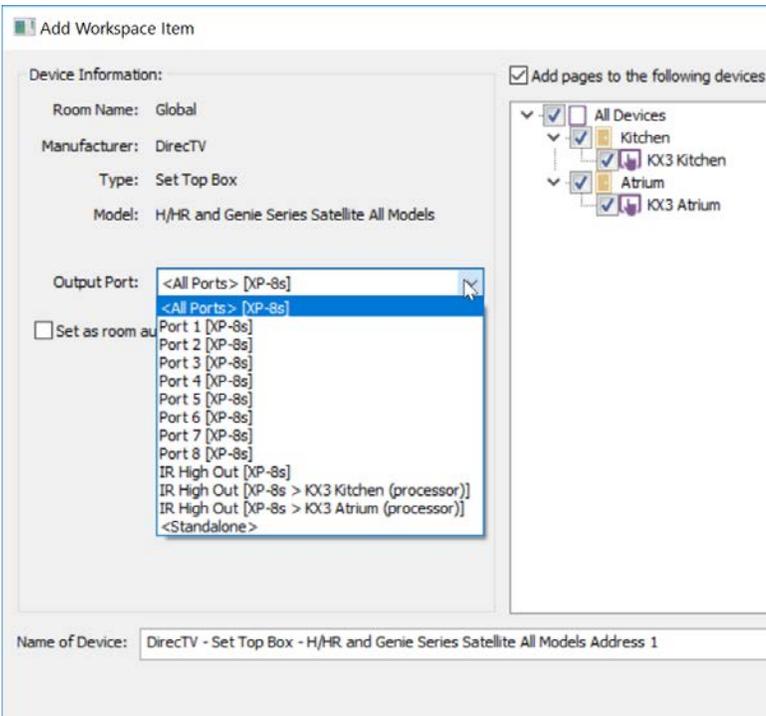
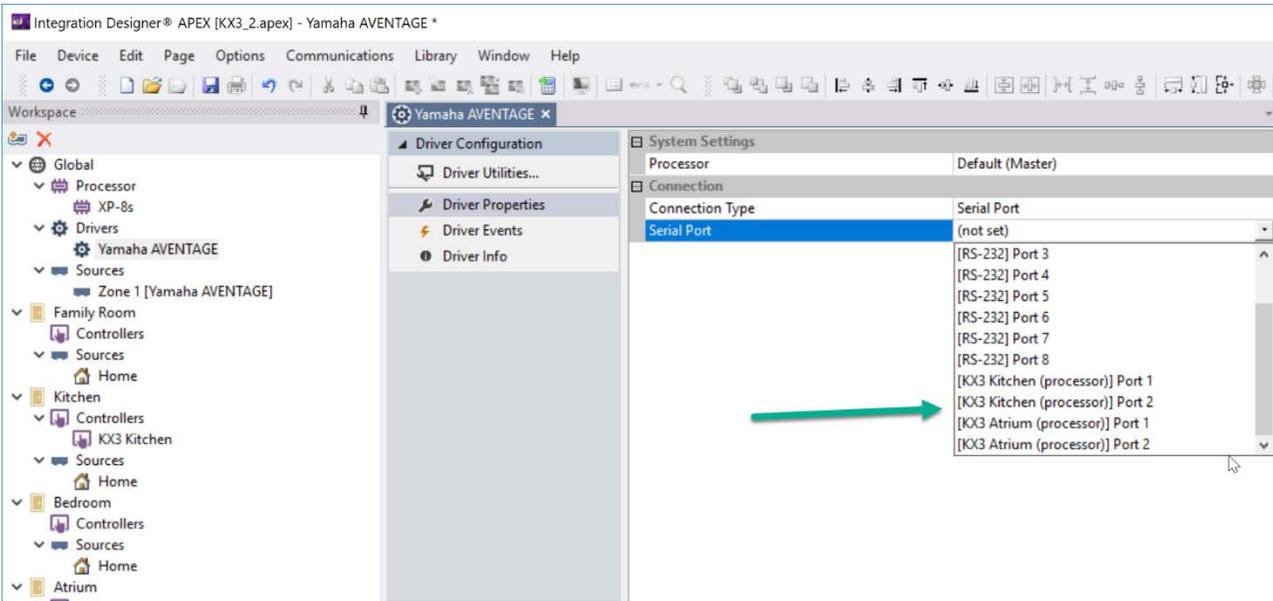


Once the keypads are renamed, click on the XP processor, then under the processor configuration, expansion devices. You will now be able to add an expansion device to your processor, and both KX3’s will be available to you. By selecting one or more KX3 touchpanels to serve as expansion devices, you are now turning on the processor features, and ZigBee communication. Since the properties are available in the actual room under

controller configuration, any settings that need to be changed can be done there. In our example, we will add both KX3's to our XP processor as expansion devices.

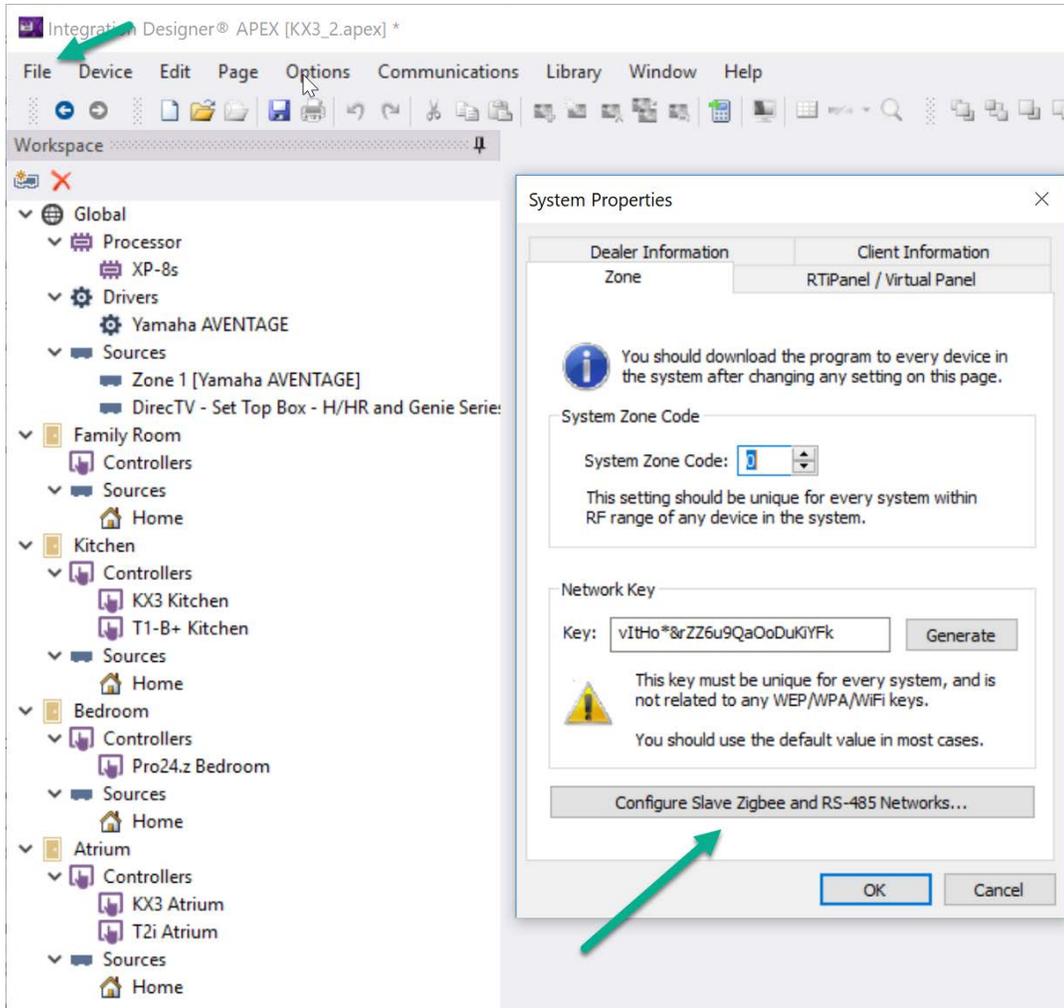


If adding drivers, now you will be able to route RS-232 to each of the 2 ports available on both KX3 expansion devices, or through IR via the high out on each KX3.

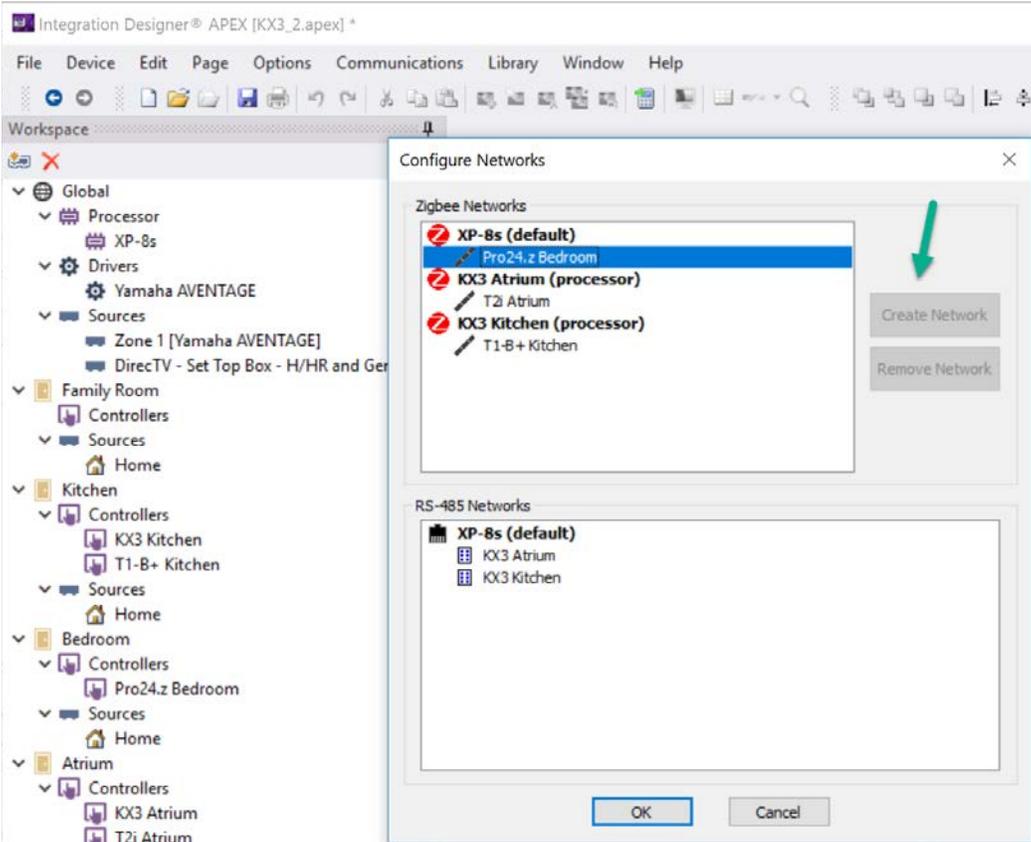


UTILIZING ZIGBEE

If you have wireless controllers in the system that need to utilize the ZigBee signal from the KX3 expansion devices, you must create a ZigBee network for those rooms. On the toolbar in the upper left of the software, click File, then System Properties, and click the option “Configure Slave ZigBee and RS-485 Networks” as shown below.

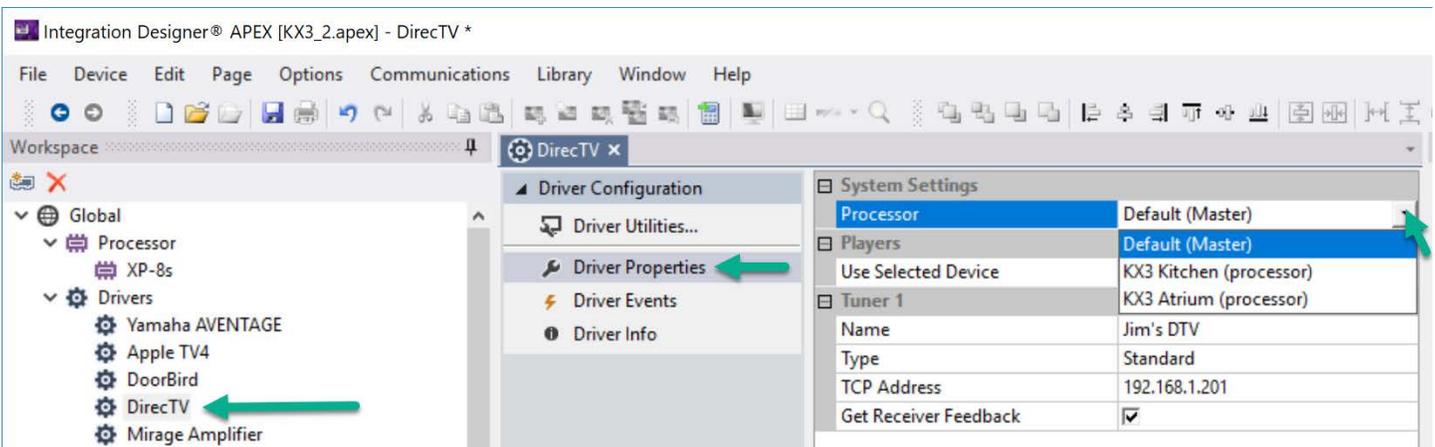


Next, click on the room where you want to create a ZigBee network and click “Create Network”. Drag the corresponding controllers to the underlying expansion device that will provide the ZigBee signal. In this example below, the Pro24.Z remote is utilizing the ZM-24 connected to the XP-8s, the T2i in the Atrium is communicating with the KX3 keypad in that room, and the T1-B+ in the kitchen is communicating with the ZigBee transceiver in the Kitchen KX3. For additional instructions and troubleshooting please consult the ZigBee tech note and video available on the dealer site.



SHARING TWO-WAY DRIVER PROCESSING

if you wish to use a KX3 as an expansion device to run an IP-based driver in a system using an XP series as the primary processor, click on the driver, then Driver Properties, and under the system settings, select the KX3 expansion device you wish to run the driver. If needed, multiple IP drivers may be assigned to the KX3 to alleviate the XP processor’s driver workload.



UTILIZING THE RTIPANEL APP

Once configured in processor mode, RTiPanel licenses may be added the same way they are added to XP series processors. To assign an RTiPanel license, go to the File menu on the upper left toolbar, select system properties, then click the RTiPanel / Virtual Panel tab. Once you have obtained an RTiPanel license file from the RTI dealer website, you can attach it by clicking 'Add', navigating to the file then 'OK'.

NOTE: It does not matter how licenses are distributed across the control processors in your system file. They can be assigned to any combination of XP series control processor and KX3 touchpanel.

