

Adder Room (RX) Module Manual

Module Description

The Adder Room (RX) Module is responsible for managing individual receiver (RX) devices within the Adder AIM system. This module interacts with the Adder Connection Manager to register rooms, handle source selection, and update the currently active source for each RX device.

Each RX module represents a single receiver unit in the system, allowing dynamic switching between available TX sources.

Digital Inputs

Signal Name	Description
RegisterRoom	Must be pulsed every time the processor restarts to register the room with the Adder Connection Manager. This ensures that the RX module is properly linked to the main module.
DisconnectRoom	Immediately disconnects the RX device from the currently connected TX source. This is equivalent to sending an empty string to Source\$, but allows for a direct digital command if preferred.

Serial Inputs

Signal Name	Description
Source\$	Specifies the name of the TX source to connect to this RX device. The name must exactly match a TX device name as retrieved from the Adder system. Sending an empty string ("") will disconnect the RX device from any currently connected TX source. This input is used both to establish a new connection or to disconnect the RX unit when required.

Digital Outputs

Signal Name	Description
RoomIsRegistered	Indicates whether the room has been successfully registered with the Adder Connection Manager. This output will be high (1) when the room is registered and low (0) otherwise.

Serial Outputs

Signal Name	Description
Active_Source_Name\$	Displays the name of the currently active source connected to this RX device. This updates dynamically when the RX is switched to a new TX or disconnected.

Integer Parameters

Parameter Name	Description
DeviceId	The unique identifier (ID) of the RX device. This ID is assigned after setting up and naming the RX unit in the AIM system. The module uses this ID to track and update the correct receiver.

Usage Instructions

1. Register the Room

- Pulse the RegisterRoom signal after every processor restart to link the RX module to the Adder Connection Manager.
- The RX module will then listen for updates from the main module.

2. Selecting a Source

- Set Source\$ to the name of a valid TX source.
- The module will attempt to switch the RX device to the selected TX.

3. Monitoring the Active Source

- The Active_Source_Name\$ output provides real-time feedback on the currently connected TX source.
 - If the RX is disconnected from a TX, this value will update to "No Source".
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Notes

- RegisterRoom must always be pulsed after a processor restart to ensure the RX device is properly registered.
 - The Source\$ input must exactly match the name of an existing TX device for a successful connection.
 - If the RX device is disconnected, Active_Source_Name\$ will update to "No Source".
 - This module relies on the Adder Connection Manager to fetch device and channel information.
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