

## When Two Become One: Simple Room Combining

### Before You Begin

The Storage (offline) configurations for all of the examples discussed in this article are available from Rane's website (<http://www.rane.com>). Download or copy these files to your computer, and add them to a new or existing Project.

*NOTE: Drag Net 3.0 or higher is required to view these device configurations. The latest version of Drag Net can be downloaded from <http://www.rane.com/dragnet.html>*

To add Storage configurations to a Project:

- 1) Right-click anywhere within the Project window and choose **Add File(s)**.  
  
- or -  
  
Click on the **File** menu, choose **Project**, then select **Add File(s)**.
- 2) Browse to the location of the Application Example files (.rx file extension, where xx is the device type - .r88 for RPM 88, as an example) on your hard drive.
- 3) Select one or more of the files from the list, then choose **Open**. The configurations then appear as entries under the Storage folder of the Project window.

### Drag Net Files Required

- RoomCombining\_1.r44
- RoomCombining\_1.r44.mem
- RoomCombining\_1.r44.lnk.xml

### Concepts Presented in this Example

- Use of Rane SR 3 Smart Remotes for Preset recall and Level control.
- Grouping of remote control devices and Level controls.
- Re-mapping remote functionality using Presets.




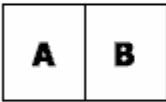
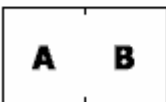
## Problem

Ready for a simple room combining example? One large room is divided into two smaller rooms using a movable wall. Each of the two smaller rooms has a local microphone and line level audio source. Level controls are also provided for adjusting the overall level in each room. When the dividing wall is closed, each room must function independently. When the wall is open, the room is considered to be one large zone and the system must adapt accordingly.

## Solution

For this application two Rane SR 3 remotes (one in each room) are connected to the RW 485 Remote Interface port of an RPM 88. The dual function nature of the SR 3 allows the user to do Level control and Preset recall from the same device. Turning the SR 3's encoder knob adjusts Level; pressing the encoder knob in while turning changes Presets. A "bump" mode is also available for recalling Presets.

The SR Configurator application (SRCfg.exe, available from <http://www.rane.com>) is used to configure the SR 3 to display descriptive bitmaps, such as those shown in Figure 1, in the SR 3's 98 x 64 pixel LCD screen.

Image	Page	Status
	Title	PC Only
	1	PC Only
	2	PC Only

■ Figure 1 SR Configurator for setting LCD bitmaps.

Two presets are required – one for when the wall is closed, one for when it is open. When the wall is closed, each remote controls the Level in its respective room, i.e., independent level control in each room.

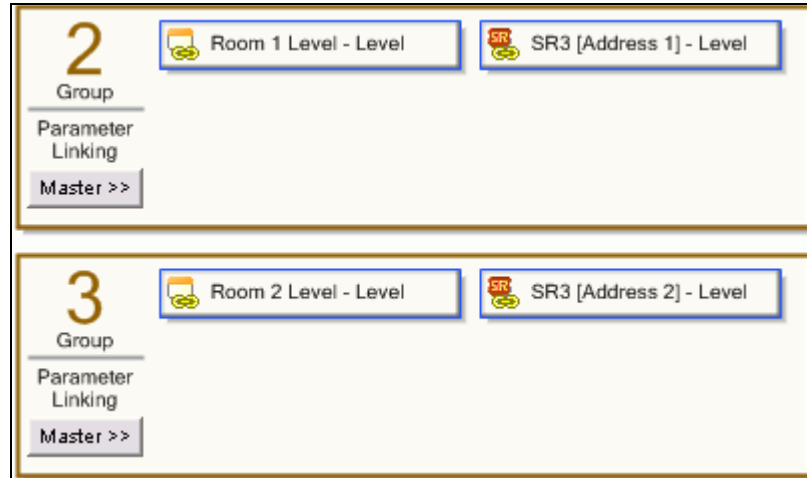
Here's where it gets interesting: when the wall is open, the functionality of the SR 3 can change. It may be desired, for example, to re-map the remote so that both remotes now control the Levels for both rooms (which now form one large room). Sound a bit confusing? Read on....we'll build the Presets together.

1. Click on the **Remote Map** tab at the bottom of the Device Configuration window.
2. Click on the **Add/Edit Remotes** entry beneath the RW-485 section of the Parameter Window (View > Parameter). Follow the on-screen instructions to add two SR 3 remotes – use Address1 and Address 2 to keep things simple.
3. Drag and drop the SR 3 [Address 1] ## **Level** parameter from the Parameter Window to an empty Group in the Group Assignment section.



4. Locate Room 1 Level's ## **Level1** parameter beneath the Misc category of the Parameter Window. Drag and drop it into the same group as the SR 3 [Address 1] ## **Level1** parameter from Step 3.
5. Repeat for the second Remote/Level combination: drag and drop the SR 3 [Address 2] ## **Level1** parameter from the Parameter Window to an empty Group in the Group Assignment section.
6. Locate Room 2 Level's ## **Level1** parameter in the Parameter Window. Drag and drop it into the same group as the SR 3 [Address 1] ## **Level1** parameter from Step 5.

The Groups should now look like this:



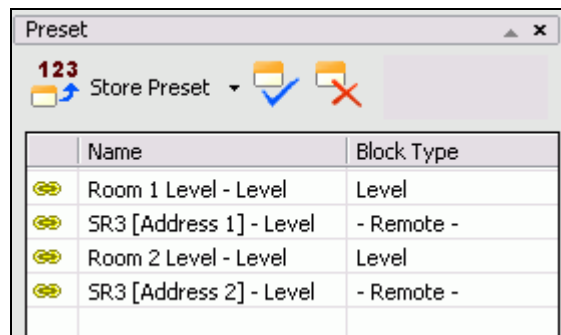
■ Figure 2 Remote Map Group Assignments for Preset 1.

By adding these blocks to groups we have now created associations between the Level blocks and the remotes.

*WARNING, powerful feature ahead:* these associations can change with Presets! Here's how...

7. Right click on Group 2 and choose **Add to preset**.
8. Right click on Group 3 and choose **Add to preset**.

The Preset window should now look like this:



■ Figure 3 Preset Block List.

9. Click on **Store Preset** and choose **Store Preset 1**.



Preset 1 is now the two room setup, with independent Level control in each room. Now let's reconfigure the Remotes so that one remote controls the Level in both Rooms, while the other remote is disabled.

10. Drag the Room 2 Level block and SR 3 [Address 2] – Level parameters from Group 3 into Group 2 (yes, it *is* possible to drag items between groups!). The combined Group now looks like this:



■ Figure 4 Remote Map Group Assignments for Preset 2.

Both SR 3s now control *both* Room 1 Level and Room 2 Level simultaneously. Making a change from either remotes affects both Levels and the remotes will always be in synch with each other.

11. Right click on Group 2 and choose **Add to preset**.
12. Choose **Store Preset 2** from the Preset window.

Don't forget to group the SR 3 ## Page parameters with the Preset Recall as shown in Figure 5.

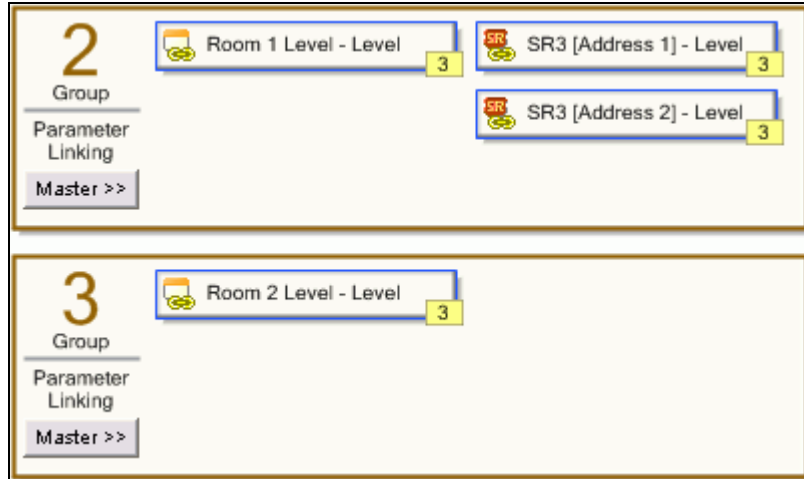


■ Figure 5 SR 3 Page parameter configured to recall Presets in the RPM.

That was fun! What else can we do?

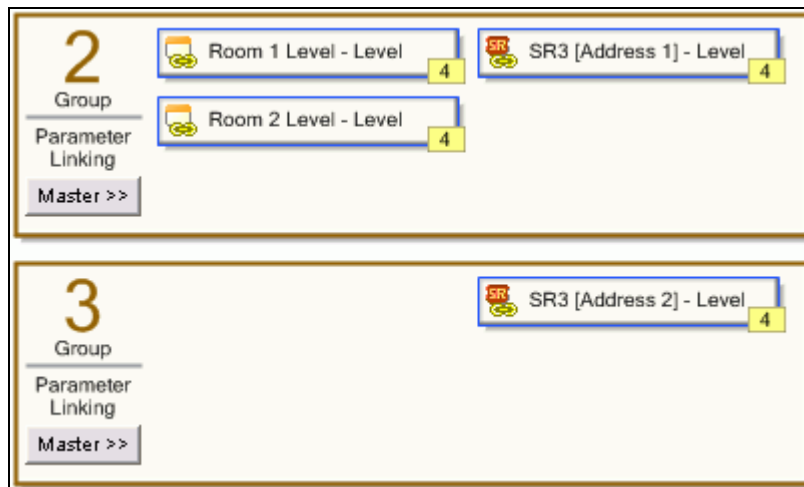
**VARIATION 1 (stored as Preset 3):** Assign multiple Smart Remotes to a single Level. In this case, the remotes will track each other, i.e. changing the Level using one remote automatically updates the display on the other, grouped remote.





■ Figure 6 Multiple Remotes controlling one Level

**VARIATION 2 (stored as Preset 4):** Assign multiple Levels to a single Remote (to adjust a stereo signal, for example).



■ Figure 7 One Remote controlling Multiple Levels.

Behold the Power of the Preset!

