CONFIGURING RU-NMP44 USING **RDL CONFIGURATION CONSOLE** SOFTWARE

The RDL RU-NMP44 is a versatile A/V system product with many functions and settings that are configured using the RDL Configuration Console ("CONSOLE") software, as described in the following step-by-step instructions. It is recommended that the installer understand all the configurable features, even if some features are not used in some installations. CONSOLE software may be downloaded from the RU-NMP44 product page at rdlnet.com.

Note: The RU-NMP44 requires CONSOLE 2.0 version (or higher). These instructions are based on the initial version 2.0 release.

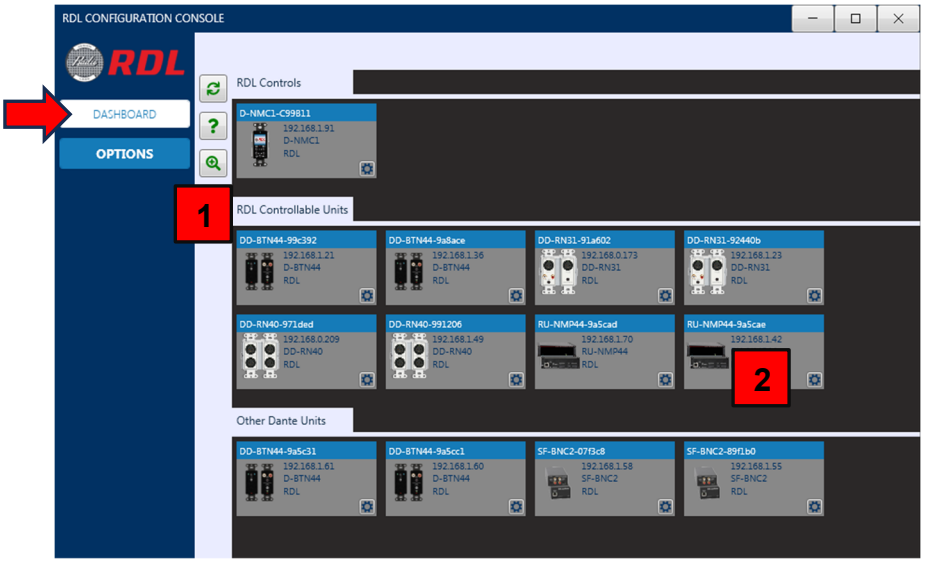
Definitions

Attenuation:	Applied level reduction in decibels (dB)
Maximum level:	0 dBFS (for digital audio)
Operating level:	-20 dBFS (nominal)
Preset:	A stored group of mixer levels that are set when triggered and are fully adjustable thereafter

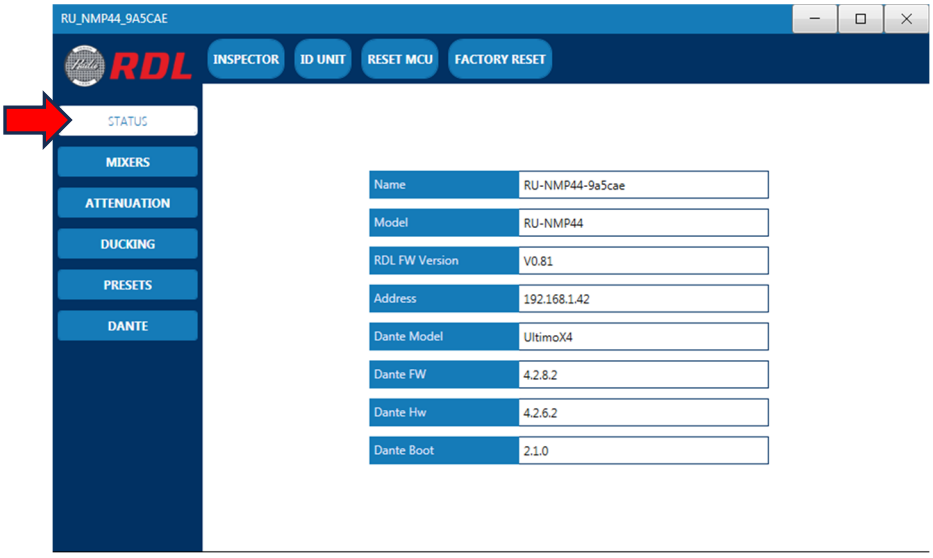
STEP 1 Select the RU-NMP44 to be configured

1 RDL Controllable Units available for setup using CONSOLE are displayed in the RDL Controllable Units frame.

2 Click on the thumbnail of the RU-NMP44 that is to be configured.

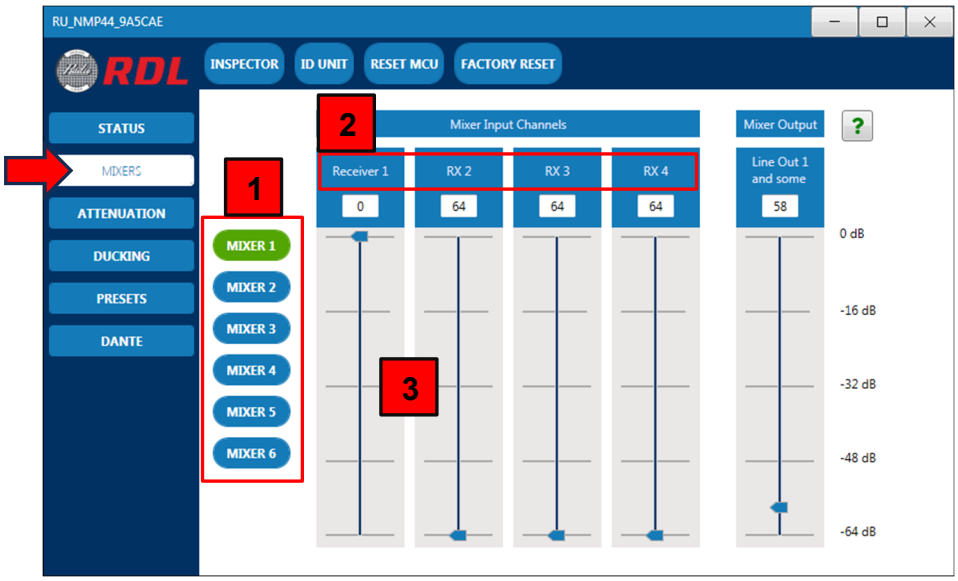


The window for the selected product will be displayed. It defaults to the STATUS frame showing relevant product and network data.



The menu buttons on the left-hand column of the frame select the setup frames for the six MIXERS, for the output ATTENUATION levels of all six mixers, DUCKING settings that may be applied to none, any or all mixers, and PRESETS that may be stored for future recall.

STEP 2 Select the MIXERS button to configure each mixer



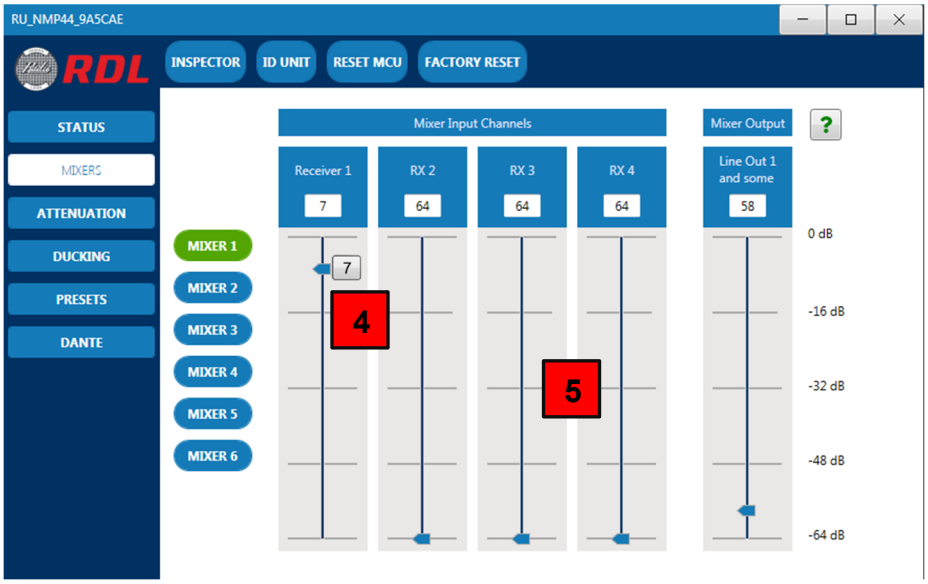
1 Click the button of the mixer, 1 through 6, that is to be configured. The input and output adjustments for Mixer 1 are displayed, as indicated by the green button background.

2 The network channel names of each input are displayed above each slider. If the channel has not been assigned a specific name (such as in Dante Controller), the channel numbers are shown (RX1, RX2, RX3, RX4).

Note: In the frame above, input 1 (RX1) and the output (TX1) names have been renamed.

3 The four input sliders point to the level of attenuation applied to the four inputs, and the numeric attenuation value is shown in the windows beneath the channel names.

Note: The windows display a value; A value cannot be typed or pasted in the window.



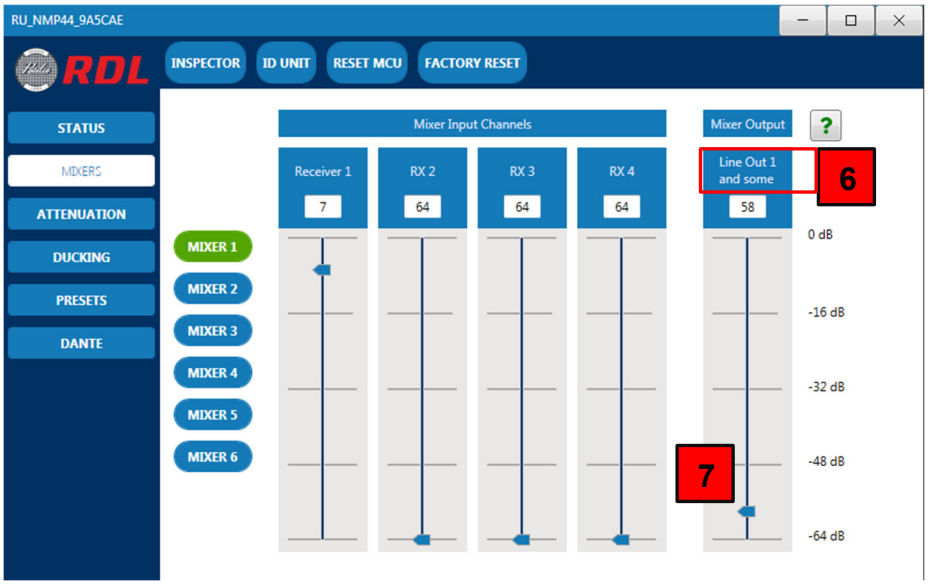
4 Adjust the level to the desired attenuation. The tool-tip by the pointer will display the level as the adjustment is being made.

Note: If an input has been assigned as the Priority Channel (paging source) for ducking, that input slider will be grayed out for mixers with ducking enabled. See DUCKING instructions.

The level displayed in the input channel box at the top of the slider is the attenuation level that the RU-NMP44 has adjusted and confirmed back to CONSOLE.

Note: That level may have been requested by CONSOLE or by a remote control configured to adjust the RU-NMP44 level(s).

5 Adjust the other three inputs to the desired attenuation. A setting of -64 dB shuts off that input.

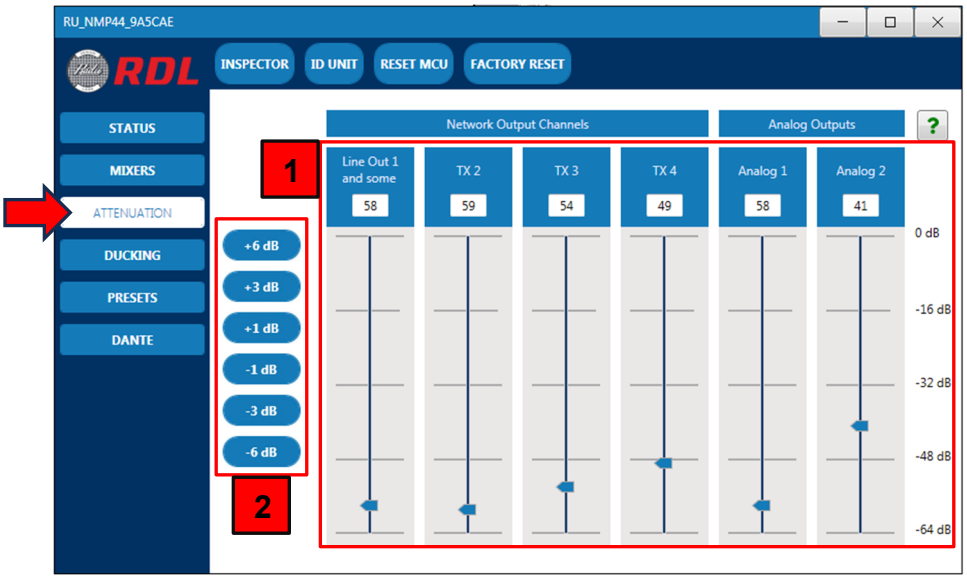


6 The network channel name of the output is displayed above the slider. If the output has not been assigned a specific name (such as in Dante Controller), the output channel number appears (TX1, TX 2, TX3 or TX4). Mixer outputs 5 and 6 have fixed names of Analog 1 and Analog 2 respectively, corresponding to the balanced line-level outputs on the RU-NMP44.

7 Adjust the output level to the desired attenuation. Note that the mixer output level is adjusted for the selected mixer in this frame. If it is desired to see and/or adjust the output levels of all 6 mixers within one frame, select the ATTENUATION button in the left menu column.

Note: Output level changes may have been requested by CONSOLE or by a remote control configured to adjust the RU-NMP44 level(s).

STEP 3 Adjust mixer output levels separately or together (optional)

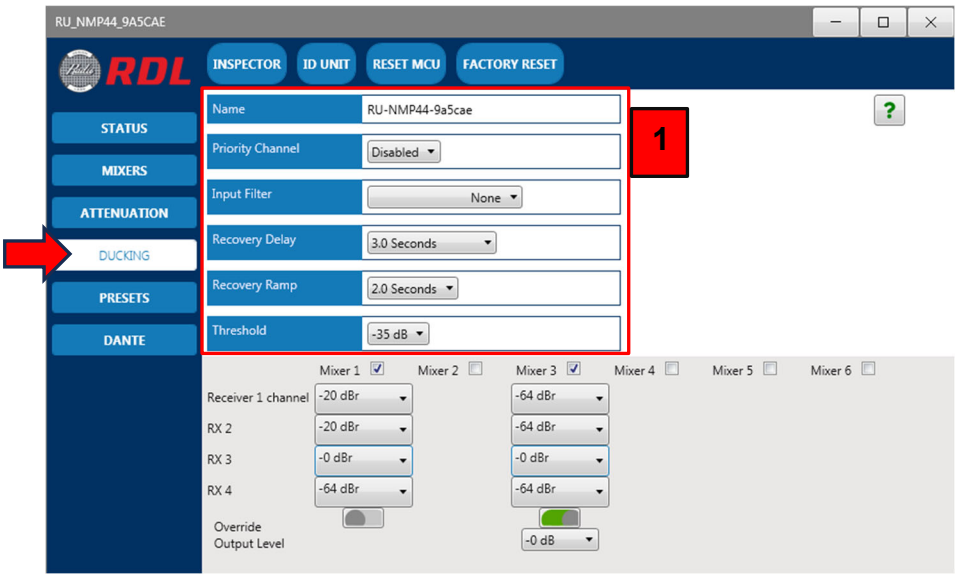


1 The output attenuator sliders from each of the MIXERS are presented in this frame. These attenuators may be adjusted from this frame or from each individual mixer frame. They are grouped here for convenience, as these levels are often configured as the zone volumes. Here, all the zone levels may be monitored or adjusted.

2 The mixer output levels may be adjusted together with single commands in steps of 1 dB, 3 dB or 6 dB, up or down. Each adjustment stops at its respective minimum or maximum, and the remaining outputs continue to be adjusted by the steps that are clicked.

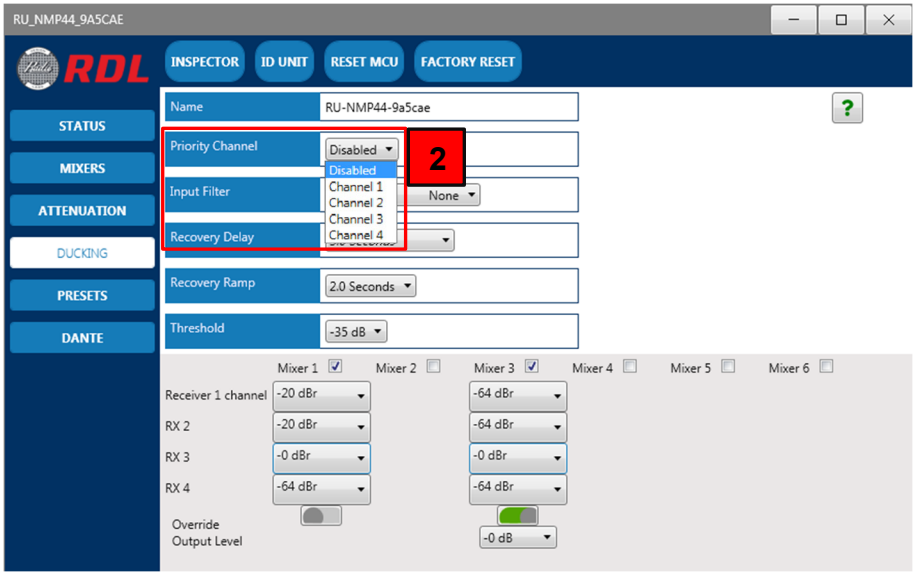
STEP 4 Enable and set DUCKING functions and levels

Click the DUCKING button on the left menu column.

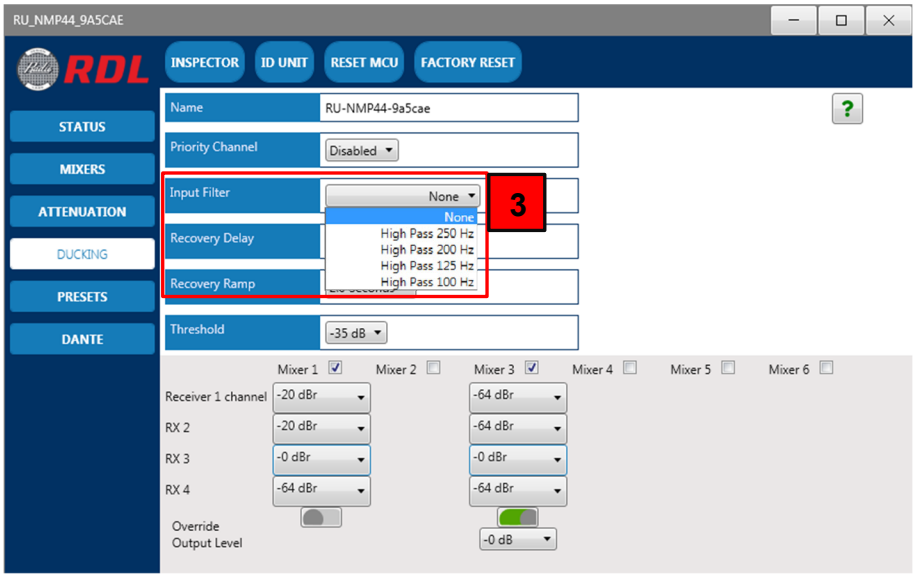


1 Definitions

Name: The name of the controlled unit plus its MAC address
Priority Channel: One of the four network inputs that will serve as the paging source
Input Filter: A high pass filter that may be applied to the paging source
Recovery Delay: The wait time between the end of paging source detection and the beginning of the ramp-up of the ducked signal(s)
Recovery Ramp: The duration of the ramp from initiation back up to normal level
Threshold: The paging source amplitude that must be exceeded to trigger ducking

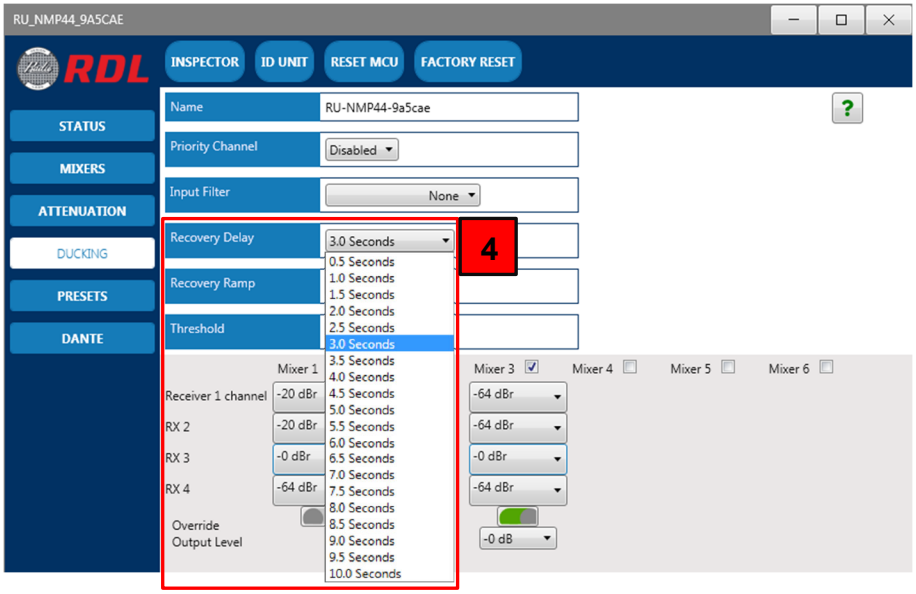


2 Use the dropdown to choose which of the four network inputs is the paging source. If "Disabled" is selected, no ducking will be applied.

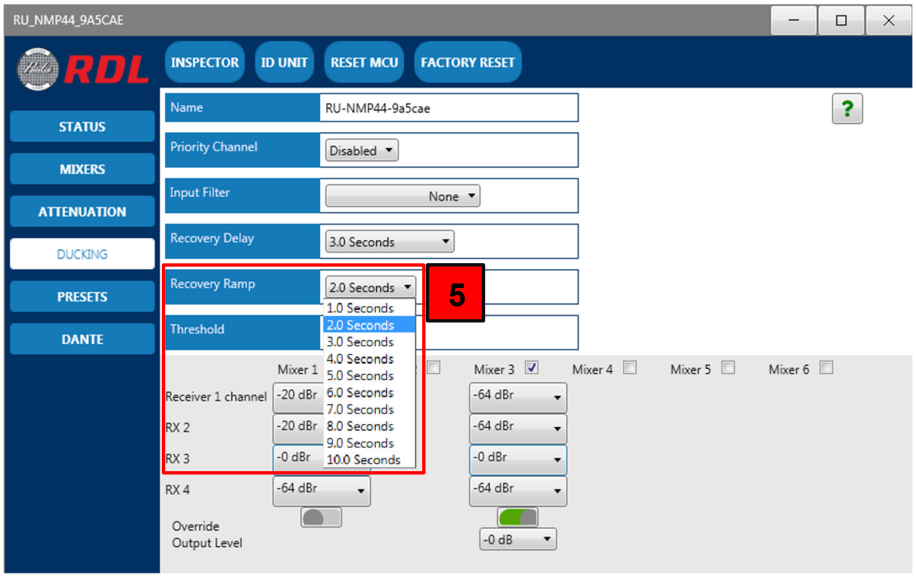


3 If it is desired to roll off low frequencies from the paging source, select the desired 3 dB cutoff frequency from the dropdown. If no roll off is desired, select “None”.

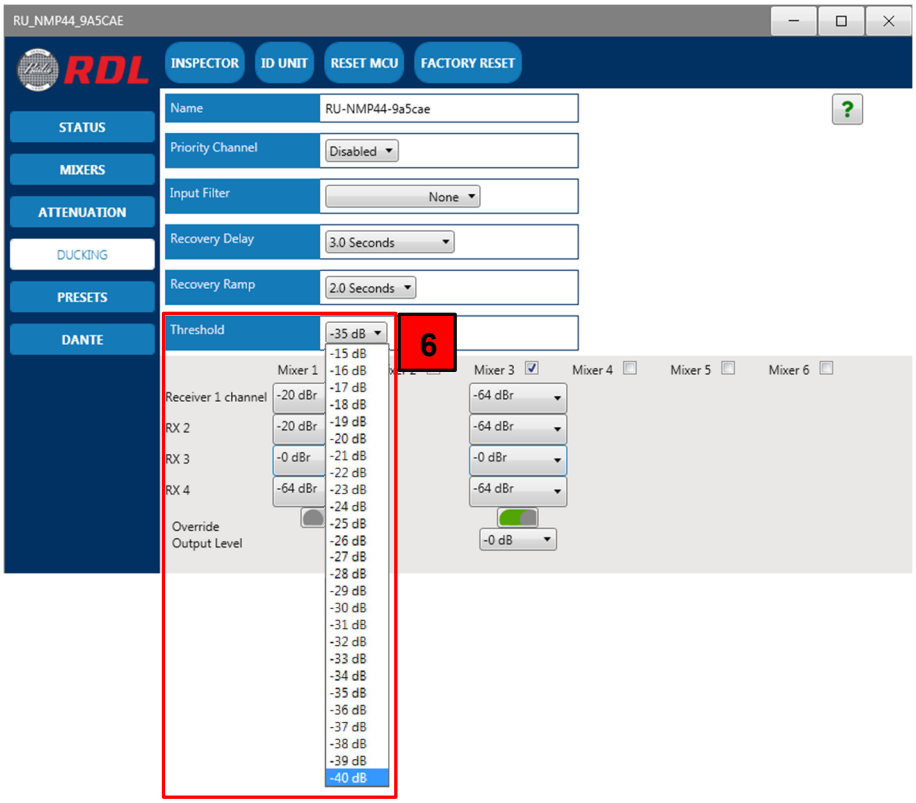
Note: The input filter applies to the paging source prior to the detector. Filtering of unwanted low frequencies may stabilize the detection function in systems with hum or other low frequency noise in the paging source.



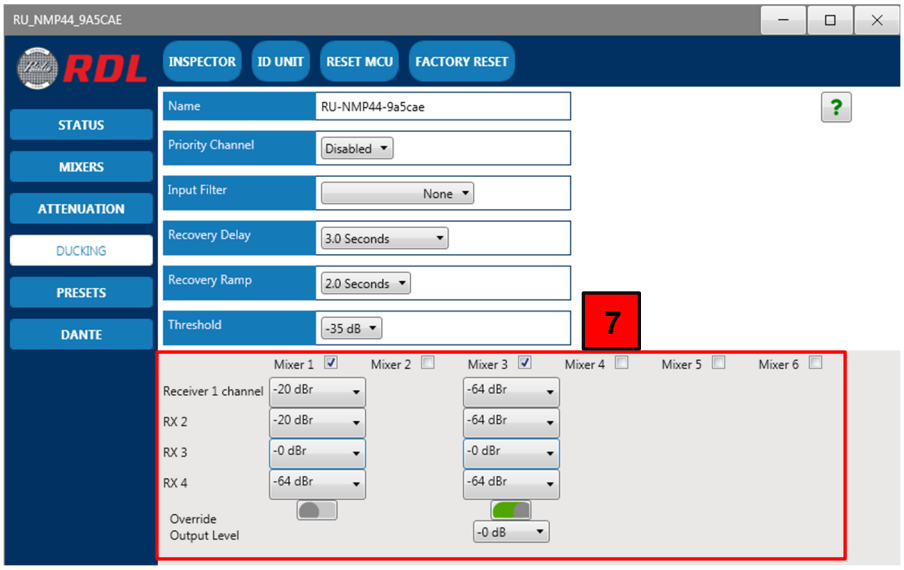
4 Select the Recovery Delay from the dropdown.



5 Set the duration of the recovery ramp from the dropdown.



6 Set the threshold of the paging source audio detector. The indicated levels are relative to a normal operating level of -20 dBFS.

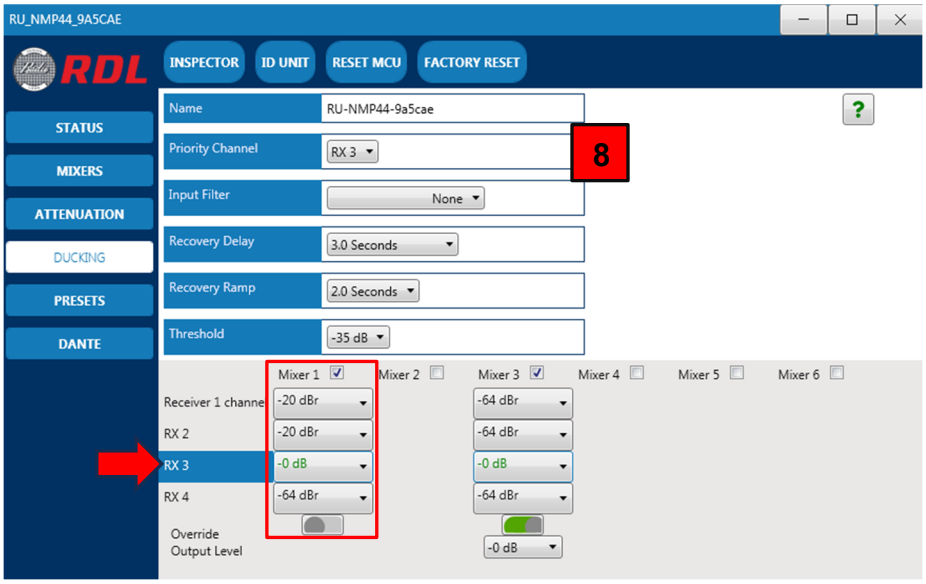


7 Use the checkboxes to select which mixers, if any, will have ducking applied. If a mixer checkbox is not selected, that mixer will operate normally with no priority ducking.

Note: If a mixer is not selected for ducking and the input channel designated as the Priority Channel is turned up on that mixer's inputs, the priority source is treated as a normal audio source for that mixer.

Note: For each selected mixer, the input slider assigned as the Priority Channel will be grayed out and cannot be adjusted because the audio is muted until a ducking cycle is actuated.

In the example above, Mixers 1 and 3 will incorporate ducking if a Priority Channel has been selected. Mixers 2, 4, 5 and 6 will operate as mixers with no ducking.



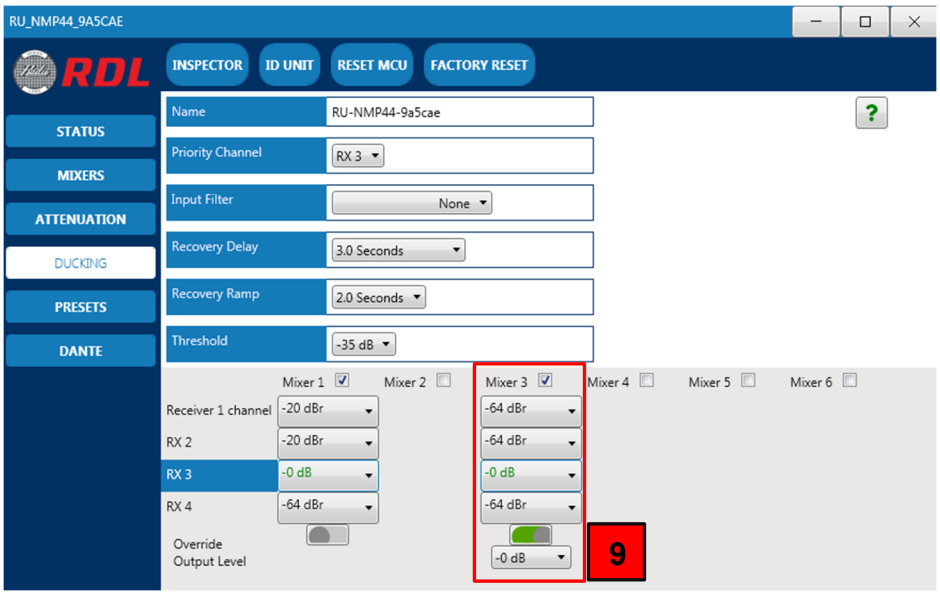
8 In the example above, input RX3 has been selected as the paging source. The RX3 label is highlighted indicating that it is the priority input for ducking. Inputs 1, 2 and 4 will all be ducked when a signal is detected on RX3. The background of the Priority Channel display field will turn green for the duration of the ducking cycle.

The settings in the red box determine what occurs during a ducking cycle. Upon detection of the priority signal, input RX1 will be turned down by 20 dB from the current input level.

Note: The label on the dropdown is in "dBr" (dB relative).

Likewise, input RX2 will be turned down by 20 dB. Input RX4 will be turned off (-64 dBr = off). The priority signal will be unmuted and set to 0 dB attenuation on mixer 1, input RX3 (fully on). When the priority signal falls below the Threshold for 3 seconds (the Recovery Delay), the priority signal will be muted and inputs RX1, RX2 and RX4 will ramp up to their prior level in 2 seconds (the Recovery Ramp time).

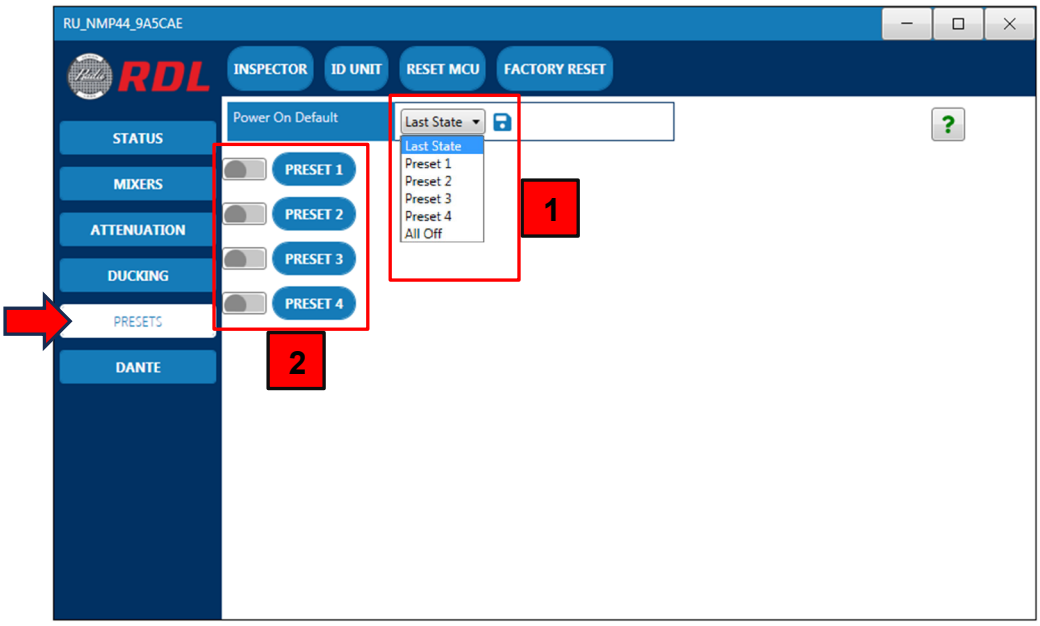
Note: The output TX1 of mixer 1 will remain at its normal operating level, unaffected by the ducking cycle.



9 Upon detection of the priority signal, Mixer 3 inputs 1, 2 and 4 will be set to "off" (-64 dBr) and the priority input will be set to 0 dB attenuation (fully on). For Mixer 3, the Override Output Level has been turned on (green indicator). During the ducking cycle, the output level of Mixer 3 will be set to 0 dB attenuation (fully on). The output level is restored to normal operating level at the end of the ducking cycle. This setting ensures that the zone fed by Mixer 3 cannot miss a page due to the audio level in the zone being set too low to be heard.

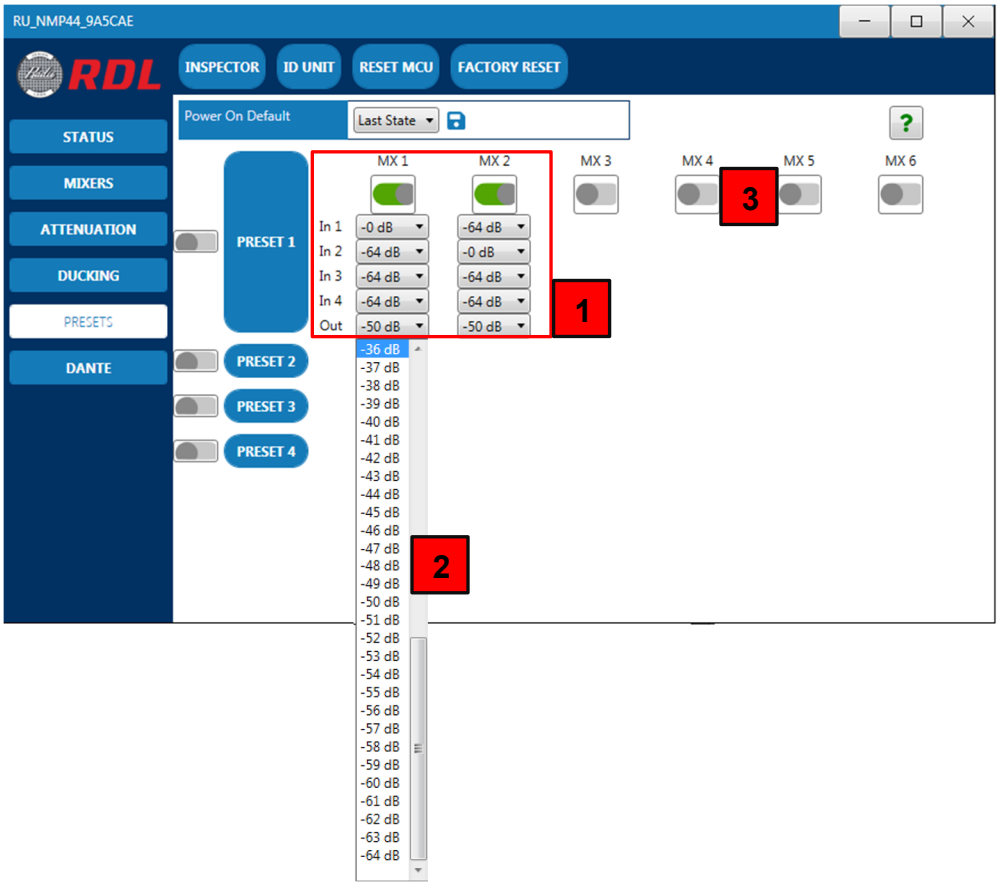
STEP 5 Define Start-Up and PRESET levels

Click the PRESETS button on the left menu column.



1 Use the pulldown to select all mixer input and output levels upon power-up. If the unit should come up as it was before re-powering, select Last State. If it is preferred that the unit comes up with every level off (-64 dB), select All Off. Otherwise, select one of the four saved Presets. Click the "save" icon to store the selection.

2 Select a Preset to review and/or set up. The button will expand to display the current levels and pulldown choices.



1 In the example above, Preset 1 will set the 4 input levels and the output level for Mixers 1 and 2. When triggered, Preset 1 will not change any of the levels for Mixers 3, 4, 5 and 6. If the levels shown are correct, no changes are required.

2 If any of the levels require updating, use the pulldowns to make the changes.

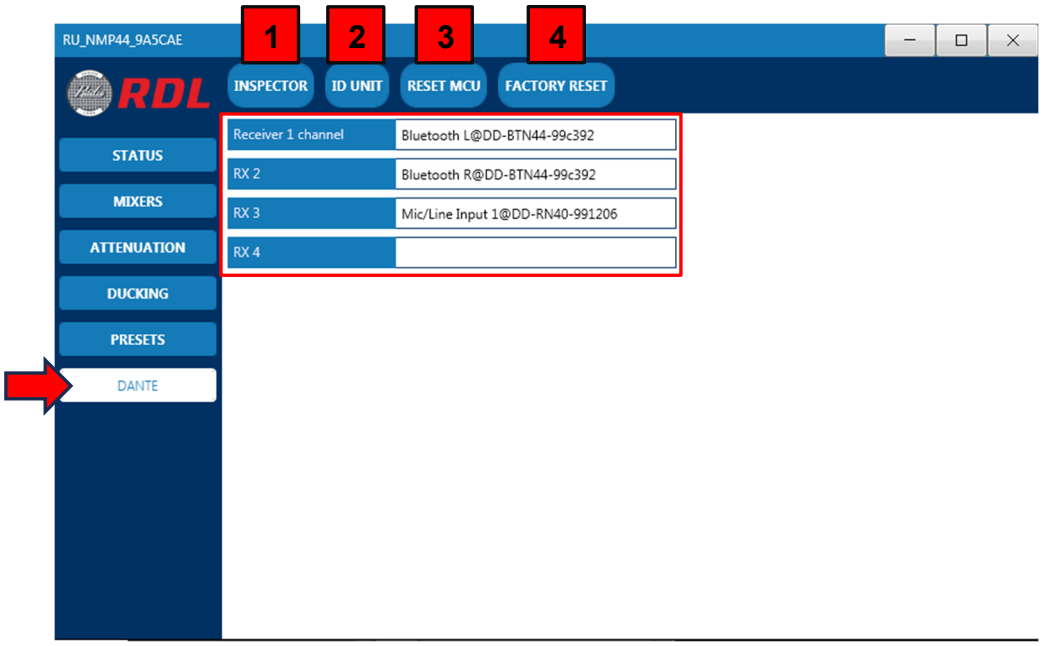
3 To add level settings for Mixers 3, 4, 5 and/or 6 to Preset 1, click the associated button to enable (green). To suspend level settings for Mixers 1 and/or 2, click the associated button to disable (gray).

In the same manner, review and set Presets 2, 3 and/or 4. Presets may be initiated by clicking the button next to the Preset selector in this frame, by remote control through the network (See compatible RDL remote controls), by RDL wired pushbutton remote controls or by an external switch closure or open-collector actuation.

Upon triggering the Preset, the green button remains “on” (both on an RDL wired remote control and in the CONSOLE frame) until any level is adjusted on any mixer input or output (manually or by a ducking cycle).

ADDENDUM Subscription Status and Utilities

Click the DANTE menu button to display receive (RX) channel subscriptions feeding this unit.



The fields in the red box show each receive channel and the source, if any, of the subscription routed to that channel.

1 Click INSPECTOR to view the command strings communicated with the unit. Click

2 ID UNIT to flash the SYNC LED on the unit.

3 Click RESET MCU to reboot the internal processor.

4 Click FACTORY RESET to restore all the unit settings to the original factory values.

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