SIGNAL PROCESSOR

RM-CR

CEILING MICROPHONE

RM-CG

BOUNDARY MICROPHONE

RM-TT

Web GUI Device Manager Operation Guide

EN

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Introduction

This document provides details on the functions of the Web GUI Device Manager as well as details on using this application software to configure and operate the following devices.

- Signal Processor RM-CR
- Ceiling Microphone RM-CG
- Boundary Microphone RM-TT

In addition, this document complements the following Reference Manuals. Each Reference Manual provides comprehensive details on connecting and using the corresponding device. Be sure to read those as well.

- RM-CR Reference Manual
- RM-CG Reference Manual
- RM-TT Reference Manual

Web GUI Device Manager is a general term for the following application software, which is used to configure the corresponding device.

- Web GUI RM-CR Device Manager
- Web GUI RM-CG Device Manager
- Web GUI RM-TT Device Manager

About this manual

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  Yamaha website

U.S.A. and Canada：	**Other Countries：**
https://uc.yamaha.com/support/	https://download.yamaha.com/

About the software interface

This software requires a browser application on a computer. Configure the device by specifying settings in the screens displayed in the browser.

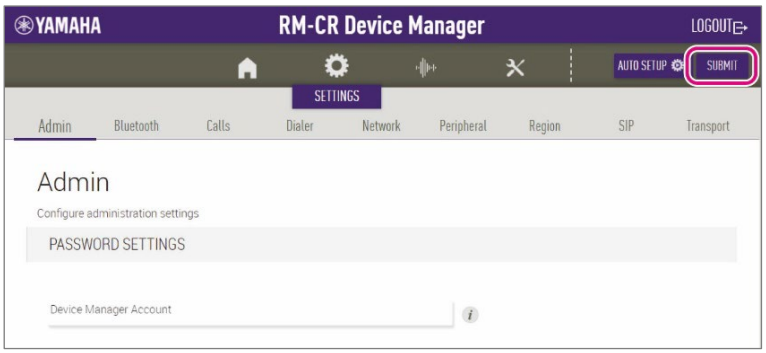
Useful icons in screens

The screens of this software have various icons that are useful for providing details on the functions and for checking the status of the device.

	Information icon	Move the pointer to this icon to see more information about the item.
	Identify button	Click to cause the indicator of the corresponding device to flash.
	Link button	Click to go to another window for the item.

Applying settings specified in software screens

Be sure to click the [SUBMIT] button after changing settings in Device Manager. The [SUBMIT] button is always in the upper-right corner of the window.



Screen structure of Web GUI Device Manager for RM-CR, RM-CG and RM-TT

Refer to the page listed to the right for details on each item available in the various screens.

When different models share similar screens, the RM-CR screen is used for reference.

Menu	Tab	Item	RM-CR	RM-CG	RM-TT	Page
[HOME]						
		[SYSTEM STATUS]	○	○	○	9
		[PERIPHERAL STATUS]	○	—	—	10
		[LED INDICATION STATUS]	○	○	○	10
		[MEDIA STATUS]	○	—	—	11
		[BLUETOOTH STATUS]	○	—	—	12
[SETTINGS]						
	[Admin]	[PASSWORD SETTINGS]	○	○	○	13
		[SECURITY SETTINGS]	○	○	○	13
		[DEPLOYMENT SERVER SETTINGS]	○	○	○	14
		[SYSLOG SERVER SETTINGS]	○	○	○	14
		[SNMP SETTINGS]	○	○	○	15
		[LED INDICATION SETTINGS]	○	○	○	16
	[Bluetooth]	[DEVICE SETTINGS]	○	—	—	17
		[PAIRING SETTINGS]	○	—	—	18
	[Calls]	[DIAL SETTINGS]	○	—	—	20
		[FORWARDING SETTINGS]	○	—	—	21
	[Dialer]	[CONFERENCE SETTINGS]	○	—	—	22
	[Network]	[IP ADDRESS SETTINGS]	○	○	○	23
		[DANTE IP SETTINGS]	○	○	○	24
		[ETHERNET SWITCH SETTINGS]	○	—	—	25
		[HOSTNAME SETTINGS]	○	○	○	26
		[IEEE802.1X SETTINGS]	○	○	○	27
	[Peripheral]	[DEVICE SETTINGS]	○	—	—	29
		[REGISTRATION SETTINGS]	○	—	—	30
		[SPEAKER POSITIONING SETTINGS]	○	—	—	32
		[MICROPHONE GROUP MUTE SETTINGS]	○	—	—	32
	[Region]	[SYSTEM SETTINGS]	○	○	○	33
		[TIME SETTINGS]	○	○	○	34
		[DAYLIGHT SAVING SETTINGS]	○	○	○	34
	[SIP]	[SIP SETTINGS]	○	—	—	35
		[REGISTRATION SETTINGS]	○	—	—	36
		[CONFIGURATION SETTINGS]	○	—	—	37
		[MEDIA SETTINGS]	○	—	—	39
	[Transport]	[PRIORITY SETTINGS]	○	—	—	40

		[TRANSPORT SETTINGS]	○	—	—	41
		[NAT TRAVERSAL SETTINGS]	○	—	—	42
[AUDIO]						
	[Input]	[AUDIO INPUT STATUS]	○	—	—	45
	[Processing]	[INTERFACE SETTINGS]	○	—	—	46
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		[DIGITAL SIGNAL PROCESSING SETTINGS]	○			47
				○		50
					○	56
		[AUTOMATIC AUDIO TUNING]	○	—	—	48
	[Output]	[AUDIO OUTPUT STATUS]	○	—	—	58
	[Dante]	[INPUT STATUS]	—	○	○	59
		[OUTPUT STATUS]	—	○	○	60
[DIGITAL SIGNAL PROCESSING SETTINGS]						
		[EQ]	○	○	○	61
		[AGC]	○	—	—	63
		[GATE]	○	—	—	64
		[COMP]	○	—	—	65
		[FBS]	○	—	—	66
		[ECHO SUPRESSOR]	○	—	—	67
		[AUTO MIXER]	○	—	—	68
		[DUCKER]	○	—	—	69
		[SPEAKER PROCESSOR]	○	—	—	70
		[FADER]	○	○	○	73
		[ROTER]	○	○	○	74
[TOOLS]						
	[Update]	[DEVICE STATUS]	○	○	○	75
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	[Contacts]	[EXPORT CONTACTS]	○	—	—	77
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	[Control Sets]	[CONTROL SETS]	○	—	—	85
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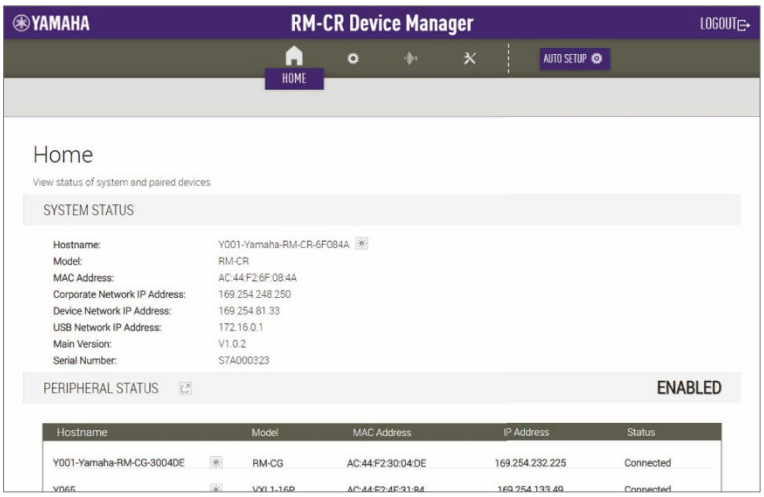
		[DETAIL]	○	○	○	90
	[Logs]	[DOWNLOAD LOGS]	○	○	○	97

[HOME]

In the [Home] screen, you can check various status information.

Applicable devices: RM-CR, RM-CG, RM-TT



① [SYSTEM STATUS]

Displays basic information on the unit.

Item	Description
Hostname	Displays the hostname.
Model	Displays the model name.
MAC Address	Displays the MAC address.
Corporate Network IP Address *1	Displays the corporate network IP address. A corporate network is intended for remote management of the ADECIA system using SNMP and syslog protocols, and for communicating with the SIP server in a company network when using the IP telephony function of RM-CR.
Device Network IP Address *1	Displays the device network IP address. This IP address is used by RM-CR to communicate with peripheral devices. The Dante/PoE port on the back of the RM-CR is intended to be connected to the device network where all ADECIA devices are connected. A device network is intended for communication between ADECIA's RM-CR and peripheral devices, and allows the flow of Dante network audio and control signals between devices.

	Separating it from the corporate network prevents the leaking of unnecessary packets and creates a secure conference network.
USB Network IP Address *1	Displays the USB network IP address (“172.16.0.1”). Device Manager can be accessed by connecting the RM-CR to a computer via USB, then typing this IP address in a web browser.
IP Address *2	Displays the IP address. This IP address is used for device control using remote control protocols, for remote management using protocols such as syslog or SNMP, and for Dante audio communication.
Main Version	Displays the version.
Serial Number	Displays the serial number.

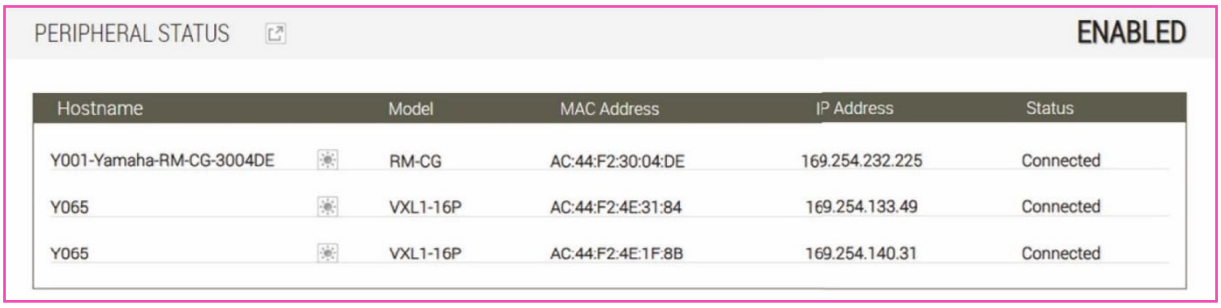
*1 RM-CR
*2 RM-CG/RM-TT

② [PERIPHERAL STATUS]

Displays basic information on peripheral devices and their connection status with this unit.

If [Enable Peripheral controls] in the [Peripheral] screen was activated, “ENABLED” is displayed beside the items, and information about the peripheral device is displayed.

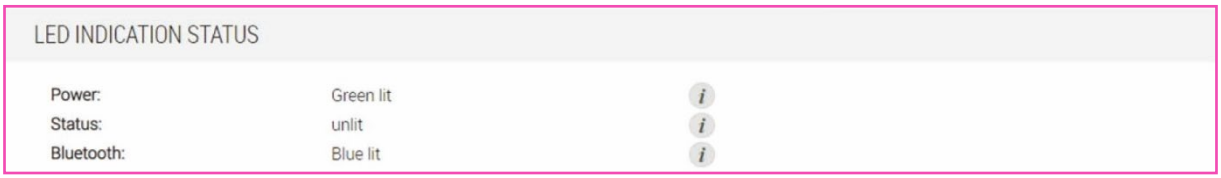
Click to display the [Peripheral] screen. Settings for peripheral devices can be specified.



③ [LED INDICATION STATUS]

Displays the status of the indicators. The status of the indicator indicates the status of the unit.

- RM-CR



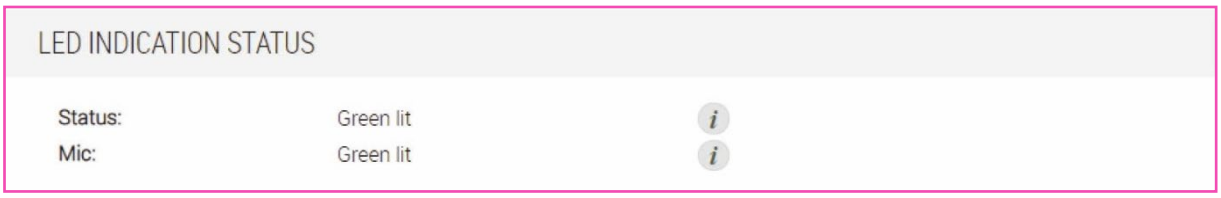
Item	Indication	Unit status
Power	Green lit Green fast flash	Operating Starting up
Status	White fast flash White faster flash 2 times blue flash 3 times blue flash Red fast flash	Responding to Identify function Firmware being updated Resetting standby/Resetting of network-related settings Resetting standby/Resetting of all settings Error occurring

	Red faster flash	Severe error occurring
Bluetooth	Blue lit	Bluetooth connection being made
	Blue faster flash	Pairing standby/Pairing
	Unlit	Bluetooth cannot be used

- RM-CG

Item	Indication	Unit status
Status	Green lit	Microphone on
	White fast flash	Responding to Identify function
	White faster flash	Firmware being updated
	2 times red flash	Microphone off
	Red fast flash	Error occurring
	Red faster flash	Severe error occurring
	2 times blue fast flash	Resetting standby/Resetting of network-related settings
	3 times blue fast flash	Resetting standby/Resetting of all settings

- RM-TT

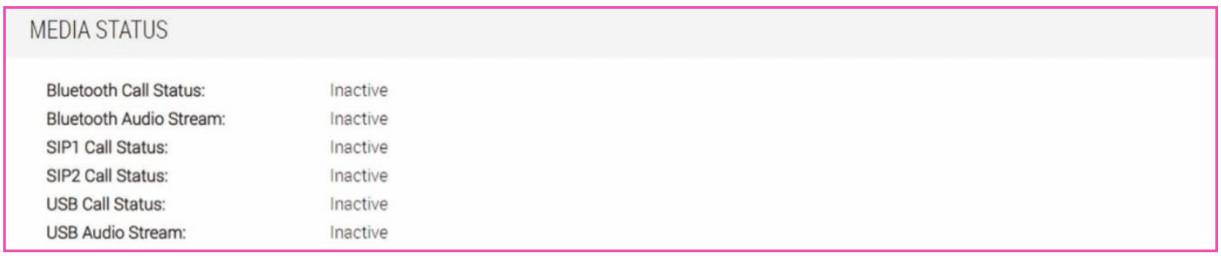


Item	Indication	Unit status
Status	Green	Microphone on
	White	Responding to Identify function
	White flash	Firmware being updated
	Constant Red	Microphone off
	Red flash	Error occurring
	Red fast flash	Severe error occurring
Mic	Green	Microphone on
	Red flashing	Microphone off

④ [MEDIA STATUS]

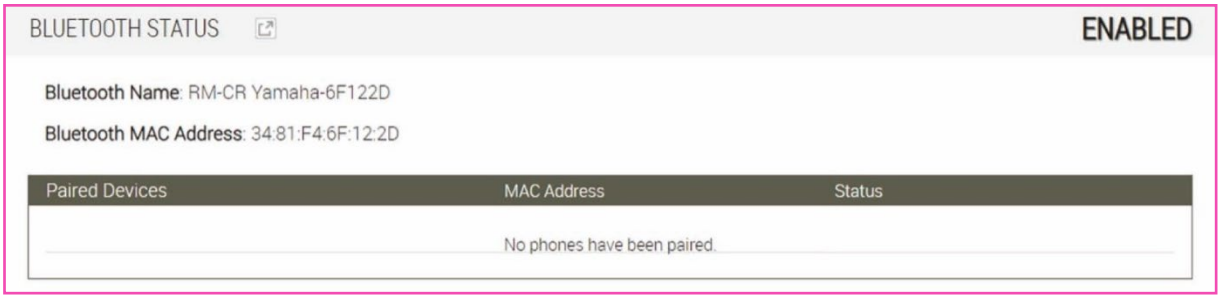
Displays the activity status of calls and audio playback.

"Active" appears during a call or when in use; "Inactive" appears when not in use.



Item	Description
Bluetooth Call Status	Displays the Bluetooth call status.
Bluetooth Audio Stream	Displays the Bluetooth audio streaming status.
SIP1 Call Status	Displays the SIP1 call status.
SIP2 Call Status	Displays the SIP2 call status.
USB Call Status	Displays the USB call status.
USB Audio Stream	Displays the USB audio streaming status.

⑤ [BLUETOOTH STATUS]



RM-CR Bluetooth information

Item	Description
Bluetooth Name	Displays the Bluetooth device name for this unit.
Bluetooth MAC Address	Displays the Bluetooth MAC address for this unit.

Basic information and connection status of paired smartphones

If none are connected, “No phones have been paired” is displayed.

Item	Description
Paired Devices	Displays the Bluetooth device name of the paired smartphone.
MAC Address	Displays the Bluetooth MAC address of the paired smartphone.
Status	The [DISCONNECT] button appears beside a connected smartphone. Click the button to disconnect.

Note

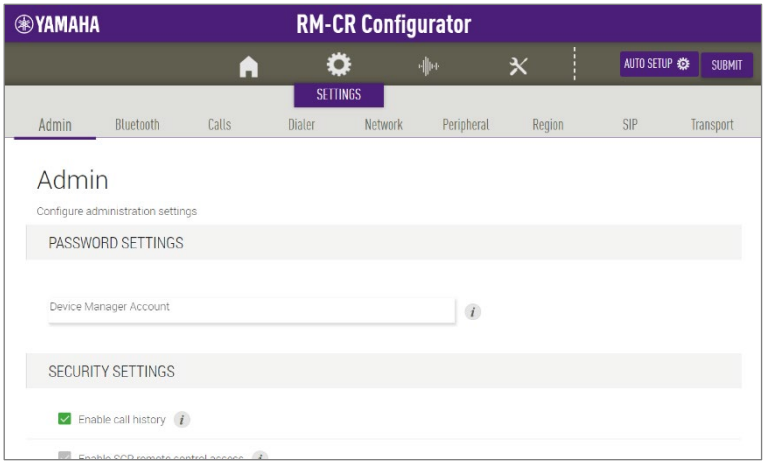
Click to display the [SETTINGS] > [Bluetooth] screen. Bluetooth settings can be specified.

[SETTINGS]

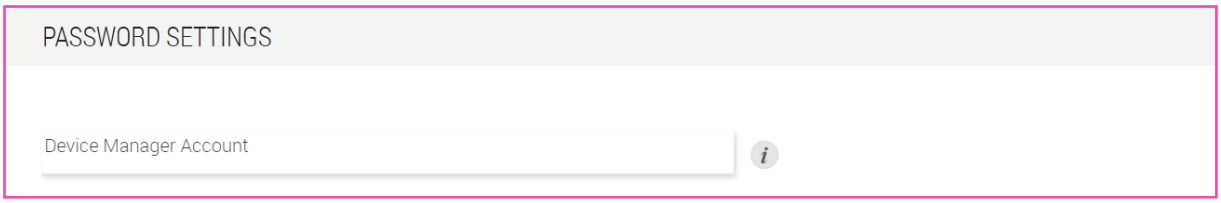
[Admin]

In the [Admin] screen, you can specify system administration settings.

Applicable devices: RM-CR, RM-CG, RM-TT

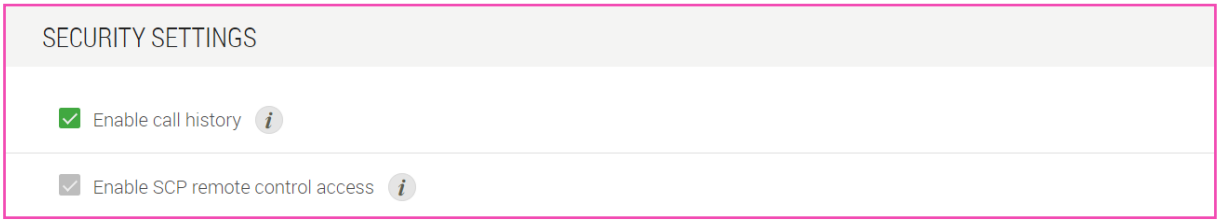


① [PASSWORD SETTINGS]



Item	Description
Device Manager Account	Specify the password for logging in to Device Manager. (4 to 16 alphanumeric characters)

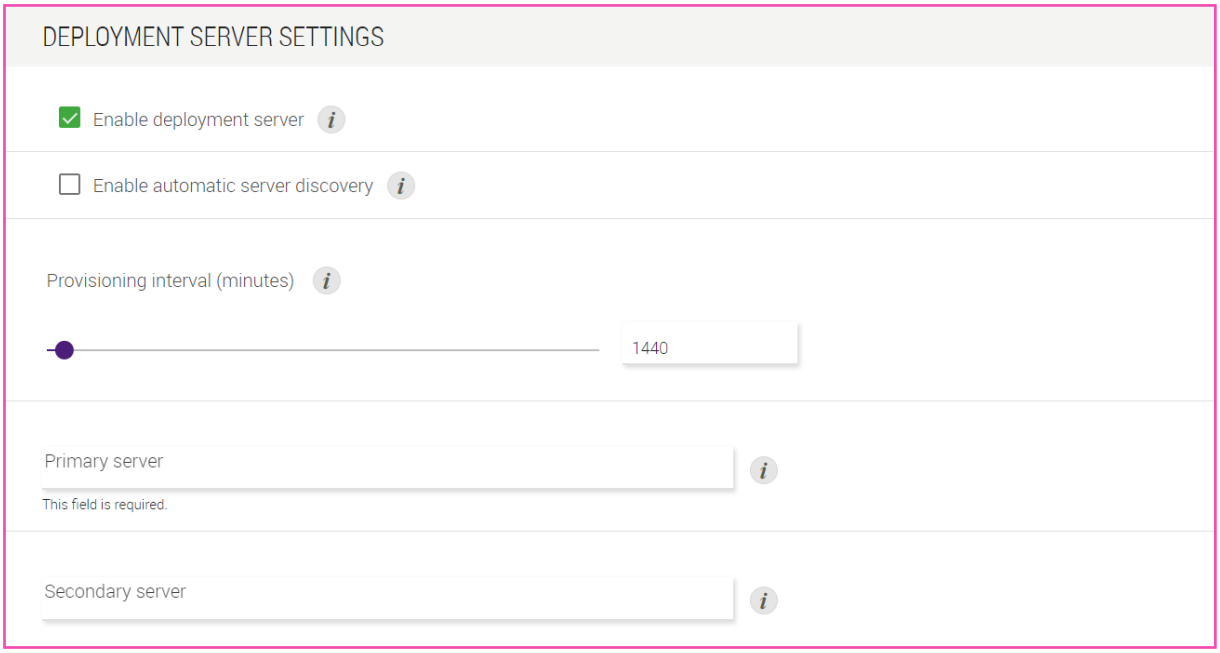
② [SECURITY SETTINGS]



Item	Description
Enable call history	Select whether to keep an SIP call history. When this is activated, the call history can be checked in applications created using ProVisionaire Control or applications using remote control protocols. Default setting: Activated

Enable SCP remote control access Select whether to use SCP remote control access.

③ [DEPLOYMENT SERVER SETTINGS]



Item	Description
Enable deployment server	Select whether to use a deployment server. Default setting: Activated
Enable automatic server discovery	Select whether to use the automatic discovery feature of the deployment server. When this is not activated, specify the IP address of the deployment server. • [Primary server] • [Secondary server] Default setting: Activated
Provisioning interval (minutes)	Specify the deployment server provisioning interval (in minutes). Default setting: 1,440 minutes (1 day) Setting range: 0 to 44,640 minutes (31 days)
Primary server	Specify the primary IP address of the deployment server.
Secondary server	Specify the secondary IP address of the deployment server.

④ [SYSLOG SERVER SETTINGS]

Item	Description
Enable Syslog	Select whether to use a syslog server. When this is activated, specify settings for the following. • [Server address] • [Port number] (Default setting: 514)

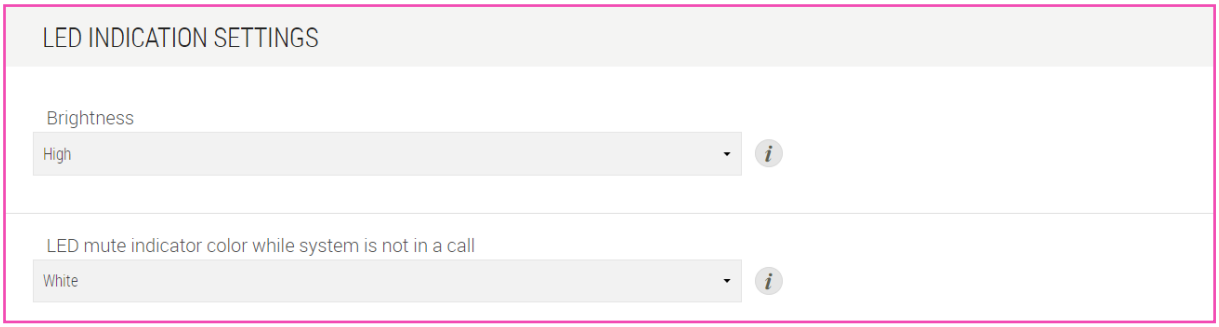
⑤ [SNMP SETTINGS]

Item	Description
Enable SNMP	Select whether to use SNMP. When this is activated, specify settings for the following. • [Server address] (In order to receive traps, port 162 on the server must be open.) • [Read-only community] • [Device location]

- [Contact name]

Default setting: Deactivated

⑥ [LED INDICATION SETTINGS]



- RM-TT

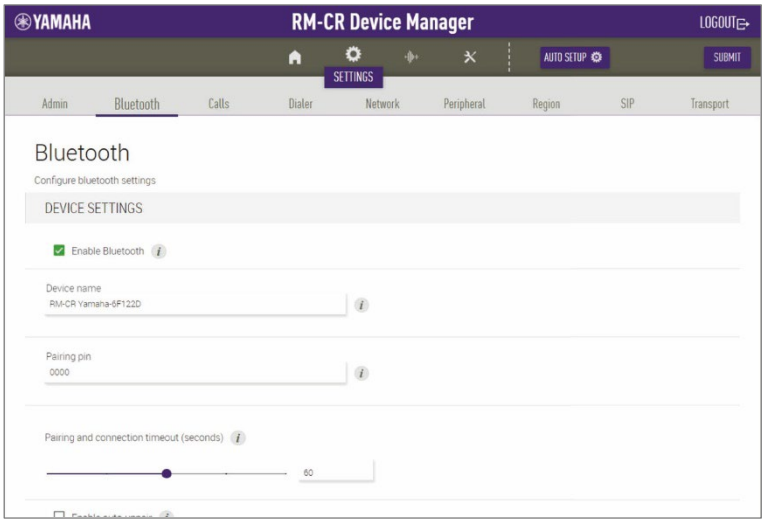
Item	Description
Brightness	Select the brightness of the indicators. • [High] (default setting) • [Medium] • [Low] • [Off]
LED mute indicator color while system is not in a call	Select the color of the indicator when the microphone is muted and there is no call. • [Off] • [Green] • [White] (default setting)
Indicate microphone direction when microphone is unmuted	Select whether the lighting/flashing of the Status indicator varies according to the directivity of the microphone. This is available if the directivity of the microphone has been set to [Cardioid], [Hypercardioid] or [Supercardioid].

[Bluetooth]

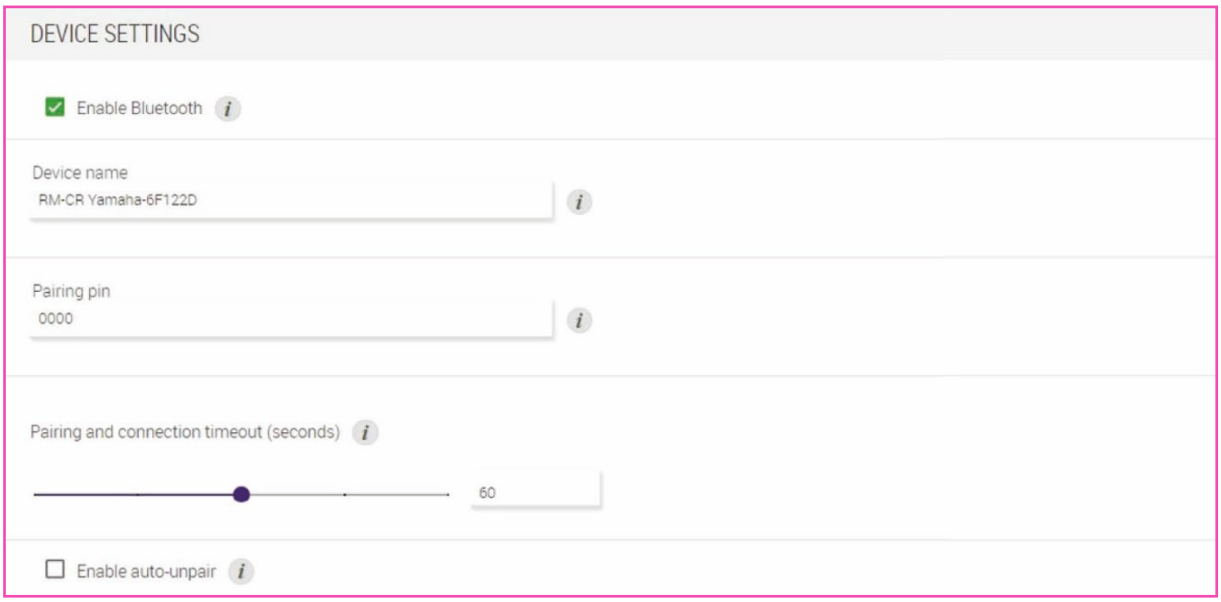
In the [Bluetooth] screen, you can specify Bluetooth settings and pair this unit with smartphones.

You can join a meeting from a different smartphone via a Bluetooth-connected smartphone, or you can play audio with a Bluetooth-connected smartphone.

Applicable devices: RM-CR



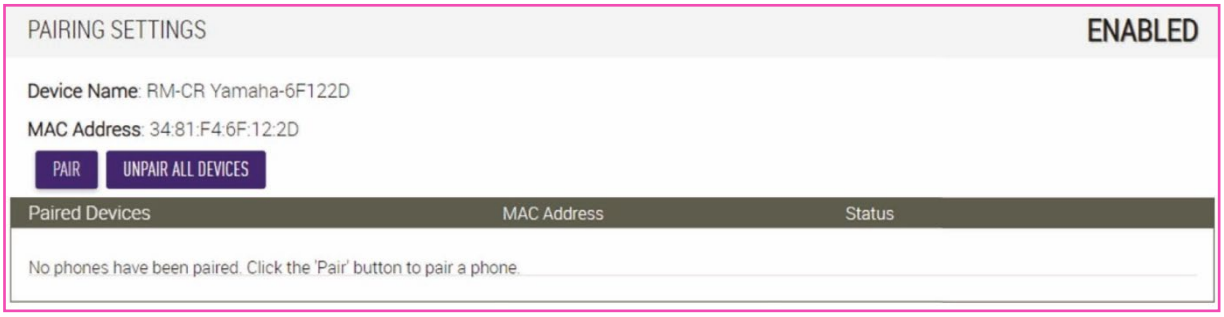
① [DEVICE SETTINGS]



Item	Description
Enable Bluetooth	Select whether to use Bluetooth.
Device name	Specify the name of the Bluetooth connection of this unit. Default setting: The product name "RM-CR Yamaha" followed by the MAC address of the unit
Pairing pin	Specify the PIN (numbers) for Bluetooth pairing with this unit. Default setting: "0000"

Pairing and connection timeout (seconds)	Specify the length of time that this unit remains in pairing standby mode. Default setting: 60 seconds Specify “0” to prevent timing out.
Enable auto-unpair	Select whether to cancel pairing when the Bluetooth connection with the smartphone is cut. Default setting: Activated

② [PAIRING SETTINGS]



RM-CR Bluetooth information

Item	Description
Device Name	Displays the Bluetooth device name for this unit.
MAC Address	Displays the Bluetooth MAC address for this unit.
PAIR	Puts this unit in pairing standby mode.
UNPAIR ALL DEVICE	Cancels the pairing with all smartphones simultaneously.

Basic information and connection status of paired smartphones

If none are connected, “No phones have been paired” is displayed.

Item	Description
Paired Devices	Displays the Bluetooth device name of the paired smartphone.
MAC Address	Displays the Bluetooth MAC address of the paired smartphone.
Status	The [DISCONNECT] button appears beside a connected smartphone. Click the button to disconnect.

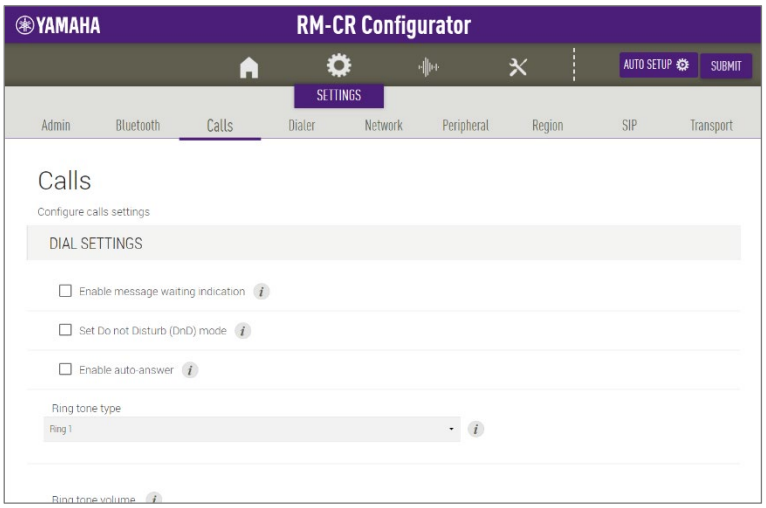
Related links

- “Connecting a smartphone” in the RM-CR Reference Manual

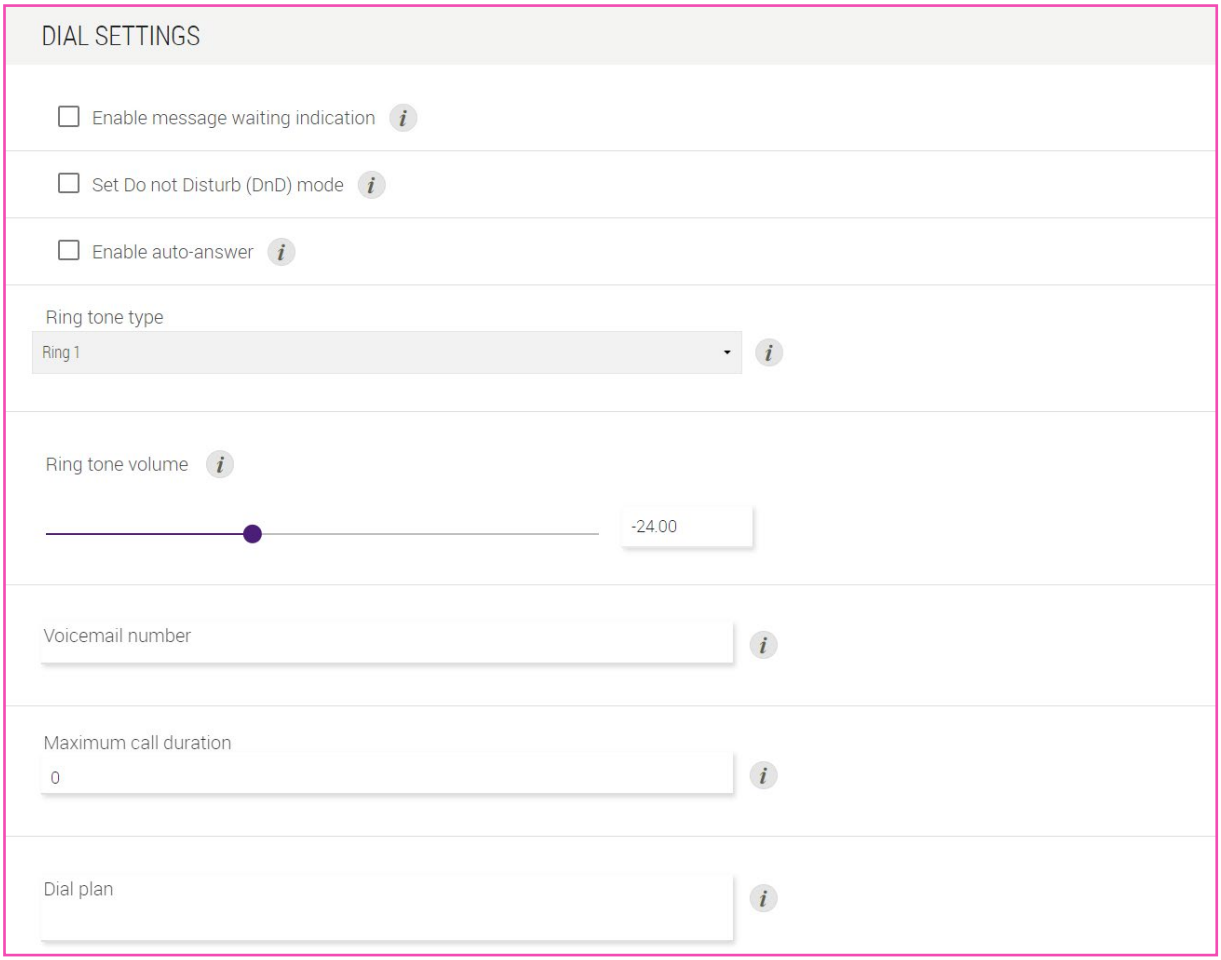
[Calls]

In the [Calls] screen, you can specify SIP communication settings.

Applicable devices: RM-CR

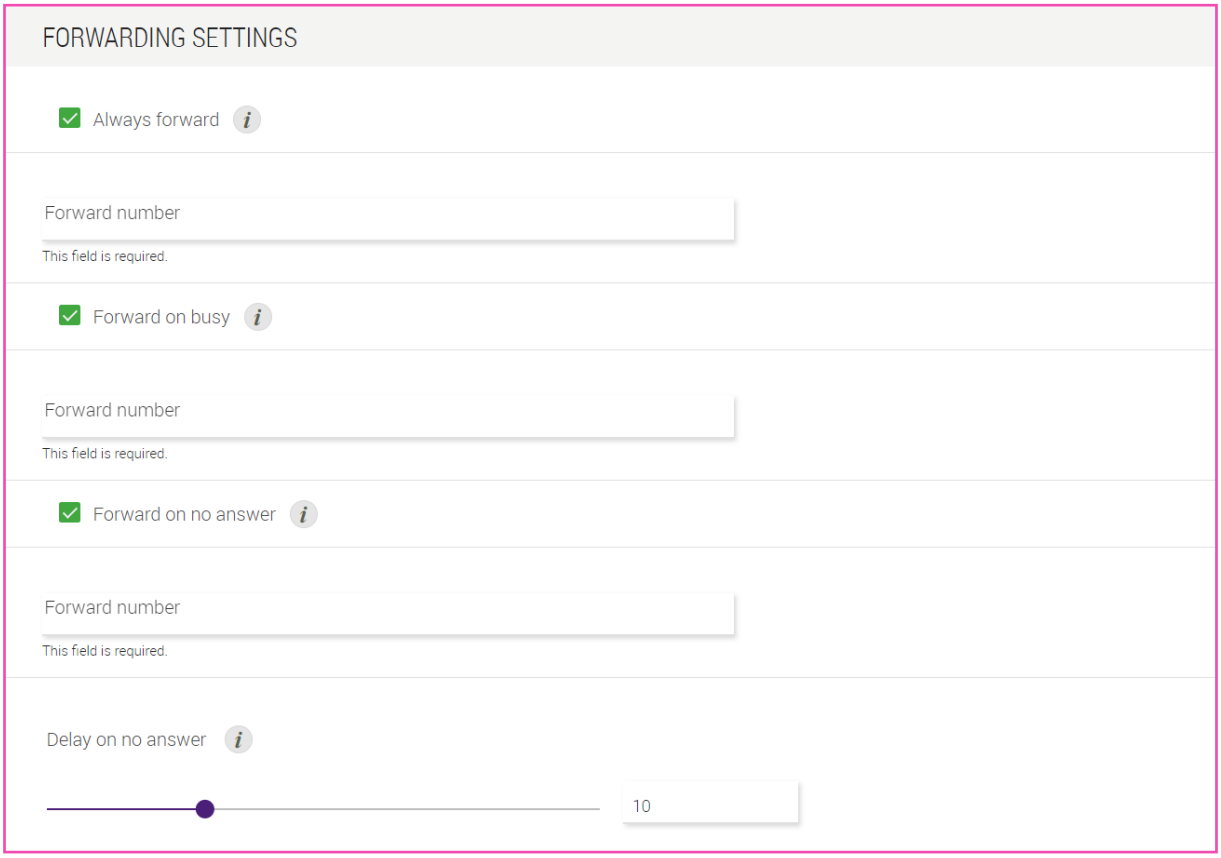


① [DIAL SETTINGS]



Item	Description
Enable message waiting indication	Select whether to activate the SIP message feature MWI (Message Waiting Indication). The SIP server must support this feature. Default setting: Deactivated
Set Do not Disturb (DnD) mode	Select whether to put this unit in call rejection mode. Default setting: Deactivated
Enable auto-answer	Select whether to put this unit in auto-answer mode. This will automatically answer calls even when the unit is not physically present. We recommend selecting this for testing purposes only. Default setting: Deactivated
Ring tone type	Select the ringtone.
Ring tone volume	Adjust the ringtone volume. Default setting: -24 dB
Voicemail number	Specify the number for checking voicemails.
Maximum call duration	Specify a maximum length of time (in minutes) for SIP calls. The call will be disconnected when the call time limit is reached. Default setting: 0 minutes (unlimited) Setting range: 0 to 10,080 minutes (7 days)
Dial plan	Specify a dial plan.

② [FORWARDING SETTINGS]

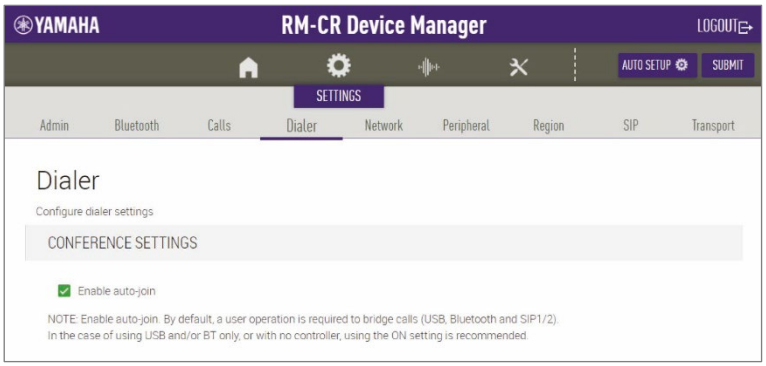


Item	Description
Always forward	Select whether to forward all incoming calls. Default setting: Deactivated When this is activated, type the forwarding number in the field.
Forward on busy	Select whether to forward incoming calls during a call and in call rejection mode. This setting will not be applied if [Always forward] has been activated. When this is activated, type the forwarding number in the field. Default setting: Deactivated
Forward on no answer	Select whether to forward incoming calls that are not answered. This setting will not be applied if [Always forward] has been activated. When this is activated, type the forwarding number in the field. Default setting: Deactivated
Delay on no answer	Specify the wait time (in seconds) before forwarding with [Forward on no answer]. Default setting: 10 seconds

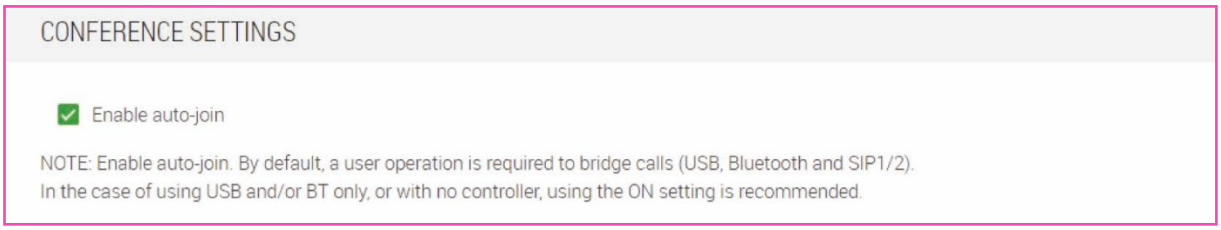
[Dialer]

In the [Dialer] screen, you can specify conference call settings.

Applicable devices: RM-CR



① [CONFERENCE SETTINGS]

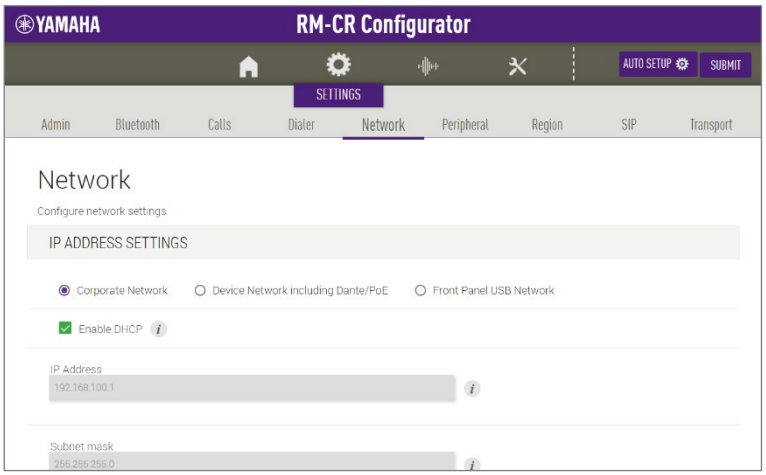


Item	Description
Enable auto-join	Select whether users can join a call without performing any special operation. When this is activated, simultaneous calls between multiple locations can be made automatically. When this is deactivated, simultaneous calls between multiple locations will be possible by manually participating in a conference using ProVisionaire Control, for example. Default setting: Activated

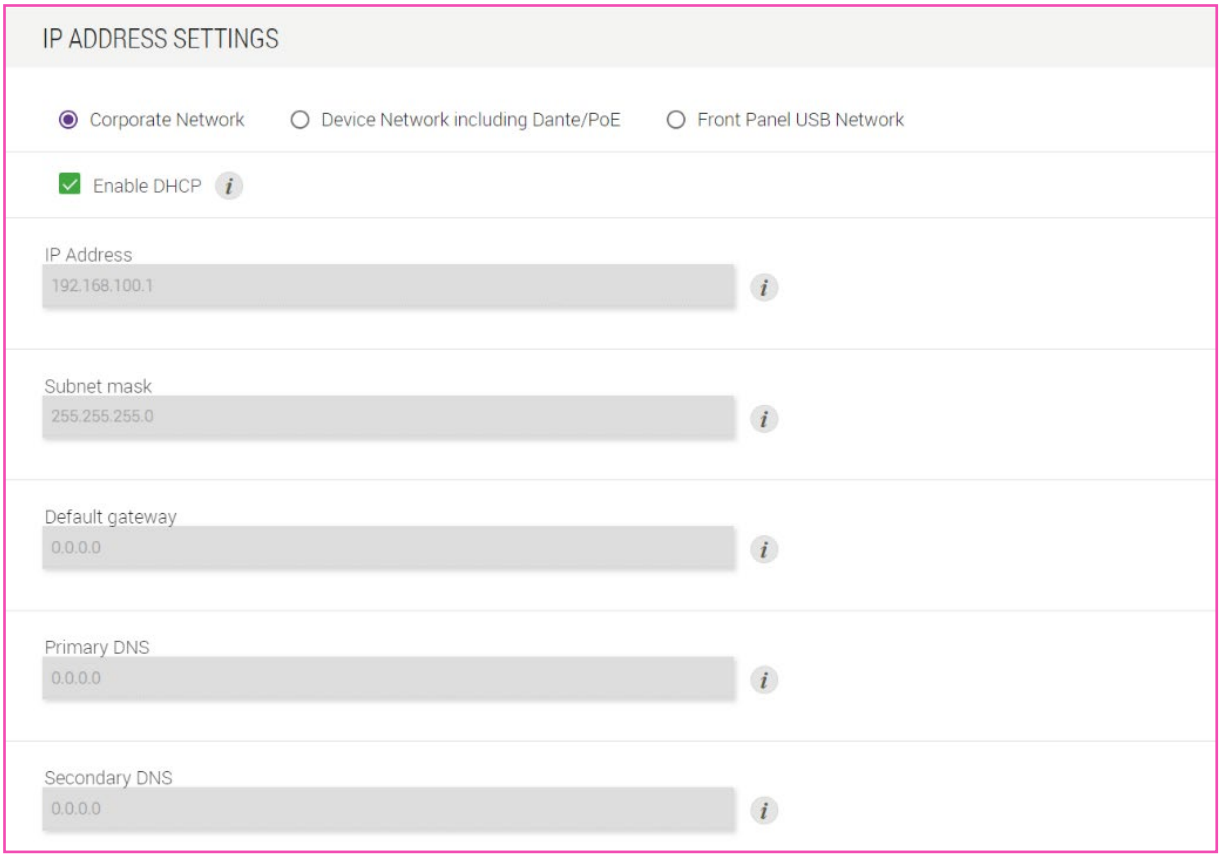
[Network]

In the [Network] screen, you can specify settings for the network used by this unit and Dante.

Applicable devices: RM-CR, RM-CG, RM-TT



① [IP ADDRESS SETTINGS]

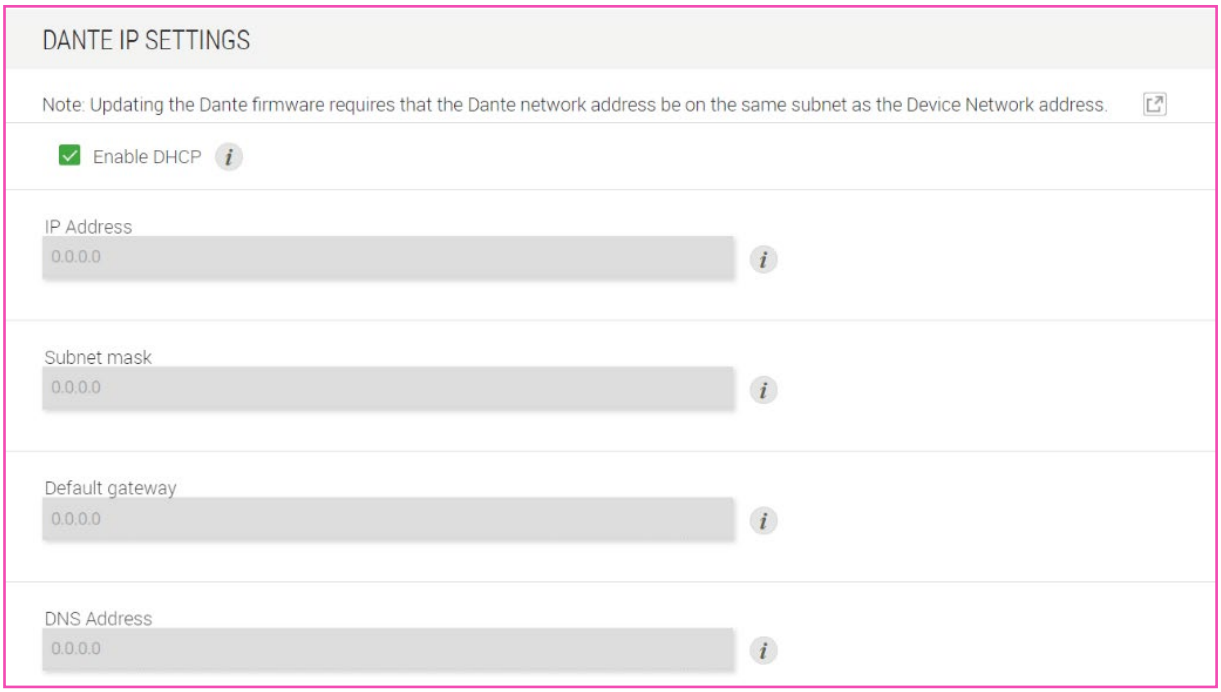


Item	Description
Corporate Network, Device Network including Dante/PoE, Front Panel USB Network	Select from the options to display the network whose IP address settings are to be specified.
Enable DHCP	Select whether to use DHCP.

To assign a static IP address, deactivate [Enable DHCP], and then specify the static IP address with the following. (Type using the "XXX.XXX.XXX.XXX" format.)

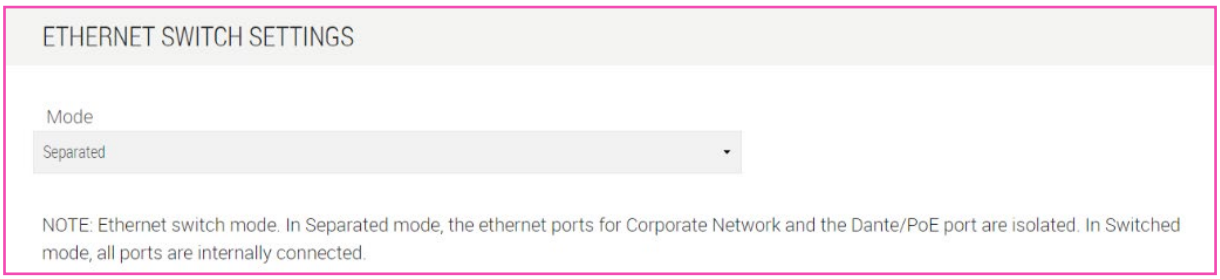
- [IP address]
- [Subnet mask]
- [Default gateway]
- [Primary DNS]
- [Secondary DNS]

② [DANTE IP SETTINGS]



Item	Description
Enable DHCP	Select whether to use DHCP. To assign a static IP address, deactivate [Enable DHCP], and then specify the static IP address with the following. (Type using the "XXX.XXX.XXX.XXX" format.) • [IP address] • [Subnet mask] • [Default gateway] • [Primary DNS] • [Secondary DNS]

③ [ETHERNET SWITCH SETTINGS]



Item	Description
Mode	Select whether to (internally) connect or to separate the network and Dante/PoE ports on the rear panel of this unit. • [Switched]: Internally connected This mode is useful when there is no need to separate the corporate network* and device network*. The network and Dante/PoE ports are connected internally, and the network port can be used to connect to a device network. • [Separated]: Internally separated (default setting) Separating the corporate network* and device network* prevents the leaking of unnecessary packets and creates a secure conference network. The network port connects to the corporate network, and the Dante/PoE port connects to the device network*.

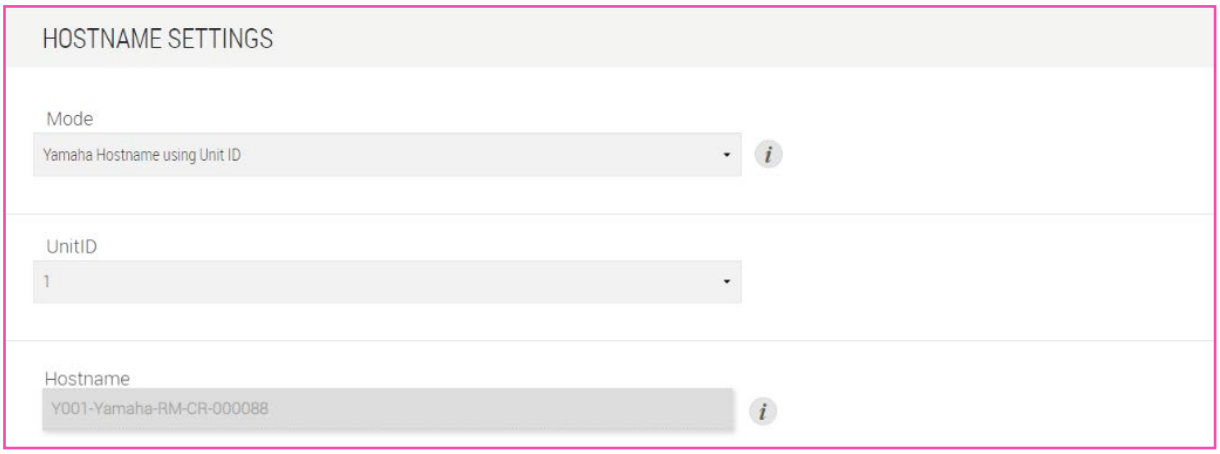
* Corporate network
This network is intended for remote management of the ADECIA system using SNMP and syslog protocols, and for communicating with the SIP server in a company network when using the IP telephony function of RM-CR.

* Device network
This network is intended for communication between ADECIA's RM-CR and peripheral devices, and allows the flow of Dante network audio and control signals between devices.

④ [HOSTNAME SETTINGS]

Allows you to select whether to specify the hostname of this unit automatically or manually.

The hostname is used as the device name in RM Device Finder, SNMP, and Dante.

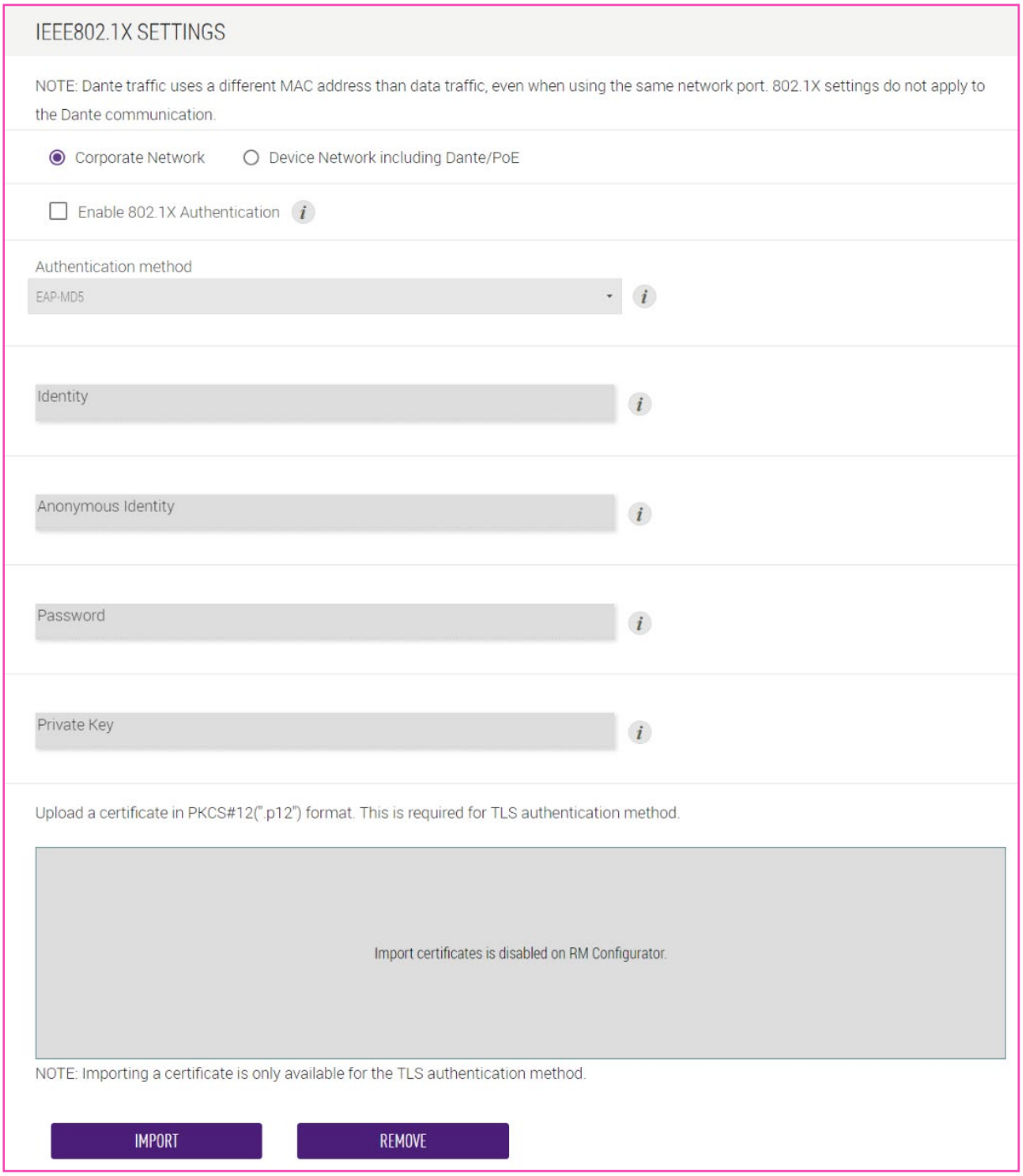


Item	Description
Mode	Select whether to use the unit ID to automatically specify the hostname or to specify it manually. • [Yamaha Hostname using Unit ID] (automatic): The hostname is automatically generated from the unit ID, model name and part of the MAC address, and is displayed in the [Hostname] field. Example: Y001-Yamaha-RM-CR-000088 • [Manual]: Specify manually. Type in the [Hostname] field.
UnitID	Select the unit ID. If [Manual] was selected, this is not available.
Hostname	If [Yamaha Hostname using Unit ID] was selected, the hostname that was automatically generated is displayed. If [Manual] was selected, type in the hostname. The Dante hostname will be the hostname plus a portion of the Dante MAC address.

⑤ [IEEE802.1X SETTINGS]

Use these settings when manually configuring network security.

When using [TOOLS] > [Plugin] > [Yamaha Quick & Easy Radius Security], do not specify these settings.

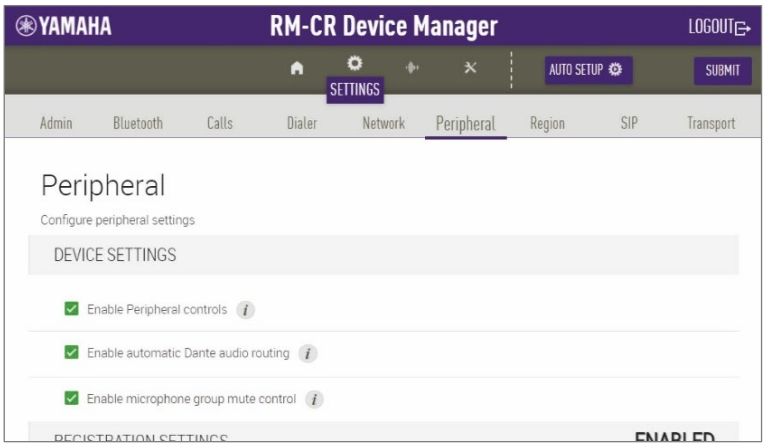


Item	Description
Enable 802.1X Authentication	Select whether to use IEEE802.1X authentication.
Authentication method	Select the authentication method. Specify settings for the following according to the authentication method. • [Identity] : • [Anonymous Identity] : • [Password] : • [Private Key] : • Certificate in PKCS#12 (".p12") format
IMPORT	Click to upload a certificate.
REMOVE	Click to delete a certificate.

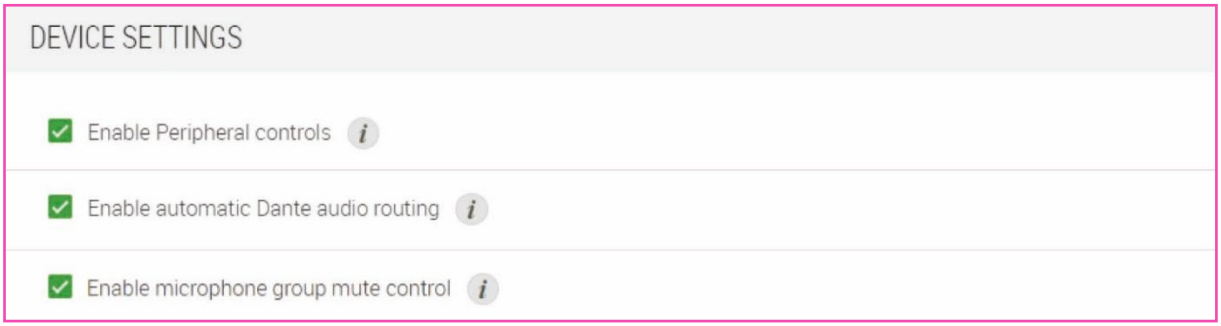
[Peripheral]

In the [Peripheral] screen, you can configure peripheral devices (such as loudspeakers, microphones and access points) connected to RM-CR.

Applicable devices: RM-CR

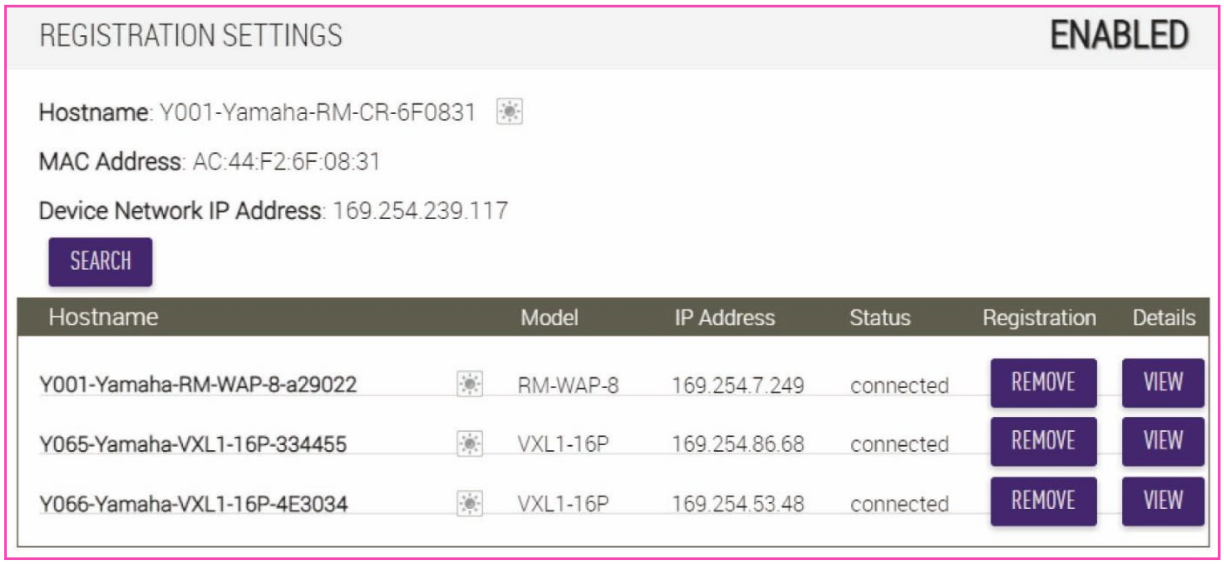


① [DEVICE SETTINGS]



Item	Description
Enable Peripheral controls	Select whether to link the system for this unit with the system for peripherals. Default setting: Activated
Enable automatic Dante audio routing	Select whether to automatically route Dante audio. Default setting: Activated To route manually, deactivate this setting, and then route using a Dante controller, for example.
Enable microphone group mute control	Select whether to activate the group mute function of the microphones. When this is activated, microphones will be grouped and muted as a group. When this is deactivated, all microphones are muted. Default setting: Deactivated

② [REGISTRATION SETTINGS]

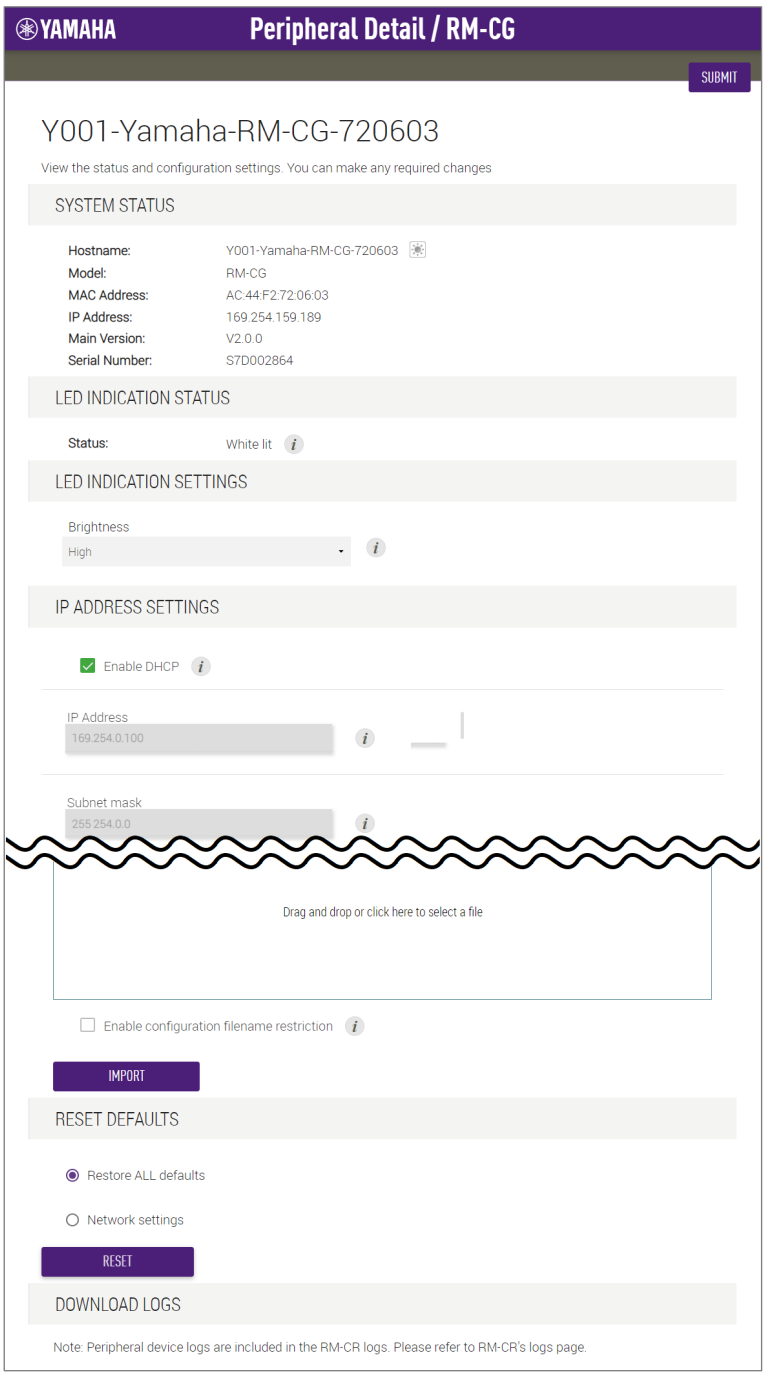


Item	Description
RM-CR device information	The following information is displayed. • Hostname • MAC Address • Device Network IP Address
SEARCH	Click to detect peripheral devices and register them as components of ADECIA.
Hostname	Displays the hostname of detected peripheral devices.
Model	Displays the model name of detected peripheral devices.
IP Address	Displays the IP address of detected peripheral devices.
Status	Displays the connection status of detected peripheral devices. • Connected • Disconnected
Registration	Click the [REMOVE] button to cancel the registration.

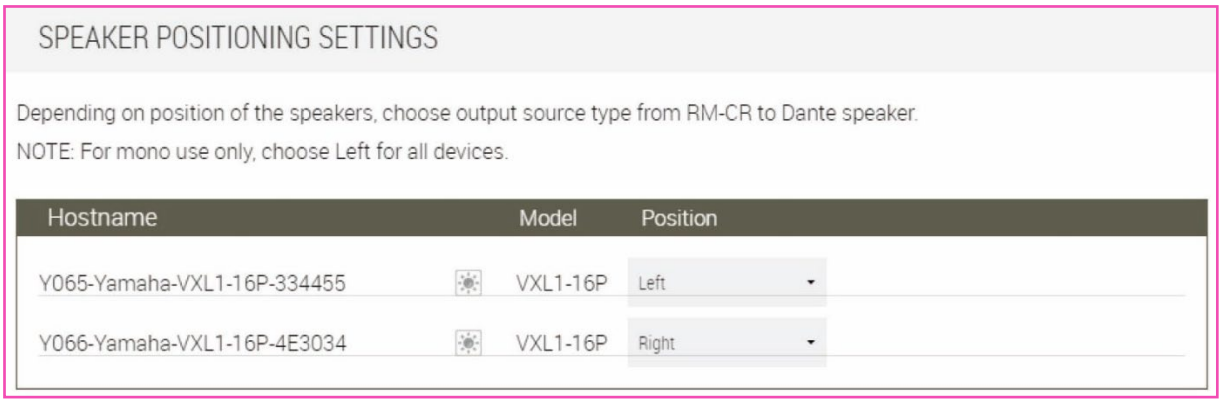
Details

Click the [VIEW] button to open the Web GUI “Peripheral Detail” for the corresponding peripheral device.
This allows you to specify the parameters that apply when that device is used in combination with RM-CR.

The following is the “Peripheral Detail” screen for RM-CG.

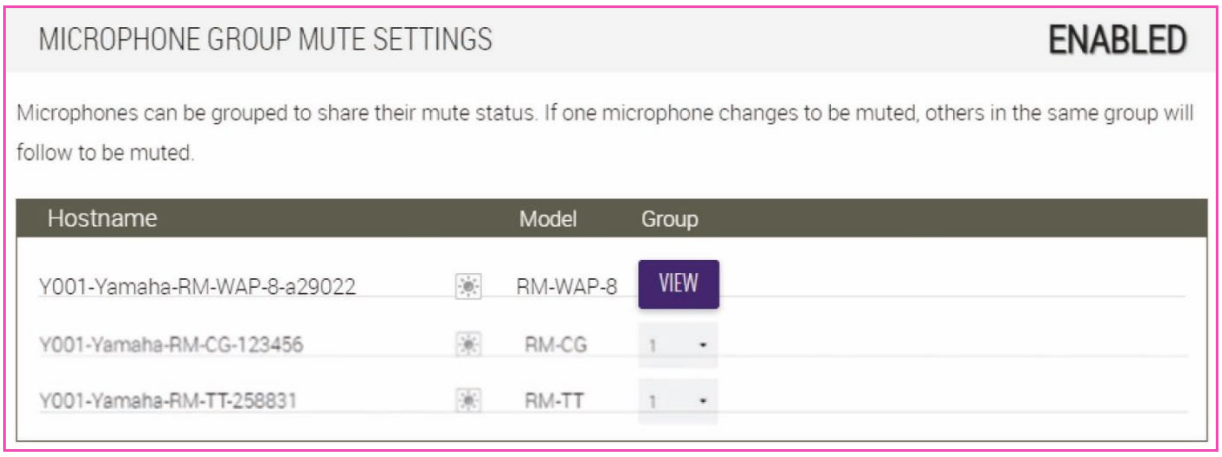


③ [SPEAKER POSITIONING SETTINGS]



Item	Description
Hostname	Displays the hostname of loudspeakers.
Model	Displays the model name of loudspeakers.
Position	Select [Left] or [Right] according to the loudspeaker position. With monaural use, select [Left] for all devices.

④ [MICROPHONE GROUP MUTE SETTINGS]

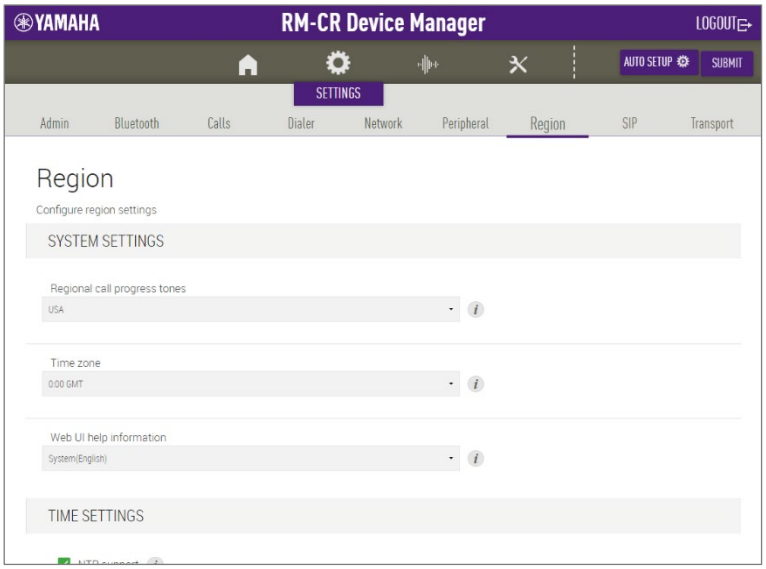


Item	Description
Hostname	Displays the hostname of microphones.
Model	Displays the model name of microphones.
Group	• RM-CG / RM-TT Specify the group number. • RM-WAP Click the [VIEW] button to display the [MICROPHONE SETTINGS] section of the Web GUI "Peripheral Detail RM-WAP". In [Mute Group] of that section, specify the group number.

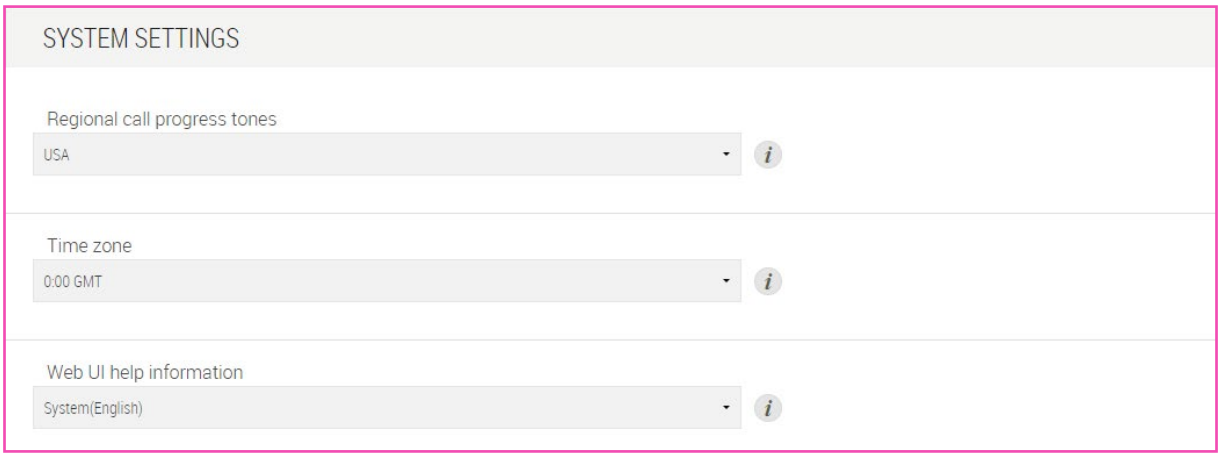
[Region]

In the [Region] screen, you can specify settings for the time and region where this unit is used.

Applicable devices: RM-CR, RM-CG, RM-TT



① [SYSTEM SETTINGS]

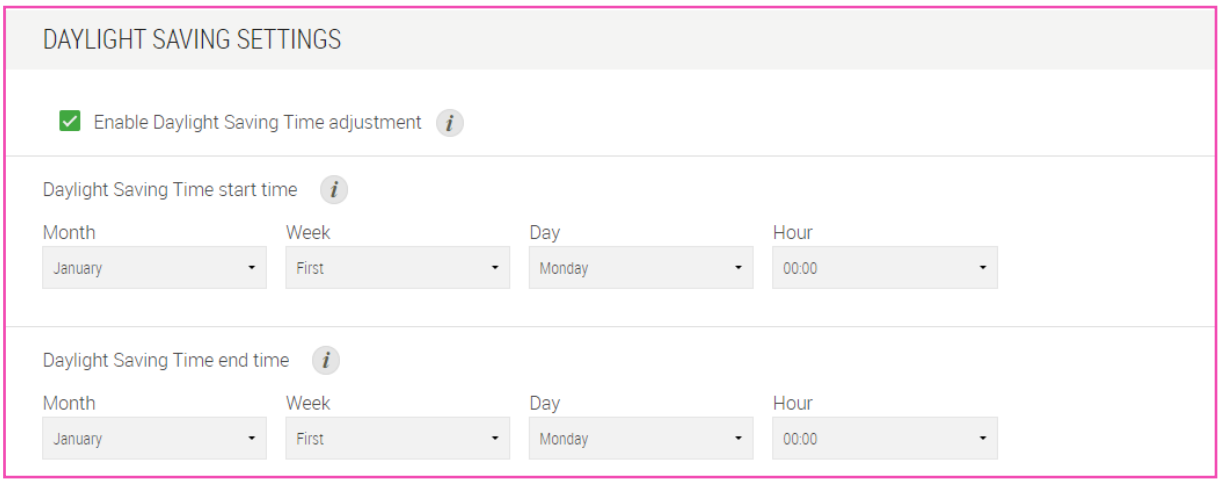


Item	Description
Regional call progress tones	Select the country or region where this unit is used. This setting is used to configure the call progress tone for SIP calls.
Time zone	Select the time zone.
Web UI help information	When the mouse pointer is moved to the information icon, a pop-up window gives detailed information about the item. Select the display language. The default setting is [System (English)]. This setting can be changed to [User]. For [User], the language file must be imported via [TOOLS] > [Configuration] > [IMPORT CONFIGURATION]. • [User] • [System(English)]

② [TIME SETTINGS]

Item	Description
NTP support	Select whether to use NTP (Network Time Protocol). To use NTP, specify settings for [Network time server]. Default setting: Activated

③ [DAYLIGHT SAVING SETTINGS]

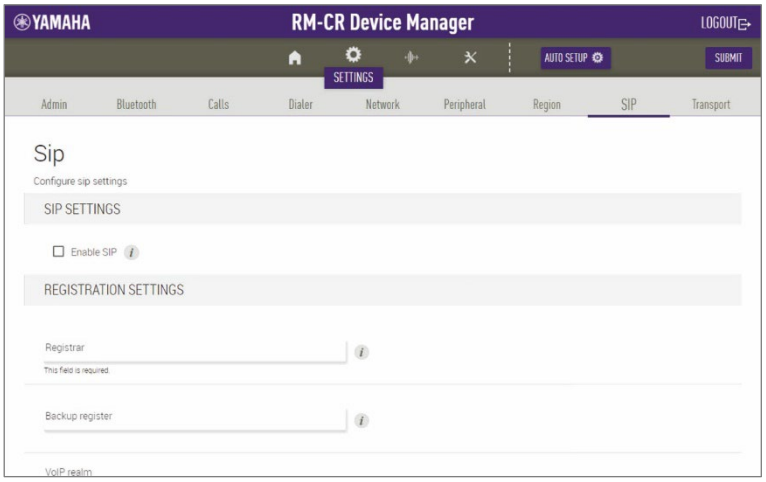


Item	Description
Enable Daylight Saving Time adjustment	Select whether to use daylight saving time with this unit. When this is activated, specify settings for the daylight saving time start and end dates and times. • [Daylight Saving Time start time] • [Daylight Saving Time end time] Default setting: Deactivated

[SIP]

In the [SIP] screen, you can register an SIP server and specify basic SIP settings.

Applicable devices: RM-CR

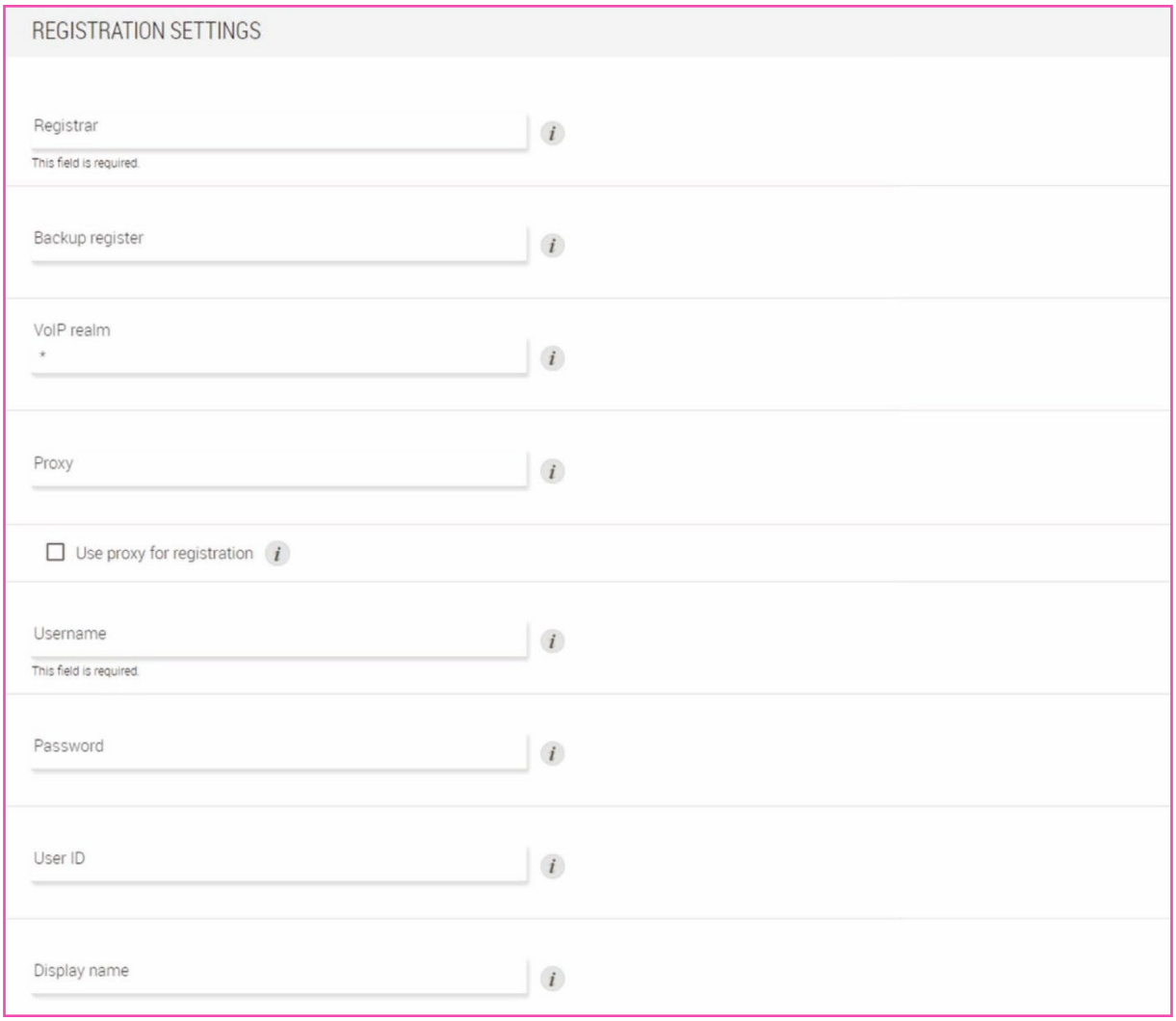


① [SIP SETTINGS]

Item	Description
Enable SIP	Select whether to use SIP (Session Initiation Protocol).

② [REGISTRATION SETTINGS]

Allows you to register the SIP server.

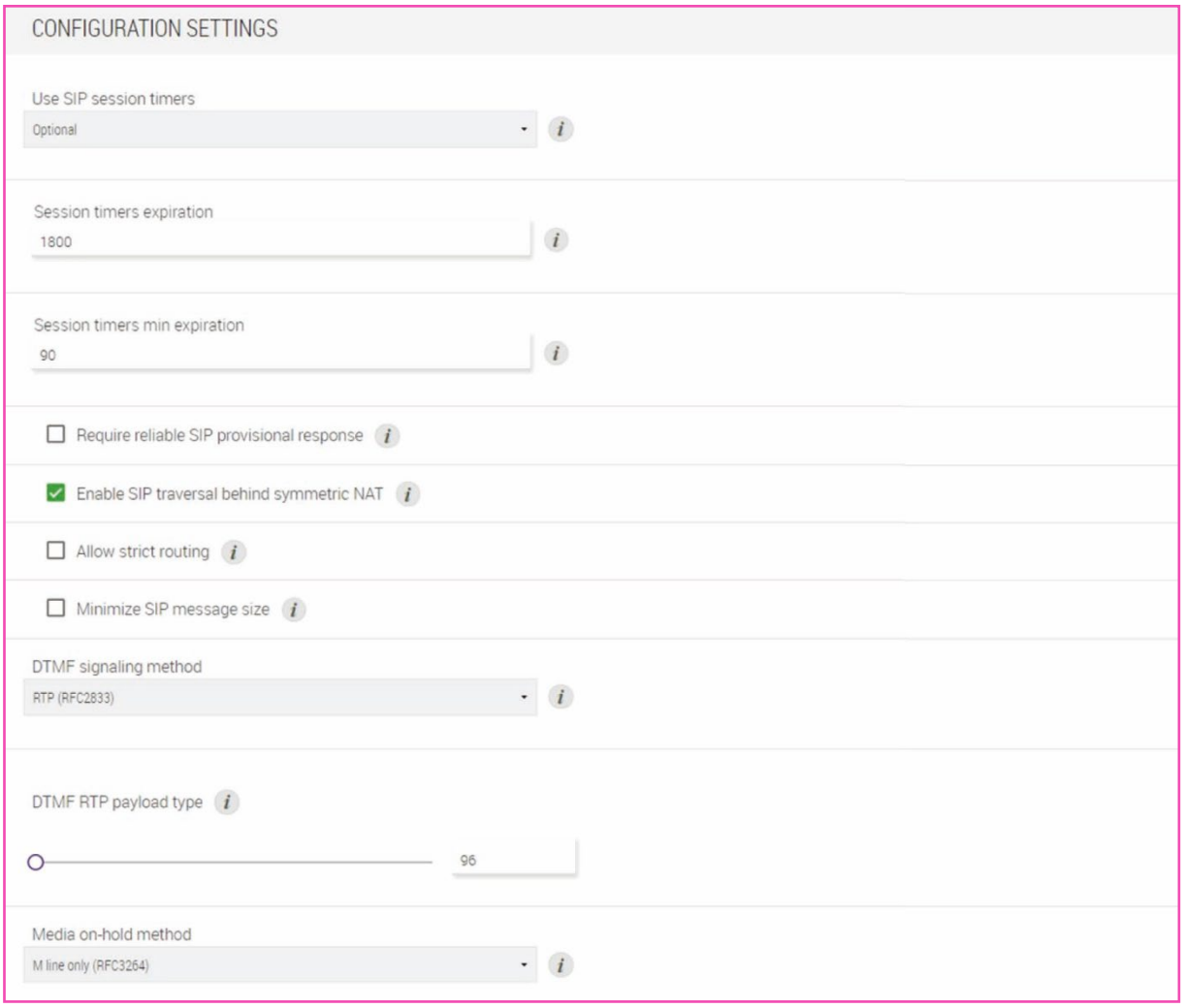


Item	Description
Registrar	Specify the IP address or DNS name of the registrar server for registering SIP client information.
Backup registrar	Specify a spare registrar server.
VoIP realm	Specify the realm used for authentication with the server. If the realm is unknown, use an asterisk (“*”).
Proxy	Specify an SIP proxy server. If there are multiple SIP proxies, separate the addresses with commas. If [Allow strict routing] is activated and an SIP proxy is configured for loose routing, add “;lr” after the proxy address. Example: 10.134.129.101;lr
Use proxy for registration	Select whether to use a proxy server for SIP registration. Default setting: Deactivated
Username	Specify the user name of the account used for authentication with the SIP registrar server and proxy server.
Password	Specify the password of the account used for authentication with the SIP

	registrar server and proxy server.
User ID	Specify the SIP user ID of the device used for SIP registration. If nothing is specified, the user name will be used as the ID.
Display name	Specify the name displayed with outgoing calls. If nothing is specified, the user name will be used.

③ [CONFIGURATION SETTINGS]

Allows you to check/change the settings related to SIP calls.



Item	Description
Use SIP session timers	Select how SIP session timers are to be used. • [Inactive]: Not used • [Optional]: Used if the remote side uses a session timer. • [Mandatory]: Session timer support is required for remote sides to establish sessions. • [Always]: Used whether or not remote side supports or uses session timers.
Session timers expiration	Specify the session timer expiration time. Default setting: 1800 seconds

	Setting range: 90 to 604,800 seconds (7 days)
Session timers min expiration	Specify the minimum acceptable session timer expiration time for negotiating with remote devices. Default setting: 90 seconds Setting range: 90 to 604,800 seconds (7 days)
Require reliable SIP provisional response	Select whether highly reliable SIP provisional responses are required. When this is activated, support for PRACK (provisional ACK) messages is added for reliability.
Enable SIP traversal behind symmetric NAT	Select whether to enable SIP traversal behind a symmetric NAT.
Allow strict routing	Select whether to use a strict routing proxy. Default setting: Deactivated (loose routing proxy)
Minimize SIP message size	Select whether to use the function that reduces the SIP message size. When this is activated, SIP headers are encoded with abbreviations in order to reduce the message size.
DTMF signaling method	Select the signaling method for sending DTMF tones. • [RTP (RFC2833)] • [SIP INFO] • [Inband]
DTMF RTP payload type	Specify the dynamic payload type for DTMF RTP signals. Default setting: 96 Setting range: 96 to 127
Media on-hold method	Select the media on-hold type. • [M line only (RFC3264)] • [M and C line (RFC2543)]

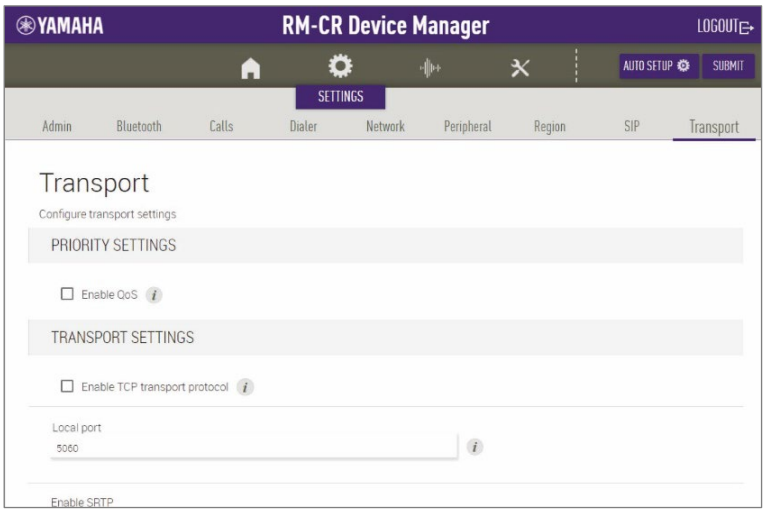
④ [MEDIA SETTINGS]

Item	Description
Audio codec	Specify supported audio codecs and their priority. Sort audio codes by dragging them into the [Enabled] or [Disabled] lists. The codec placed at the top of the [Enabled] list is used with a higher priority. Codecs in the [Disabled] list are not used. By default, the order of priority for supported codecs is as follows: • G.722 • G.711 u-law (PCMU) • G.711 A-law (PCMA) • G.726 • G.729
Codec ptime override	Specify the interval at which audio packets are sent. Default setting: 20 ms/packet

[Transport]

In the [Transport] screen, you can specify settings for communications using SIP.

Applicable devices: RM-CR

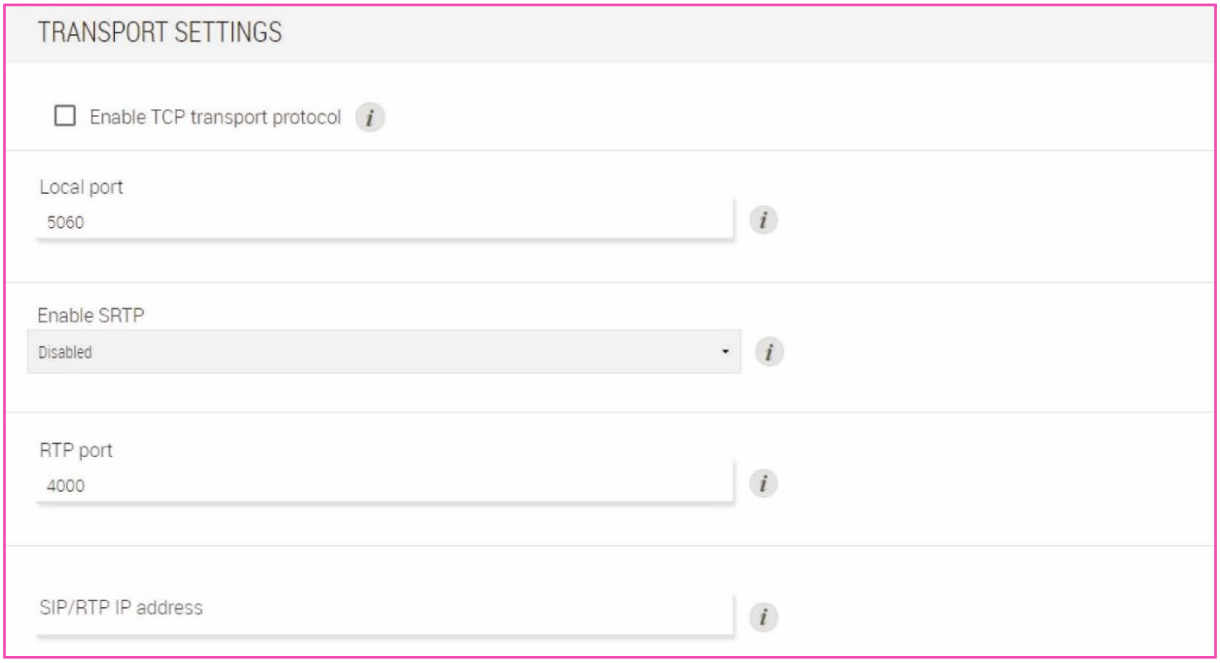


① [PRIORITY SETTINGS]

Item	Description
Enable QoS	Select whether to activate QoS (Quality of Service) for SIP and media. Activate this when QoS is activated on the network. This stabilizes communication for calls and audio playback. Default setting: Deactivated

② [TRANSPORT SETTINGS]

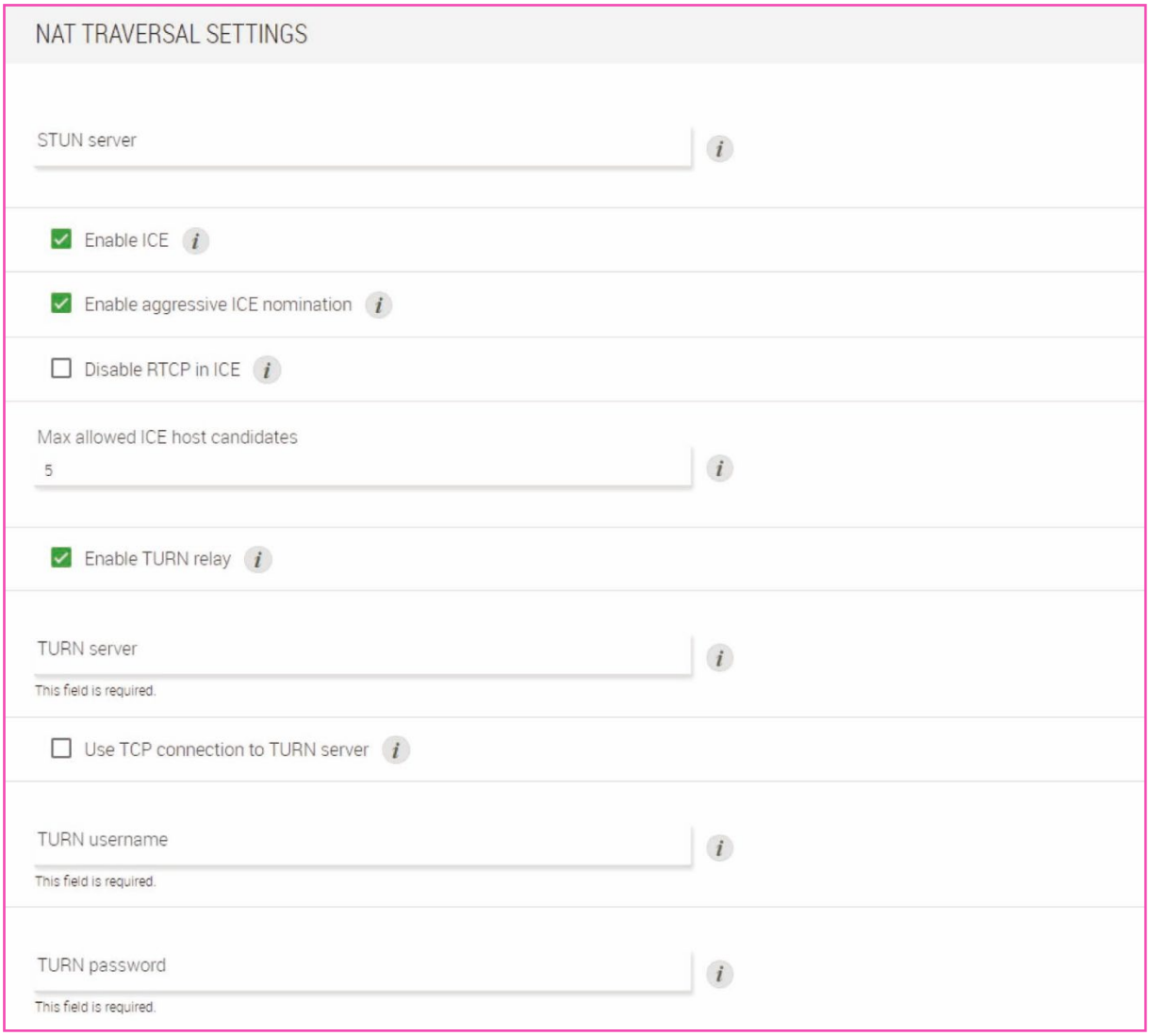
Allows you to specify the settings related to the SIP network.



Item	Description
Enable TCP transport protocol	Select whether to use the TCP transport protocol with SIP messages. When this is not activated, the UDP transport protocol is used. Default setting: Deactivated
Local port	Specify the local port. Default setting: 5060 Setting range: 1024 to 65535
Enable SRTP	Select how SRTP (Secure Real-time Transport Protocol) is to be used. • [Disabled]: SRTP is not used; RTP is always used. • [Optional]: SRTP is used if the remote end supports SRTP, otherwise RTP is used. • [Mandatory]: The use of SRTP is mandatory. If the remote end does not support SRTP, the call will not connect.
RTP port	Specify the RTP port. RTP originates and is received on even-numbered ports, and the associated RTCP uses the next higher odd-numbered port. Default setting: 4000 Setting range: 1024 to 65535
SIP/RTP IP address	Specify the IP address for SIP/RTP.

③ [NAT TRAVERSAL SETTINGS]

Allows you to specify the settings related to NAT traversal.



Item	Description
STUN server	Specify the IP address or name of the STUN (Session Traversal Utilities for NAT) server. This is used to determine if the phone is behind a NAT, the type of NAT, and the phone's public address.
Enable ICE	Select whether to use ICE (Interactive Connectivity Establishment). When this is activated, specify settings for the following. • Enable aggressive ICE nomination • Disable RTCP in ICE • Max arrowed ICE host candidates
Enable TURN relay	Select whether to use TURN (Traversal Using Relay NAT). When this is activated, specify settings for the following. • TURN server • Use TCP connection to TURN server • TURN username

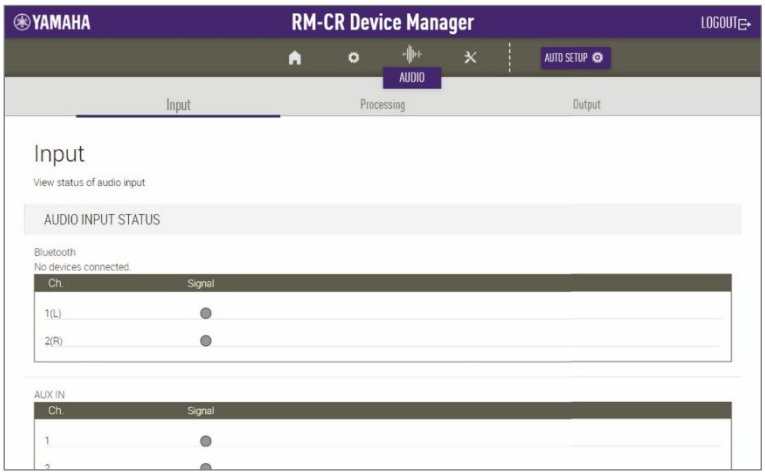
- TURN password

[AUDIO]

[Input]

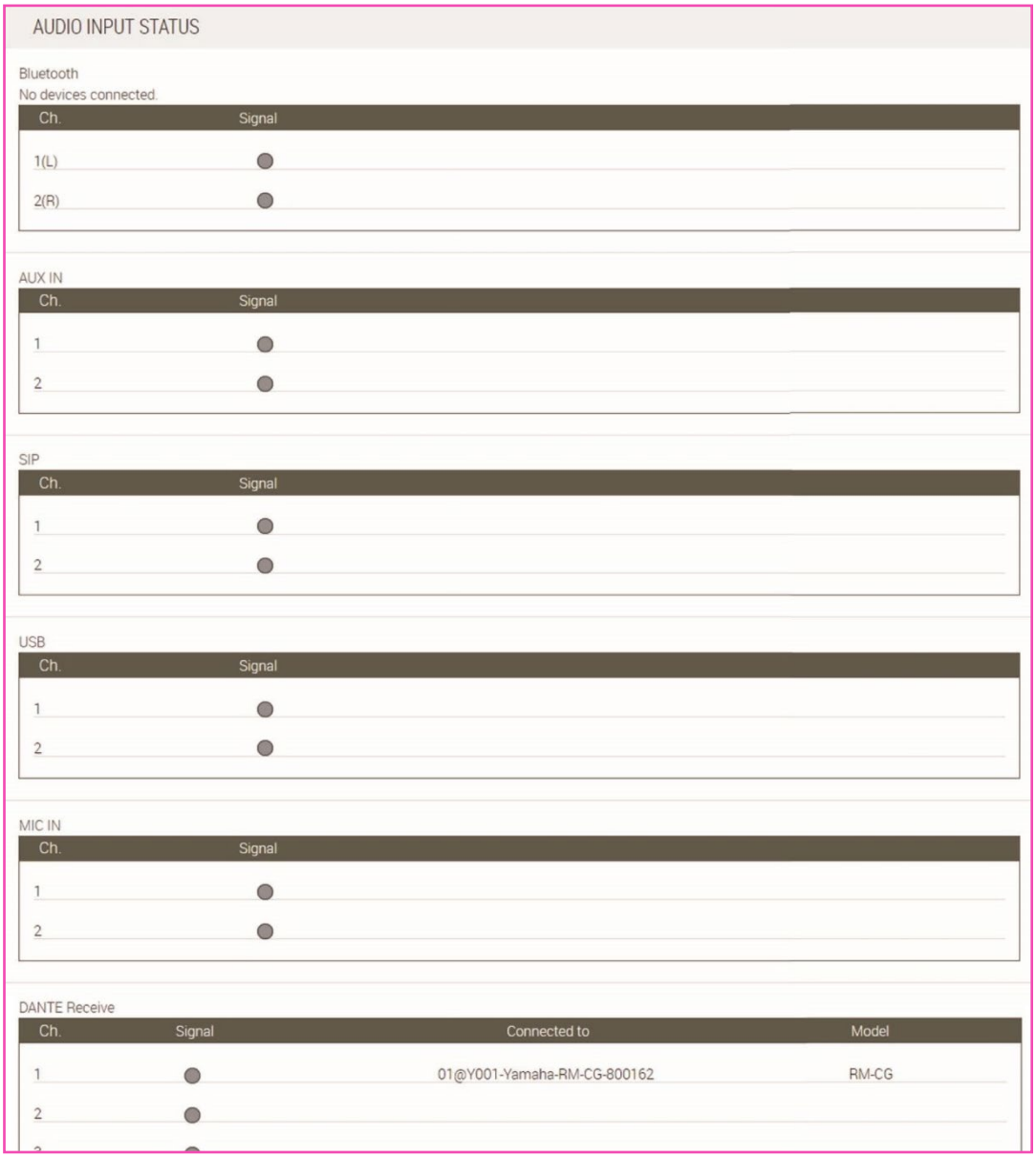
In the [Input] screen, you can check the status of the audio input.

Applicable devices: RM-CR



① [AUDIO INPUT STATUS]

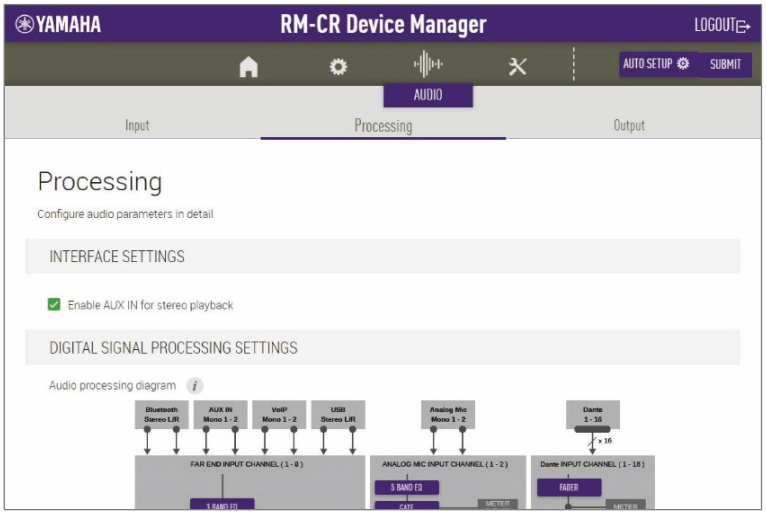
Displays the audio input status for each connection type and each connected device.



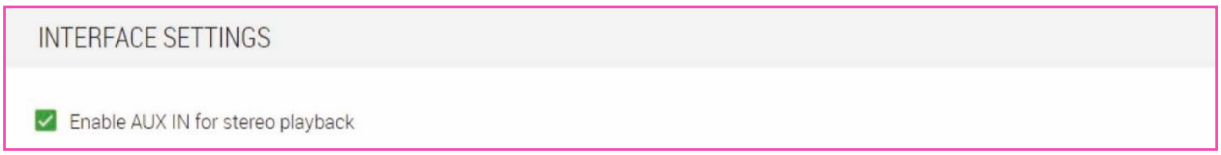
Item	Description
Ch.	Displays the channel.
Signal	Displays the input signal level. ●: –40 dB or more ●: Less than –40 dB
Connected to	Displays the name of the connected Dante channel.
Model	Displays the model name.

[Processing] (RM-CR)

In the [Processing] screen, you can specify settings for automatic audio tuning and digital signal processing.



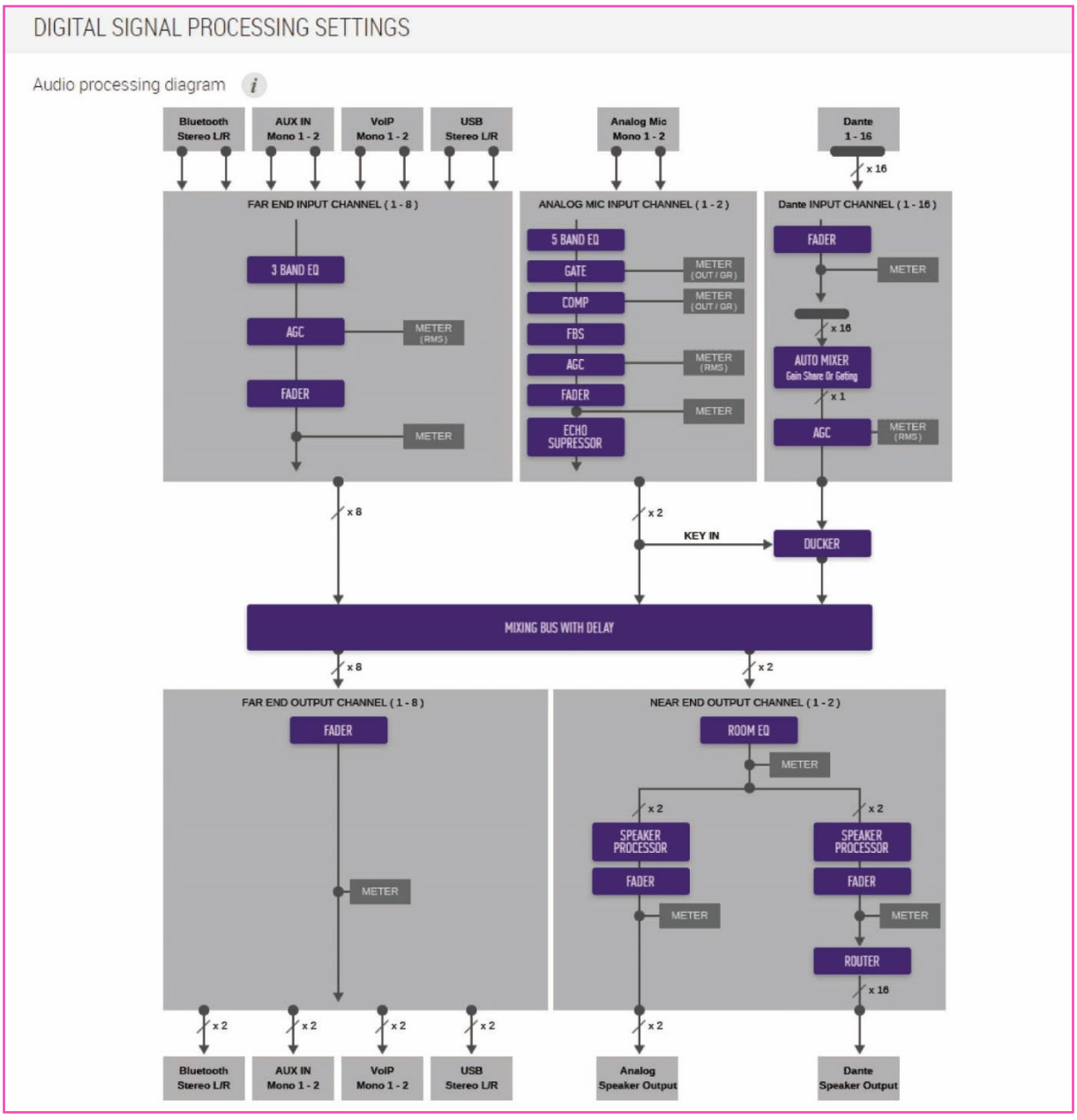
① [INTERFACE SETTINGS]



Item	Description
Enable AUX IN for stereo playback	Select whether to activate the AUX jacks on the rear panel of this unit.

② [DIGITAL SIGNAL PROCESSING SETTINGS]

Allows you to display a screen for checking/changing parameters for digital signal processing, by clicking a button in the [Audio processing diagram].

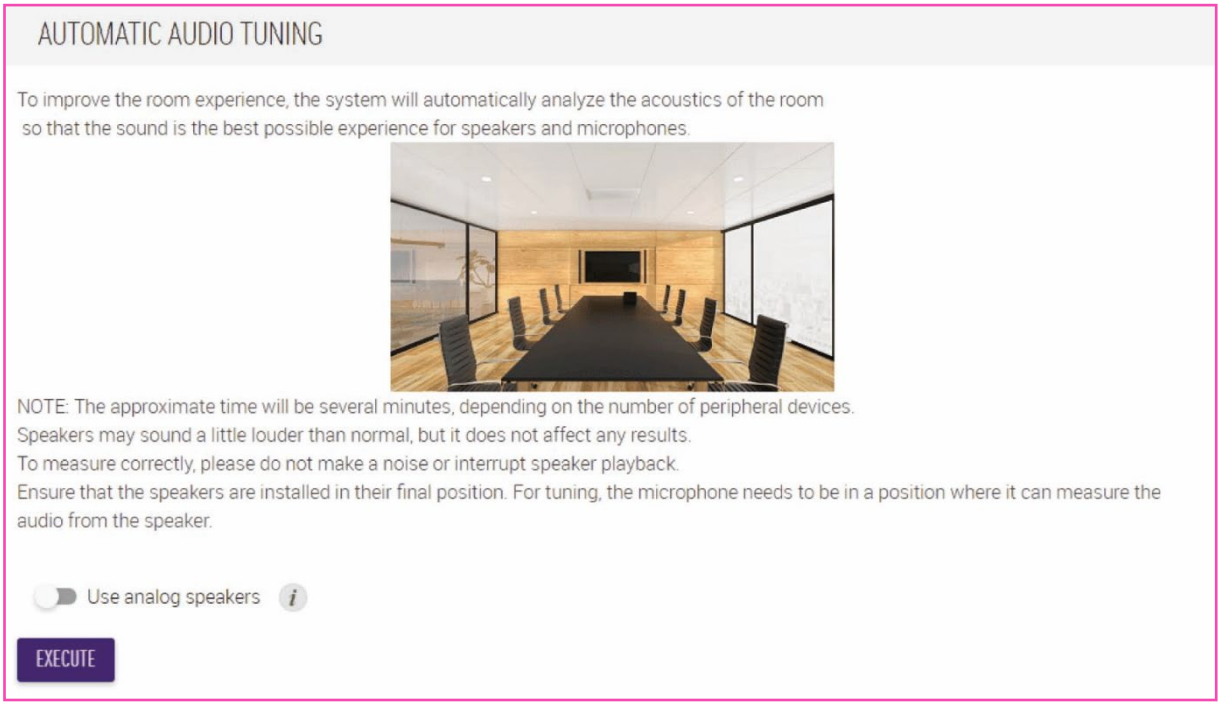


Item	Description	Page
3 BAND EQ	Configure the equalizers.	61
AGC	Configure the AGC (auto gain controllers).	63
GATE	Configure the gates.	64
COMP	Configure the compressors.	65
FBS	Configure the FBS (feedback suppressors).	66
ECHO SUPRESSOR	Configure the echo suppressors.	67
AUTO MIXER Gain Share Or Gating	Configure the automixers.	68

DUCKER	Configure the ducker.	69
SPEAKER PROCESSOR	Configure the loudspeaker processors.	70
FADER	Configure the faders.	73
ROUTER	Configure the routers.	74

③ [AUTOMATIC AUDIO TUNING]

In order to make conference audio easier to hear, the acoustics can be automatically adjusted according to the room environment.



Item	Description
Use analog speakers	Select whether to manually adjust the analog loudspeaker volume before starting automatic audio tuning. Activate this when using analog loudspeakers.
EXECUTE	Click to start automatic audio tuning. This is part of the AUTO SETUP function.

Notice

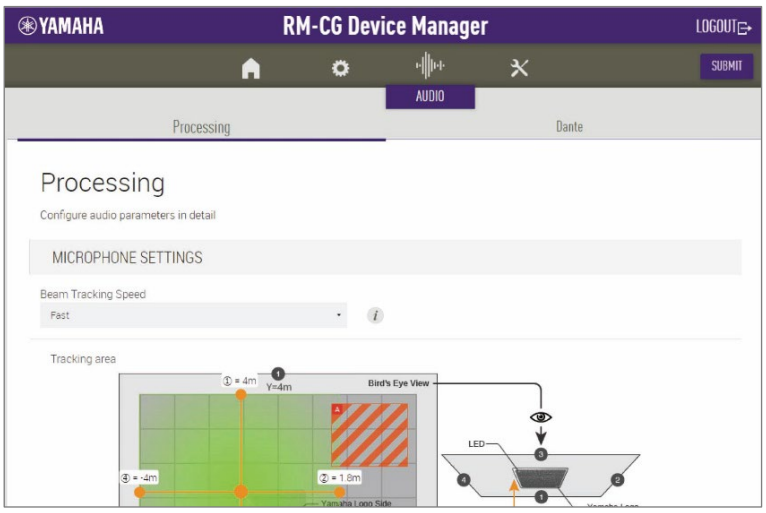
A loud sound is output from the loudspeakers during tuning.

Note

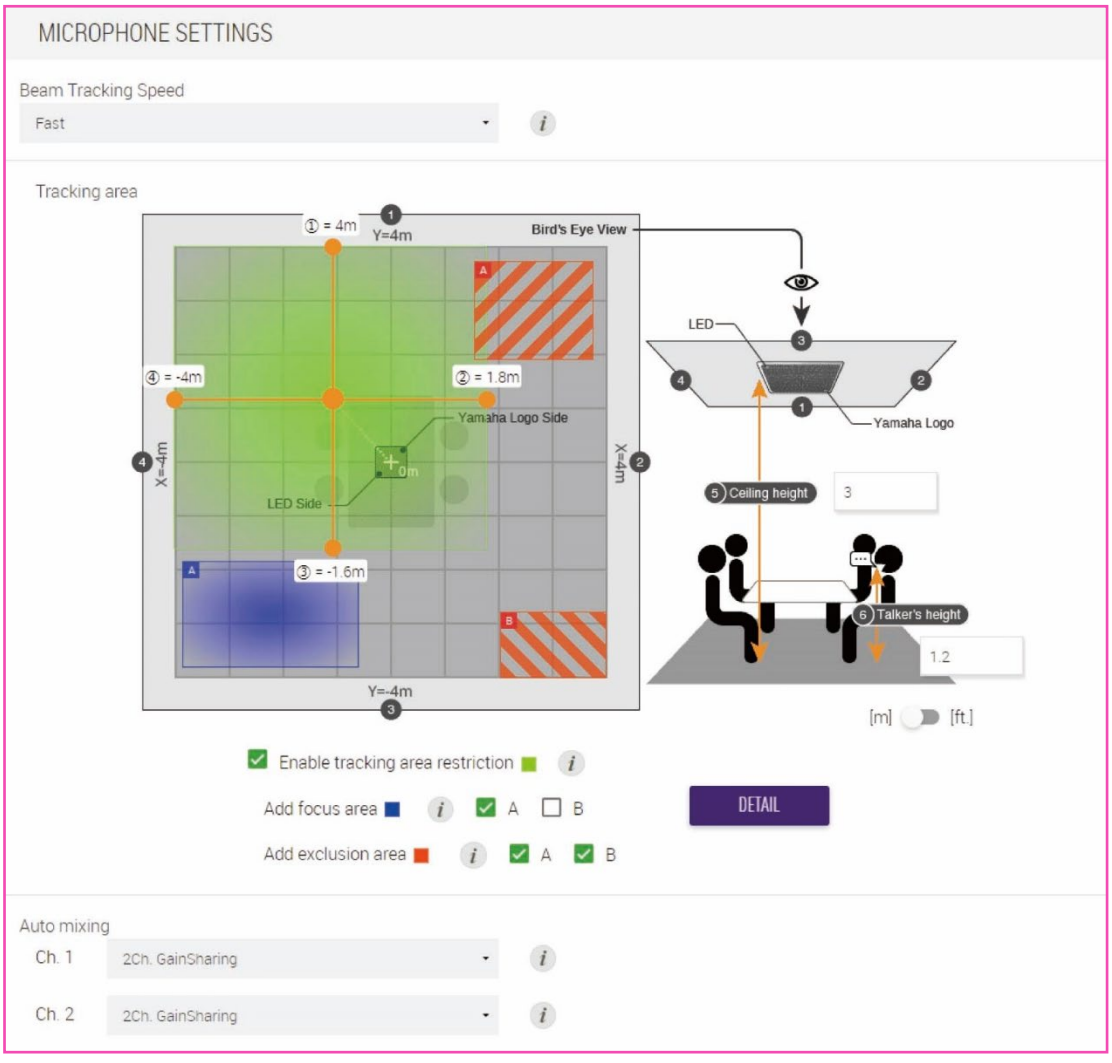
For better accuracy, as much as possible, avoid making noise during tuning.

[Processing] (RM-CG)

In the [Processing] screen, you can specify settings for microphones and for digital signal processing.



① [MICROPHONE SETTINGS]

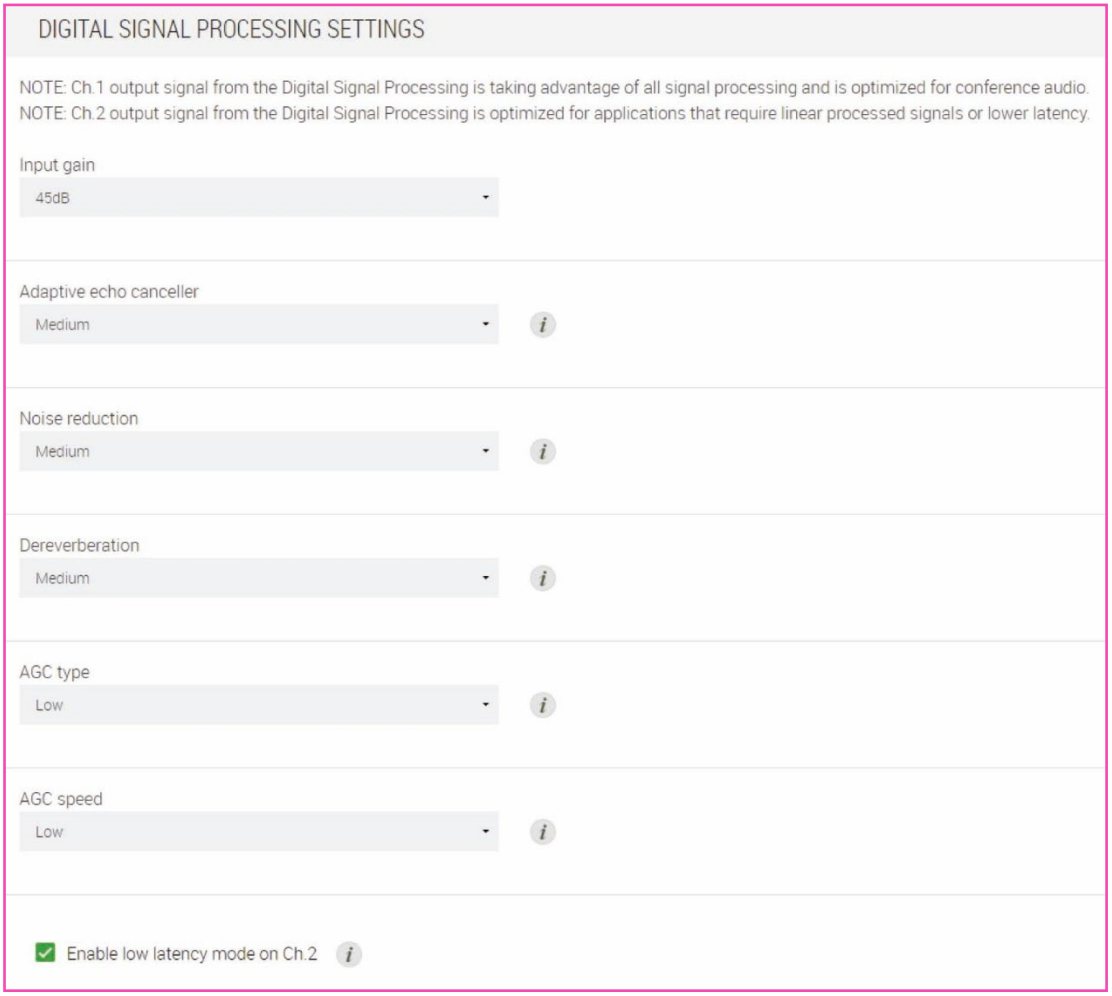


Item	Description
Beam Tracking Speed	Select the reaction speed at which the microphone beam follows the speaker. • [Slow]: Volume variations are stabilized, but tracking of the speaker is slow. Select this when the volume changes frequently, such as in a room with a long reverberation time. • [Fast]: This setting provides a good balance between stabilizing volume variations and tracking the speaker. Default setting: [Fast]
Tracking area	Specify various areas within the tracking area. • [Restriction area (Whole area)]: Specify the area to be tracked within the larger tracking area. • [Focus area]: Specify a focus area to be tracked. • [Exclusion area]: Specify an area not to be tracked. Drag the mouse to specify the tracking area. To specify numerical values, a screen with detailed settings can be displayed by clicking the [DETAIL] button.
Auto mixing	Select the automixer type for the microphone beam input. • [1Ch. Gating]: Select this setting for a single microphone beam mode. In a room with long reverberation times and few speakers, clarity will be high, but volume variations large with this setting. • [2Ch. GainSharing]: Select this setting for gain sharing of two microphone beams. This setting provides a good balance between clarity and volume variations. • [4Ch. GainSharing]: Select this setting for gain sharing of four microphone beams. In a room with good acoustics, short reverberation times and many speakers, this setting will produce a natural sound; clarity will be reduced and volume variations will be small. • [4Ch. Mixing]: Select this setting to mix four microphone beams. In a room with good acoustics, short reverberation times and many speakers, the sound will be most natural with this setting. Clarity will be high and volume variations small.

② [DIGITAL SIGNAL PROCESSING SETTINGS]

Ch. 1 handles audio signals for remote sites, and Ch. 2 can be used for microphone input signals. Settings for the following can be changed.

	Ch. 1	Ch. 2	
		Low latency mode	
		OFF	ON
Input gain	✓	✓	✓
Adaptive echo canceller	✓	Partial processing	—
Noise Reduction	✓	Partial processing	—
Dereverberation	✓	—	—
AGC type	✓	—	—
AGC speed	✓	—	—



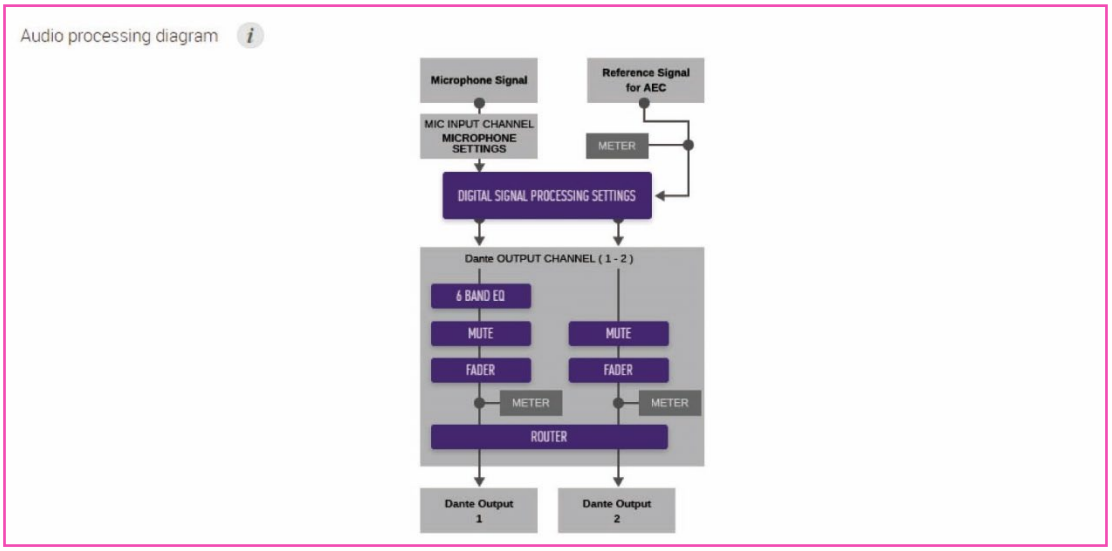
Item	Description
Input gain	Select the input gain. [0dB], [15dB], [30dB], [45dB] (default setting)
Adaptive echo canceller	This function eliminates constant noise, such as air conditioning or echoes from loudspeakers or from wall reflections, which are problematic during remote conferences. • [Off] : The echo canceller is not used. • [Low] : Suppresses echo while maintaining the quality of the original audio. • [Medium] (default setting): This setting provides a good balance between sound quality and echo cancellation strength. • [High] : Applies a strong echo canceller. Select this for rooms with long reverberation times or rooms where echoes are likely to occur.
Noise Reduction	Select the noise reduction strength for stationary noise. • [Off] : Noise reduction is not used. • [Low] : Suppresses stationary noise while maintaining the quality of the original audio.

	• [Medium] (default setting): This setting provides a good balance between sound quality and noise reduction strength. • [High] : Applies strong noise reduction. Select this for a room with stationary noise from a large fan or air conditioning system.
Dereverberation	This function removes reverberation components from audio in order to make the audio clearer. Select the strength of the removal of reverberation components. • [Off] : Dereverberation is not used. • [Low] : Select this for a room with short reverberation times. • [Medium] (default setting): This setting can be used in normal environments. This setting provides a good balance between sound quality and dereverberation strength. • [High] : Applies strong dereverberation. Select this for rooms with long reverberation times, such as rooms with glass walls.
AGC type	AGC (Auto Gain Control) is a function that automatically adjusts the output gain in order to stabilize the audio level. It increases the volume level of soft voices and decreases the volume of excessively loud voices. Select the AGC strength. • [Off] : AGC is not used. • [Low] (default setting): This setting provides well-balanced volume changes. • [High] : Applies strong AGC.
AGC speed	Select the reaction speed for AGC volume changes. • [Low] (default setting): This setting provides well-balanced reaction speeds. • [High] : Responds quickly to volume variations.
Enable low latency mode on Ch.2	Select whether to activate low latency mode. When this is activated, adaptive echo canceller and noise reduction for Ch. 2 are bypassed. This reduces delay and can be used for the audio signal of your local site. Activate this when using only the RM-CG.

Note

Set [Adaptive echo canceller], [Noise reduction], [Dereverberation] and [AGC type] to [Off] on RM-CG when using the functions built into your video conferencing software or when using a different external device.

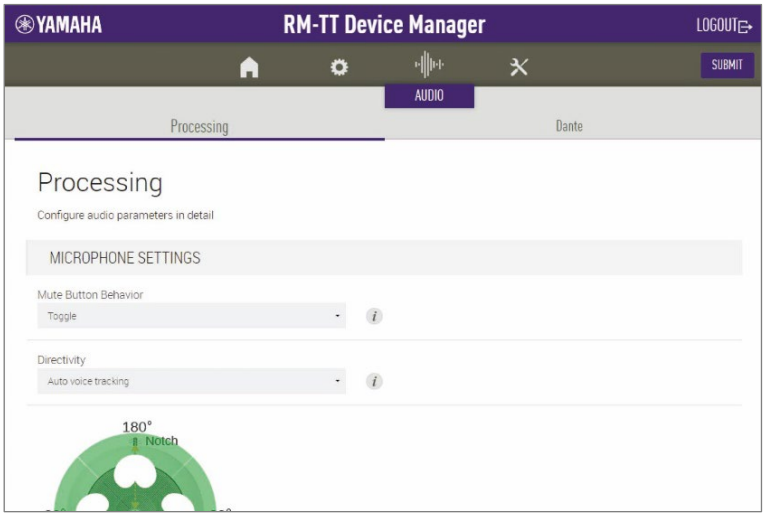
Allows you to display a screen for checking/changing parameters for digital signal processing, by clicking a button in the [Audio processing diagram].



Item	Description	Page
3 BAND EQ	Configure the equalizers.	61
FADER	Configure the faders.	73
ROUTER	Configure the routers.	74

[Processing] (RM-TT)

In the [Processing] screen, you can specify settings for microphones and for digital signal processing.



① [MICROPHONE SETTINGS]

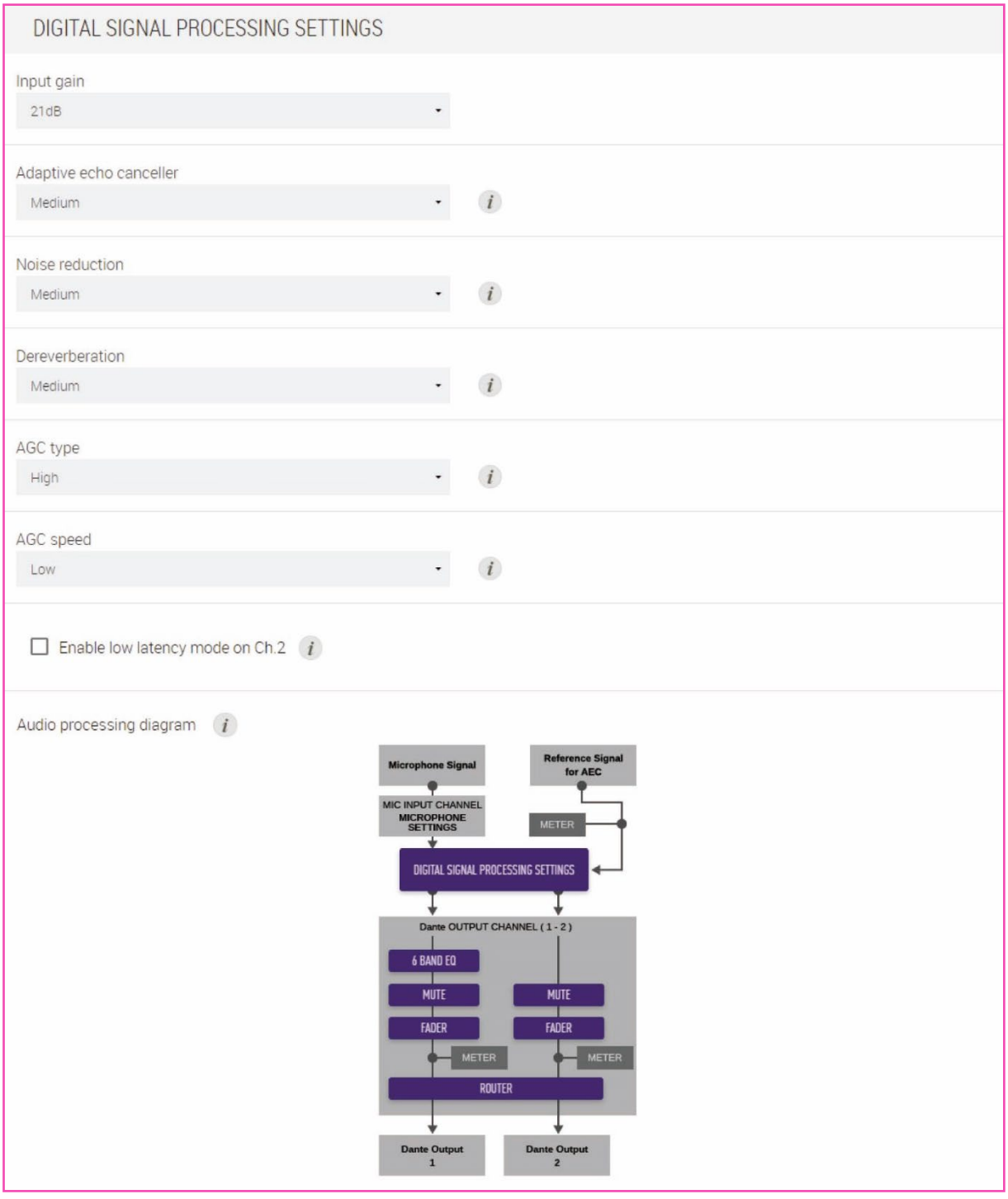
Item	Description
Mute Button Behavior	Set the operation of the Mic button to one of the following. • [Toggle]: Touch the Mic button to turn the microphone on/off. • [Push to talk]: The microphone is on while the Mic button is touched. • [Disable]: The Mic button is deactivated.
Directivity	Set the directivity of the microphone to one of the following. • [Auto voice tracking] • [Omnidirectional]

- [Cardioid]
- [Supercardioid]
- [Hypercardioid]
- [Toroid]
- [Bidirectional]

If the directivity of the microphone has been set to [Cardioid], [Hypercardioid] or [Supercardioid], you can check or change the automixer settings.

② [DIGITAL SIGNAL PROCESSING SETTINGS]

This explanations for this section are the same as for RM-CG. Refer to page 50.



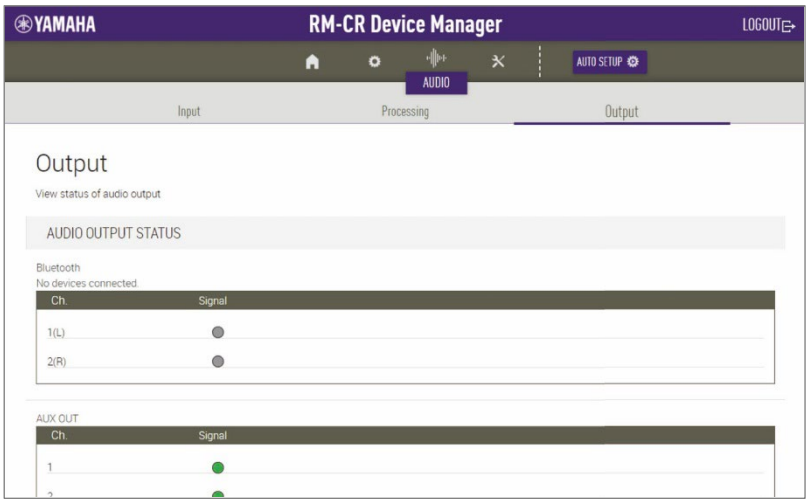
Note

Set [Adaptive echo canceller], [Noise reduction], [Dereverberation] and [AGC type] to [Off] on RM-TT when using the functions built into your video conferencing software or when using a different external device.

[Output]

In the [Output] screen, you can check the status of the audio output.

Applicable devices: RM-CR



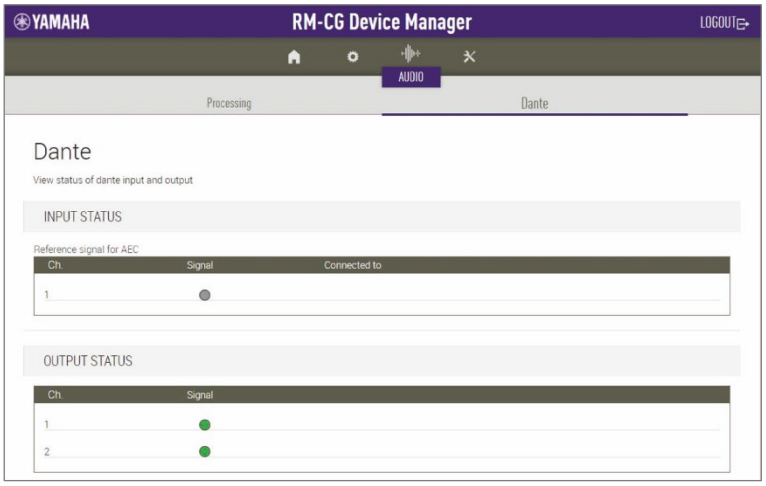
① [AUDIO OUTPUT STATUS]

Item	Description
Ch.	Displays the channel.
Signal	Displays the output signal level. ●: –40 dB or more ●: Less than –40 dB
Connected to	Displays the name of the connected Dante channel.
Model	Displays the model name.

[Dante]

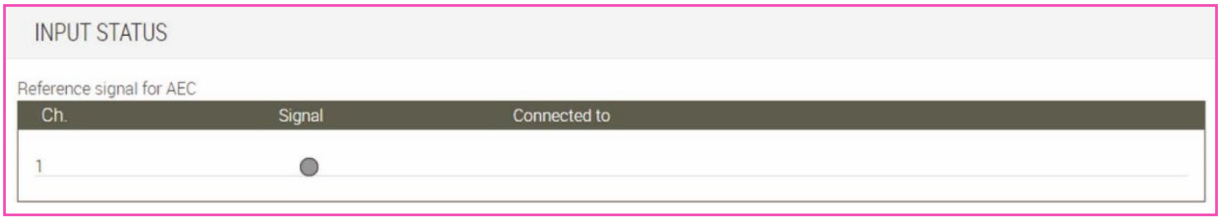
In the [Dante] screen, you can check the status of the Dante inputs/outputs.

Applicable devices: RM-CG, RM-TT



① [INPUT STATUS]

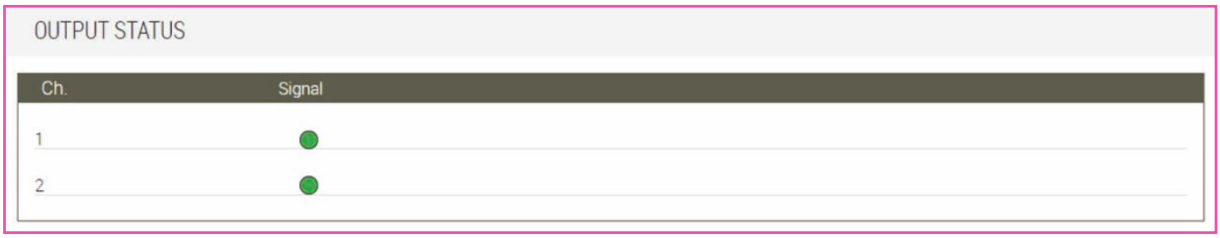
Displays the Dante input status for each connected device.



Item	Description
Ch.	Displays the channel.
Signal	Displays the input signal level. ●: –40 dB or more ●: Less than –40 dB
Connected to	Displays the name of the connected Dante channel.

② [OUTPUT STATUS]

Displays the Dante output status for each connected device.



Item	Description
Ch.	Displays the channel.
Signal	Displays the output signal level. ●: –40 dB or more ●: Less than –40 dB

[DIGITAL SIGNAL PROCESSING SETTINGS]

[EQ]

EQ (equalizer) is a function that adjusts sound quality by amplifying or attenuating specific frequency ranges. It can reduce noise and make voices and instruments easier to hear.

Applicable devices: RM-CR, RM-CG, RM-TT

Item	Description
Switch Input Interface	Select the input interface to be displayed.
EQ curve	Displays the characteristics in a graph. You can change settings by dragging points on the graph.
Ch.	Select the input channel.
ON	Select whether to activate or deactivate the equalizer function.
Type	Select a filter type. • PEQ (Parametric Equalizer) Increases or decreases the volume at the specified frequency with a specified width of Q. • L.SHELF (Low Shelf) Increases or decreases the volume of the entire low-frequency range starting at the specified frequency. This is used as a bass boost, for example. [6dB/Oct] and [12dB/Oct] specifies the amount of attenuation per octave. • H.SHELF (High Shelf) Increases or decreases the volume of the entire high-frequency range

	starting at the specified frequency. This is used as a treble boost, for example. [6dB/Oct] and [12dB/Oct] specifies the amount of attenuation per octave. • HPF (High Pass Filter) Cuts off the low band starting at the specified frequency. • LPF (Low Pass Filter) Cuts off the high band starting at the specified frequency.
Q	Specify the frequency width for each band.
Freq	Specify the center frequency of each band.
Gain	Specify the output gain of each band.
Bypass ON	Select whether to bypass each band.

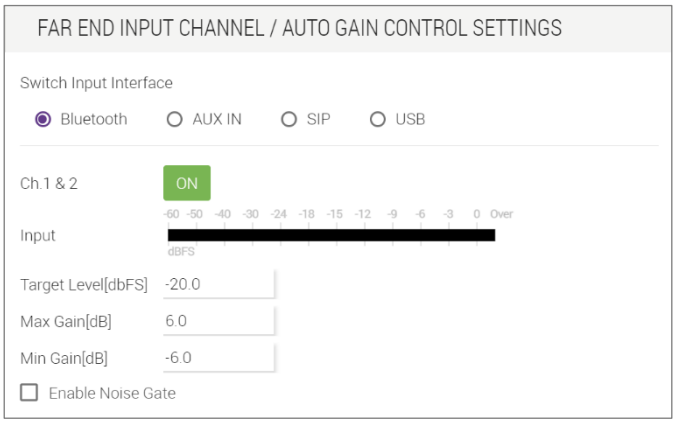
Note

Parameter changes are immediately reflected in the acoustics of the unit.

[AGC]

AGC (auto gain controller) is a function that automatically corrects the gain according to the input level and maintains a constant output level for signals with level variations. For example, if the position of the microphone or the volume of your voice changes, the volume of the amplified sound will change, making it difficult to hear. In such a case, the volume will be automatically adjusted within a certain range.

Applicable devices: RM-CR



Item	Description
Switch Input Interface	Select the input interface to be displayed.
Ch.	Displays the input channel.
ON	Select whether to activate or deactivate the AGC function.
Input	Displays the input signal level.
Target Level	Specify the target volume level.
Max Gain	Specify the upper limit of the level width, based on the target level. For example, in the following case, a level above –14 dB (target level + Max Gain) will be lowered to bring it closer to –14 dB. • Target level: –20 dB • Max Gain：6dB
Min Gain	Specify the lower limit of the level width, based on the target level. For example, in the following case, a level below –26 dB (target level + Min Gain) will be raised to bring it closer to –26 dB. • Target level: –20 dB • Min Gain：-6dB * In the previous examples, there is no volume change for input signals between –26 dB and –14 dB.
Enable Noise Gate	Noise Gate is a function that removes stationary noise. Select whether to activate or deactivate Noise Gate.

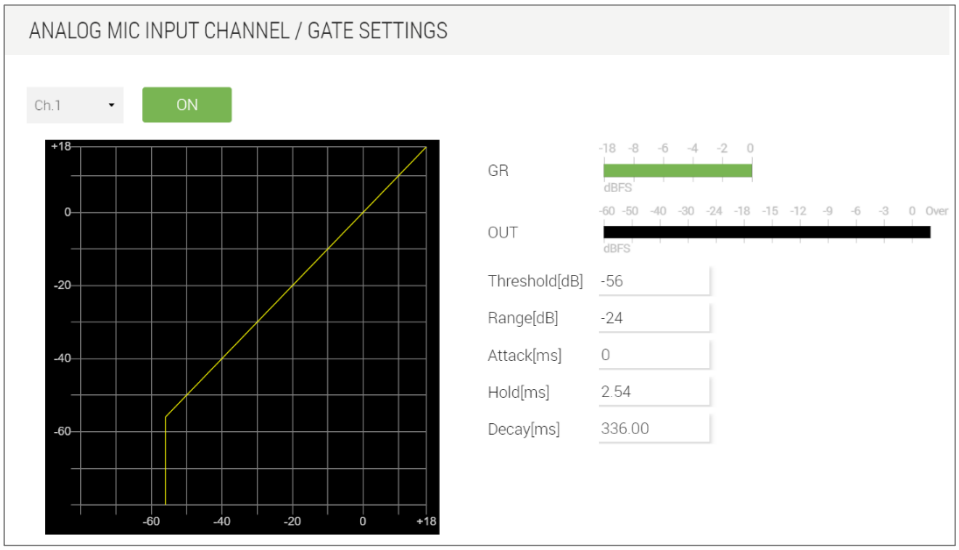
Note

Parameter changes are immediately reflected in the acoustics of the unit.

[GATE]

GATE is signal processing that only allows audio above a certain volume to pass through. Use this to cut out small noises when there is no input from the microphone or when the input is below a certain level (threshold).

Applicable devices: RM-CR



Item	Description
Ch.	Select the input channel.
ON	Select whether to activate or deactivate the GATE function.
Gate curve	Displays the effect in a graph. The horizontal axis represents the input signal level, and the vertical axis represents the output signal level.
GR	Displays the amount of attenuation in the gain reduction.
OUT	Displays the output signal level.
Threshold	Specify the threshold at which the gate effect is applied.
Range	Specify the amount of attenuation when the gate effect is applied.
Attack	Specify the attack time (time from when the input signal exceeds the threshold until the gate opens).
Hold	Specify the hold time (wait time until the gate begins to close after the input signal falls below the threshold).
Decay	Specify the decay time (wait time until the gate closes after the Hold wait time has elapsed).

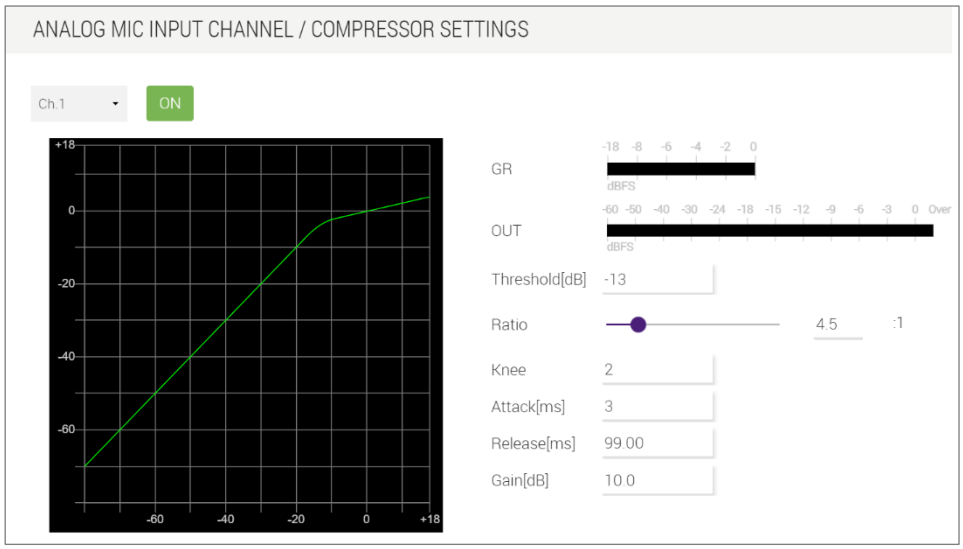
Note

Parameter changes are immediately reflected in the acoustics of the unit.

[COMP]

COMP is signal processing that compresses the dynamic range. This prevents abnormal sound when the input exceeds a certain level (threshold).

Applicable devices: RM-CR



Item	Description
Ch.	Select the input channel.
ON	Select whether to activate or deactivate the COMP function.
Compressor curve	Displays the effect in a graph. The horizontal axis represents the input signal level, and the vertical axis represents the output signal level.
GR	Displays the amount of attenuation in the gain reduction.
OUT	Displays the output signal level.
Threshold	Specify the threshold at which the compressor effect is applied.
Ratio	Specify the compression ratio of the compressor. You can also change the setting by dragging the slider. Specify (as a ratio of "input signal:output signal") the output signal when the threshold is exceeded. For example, if this has been set to 4:1, a signal that exceeds the threshold is compressed to a level exceeding the threshold by 1/4.
Knee	Specify how the compressor is applied.
Attack	Specify the attack time (time from when the input signal exceeds the threshold until the compressor reaches its maximum effect).
Release	Specify the release time (time it takes for the compressor effect to no longer be applied after the input signal falls below the threshold).
Gain	Specify the gain of the output signal.

Note

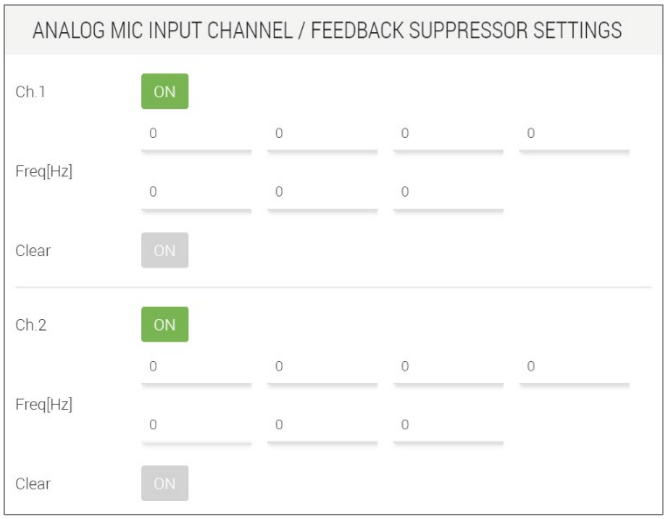
Parameter changes are immediately reflected in the acoustics of the unit.

[FBS]

FBS (feedback suppressor) is a function that prevents the unpleasant feedback that occurs when audio from a loudspeaker is routed to the microphone. Feedback is not only annoying, but it can also put a strain on the loudspeakers or even damage them. To prevent feedback, place the loudspeaker so as to avoid as much as possible amplifying the sound at the microphone position. If feedback still occurs, you can improve the feedback margin by using FBS.

FBS of RM-CR monitors the changing feedback points and automatically updates the filter frequency.

Applicable devices: RM-CR



Item	Description
Ch. ON	Select whether to activate or deactivate the FBS function.
Freq	Displays the frequencies of the filters that are operating. The frequencies of up to 7 filters can be displayed.
Clear ON	Clears the filter settings.

Note

Parameter changes are immediately reflected in the acoustics of the unit.

[ECHO SUPRESSOR]

In an environment where the far-end audio is output from the loudspeaker at the local site, an echo (which makes it difficult to speak) will occur on the far end if the analog microphone at the local site picks up the far-end audio and transmits it. This is a function that reduces that echo.

Applicable devices: RM-CR

Item	Description
Ch. ON	Select whether to activate or deactivate the ECHO SUPPRESSOR function for each channel.

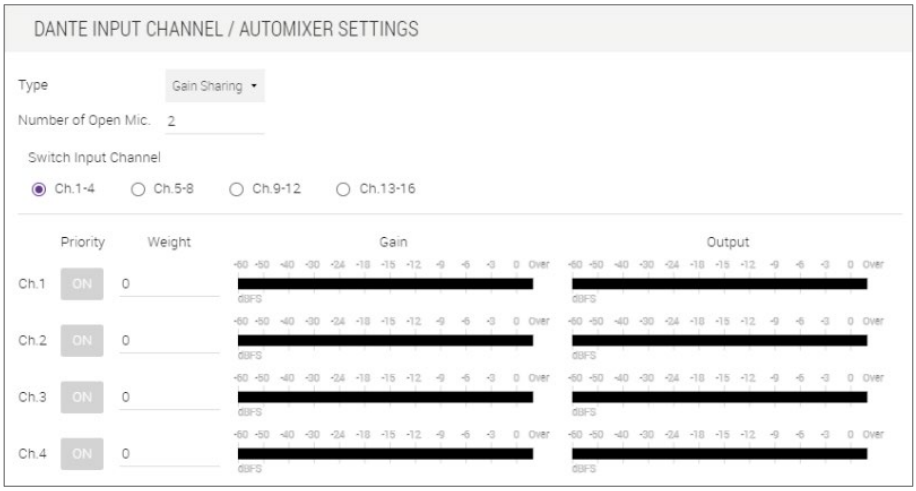
Note

Parameter changes are immediately reflected in the acoustics of the unit.

[AUTO MIXER]

AUTO MIXER is a function that automatically adjusts the input audio level of the microphone in the Dante route and transmits it as a single signal.

Applicable devices: RM-CR



Item	Description
Type	Select the processing type of the automixer. • Gain Sharing This type adjusts the gain of each channel so that the sum of the gains of multiple input audio is always equal. • Gating This type uses an input level threshold to determine whether the input audio of a channel is subject to processing.
Number of Open Mic.	Specify the number of activated microphones that are subject to automixing when there is overlapping speech.
Switch Input Channel	Select the input channel to be displayed.
Priority ON	Set [Priority] to [ON] for channels with a high-priority volume level. If [Priority] has been set to [ON], the input level will be preserved during mixing. When this is deactivated, the volume level will be automixed.
Weight	Specify the automix level weighting. The higher the value, the higher the volume level after automixing. Input range: –30 to 15 dB Specifying a [Weight] setting has no effect on channels whose [Priority] has been set to [ON].
Gain	Displays the input signal level.
Output	Displays the output signal level.

Note

Parameter changes are immediately reflected in the acoustics of the unit.

[DUCKER]

DUCKER is a function that reduces the audio signal level (volume) of the microphone in the Dante route when an audio signal is input to the analog microphone route (microphone jack on the front of the RM-CR). For example, when an announcement is being broadcast using an analog microphone, the volume of the microphone in the Dante route is automatically reduced, and when the announcement is finished, the volume is automatically returned to its original level.

Applicable devices: RM-CR

Item	Description
ON	Select whether to activate or deactivate the DUCKER function.

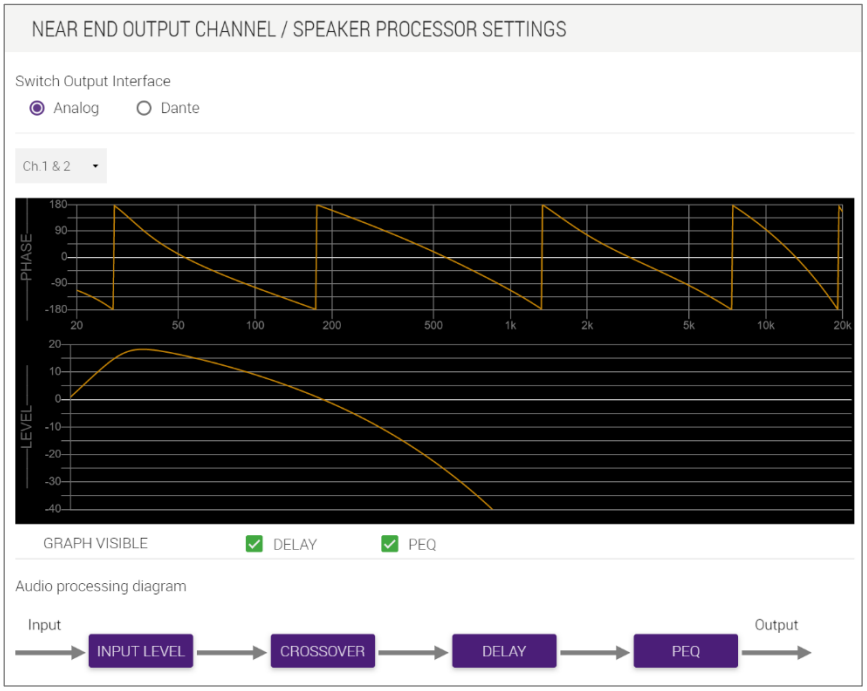
Note

Parameter changes are immediately reflected in the acoustics of the unit.

[SPEAKER PROCESSOR]

This is a crossover processor for loudspeaker adjustment.

Applicable devices: RM-CR

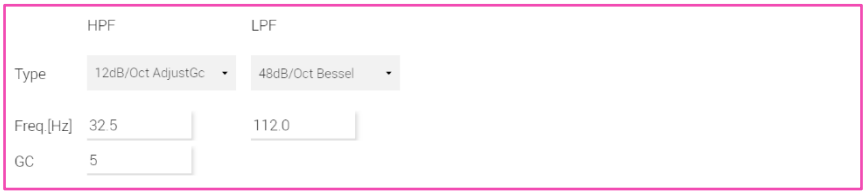


Item	Description
Switch Output Interface	Select the output interface to be displayed.
Ch.	Select the output channel.
PHASE	Displays the characteristic curve for the crossover phase.
LEVEL	Displays the characteristic curve for the crossover amplitude.
DELAY	Select whether to display or hide the DELAY characteristic in the crossover curves.
PEQ	Select whether to display or hide the PEQ characteristic in the crossover curves.
INPUT LEVEL	Displays the input level settings.
CROSSOVER	Displays the crossover settings.
DELAY	Displays the delay settings.
PEQ	Displays the parametric equalizer settings.

INPUT LEVEL

Item	Description
Input Level	Specify the input level. You can also change the setting by dragging the slider.

CROSSOVER



Item	Description
Type HPF/LPF	Select the attenuation width and filter type per octave for HPF and LPF.
Freq HPF/LPF	Specify the cutoff frequency for HPF and LPF.
GC	Specify the cutoff frequency gain if [Type] has been set to [AdjustGc] (Adjustable Gc).

DELAY

Item	Description
Delay ON	Select whether to activate or deactivate the Delay function.
Time	Specify the delay time.

PEQ

Item	Description
EQ curve	Displays the characteristics in a graph. You can change settings by dragging points on the graph.
ON	Select whether to activate or deactivate the equalizer function.
Type	Select a filter type. • PEQ（Parametric Equalizer） Increases or decreases the volume at the specified frequency with a specified width of Q. • L.SHELF（Low Shelf） Increases or decreases the volume of the entire low-frequency range starting at the specified frequency. This is used as a bass boost, for example. [6dB/Oct] and [12dB/Oct] specifies the amount of attenuation per octave. • H.SHELF（High Shelf） Increases or decreases the volume of the entire high-frequency range starting at the specified frequency. This is used as a treble boost, for example. [6dB/Oct] and [12dB/Oct] specifies the amount of attenuation per octave. • HPF（High Pass Filter） Cuts off the low band starting at the specified frequency. • LPF（Low Pass Filter） Cuts off the high band starting at the specified frequency.
Q	Specify the frequency width for each band.
Freq	Specify the center frequency of each band.
Gain	Specify the frequency gain for each band.
Bypass ON	Select whether to bypass each band.

Note

Parameter changes are immediately reflected in the acoustics of the unit.

[FADER]

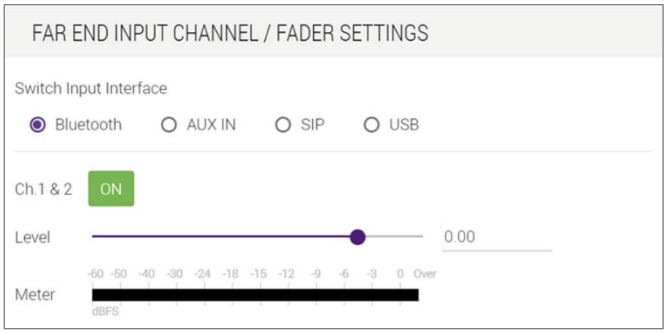
This screen is for turning on/off each channel and for specifying their levels.

Applicable devices: RM-CR, RM-CG, RM-TT

There is a FADER screen for each of the five following input and output channels.

- FAR END INPUT CHANNEL
- ANALOG MIC INPUT CHANNEL
- DANTE INPUT CHANNEL
- FAR END OUTPUT CHANNEL
- NEAR END OUTPUT CHANNEL

The following example shows the [FAR END INPUT CHANNEL] screen.



Item	Description
Switch Input Interface, Switch Output Interface	Select the interface to be displayed.
ON	Select whether to turn on or off the channel.
Level	Adjust the channel signal level with the slider.
Meter	Displays the signal level.

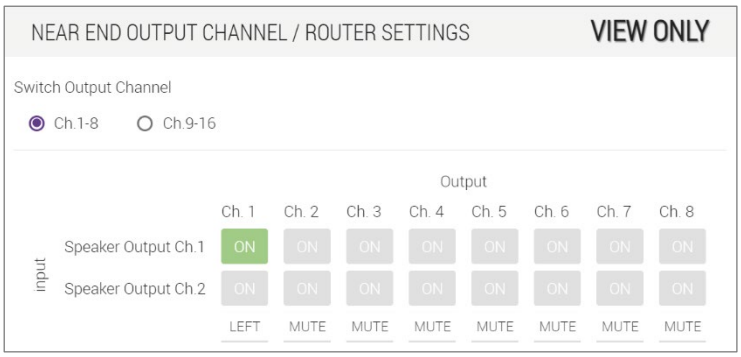
Note

Parameter changes are immediately reflected in the acoustics of the unit.

[ROUTER]

This screen is for patching the audio from the Speaker Output channel to the Dante Output channel.

Applicable devices: RM-CR, RM-CG, RM-TT



Item	Description
Switch Output Channel	Select the output channel range to be configured.
ON	Select the destination Dante Output channels for the Speaker Output channels. In order to change this setting manually, [SETTINGS] > [Peripheral] > [Enable automatic Dante audio routing] must be deactivated.

Note

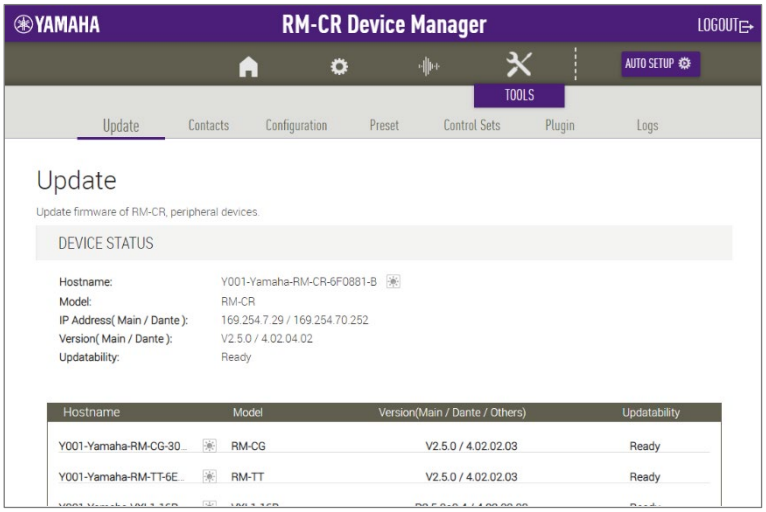
Parameter changes are immediately reflected in the acoustics of the unit.

[TOOLS]

[Update]

In the [Update] screen, you can update the firmware of the corresponding unit. In the screen for RM-CR, you can also update the firmware of peripheral devices.

Applicable devices: RM-CR, RM-CG, RM-TT



① [DEVICE STATUS]

Allows you to check the firmware and Dante versions of devices.

Devices with “Ready” appearing below “Updatability” can be updated.

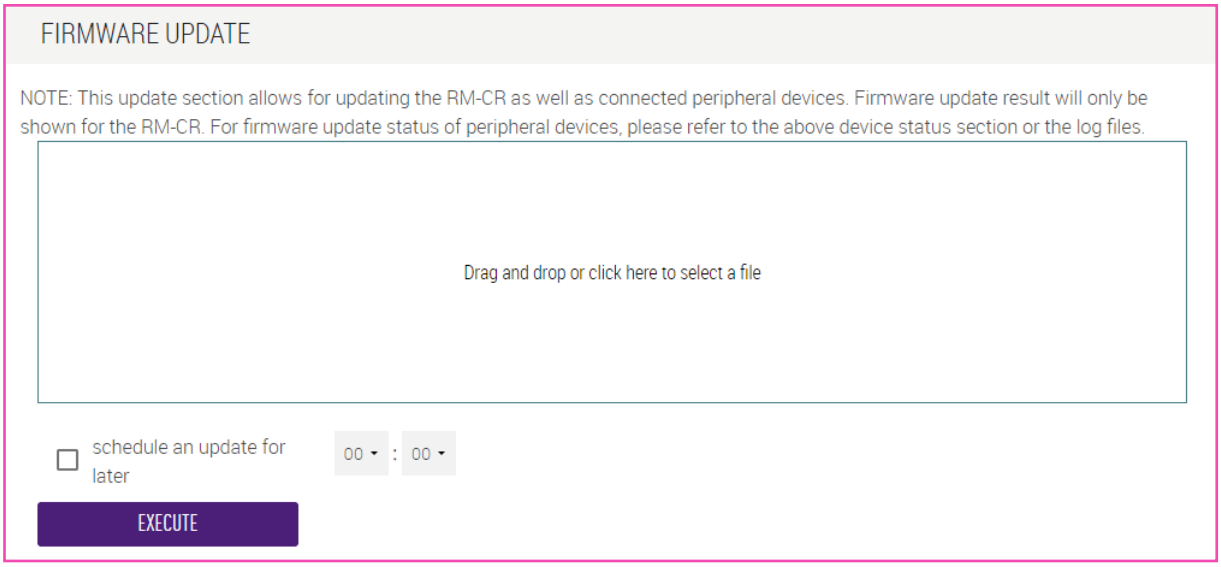
Item	Description
Hostname	Displays the hostname.
Model	Displays the model name.

IP Address (Main / Dante)	Displays the IP addresses of the device/Dante.
Version (Main / Dante)	Displays the versions of the device/Dante. If the firmware must be updated, the version number appears in red.
Updatability	Displays the firmware updatability status. • [Ready]: The firmware and Dante can be updated. • [IP Mismatched]: The IP address of the device network and the network portion of Dante's IP address are different.

Note

In order to update Dante, the network portion of the device's IP address and the network portion of Dante's IP address must be the same, and network communication must be possible.

② [FIRMWARE UPDATE]

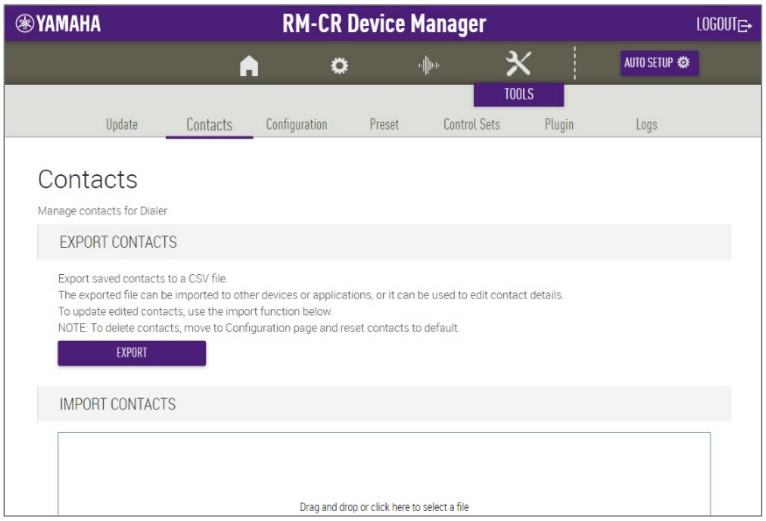


Item	Description
schedule an update for later	Select whether the update will be performed automatically after the specified length of time. In order to use this, specify a wait time, and then click the [EXECUTE] button.
EXECUTE	Drag the update file(s) into the box to update the firmware and Dante collectively or individually. The files for the latest firmware can be downloaded from the Yamaha website. Yamaha website U.S.A. and Canada : https://uc.yamaha.com/support/ Other Countries : https://download.yamaha.com/

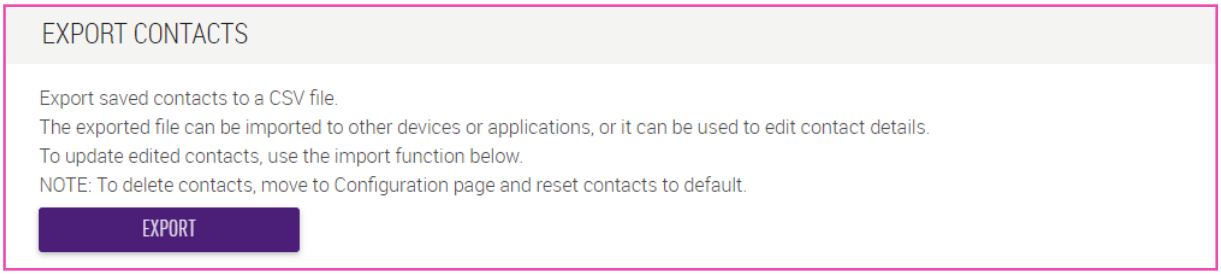
[Contacts]

In the [Contacts] screen, you can import or export SIP call contact information.

Applicable devices: RM-CR

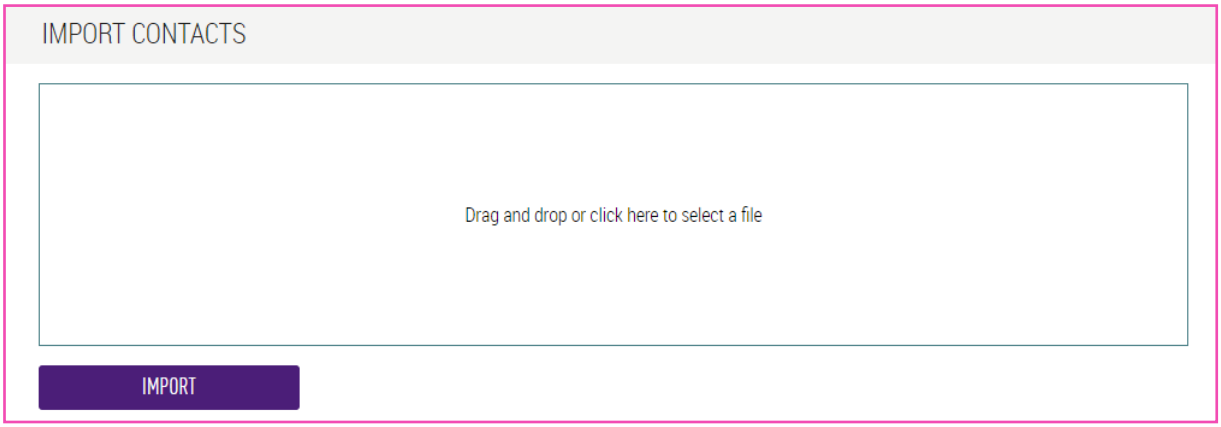


① [EXPORT CONTACTS]



Item	Description
EXPORT	Click to export the SIP call contact information stored on this unit.

② [IMPORT CONTACTS]

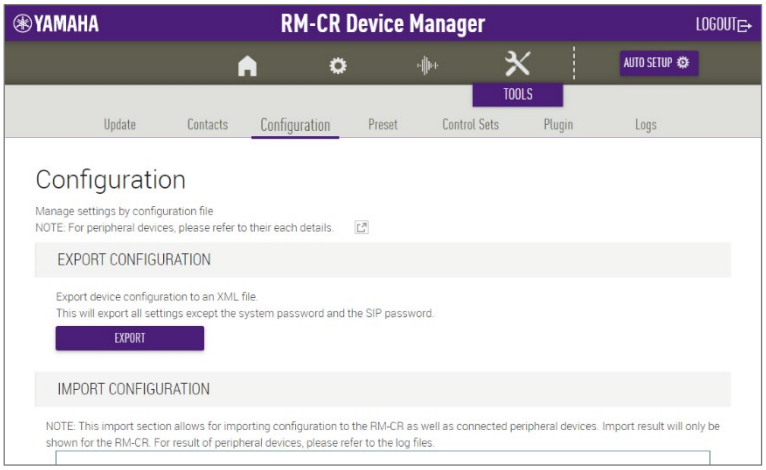


Item	Description
IMPORT	Drag the contact file into the box. Click the button to import the SIP call contact information into this unit. Create the contact file to be imported, by editing the one exported in ①.

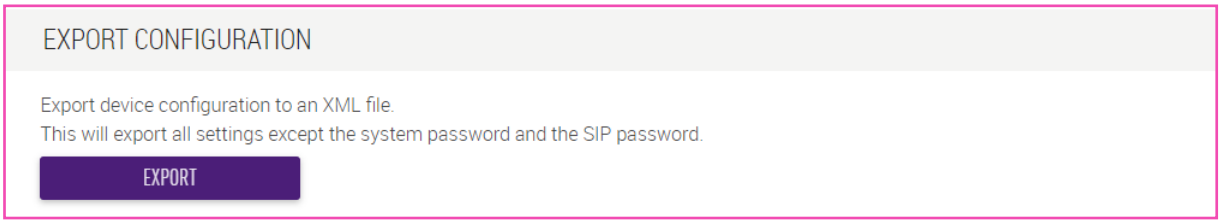
[Configuration]

In the [Configuration] screen, you can export, import or reset the settings of this unit. In the screen for RM-CR, you can also import the settings of peripheral devices.

Applicable devices: RM-CR, RM-CG, RM-TT



① [EXPORT CONFIGURATION]



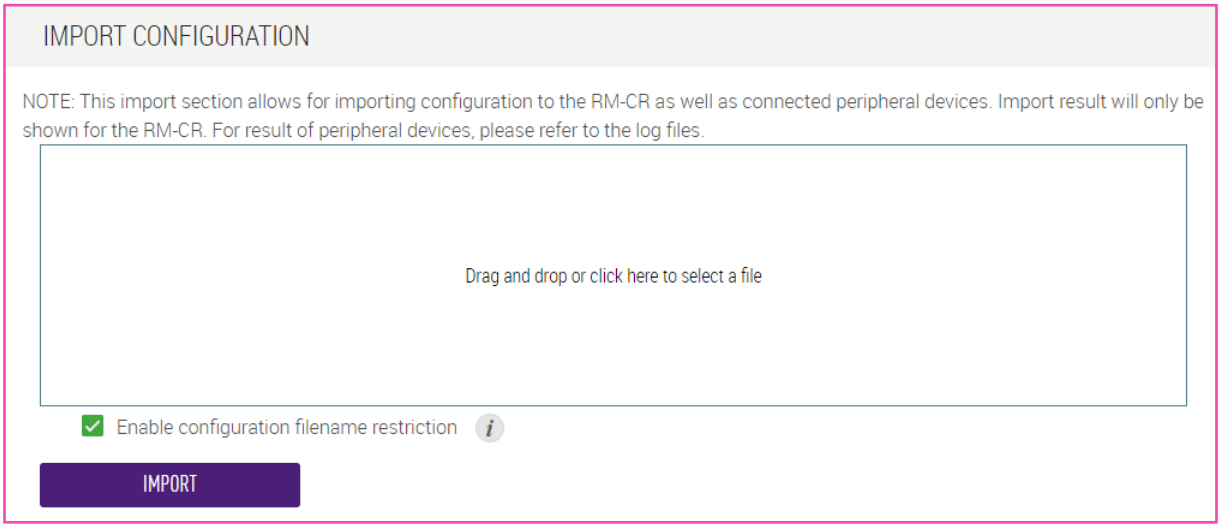
Item	Description
EXPORT	Click to export the settings of this unit.

② [IMPORT CONFIGURATION]

Allows you to import settings for this unit. RM-CR Device Manager can also be used to import settings for peripheral devices such as RM-CG and RM-TT. A language file for the language of the information displayed with the information icon can also be imported.

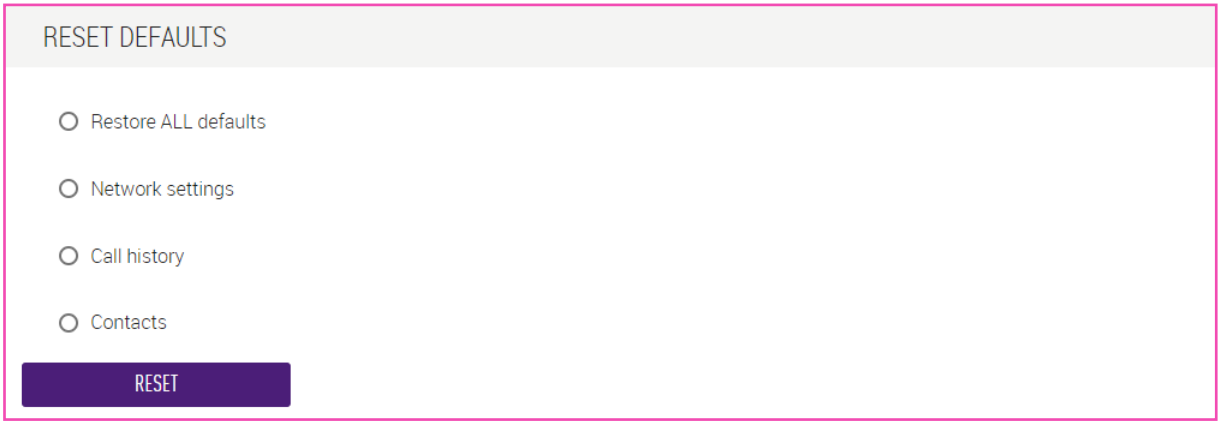
Note

- Create the configuration file to be imported, by editing the one exported in ①.
- The name of the configuration file should be the MAC address of the device receiving the upload file.
  Example: AC1234567899.xml



Item	Description
Enable configuration filename restriction	Select whether the name of the configuration file will be checked. When this is deactivated, an RM-CR configuration file whose name has been changed can be imported.
IMPORT	Drag the configuration file into the box. Click the button to import the settings of this unit or the peripheral devices. In the same way, a language file for the language of the information displayed with the information icon can also be imported.

③ [RESET DEFAULTS]



Item	Description
RESET	Click to reset the settings of this unit. • Restore ALL defaults: Restores the factory default settings. • Network settings: Resets the network settings. • Call history: Resets the SIP call history. • Contacts: Resets the SIP call contact information.

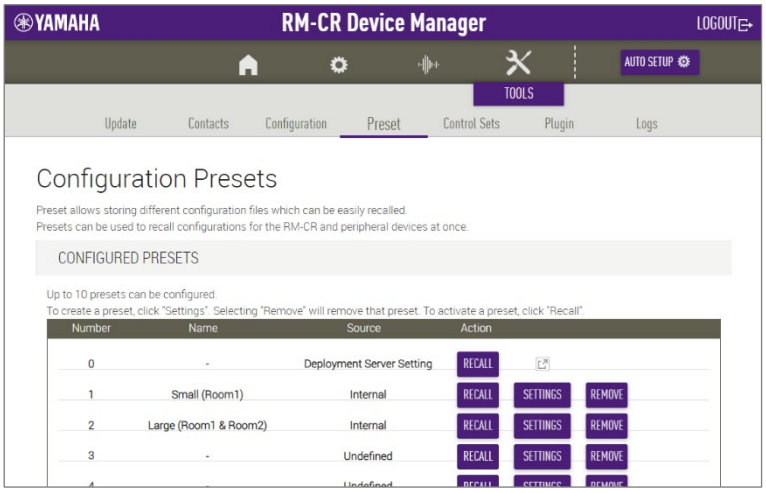
Notice

Confirm the settings to be reset before performing this operation.

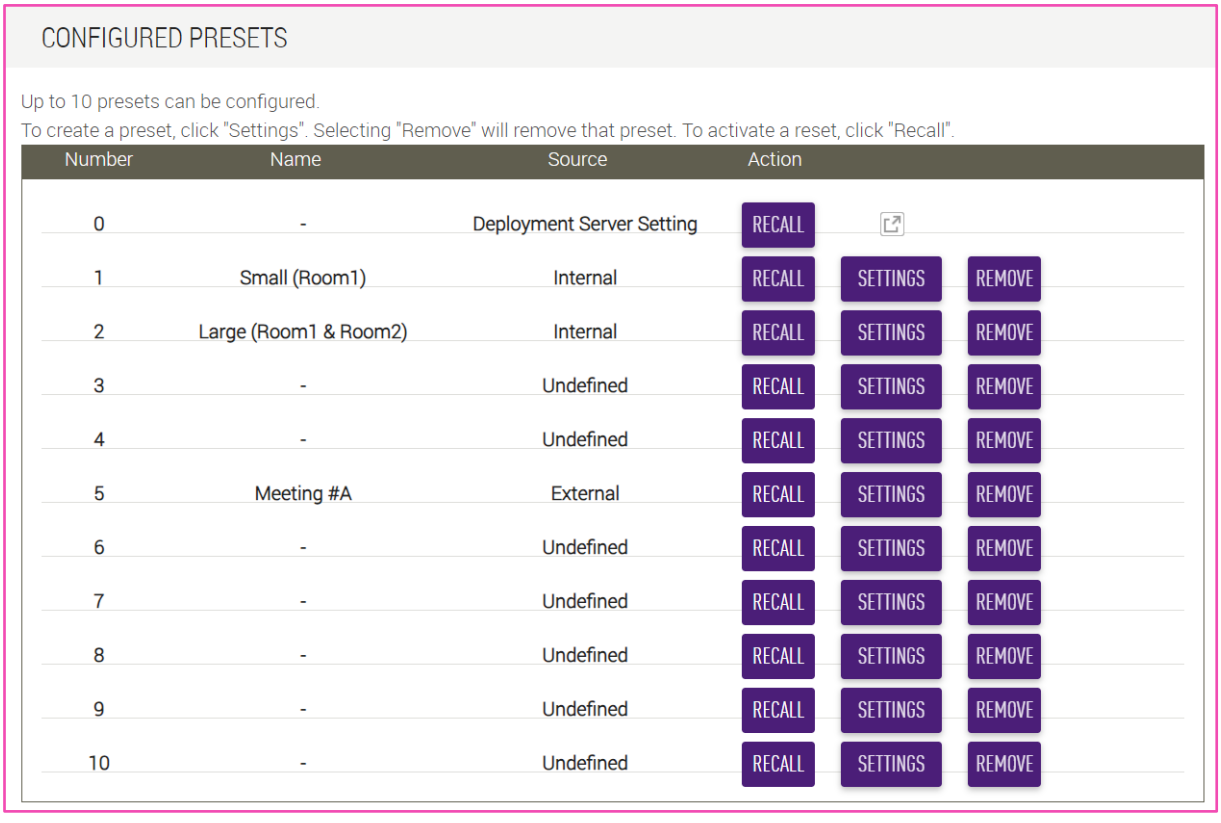
[Preset]

In the [Preset] screen, you can save and recall up to 10 presets for this unit and the peripheral devices.

Applicable devices: RM-CR



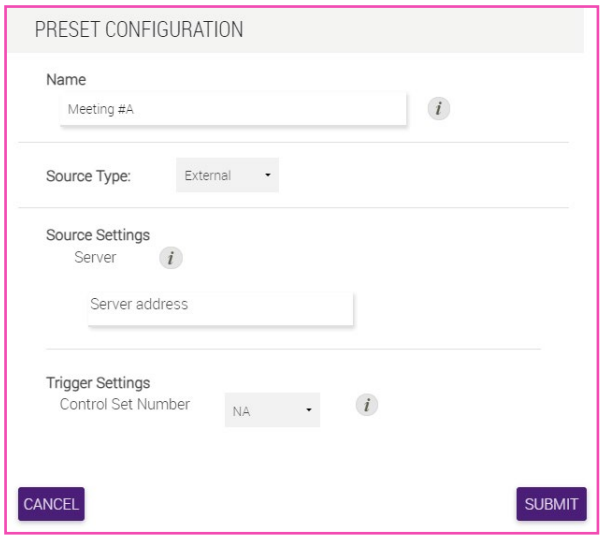
① [CONFIGURED PRESETS]

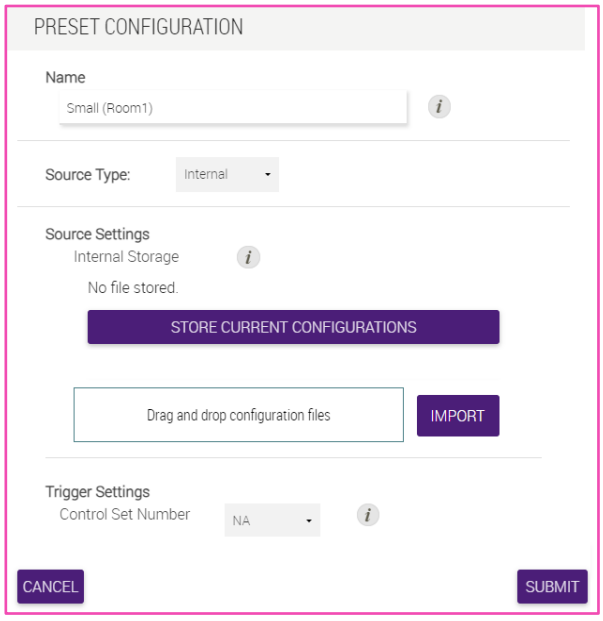


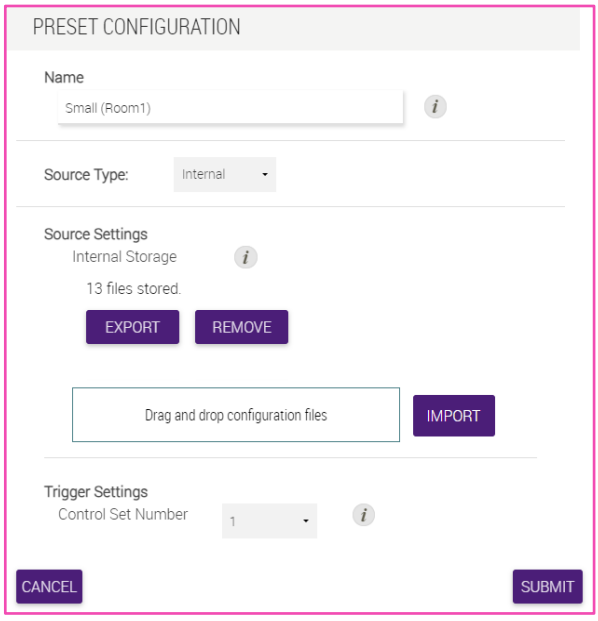
Item	Description
Number	Displays the preset number. • 0: For recalling the configuration specified on the deployment server • 1 to 10: For saving or recalling configurations as presets.

Name		Displays the preset name.
Source		Displays the source of the configuration. • "Deployment Server Setting": Deployment server • "Undefined": Not used • "Internal": Internal RM-CR storage • "External": External server
Action	RECALL	Click to recall the data of the corresponding preset.
	SETTINGS	Click to display the [PRESET CONFIGURATION] screen, where a preset can be saved. For details, refer to the following. • Saving a preset (external server) (page 98) • Saving a preset (internal server) (page 100)
	REMOVE	Click to erase the corresponding preset.

② [PRESET CONFIGURATION]







Item	Description
Name	Allows you to name the preset.
Source Type	Select whether the configuration file is saved on an external server or the internal storage of RM-CR. • [Unused]: Deactivates this preset. • [External]: Selects an external server. • [Internal]: Selects the internal storage of RM-CR.
Trigger Settings	To link a Control Set with a preset, select the Control Set number. • [NA]: Not used • [1] to [10]: Control Set number This is executed if [Mode] has been set to [Toggle (on/off)].
STORE CURRENT CONFIGURATIONS	Click to use the current settings of RM-CR and of the peripheral devices.
IMPORT	Click to load the configuration file specified with [Drag and drop configuration files].
EXPORT	Click to output the settings (saved in internal storage) as a file.
REMOVE	Click to delete the settings saved in internal storage.
SUBMIT	Click to save the settings to the corresponding preset.
CANCEL	Click to discard the currently specified settings and return to the [CONFIGURED PRESETS] screen.

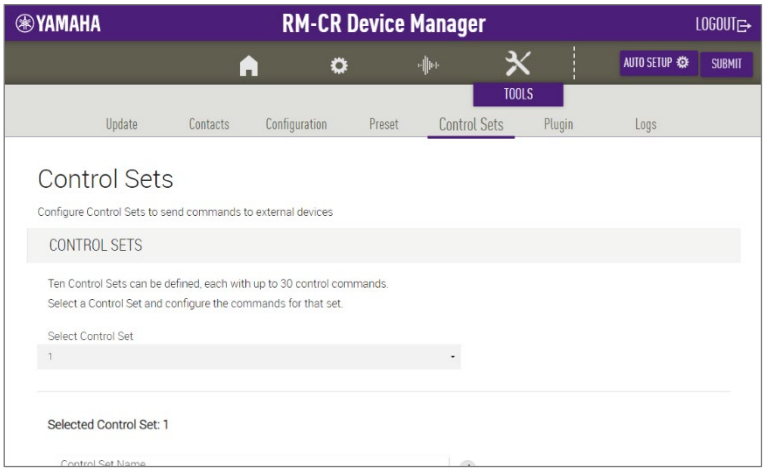
Related links

- Saving a preset (external server) (page 98)
- Saving a preset (internal storage) (page 100)

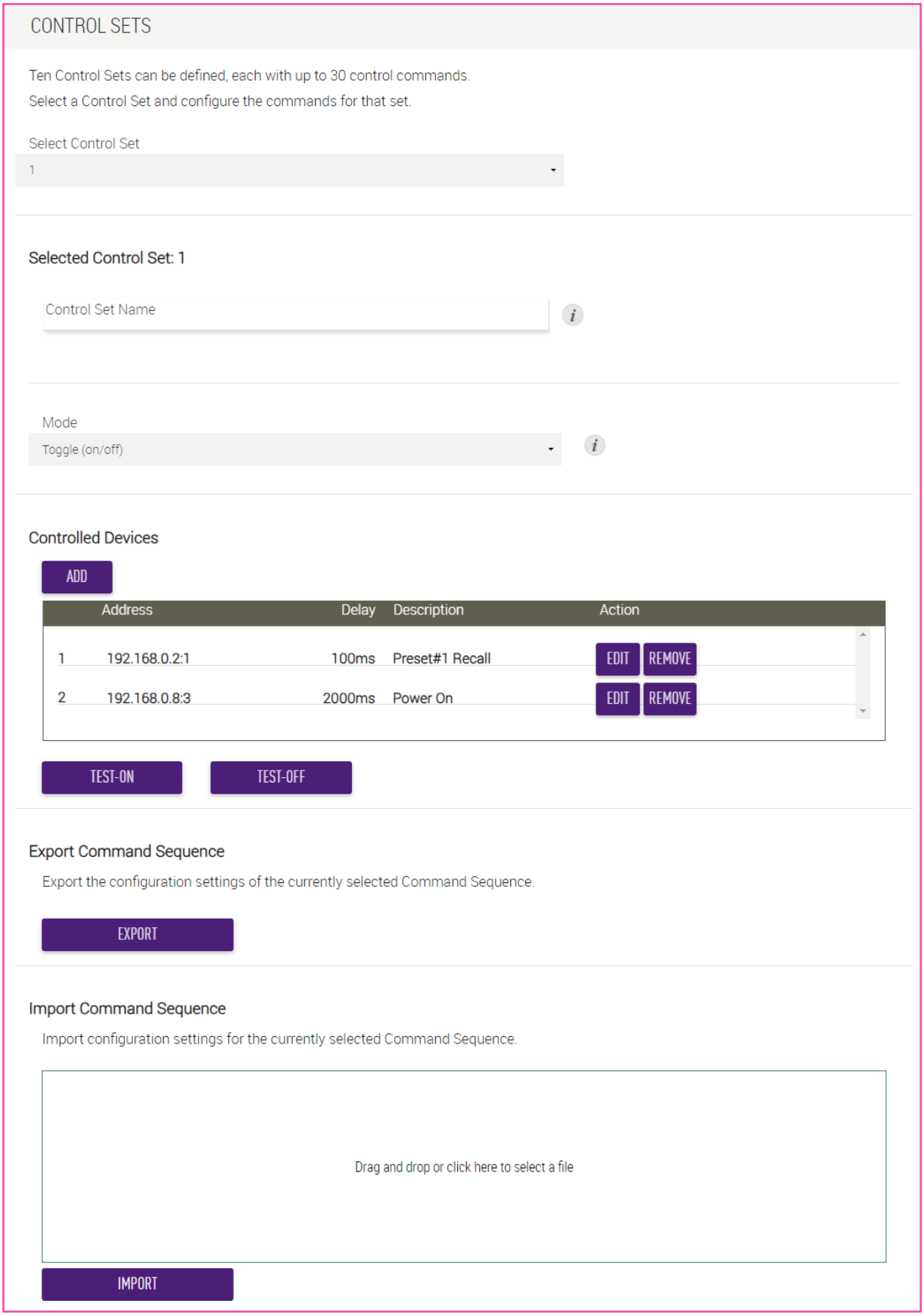
[Control Sets]

In the [Control Sets] screen, you can specify commands for controlling external devices on the same network and save those commands as a Control Set. Up to ten Control Sets can be saved. Up to 30 control commands can be saved in each Control Set. By linking a Control Set number to a preset, you can send commands to an external device when a preset is recalled.

Applicable devices: RM-CR

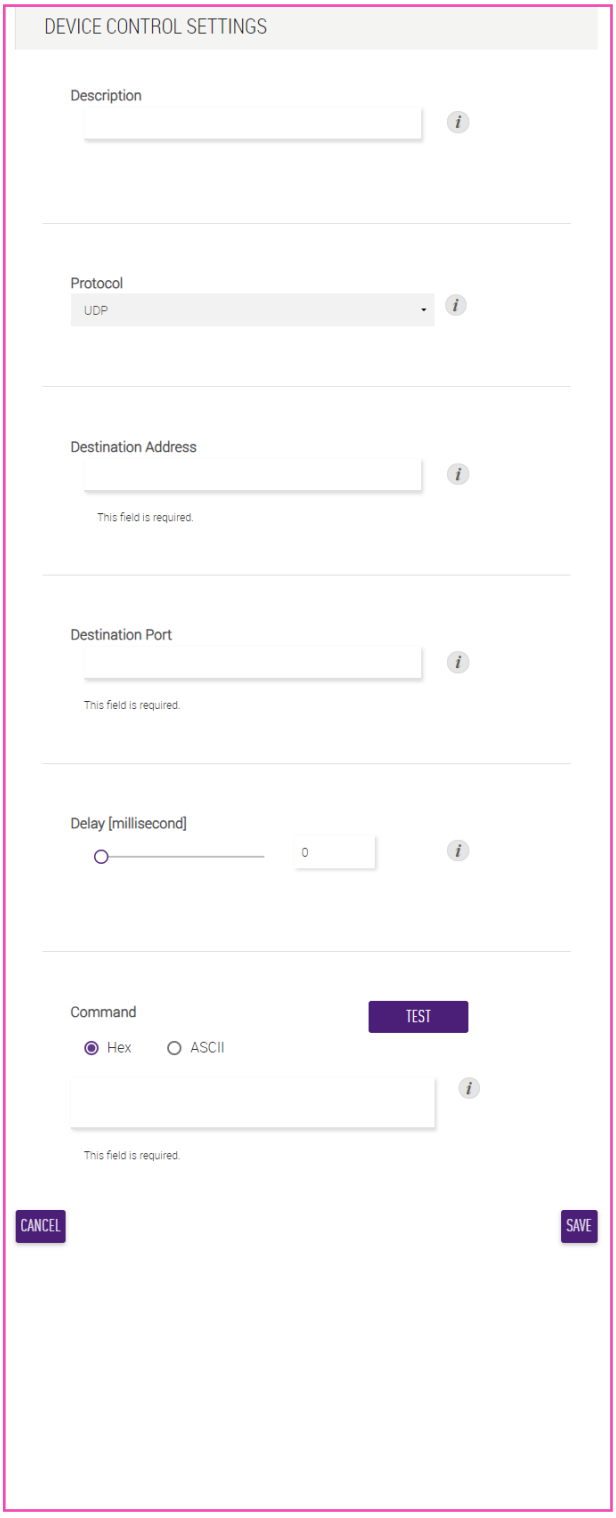


① [CONTROL SETS]

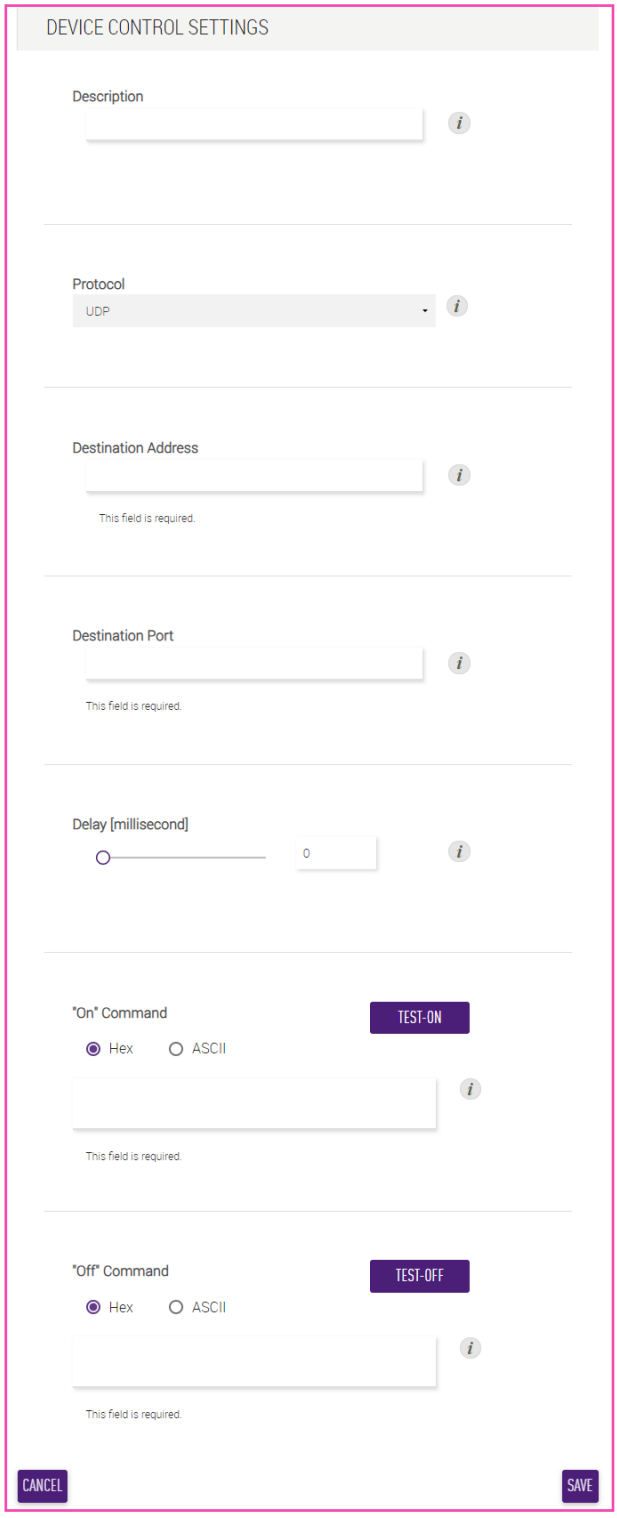


Item	Description
Select Control Set	Select the number of the Control Set to be specified. Selection range: 1 to 10
Control Set Name	Allows you to name the currently selected Control Set.
Mode	Select the mode for the currently selected Control Set. • [Toggle (on/off)]: Each time a Control Set is executed, an On command and an Off command are sent alternately. However, only the On command is sent for a Control Set linked to a preset. • [Single Command Sequence]: Executing a Control Set sends the saved commands.
ADD	Click to display the [DEVICE CONTROL SETTINGS] screen, where commands can be added.
No	1 to 30: A maximum of 30 commands can be saved in a Control Set.
Address	Displays the hostname or IP address of the device.
Delay	Displays the delay time between executing the Control Set and sending the command.
Description	Displays the description given to the command.
Action EDIT	Click to display the [DEVICE CONTROL SETTINGS] screen, where commands can be specified and saved.
REMOVE	Click to erase the corresponding command.
TEST TEST-ON TEST-OFF	Click to send the specified commands. This allows you to check the execution of the specified commands. The [TEST] button is displayed if [Mode] has been set to [Single Command Sequence]. The [TEST-ON] and [TEST-OFF] buttons are displayed if [Mode] has been set to [Toggle (on/off)].
EXPORT	Click to output to a file the configuration of the currently selected Control Set.
IMPORT	Click to load the Control Set configuration file (specified with [Drag and drop or click here to select a file]) into the currently selected Control Set.

② [DEVICE CONTROL SETTINGS]



[Single Command Sequence] mode



[Toggle (on/off)] mode

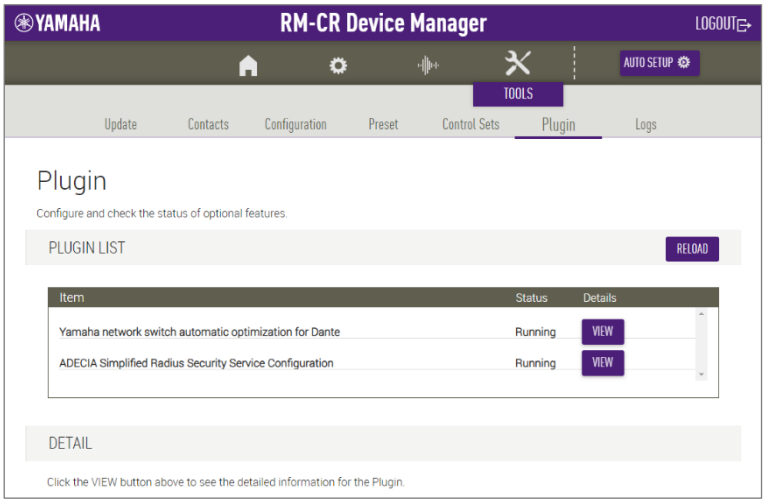
Item	Description
Description	Allows you to give a description to a command.
Protocol	Select the transmission protocol for the command. • UDP • TCP

Destination Address	Type the hostname or IP address of the device.
Destination Port	Type the device port.
Delay (millisecond)	Type the delay time between executing the Control Set and sending the command. Default setting: 0 millisecond Setting range: 0 to 60,000 milliseconds
Command	Select the command string encoding, and type the command (up to 1024 bytes). • [Hex]: Hexadecimal numbers • [ASCII]: ASCII codes Selecting a different string encoding changes how the entered command is displayed. If [Mode] has been set to [Toggle (on/off)], type each command.
TEST TEST-ON TEST-OFF	Click to send the entered commands. This allows you to check the execution of the entered command. The [TEST] button is displayed if [Mode] has been set to [Single Command Sequence]. The [TEST-ON] and [TEST-OFF] buttons are displayed if [Mode] has been set to [Toggle (on/off)].
SAVE	Click to save the specified command in the currently selected Control Set.
CANCEL	Click to discard the currently specified settings and return to the [CONTROL SETS] screen.

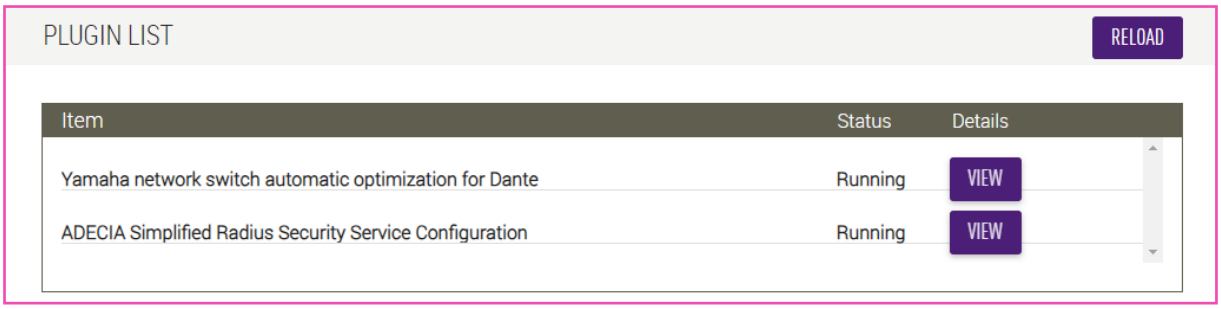
[Plugin]

This screen contains a list of functions for optimal network configuration of Yamaha network switches on networks supporting ADECIA and for easy configuration of RADIUS security on a network.

Applicable devices: RM-CR, RM-CG, RM-TT



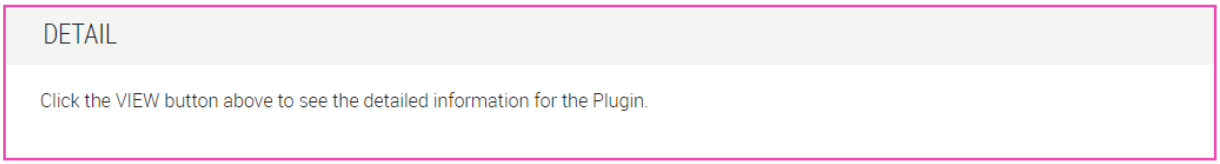
① [PLUGIN LIST]



Item	Description
RELOAD	Updates the displayed list of plug-ins.
Item	Displays the name of the plug-in. • "Yamaha network switch automatic optimization for Dante": Configures the optimal network settings for network switches on networks supporting ADECIA. • "ADECIA Simplified Radius Security Service Configuration": Easily configures RADIUS security for network switches on networks supporting ADECIA.
Status	Displays the status of the plug-in. • "Stopped": The plug-in has stopped. • "Running": The plug-in is running.
Details	Click the [VIEW] button to display the [DETAIL] and [STATUS] sections for the plug-in.

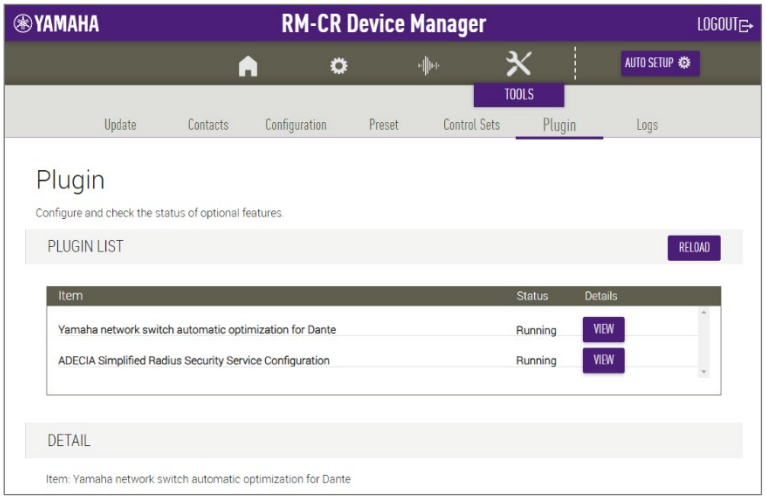
② [DETAIL]

Displays detailed information for each plug-in or allows it to be configured.



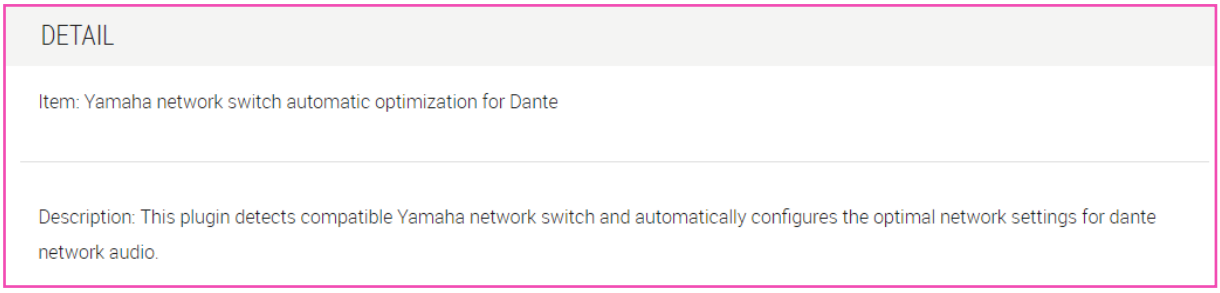
[Yamaha network switch automatic optimization for Dante]

Configures the optimal network settings for network switches on networks supporting ADECIA. The items shown in the screen below are automatically configured by ADECIA, and the settings are displayed. The configuration is automatically applied when the network switch is connected to RM-CR.



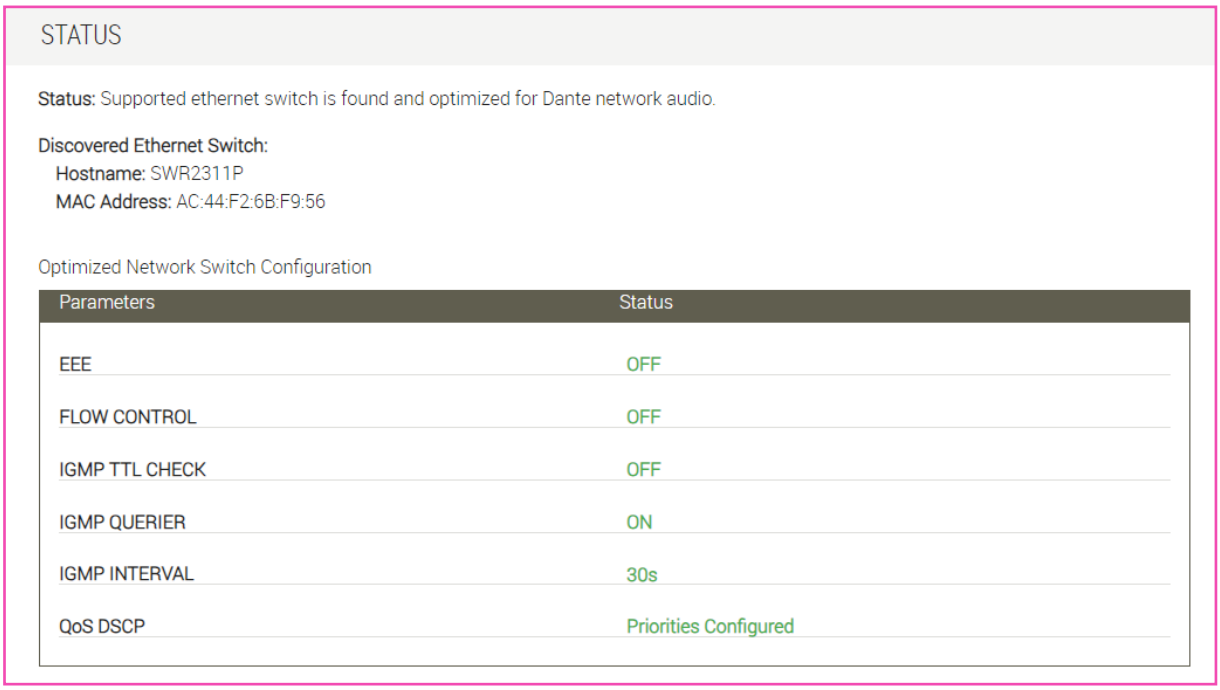
① [DETAIL]

Displays detailed information for the plug-in.



② [STATUS]

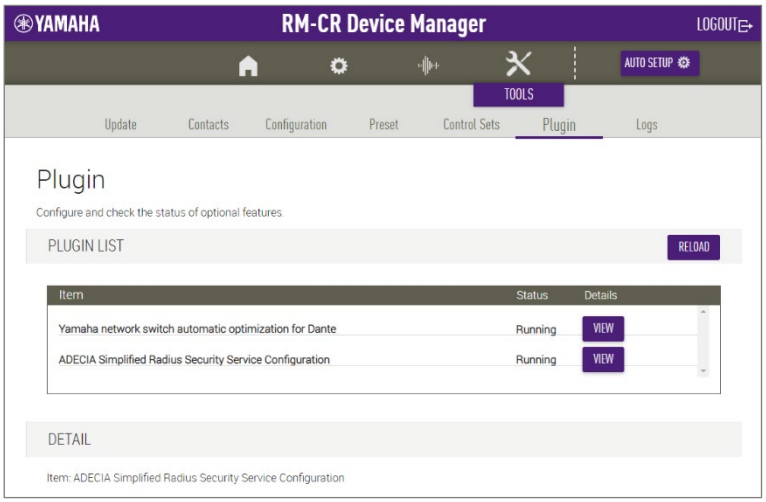
Displays the status of the plug-in.



Item	Description
Status	Displays the status of Dante optimization configuration. • ACTIVE • SEARCHING • INACTIVE
Hostname	Displays the hostname of the switch.
MAC Address	Displays the MAC address of the switch.

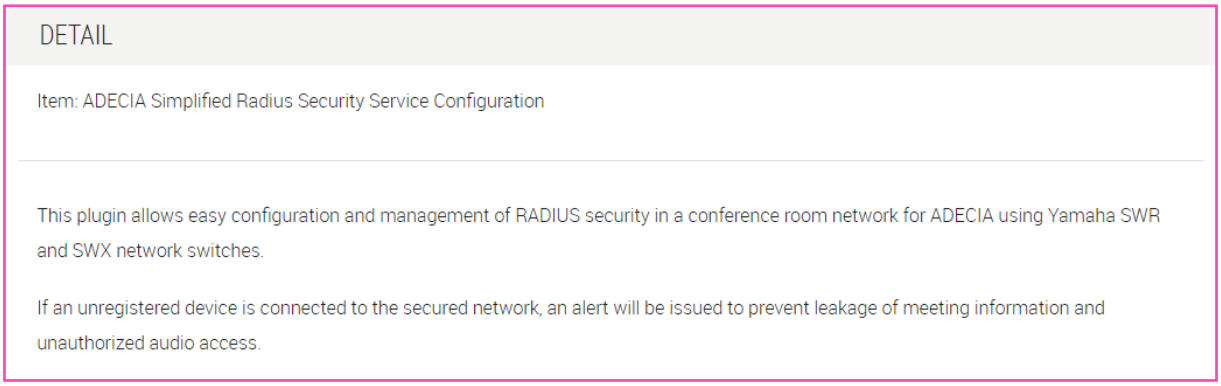
[ADECIA Simplified Radius Security Service Configuration]

By using a network switch that supports the ADECIA Simplified Radius Security Service Configuration feature, you can easily restrict and manage the terminals that can connect to the network. SWR2311P-10G is compatible with this feature.



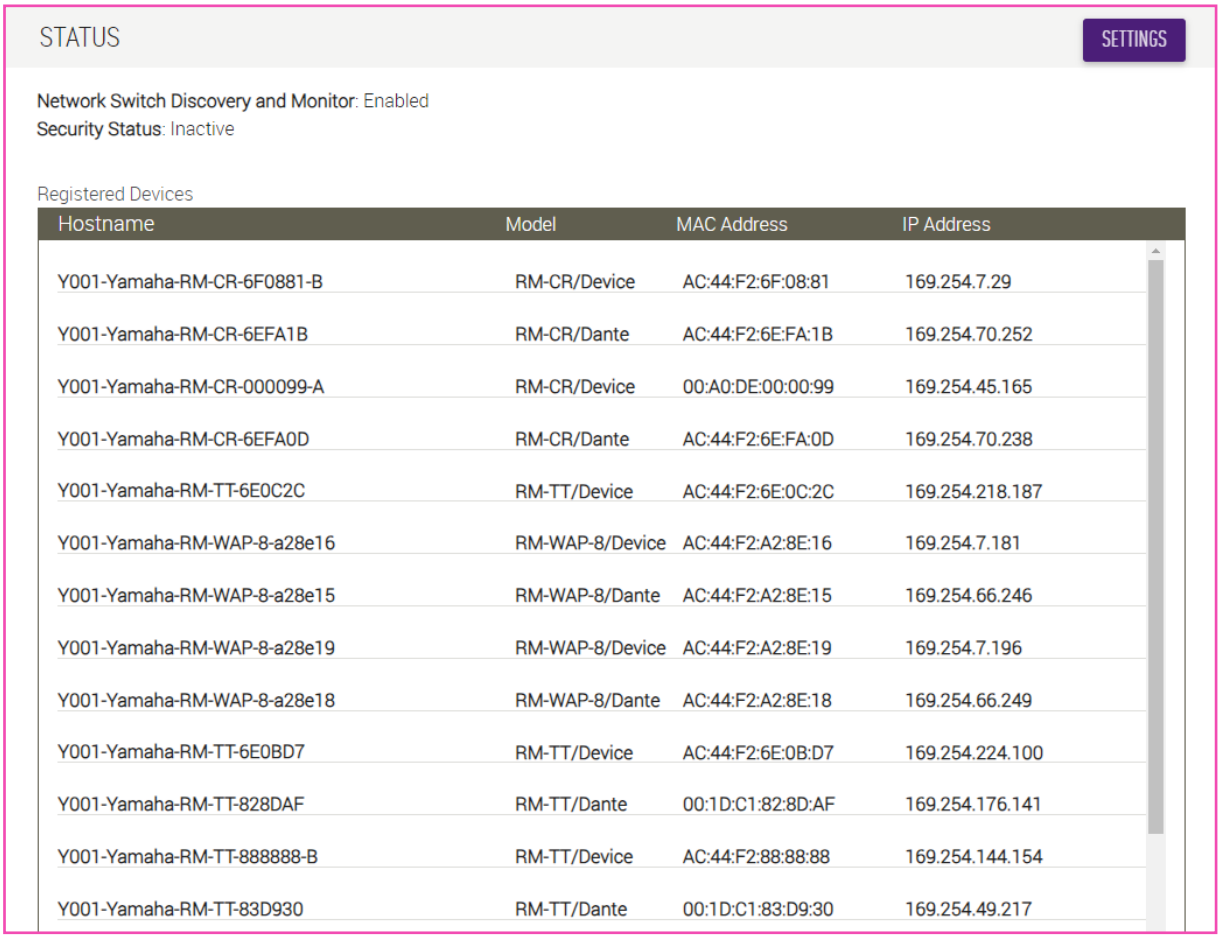
① [DETAIL]

Displays detailed information for the plug-in.



② [STATUS]

Displays the operating status of the Simplified Radius Security Service Configuration feature and information (stored on RM-CR) on devices registered with RADIUS security.

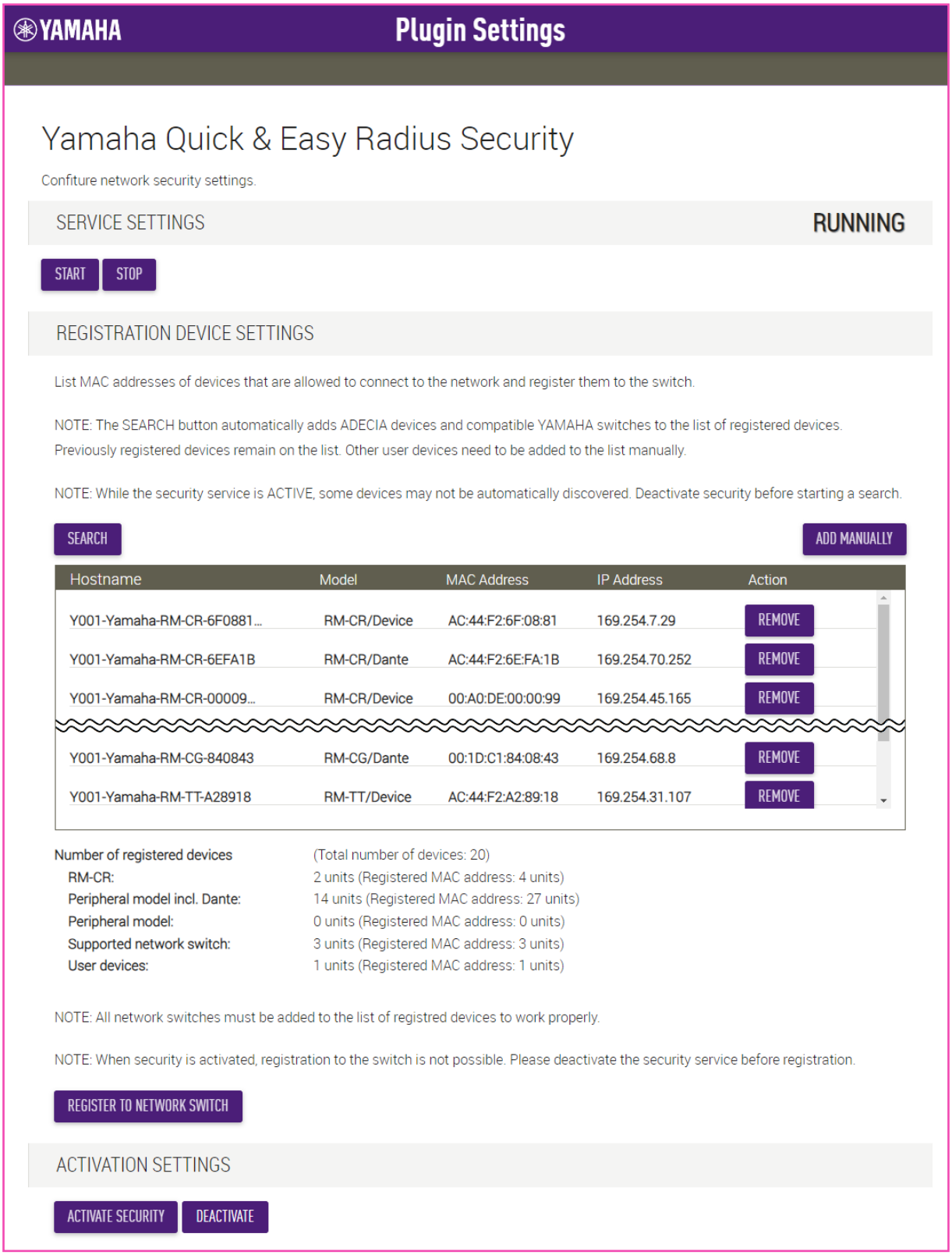


Item	Description
Network Switch Discovery and Monitor	Displays whether the usage status of this plug-in is “Enabled” or “Disabled”. If “Disabled” is displayed, no device is listed below “Registered Devices”, indicating that the plug-in is not used.
Security Status	Displays whether the security setting on the network switch is “Active”, “Inactive”, or “Unknown”.
Registered Devices	Displays a list of devices (registered on the network switch) that are subject to RADIUS security.
SETTINGS	Click to display the [Yamaha Quick & Easy Radius Security] screen, where RADIUS security settings can be specified.

③ [Yamaha Quick & Easy Radius Security] screen

Specify in the list the devices that are subject to the Simplified Radius Security Service Configuration feature, register them with the network switch ([REGISTER TO NETWORK SWITCH]), and then click the [ACTIVATE SECURITY] button. The devices that can be specified are ADECIA devices, network switches compatible with ADECIA, and devices for which device information has been manually registered.

To change the value of [Enable yamaha network switch discovery], save the settings by clicking the [SUBMIT] button.



Item	Description
START STOP	Select whether to use the Simplified Radius Security Service Configuration feature. Click the [START] button to discover devices on the network.
SEARCH	The ADECIA devices on the network, compatible network switches, and registered device information are displayed in the list. If RADIUS security has been registered with the network switch, the managed device information will be retrieved from the network switch and displayed in the list. The number of registered devices is displayed below the list.
ADD MANUALLY	Click to display a screen for manual registration. Devices that are not displayed in the list after the [SEARCH] button has been clicked can be added to the managed list, by typing in the [Hostname] and [MAC Address] fields, then clicking the [ADD] button in the screen. For the MAC Address, type a hexadecimal number without colons or hyphens.
Hostname	Displays the hostname of the device.
Mode	Displays the model name of the device.
MAC Address	Displays the MAC address of the device.
IP Address	Displays the IP address of the device.
Action REMOVE	Click to remove the corresponding device from the list.
REGISTER TO NETWORK SWITCH	Click to register with the network switch the devices displayed in the list.
ACTIVATE SECURITY	Click to activate on registered devices the RADIUS security feature of the network switch.
DEACTIVATE	Click to deactivate the RADIUS security feature of the network switch.

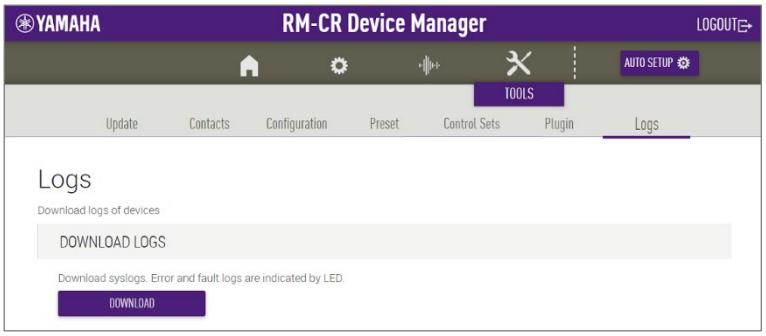
Note

- Devices connected to the RM-CR corporate port are not subject to RADIUS security.
  Since one device may be displayed in the list as multiple devices (MAC addresses), be sure to register all relevant devices.
- For security to work properly, all network switches must be included in the list.
- When using this feature, do not specify manual configuration on the [SETTINGS] > [Network] > [IEEE802.1X SETTINGS] screen.
- Once the [ACTIVATE SECURITY] button has been clicked and RADIUS security has been activated, the [REGISTER TO NETWORK SWITCH] button will no longer be available. To change the device configuration, click the [DEACTIVATE] button, change the configuration of the list, and then click the [ACTIVATE SECURITY] button.
- When connecting a computer (for configuring RADIUS security) to a network switch, the computer itself must also be subject to RADIUS security. To change settings from a computer that is not registered with RADIUS security, use the Web GUI on a computer connected to the USB port on the front of RM-CR.
- This feature assumes that the network switch will be used and configured from its initial state. If a problem with device management occurs, such as devices not being displayed as expected, initialize the network switch, and then configure it again using this plug-in. However, note that initializing will erase the previous settings.
- For details on initializing or on updating the firmware of the network switch, refer to the RM-CR Reference Manual.

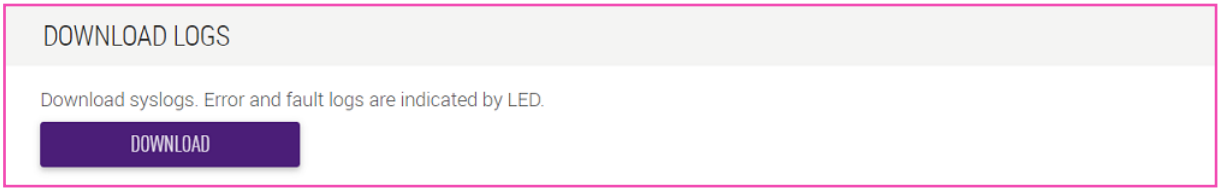
[Logs]

In the [Logs] screen, you can download logs.

Applicable devices: RM-CR, RM-CG, RM-TT



① [DOWNLOAD LOGS]



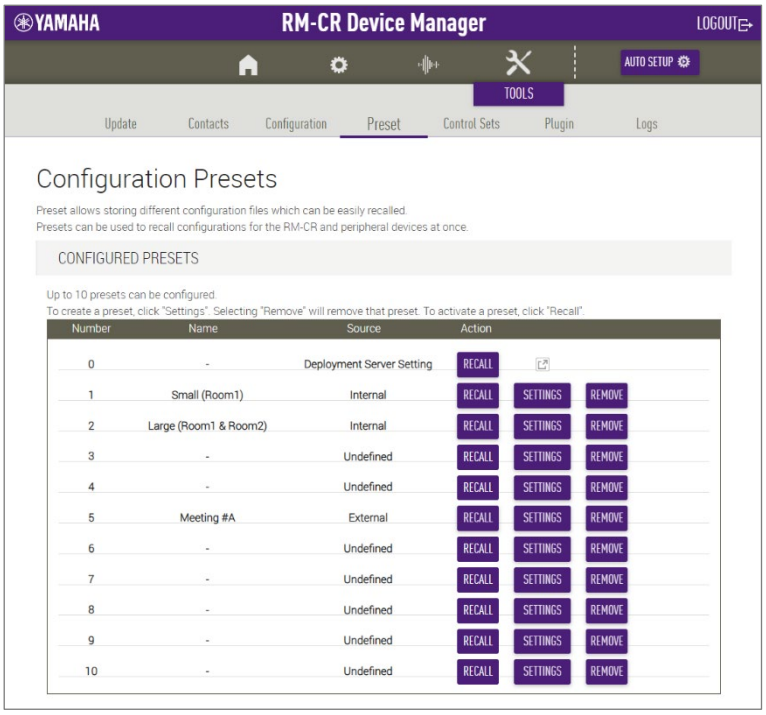
Item	Description
DOWNLOAD	Click to download the logs. Logs record errors, warnings and actions. For explanations on alert logs and recommended solutions, refer to "Alert log list" in the Reference Manual.

Operating procedures

Saving a preset (external server)

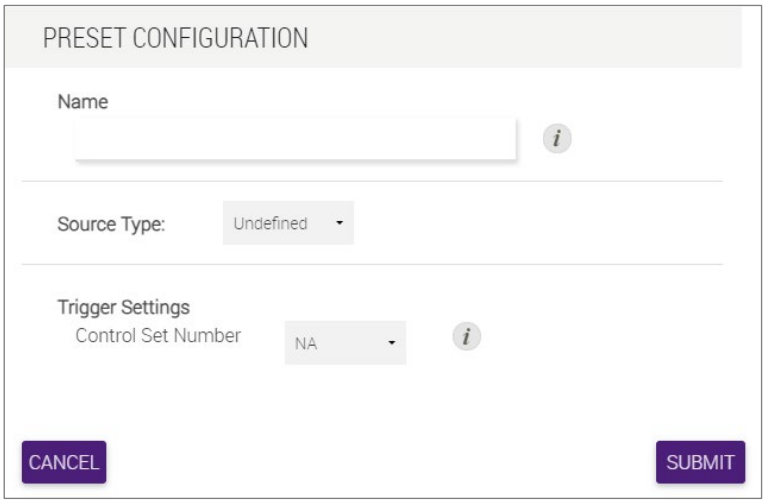
Follow the steps below to save as a preset the settings (stored on an external server) for this unit and for peripheral devices.

[TOOLS] > [Preset]



1. Display the settings.

In the [CONFIGURED PRESETS] section, click the [SETTINGS] button for a preset number with "Undefined" displayed below "Source". The [PRESET CONFIGURATION] section appears.

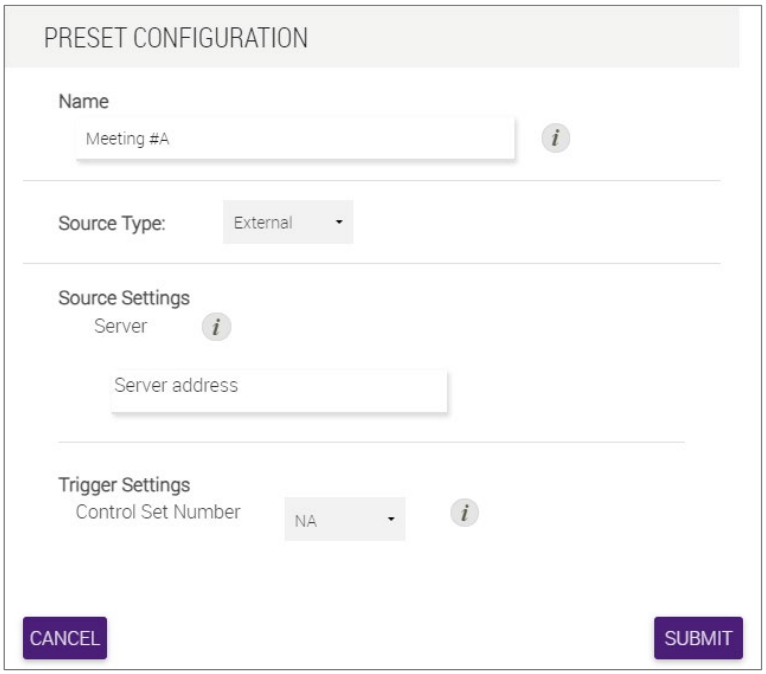


2. Type in the [Name] field.

Give the preset a name to help you identify it.

3. Select from [Source Type].

To use an external server, select [External]. The parameters for [External] appear.



4. Type in the [Source Settings] field.

In the [Server address] field, specify the address of the external server where the configuration file is located.

5. Select from [Trigger Settings].

To link a Control Set, select the Control Set number.

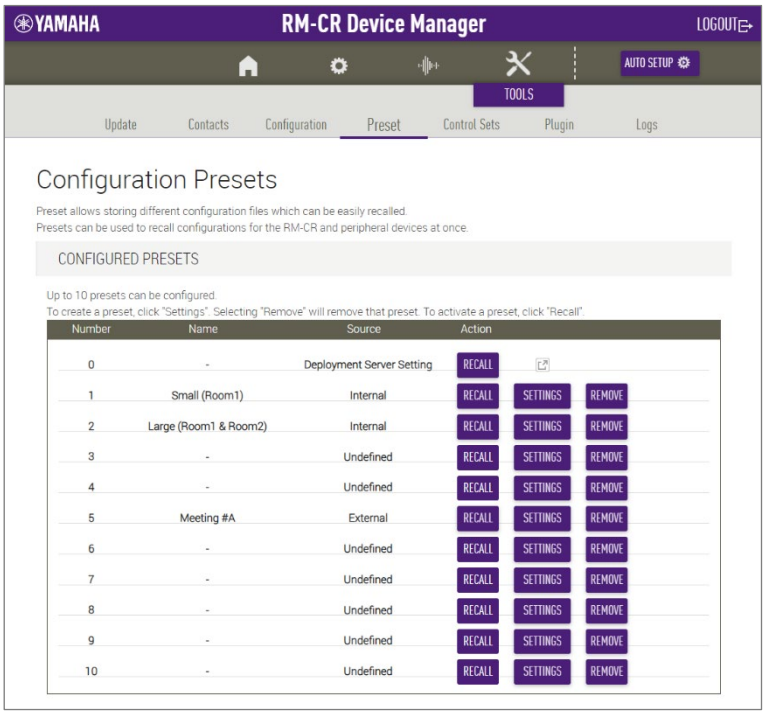
6. Click the [SUBMIT] button to register the settings.

Registration is finished when the specified information appears below “Name” and “Source” in the [CONFIGURED PRESETS] section.

Saving a preset (internal storage)

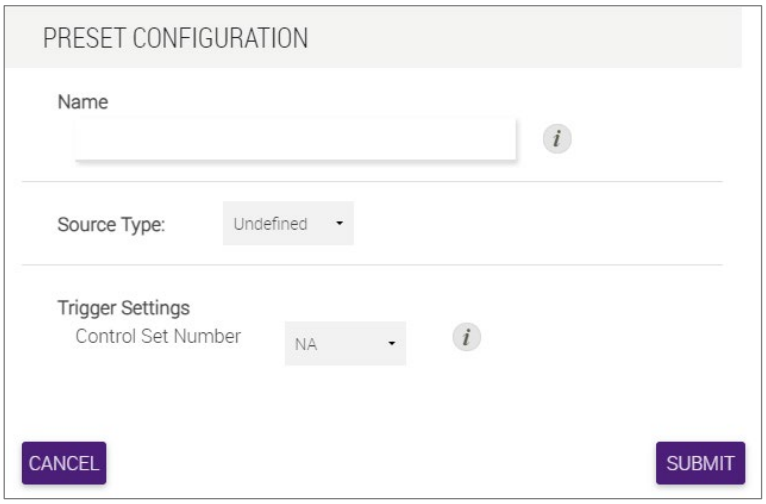
Follow the steps below to save the settings for this unit and for peripheral devices as a preset in the internal storage of RM-CR.

[TOOLS] > [Preset]



1. Display the settings.

In the [CONFIGURED PRESETS] section, click the [SETTINGS] button for a preset number with "Undefined" displayed below "Source". The [PRESET CONFIGURATION] section appears.

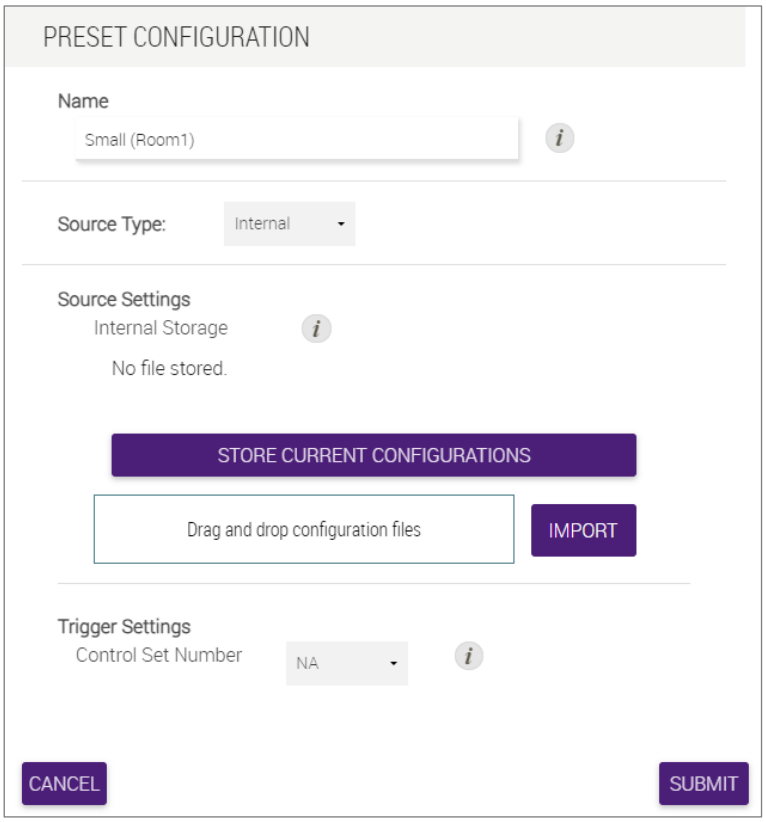


2. Type in the [Name] field.

Give the preset a name to help you identify it.

3. Select from [Source Type].

To use the internal storage of RM-CR, select [Internal]. The parameters for [Internal] appear.



4. Type in the [Source Settings] field.

When using internal storage, there are two ways to import settings.

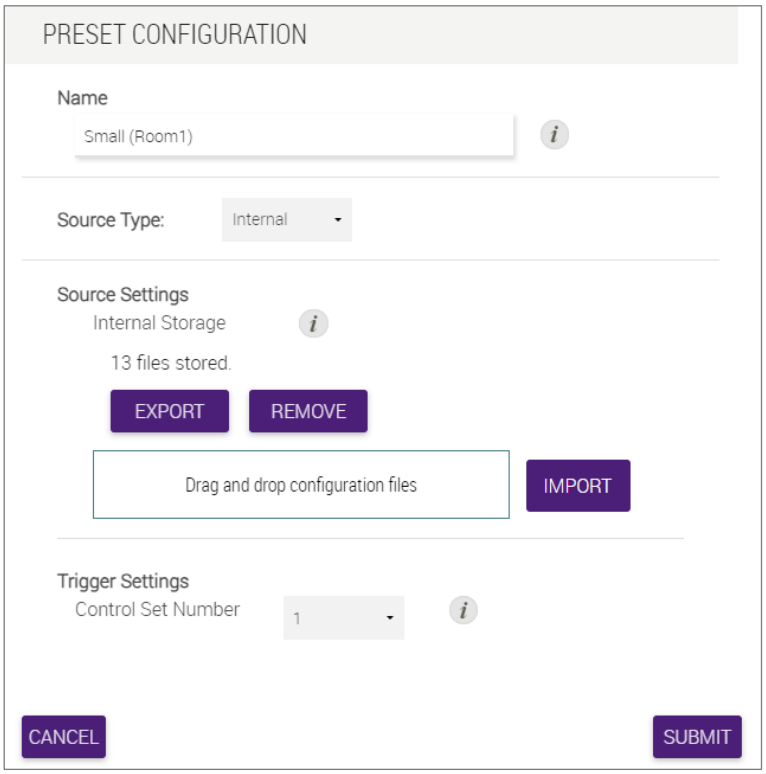
4.1. To import current settings

Click the [STORE CURRENT CONFIGURATIONS] button.

4.2. To import a configuration file

Specify the configuration file with [Drag and drop configuration files].
With one configuration file, specify the XML file.
With multiple configuration files, specify the XML files as one ZIP file.
Click the [IMPORT] button.

Once the settings have been imported, the following section appears.



5. Select from [Trigger Settings].

To link a Control Set, select the Control Set number.

6. Click the [SUBMIT] button to register the settings.

Registration is finished when the specified information appears below “Name” and “Source” in the [CONFIGURED PRESETS] section.

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