



Manufacturer: Roon Labs, LLC
Model: Roon
Device Type: Media Server

GENERAL INFORMATION

SIMPLWINDOWS NAME:	RoonDeviceModule
CATEGORY:	Media Resource
VERSION:	V 1.0 (Build 10)
SUMMARY:	(Provide a brief description of the module and what it does. Also include connection type)
GENERAL NOTES:	
CRESTRON HARDWARE REQUIRED:	3-Series or 4-Series Processor

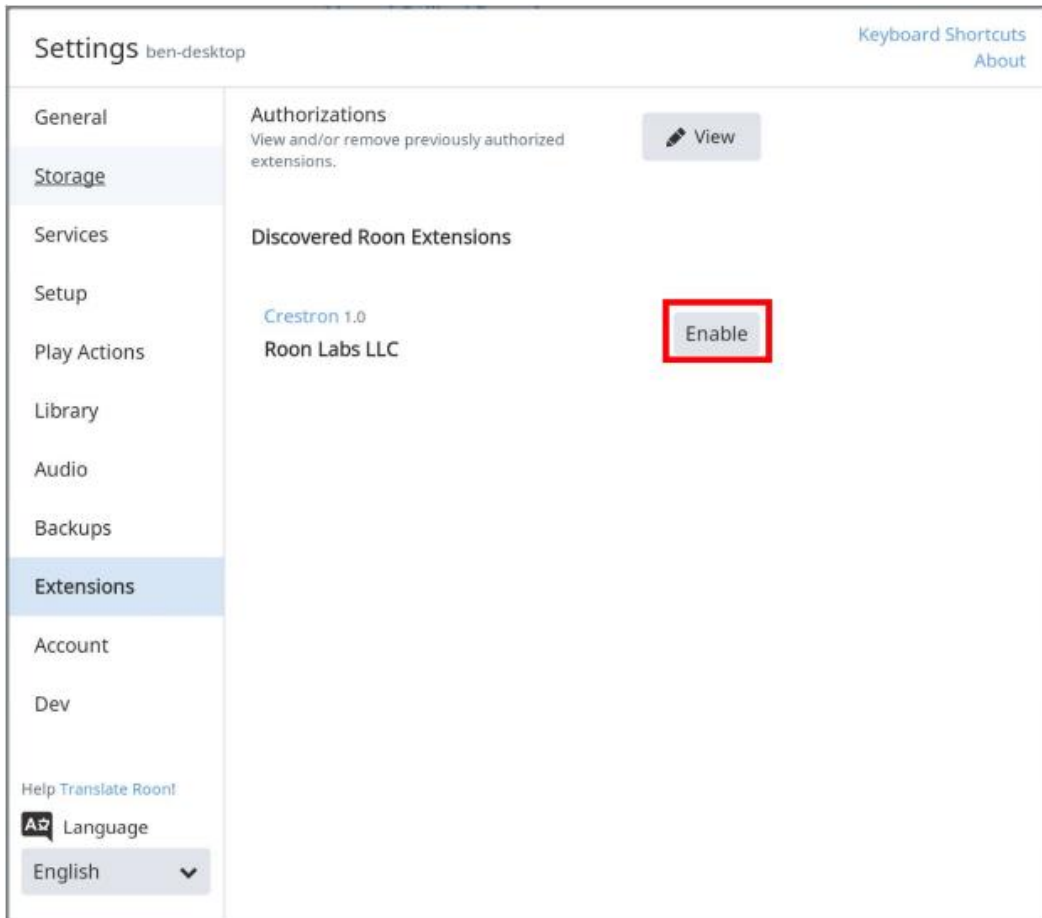
Getting Started with the Demo Program:

This package includes a demo program, which shows you how to connect the Crestron Media Player Smart Object to the Roon Device Modules for the purpose of controlling devices and zones that are part of your Roon system. Once you have loaded the demo program to your control processor, there are a couple of steps to follow in Roon's app to enable your Crestron processor to control your Roon services and zones:



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1. Enable the “Crestron 1.0” Extension that will be visible in the “Extensions” menu of Roon Settings once the demo program is running on your control processor:





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2. Associate each Zone within this extension (these are determined by the individual RoonDeviceModule symbols that exist in your program) with a corresponding Roon device/zone:

Extension Settings

Crestron 1.0 (build 7)

S-3.1: Zone 1

Headphones ▼

S-3.2: Zone 2

Chord Hugo TT HD ▼

S-3.3: Zone 3

DragonFly Red ▼

S-3.4: Zone 4

System Output ▼



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CONTROL:

<u>Signal/Function Name</u>	<u>D,S,A</u>	<u>Digital, Serial, Analog signal property definition.</u>
SystemModuleReady	D	Indicates that the system module is up and operating, the device module won't operate until this is set. Should be driven by the corresponding feedback join from the RoonSystemModule
StandBy	D	Pulse to put the audio hardware controlled by this module into standby mode
ConvenienceSwitch	D	Pulse to take the audio hardware controlled by this module out of standby mode and do anything required to get it ready to play media
Play	D	Pulse to play media
Pause	D	Pulse to pause media
Play/Pause	D	Pulse to toggle between play and pause states
NextTrack	D	Pulse to switch to the next track
PreviousTrack	D	Pulse to switch to the previous track
Stop	D	Pulse to stop media
SetShuffleOn	D	Pulse to set Shuffle mode to on
SetShuffleOff	D	Pulse to set Shuffle mode to off
ToggleShuffle	D	Pulse to toggle Shuffle mode between on and off
SetLoop	D	Pulse to set Loop mode to loop the whole current queue
SetLoopOne	D	Pulse to set Loop mode to loop the current track
SetLoopOff	D	Pulse to set Loop mode to none
ToggleLoop	D	Pulse to toggle between loop modes, in this order: whole queue > current track > none
SetAutoRadioOn	D	Pulse to turn on auto radio, so that Roon will automatically enable radio mode when



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		the current queue ends
SetAutoRadioOff	D	Pulse to turn off auto radio
ToggleAutoRadio	D	Pulse to toggle auto radio
VolumeUp	D	Pulse to increase volume slightly
VolumeDown	D	Pulse to decrease volume slightly
Volume	A	Set the volume in the device's native units
VolumeNormalized	A	Set the volume in a normalized scale between 0 and 65535
Mute	D	Pulse to mute the audio
Unmute	D	Pulse to unmute the audio
Mute/Unmute	D	Pulse to toggle mute between on and off
Seek	A	Seek to a position in the track in seconds
SeekNormalized	A	Seek to a position in the track, in a normalized scale between 0 and 65535
CRPC	S	To be connected to the Media Server Object Router module



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FEEDBACK:		
IsAvailable_fb	D	Set to high when the device module is available and functioning correctly
SupportsStandby_fb	D	Set to high if the hardware connected to this device module supports a standby mode
SupportsConvenienceSwitch_fb	D	Set to high if the hardware connected to this device module supports convenience switching
Name_fb	S	The name of the audio zone in Roon
IsPlayAllowed_fb	D	Set to high if the play action is available
IsPauseAllowed_fb	D	Set to high if the pause action is available
IsNextAllowed_fb	D	Set to high if the next track action is available
IsPreviousAllowed_fb	D	Set to high if the previous track action is available
Playing_fb	D	Set to high if media is playing
Paused_fb	D	Set to high if media is paused
Loading_fb	D	Set to high if a file is loading
Stopped_fb	D	Set to high if media is stopped
IsShuffle_fb	D	Set to high if Shuffle mode is active
IsLoop_fb	D	Set to high if Loop mode is set to loop the whole queue
IsLoopOne_fb	D	Set to high if Loop mode is set to loop a single track
IsAutoRadio_db	D	Set to high if auto radio mode is active, so that Roon will go to radio mode automatically when the queue ends
VolumeMin_fb	A	Minimum possible volume level, in the hardware's native units
VolumeMax_fb	A	Maximum possible volume level, in the hardware's native units



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Volume_fb	A	Current volume, in the hardware's native units
VolumeNormalized_fb	A	Current volume, normalized to a range between 0 and 65535
VolumeType_fb	S	Volume type, as a string. Possible values are "number," "dB," and "incremental." If an unanticipated value is returned, treat it as "number"
IsVolumeFixed_fb	D	Set to high if the hardware volume is fixed and cannot be controlled through Roon
IsMuted_fb	D	Set to high if muted
IsSeekAllowed_fb	D	Set to high if seeking is possible in the current track
PositionSeconds_fb	A	Position in the current track in seconds
PositionNormalized_fb	A	Position in the current track, normalized to a range between 0 and 65535
PositionSerial_fb	S	Position in the current track, as a string suitable for displaying to users. Formatted such that 1:23:45 indicates a position of 1 hour, 23 minutes, and 45 seconds into a track
LengthSeconds_fb	A	Length of the current track in seconds
LengthSerial_fb	S	Length of the current track, as a string suitable for displaying to users. Formatted such that 1:23:45 indicates a track length of 1 hour, 23 minutes, and 45 seconds
ShowSeekPosition_fb	D	Set to high if there is a meaningful seek position for the current track
ShowLength_fb	D	Set to high if there is a meaningful length for the current track
OneLine_fb	S	Now playing information formatted for a single-line display
TwoLine_Line1_fb	S	First line of the now playing track information formatted for a two-line display
TwoLine_Line2_fb	S	Second line of the now playing track information formatted for a two-line display
ThreeLine_Line1_fb	S	First line of the now playing track information formatted for a three-line display
ThreeLine_Line2_fb	S	Second line of the now playing track information formatted for a three-line display
ThreeLine_Line3_fb	S	Third line of the now playing track information formatted for a three-line display
NowPlayingImageUrl_fb	S	URL for the artwork to be shown with the currently playing track



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PlayBackError_fb	S	Error message for the currently playing track
CRPC_fb	S	To be connected to the Media Server Object Router module

PARAMETERS: (anything needed to be assigned inside program)

Output Name	S	Name for the device that will be displayed in the Extension Settings for the Crestron Extension within the Roon app (see screenshot shown in Step 2 at the beginning of this file for reference)
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TESTING: (please fill out carefully)

OPS USED FOR TESTING:	CP4 on v2.7000.00052.01
SIMPL WINDOWS USED FOR TESTING:	4.1800.14.01
DEVICE DB USED FOR TESTING:	200.155.002.00
CRES DB USED FOR TESTING:	211.00.002.00
SAMPLE PROGRAM:	Roon Example CP4 – Build 10.smw



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FAQ:

Q: The Controls for a Zone are not working – the module seems to be loading but nothing is happening.

A: Please make sure that the hardware device is powered on and that it shows up as an active audio zone in the Roon app Settings menu.

Q: I cannot control the volume of a device through the RoonDeviceModule.

A: Please make sure that the hardware device supports the ability to change the volume from within Roon and is not a “Fixed Volume” device. This can be determined from the Roon app or by looking at the status of the IsFixedVolume_fb join – if this join is high, volume control is not supported for this device.

Q: How do I set the Zone Outputs for my devices?

A: Please open the Roon app and proceed to Settings> Extensions > Crestron Settings and set your RoonDeviceModule zones to align with the corresponding hardware devices in your Roon system.

Q: I don't see the Crestron Extension listed in the Roon app under Settings > Extensions.

A: Please make sure that your Roon server was powered on and connected to the network when you performed the upload of the program to the Crestron control processor. You can also perform a “Recompile All” in SIMPL Windows and then upload the Sample Project to your processor once more. If there is nothing listed under Roon Extensions related to “Crestron,” then the module is not communicating properly and a re-upload of the program is needed, or the control processor and Roon server are not communicating with each other on the network.