BluOS™

Crestron Media Player Manual

Revision History			
Version	Date	Author	Description
1.0.0	09/14/2020	Gary S.	First public release. Supports driver v1.0.0.

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1.0 Introduction

The Crestron BluOS Media Player integration module provides rich control of BluOS streaming devices via Crestron's Smart Graphics Media Player object. Functionality includes:

- Now playing information
- Playback controls
- Play queue management
- Source selection (including analog, optical, coaxial and HDMI inputs)
- Content browsing
- Searching
- Preset selection

Additionally, it offers support for programmatic control of the player transport, volume and preset recall functions.

This is a multi-language driver that includes translations for all of the BluOS supported languages.

The included example program provides a simple guide to how multiple devices can be connect to a couple of user interfaces. The touch panel file included is purely for demonstrating the module and not intended to be a complete solution. However, if you modify the module parameters to suit your hardware configuration, the program will compile without errors and be fully functional.

2.0 Installation

Ensure that you have the required version of BluOS on your players. Also ensure that you are using the proper Crestron software. These versions are listed in the Release Notes.

2.1 Equipment Setup

The BluOS Controller app (iOS or Android) must be used to initially configure the player. Using BluOS Controller, you will set up the player name, configure inputs and adjust audio settings. You also use BluOS Controller to login to streaming music services, add network music libraries, create presets etc.

The module supports player discovery using the Lenbrook Service Discovery Protocol (LSDP). It also supports static IP addresses.

3.0 Configuration

Using the driver will be simple to those familiar with other Media Player integration objects. The essential steps are:

1. Add the module to your SIMPL environment. This can be done by adding the modules and SIMPL# library to your SIMPL project directory, or by adding them to the global SIMPL Plus User Directory. You may need to refresh the user database before you see the driver appear in the symbol tree.
2. Add a BluOS Media Player module to your SIMPL program for each device you wish to control. The module is designed to sit one-to-one with each controllable BluOS zone. The module can be found under the "BluOS" section of the symbol tree.
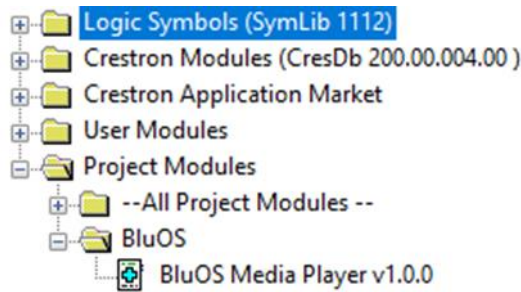
Note: If you have a multi-player configuration, such as a stereo pair, you should only add a single module and point it at the "primary" device (defined when you set up the fixed group using the BluOS app).

Note: If you have a device with multiple outputs (such as the NAD CI 580), each OUTPUT will need its own module (see "Zone" below).

3. For each module instance, you will need to configure the connection parameters as follows:

   a. NameOrIp: This should preferably be the fixed IP address of the player. You can also use the Player's name, though this will then require the device to be discovered on the network which may add delay to the start-up process.
   b. Zone: For single zone players, this should be left at the default (Output 1). For devices with multiple outputs, such as the NAD CI 580, you should select the appropriate output to control.
   c. CrpcPort: This must be an unused port for the Media Player object to communicate with the processor module. We suggest using a unique port for each instance of the module as this will ensure the current player is referenced via the Media Server Object Router (Crestron module).
   d. Adapter: Set this to the LAN adapter on which the BluOS devices are located. This will normally be the LAN adapter (default).
   e. Language: You can define the language that the BluOS device will use to localise various elements of the browse menu. This can also be changed dynamically via the Language_Code$ signal.
4. Each module must be connected to the Media Server Object Router which is explained in the Crestron documentation. The essential signals are Is_Offline_Fb, CRPC_To_Device$ and CRPC_From_Device$.
5. With a properly configured Media Server Object Router and user interface, you will no be able to browse libraries, services and presets and control the playback of the BluOS device.
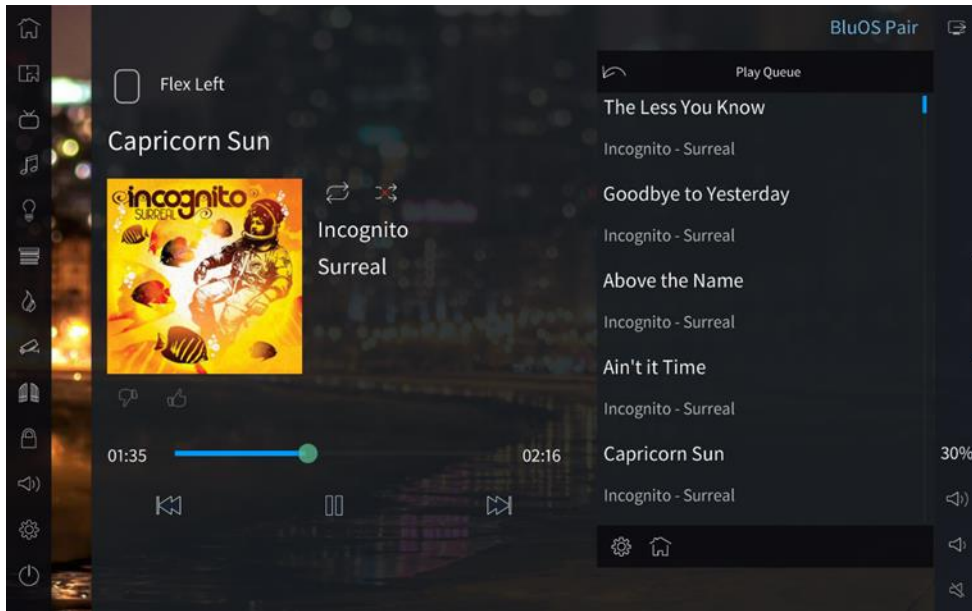
4.0 Programmatic Control

The module also provides for programmatic control over the BluOS device.
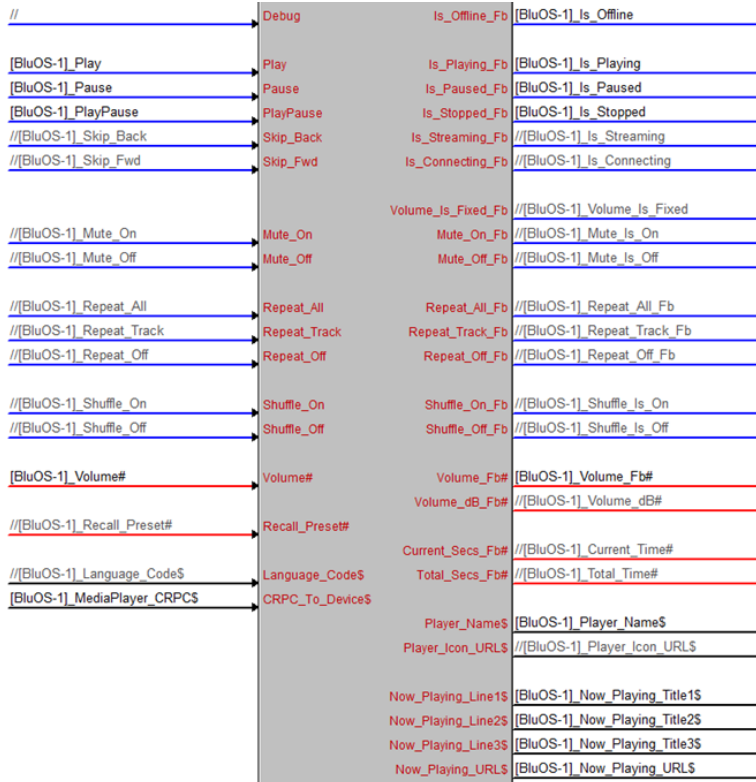
- Debug – when enabled, this will provide additional output to the console which may aid in diagnosing communication issues.
- Is_Offline_Fb – when high, indicates that the player is currently offline
- Play, Pause, PlayPause, Skip_* - Trigger these signals to control the player. This would normally be controlled from a device without a UI (handheld remote).
- Play_Fb etc. – Provides information about the current state of the device.
- Mute On/Off – controls the mute status.
- Volume_Is_Fixed_Fb – if high, the player's volume is fixed and mute/volume control will be unavailable. This can be used to show/hide volume controls.
- Repeat/Shuffle – control the play queue behaviour.
- Volume#, Volume_Fb# - the current player volume (if not fixed) as a full-scale value from 0-100% (0-65535). This controls the volume between the volume limits set for the specific device, so volume ranges can be balanced across devices and spaces.
- Language_Code$ - Set the device language dynamically by setting this signal to one of the following:

enGB	English (UK)
enUS	English (US)
zh	Chinese
cs	Czech
da	Danish
nl	Dutch
fi	Finnish
frFR	French (FR)
crCA	French (CA)
de	German
hu	Hungarian
it	Italian
ja	Japanese
ko	Korean
pl	Polish
pt	Portuguese
ru	Russian
sk	Slovak
es	Spanish
sv	Swedish

- Current/Total_Secs_Fb# - the now playing time in seconds.
- Player_Name$ - the name of the player.
- Player_Icon_URL$ - a URL to the icon for the player.
- Now_Playing_x$ - Now playing information used to drive non-Media Player UI information.

5.0 Support

For technical support issues, contact Bluesound technical support at http://support.bluesound.com or email support@bluesound.com.

6.0 Known Issues

The following issues are known to exist.

Driver Version	Issue	Workaround
All	Some issues have been reported for content using extended characters.	None