# Music Assistant Plugin for HomeSeer 4

Control Music Assistant players directly from HomeSeer 4

## What is Music Assistant?

**Music Assistant** is a free, open-source music library manager and streaming bridge that lets you play music from your own library and streaming services (Spotify, Tidal, YouTube Music, and more) on any speaker in your home — including Chromecast, Airplay, DLNA, Sonos, and Squeezebox devices.

It runs as a standalone server on your network (or as a Home Assistant add-on) and provides a unified interface to discover and control all your media players from one place.

> **Website:** https://www.music-assistant.io/
> **Cost:** Free and open source (MIT License)

## Requirements

- HomeSeer 4 (HS4) running on your network
- Music Assistant server (v2.x) already installed and running on your network
- At least one player configured in Music Assistant (Chromecast, Airplay, DLNA, etc.)
- Music Assistant HTTP API access enabled (default: port 8095)

### Running Music Assistant

The easiest way to run Music Assistant is with **Docker**. A single command on any always-on machine (NAS, Raspberry Pi, home server, or the same machine running HomeSeer) is all it takes:

> `docker run -d --name music-assistant --network host -v /path/to/data:/data ghcr.io/music-assistant/server:latest`
>
> Then open **http://<your-server-ip>:8095** in a browser to complete setup.

Music Assistant is also available as a **Home Assistant add-on** if you run Home Assistant OS or Supervised. See music-assistant.io for all installation options.

> **Note:** This plugin connects to an existing Music Assistant server. Installation of Music Assistant itself is outside the scope of this document — see music-assistant.io for full setup instructions.

## Installation

1. In the HomeSeer web interface, go to **Plug-ins → Manage**
2. Click **Additional Interfaces** to open the HomeSeer Plug-in Store
3. Search for **Music Assistant for HS4** and click **Download**
4. Enable the plug-in when prompted

5. Go to **Plug-ins → Music Assistant for HS4 → Settings** to configure the server connection

## Configuration

### Server Settings

| Setting | Description | Default |
|---|---|---|
| Server IP Address | IP address of your Music Assistant server | — |
| Port | HTTP API port for Music Assistant | 8095 |
| Username | MA login username (if authentication is enabled) | — |
| Password | MA login password (if authentication is enabled) | — |
| Poll Interval | How often (seconds) to refresh player state from MA | 10 |
| Floor (Location2) | The HS4 Location2 assigned to all player devices | Music Players |

### General Settings

| Setting | Description |
|---|---|
| Debug Mode | Logs all API requests and responses to the HS4 log. Useful for troubleshooting. |
| Remove All Devices & Rescan | Deletes all MA devices in HS4 and rediscovers them. Use this after adding new players to MA or after changing naming settings. |

## Devices & Features

The plugin automatically discovers all players from Music Assistant and creates one HS4 device per player. Each player device includes the following features:

| Feature | Type | Description |
|---|---|---|
| Playback | Status + Buttons | Current state (Idle / Playing / Paused / Unavailable). Buttons: Play, Pause, Stop, Next, Prev. |
| Volume | Slider 0–100% | Current volume level. Drag to adjust. |
| Muted | Toggle | Mute / Unmute the player. |
| Power | Toggle | Power the player on or off. |
| Track | Display | Currently playing track title. |
| Artist | Display | Currently playing artist. |
| Album | Display | Currently playing album. |
| Next Track | Display | Title of the next track in the queue. |
| | Dropdown | |

| | | |
|---|---|---|
| Play Media | | Select a playlist or radio station from your MA library to start playing. |
| Queue | Dropdown | Browse the current playback queue and jump to any track. |

## Player Naming

Music Assistant can expose the same physical speaker via multiple protocols (Airplay, Chromecast, DLNA, etc.). Each protocol creates a separate player in MA and a separate device in HS4. To make them easy to tell apart, the plugin appends a short provider tag to each device name:

| Protocol | Suffix | Example |
|---|---|---|
| Airplay | (AP) | Amp (AP) |
| Chromecast | (CC) | Amp (CC) |
| DLNA | (DLNA) | Amp (DLNA) |
| SendSpin | (SS) | Web (Chrome on Mac) (SS) |

## Using the Queue Feature

When a player is actively playing or paused, the **Queue** dropdown is populated with all tracks in the current playback queue. Selecting a track from the dropdown immediately jumps playback to that position in the queue. The queue list refreshes automatically whenever the number of tracks changes.

## Playing to Multiple Speakers

Music Assistant natively supports **player groups** — a group behaves as a single player that streams in sync to all its members. If you have configured a group in MA (e.g., a whole-house group), it appears as its own device in HS4 and can be controlled like any individual player. Create and manage groups from the Music Assistant web interface.

## How the Plugin Works

The plugin communicates with your Music Assistant server using its built-in HTTP API. Here is what happens from the moment the plugin starts:

1. **Login.** The plugin authenticates with your MA server using the username and password you configured. It receives a session token that is used for all subsequent requests. If the token expires, the plugin automatically re-authenticates.
2. **Player discovery.** The plugin calls the MA API to retrieve the list of all players. For each player not yet in HS4, a new device is created with all its features (Playback, Volume, Muted, Power, Track, Artist, Album, Next Track, Play Media, Queue). Existing devices are left unchanged, so your events and dashboards stay intact across restarts.
3. **Media library.** Playlists and radio stations from your MA library are fetched and loaded into the Play Media dropdown on each player device. The library refreshes automatically every 30 poll cycles.

4. **Polling.** On a configurable interval (default: every 10 seconds), the plugin fetches the current state of all players and updates the HS4 device features: playback state, volume, mute, power, and the currently playing track details. For any player that is actively playing or paused, it also fetches the playback queue to update the Next Track display and the Queue dropdown with all upcoming tracks.
5. **Control.** When you press a button, move a slider, or select from a dropdown in HS4, the plugin immediately sends the corresponding command to MA via the API — for example, play, pause, volume_set, play_media, or play_index to jump to a specific queue position.

All communication is one-way polling — the plugin asks MA for updates rather than MA pushing events to HS4. This keeps the integration simple and reliable without requiring any changes to the MA server or firewall rules beyond opening port 8095.

## Events & Automation

All player features are standard HS4 devices and can be used in events and scripts:

- Trigger an event when a player starts or stops playing (watch the Playback feature value)
- Set volume or mute a player as part of a scene
- Start a specific playlist when you arrive home by controlling the Play Media feature
- Display current track info on a dashboard or touchscreen