

[RF-2b]_DD-Functions.md

⚙️ Producer.ai Function Inventory

This inventory is derived from the API payload structure and represents the full boundary of the AI chat agent's control.

Audio Generation Core

Function Name	Description	Key Parameters
riff_create_custom	Create a new song from scratch using structured sound prompts and lyrics.	lyrics_id , sound_prompts[] , seed , weirdness
riff_create_cover	Transform an existing song or audio into a new style (Remix).	audio_input , cover_strength , sound_prompt , lyrics_id
riff_replace_audio	Re-generate specific time regions of a song while keeping the rest identical (regional mask).	audio_input , clips_to_replace[] , sound_prompt , weirdness
riff_extend_audio	Continue a song from a specific timestamp or the end.	audio_input , start_s , extend_duration_s , lyrics_id
riff_stem_swap	Isolate one stem (vocal/inst) and regenerate the other.	audio_input , swap_type ('vocals' or 'instrumentals') , sound_prompt
riff_create_vibe	Create a 10s stylistic audio reference ('Vibe') from a song for later injection.	audio_input , start_s

Audio Processing and Analysis

Function Name	Description	Key Parameters
riff_split_stems_v2	Separate a track into 4 distinct stems: Vocals, Drums, Bass, Other.	id (source audio UUID)
apply_audio_effect	Apply a node graph of deterministic DSP effects (EQ, Reverb, Compression, etc.).	graph[] (array of node objects), output_title
listen_to_audio_from_url	AI listens to audio and describes it textually (useful for analysis).	audio_url , prompt (what to listen for)
riff_identify_musical_key	Detect the musical key of a track.	audio_input

Lyrics Engine

Function Name	Description	Key Parameters
<code>write_lyrics</code>	Generate lyrics using the Ghostwriter agent.	<code>prompt</code> (context, genre, topic)
<code>register_lyrics</code>	Save user-written text as a lyrics object (generates a UUID).	<code>lyrics</code> (string)

Visuals and Video

Function Name	Description	Key Parameters
<code>music_video__create</code>	Generate a full music video.	<code>song_id</code> , <code>style_image_url</code> , <code>user_message</code>
<code>image_tools__generate_image</code>	Create an image from text (for cover art).	<code>prompt</code> , <code>aspect_ratio</code>
<code>video_tools__generate_video</code>	Generate a short video clip (4-8s) from text or image.	<code>inputs</code> (Text or Image based)

Data Retrieval

Function Name	Description	Key Parameters
<code>riffusion_data_songs__fetch_user_songs</code>	Get a list of the user's generated songs.	<code>num_songs</code> , <code>sort_order</code>
<code>riffusion_data_songs__fetch_trending</code>	Get trending songs from the platform.	<code>type</code> ('daily', 'weekly', etc.)