

API v37 changes

With the new audiomixer system, audio management is now independent of inputs and supports multiple outputs.

[V37 release note](#)

You can mix up to 12 different audio tracks at the same time and have up to 4 different output buses (up to 4 output languages).

When adding a new input in the **Production**, a new audio input fader will be added for this input in the audio mixer and the first output bus (P1) will be selected by default.

Input Fader Configuration

LiveU Studio supports 1–12 input faders. The current configuration is an array of objects, available in the control room initialization message (located at: `init → customer → current_live → audio_input_settings`).

Example input fader configuration:

```
1  [
2    {
3      "input": "playlist_89393470", // Fader selected input. String
4      "track": "@@1@1@1@auto", //Fader selected track. String
5      "audio-pan": 0, //Fader pan. Integer Number
6      "volume": -1, //Fader volume. Integer Number
7      "volume-mute": -1, //Fader is muted or not. Integer Number
8      "forced_audio": false, // Force audio, Boolean
9      "out": ["@3","@4"], //Selected output cards. Array of Strings (@1 = P1, @2 = P2, @3 = P3, @4 =
10     P4)
11      "index": 0, // Fader index. Integer Number
12    }
13  ]
```

To update the configuration, send the entire input faders array back to the API.

Example update message:

```
1  website : {
2    "scope": 178259349,
3    "set_audio_input_settings": [
4      {
5        "input": "playlist_89393470",
6        "track": "@@1@1@1@auto",
7        "audio-pan": 0,
8        "volume": -147,
9        "volume-mute": -1,
10       "forced_audio": false,
11       "out": ["@1","@2"],
12       "index": 0
13     },
14     {
15       "input": "playlist_89393470",
16       "track": "@@1@1@1@auto",
17       "audio-pan": 0,
18       "volume": -266,
19       "volume-mute": -1,
20       "forced_audio": false,
21       "out": [],
22       "index": 1
23     }
24   ]
25 }
```

The API will respond with the updated array.

To delete a fader, simply remove it from the array and send the updated message.

Important:

Do not configure multiple faders with the same input, same track, and shared outputs. This can disrupt live audio.

Output Fader Configuration

LiveU Studio supports four outputs. The configuration is an array of objects, available in the control room initialization message (`init` → `customer` → `current_live` → `audio_output_settings`).

Example output fader configuration:

```
1  [
2      {
3          "id": "@1", //Id of the output card. String
4          "mode": "stereo", //Output mode, always stereo. String
5          "audio-pan": 0, //Output pan. Integer Number
6          "volume": -33, //Output volume. Integer Number
7          "volume-mute": -1, //Output is muted or not. Integer Number,
8          "description": "English track" // Optional output
9          description. String
10         "lang": "abk" // Optional output lang. String based on iso
11         639-2 code
12         "enable": true //Output fader is used or not. Boolean
13     },
14     {
15         "id": "@2",
16         "mode": "stereo",
17         "audio-pan": 0,
18         "volume": -98,
19         "volume-mute": -1,
20         "enable": true
21     },
22     {
23         "id": "@3",
24         "mode": "stereo",
25         "audio-pan": 0,
26         "volume": -98,
27         "volume-mute": -1,
28         "enable": true
29     },
30     {
31         "id": "@4",
32         "mode": "stereo",
33         "audio-pan": 0,
34         "volume": 28,
35         "volume-mute": -1,
36         "enable": true
37     }
38 ]
```

There are always four outputs in the array:

- `@1` corresponds to P1
- `@2` to P2
- `@3` to P3
- `@4` to P4

To update the configuration, send the entire output faders array back to the API. Example update message:

```
1  website : {
2      "scope": 396223040,
3      "set_audio_output_settings": [
4          {
5              "id": "@1",
6              "mode": "stereo",
7              "audio-pan": 0,
8              "volume": -33,
9              "volume-mute": -1,
10             "enable": true
11          },
12          {
13              "id": "@2",
14              "mode": "stereo",
15              "audio-pan": 0,
16              "volume": -98,
17              "volume-mute": -1,
18              "enable": true
19          },
20          {
21              "id": "@3",
22              "mode": "stereo",
23              "audio-pan": 0,
```

```

24         "volume": -98,
25         "volume-mute": -1,
26         "enable": true
27     },
28     {
29         "id": "@4",
30         "mode": "stereo",
31         "audio-pan": 0,
32         "volume": -173,
33         "volume-mute": -1,
34         "enable": true
35     }
36 ]
37 }

```

The API will respond with the updated array.

Audiomixer and Hotkeys

To save an audio configuration within hotkeys, store your audio input faders configuration in an `audioSettings` object:

```

1  website: {
2      "scope": 38694502,
3      "json_action": {
4          "edit": [
5              {
6                  "id": 29002,
7                  "action": {
8                      "payload": {
9                          "active": {
10                             "55089522": "blank",
11                             "986411788": "playlist_384839480"
12                         },
13                         "settings": {},
14                         "audioSettings": [
15                             {
16                                 "audio-pan": 0,
17                                 "volume": -1,
18                                 "volume-mute": -755,
19                                 "forced_audio": false,
20                                 "out": ["@3", "@4"],
21                                 "index": 0,
22                                 "save_volume": true //Volume should be
23                                 applied
24                                 "active": true //Fader is impacted by
25                                 hotkey
26                             },
27                             {
28                                 "audio-pan": 0,
29                                 "volume": -104,
30                                 "volume-mute": -1,
31                                 "forced_audio": false,
32                                 "out": [],
33                                 "index": 1,
34                                 "active": true,
35                                 "save_volume": true
36                             },
37                             {
38                                 "audio-pan": 0,
39                                 "volume": 0,
40                                 "volume-mute": -1,
41                                 "forced_audio": false,
42                                 "out": [],
43                                 "index": 2,
44                                 "active": false,
45                                 "save_volume": false
46                             }
47                         ]
48                     },
49                     "transitionId": 0,
50                     "autoMode": false,
51                     "type": "active_grouping",
52                     "name": ""
53                 },
54                 "filter": "hotkey",
55                 "keyboards": ["M"],
56                 "autoMode": true
57             }
58         ]
59     }
60 }

```

A fader will be updated by a hotkey only if its `active` parameter is enabled in the hotkey configuration. The fader parameters affected by a hotkey are:

- `audio-pan`
- `volume` (only if `save_volume` is enabled)
- `out`
- `volume-mute`
- `forced_audio`

Publishing Points

The `audio_outputs` field has been added to the broadcast model, allowing you to control which audio output channels are active when publishing a stream.

To specify which outputs are enabled, include the `audio_outputs` object in your API request. Each key represents an output (1–4), and the value (true/false) determines whether that output is active for the broadcast.

Example:

```

1 website: {
2   "scope": 780881264,
3   "objs": {
4     "action": "edit",
5     "model": "broadcast",
6     "values": {
7       "identifier": "Boss1100_197893124213515_Instance1",
8       "stream_name": "ST_01_19351_eu-irl",
9       "studio": false,
10      "audio_outputs": {
11        "1": true, // Output 1 enabled
12        "2": true, // Output 2 enabled
13        "3": false, // Output 3 disabled
14        "4": false // Output 4 disabled
15      },
16      "streamType": "lrt",
17      "id": 39644
18    }
19  }
20 }
```

When the broadcast is published, only the outputs set to true will be active. This allows for flexible routing of audio to different destinations as needed.

The API response will confirm the status of each audio output in the `broadcasters.fields.audio_outputs` object:

```

1 {
2   "broadcasters": [
3     {
4       "identifier": 39644,
5       "description": "ST_01_19351_eu-irl",
6       "fields": {
7         "identifier": "Boss1100_197893124213515_Instance1",
8         "stream_name": "ST_01_19351_eu-irl",
9         "studio": false,
10        "audio_outputs": {
11          "1": true,
12          "2": true,
13          "3": false,
14          "4": false
15        }
16      }
17    }
18  ]
19 }
```

Note:

- Ensure that the correct outputs are enabled according to your broadcast requirements.
- Disabling unused outputs can help prevent unintended audio routing.

