Version 1.2

HTTP API for WiiM PRODUCTS

1. Introduction

1.1. API format

It supports the https based API.

1.2. Request format

You can send 'HTTPs Get' request to the device, most of the response is in the JSON format.

Request format is https://x.x.x.x/httpapi.asp?command=********

x.x.x.x is the IP address of the device (Below, we assume the IP of the device is 10.10.10.254）

******* is the actual command.

Commands can contain both integers and strings, denoted as ‘%d’ for integers and ‘%s’ for strings, respectively.

2. Open API list

2.1. Get device information

Params: getStatusEx

https://10.10.10.254/httpapi.asp?command=getStatusEx

JSON response：

```
{
```

```
"language": "en_us",

"ssid": "WiiM Mini-8FA2", // Name of the device

"hideSSID": "0",

"firmware": "Linkplay.4.6.425351", // firmware version

"build": "release",

"project": "Muzo_Mini",

"priv_prj": "Muzo_Mini",

"Release": "20220805",  // data the firmware is released

"FW_Release_version": "", // Reserved

"group": "0", // 0 means it's a master speaker, 1 means a
slave speaker in a group

"wmrm_version": "4.2", // LinkPlay's MRM SDK version,
version 4.2 or above won't work with any version below
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"expired": "0", // Reserved

"internet": "1", // Is it connected to Internet

"uuid": "FF970016A6FE22C1660AB4D8",  // The unique
ID of the device

"MAC": "08:E9:F6:8F:8F:A2", // The WiFi MAC address of
the device

"BT_MAC": "08:E9:F6:8F:8F:A3", // The BT MAC address
of the device

"AP_MAC": "0A:E9:F6:8F:8F:A2", // The MAC address of
the AP that the device is connected to

"date": "2022:08:09",
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```
"time": "07:13:16",

"netstat": "2",

"essid": "4C6966656E674F66666963655F3547", // The AP name in the HEX format

"apcli0": "192.168.4.62", // The IP v4 address of the device

"eth0": "0.0.0.0",

"ETH_MAC": "00:00:00:00:00:00",

"hardware": "ALLWINNER-R328",

"VersionUpdate": "0",   // 0: No new version; 1: new version.

"NewVer": "0",  // If there's new version, the new firmware version number

"mcu_ver": "0",

"mcu_ver_new": "0",

"update_check_count": "102",

"ra0": "10.10.10.254",

"temp_uuid": "BEDA811FFC2F4D5C",

"cap1": "0x400",   // Reserved

"capability": "0x20084000",   // Reserved

"languages": "0x1ec",

"prompt_status": "1",

"alexa_ver": "20180604",

"alexa_beta_enable": "1",
"alexa_force_beta_cfg": "1",
"dsp_ver": "0",
"streams_all": "0x1edffbfd",  // Reserved
"streams": "0x1edffbfd",  // Reserved
"region": "unknown",
"volume_control": "0",
"external": "0x0",
"preset_key": "6",  // Number of preset keys
"plm_support": "0x300006",  // Reserved
"lbc_support": "0",   // Reserved
"WifiChannel": "0",
"RSSI": "-30",   // WiFi signal strength
"BSSID": "8c:25:05:1c:41:40",   // The MAC address of connected access point
"wlanFreq": "5805",
"wlanDataRate": "390",
"battery": "0",
"battery_percent": "0",
"securemode": "1",
"ota_interface_ver": "2.0",
"upnp_version": "1005",
"upnp_uuid": "uuid:FF970016-A6FE-22C1-660A-B4D8FF970016",
"uart_pass_port": "0",

"communication_port": "8819",

"web_firmware_update_hide": "0",

"tidal_version": "2.0",

"service_version": "1.0",

"EQ_support": "Eq10HP_ver_1.0",

"HiFiSRC_version": "1.0",

"power_mode": "-1",

"security": "https\/2.0",

"security_version": "3.0",

"security_capabilities": { "ver": "1.0", "aes_ver": "1.0" },

"public_https_version": "1.0",

"privacy_mode": "0",

"DeviceName": "WiiM Mini-8FA2", // The device name

"GroupName": "WiiM Mini-8FA2"   // The group name of
the device is belonged to

}
```

2.2 Network

2.2.1 Get the connection status

Params: wlanGetConnectState

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https://10.10.10.254/httpapi.asp?command=wlanGetConnectState

Note the return result is not in json.

Return string：

Return string	**Description**
PROCESS	In progress
PAIRFAIL	Wrong password
FAIL	Connect fail
OK	connected

2.3 Playback control

2.3.1 Get the playback status

Params: getPlayerStatus

https://10.10.10.254/httpapi.asp?command=getPlayerStatus

JSON response：

```
{
    "type":"0",
    "ch":"2",
    "mode":"10",

    "loop":"4",

    "eq":"0",

    "status":"play",

    "curpos":"184919",

    "offset_pts":"184919",

    "totlen":"0",

    "alarmflag":"0",

    "plicount":"0",

    "plicurr":"0",

    "vol":"39",

    "mute":"0"

}
```

Description：

Field	**Description**
type	0: master or standalone device 1: slave
ch	0 stereo，1 left，2 right
mode	0 None 1 AirPlay or AirPlay 2 2 3rd party DLNA 10 ~ 19 Wiimu playlist （10： default wiimu mode;

	11 : USB disk playlist 16: TF card play list) 20 ~ 30 Reserved 31 Spotify Connect 32 TIDAL Connect 40 AUX-In 41 BT 42 external storage 43 Optical-In 50 Mirror 60 Voice mail 99 Slave
loop	Loop mode: 0: loop all 1: single loop 2： shuffle loop 3： shuffle, no loop 4: no shuffle, no loop
eq	The preset number of the Equalizer
status	"stop" "play"

	"loading" "pause"
curpos	Position, in ms
offset_pts	
totlen	Duration in ms
alarmflag	
plicount	The total number of tracks in the playlist
plicurr	Current track index
vol	Current volume
mute	Current mute state

2.3.2 Play audio URL

Params: setPlayerCmd:play:url

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:play:url

Play the URL. URL points to an audio stream address.

Response is always 'OK' now.

2.3.3 Play audio playlist

Params: setPlayerCmd:playlist:url:<index>

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:playlist:url:<index>

Play the playlist with the URL (URL points to the m3u or ASX playlist link, index is the start index).

Response is always 'OK' now.

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http://10.10.10.254/httpapi.asp?command=setPlayerCmd:hex_playlist:url:<index>

Play the URl (URI is the m3u or ASX playlist link, index is the start index), here, url should be hexed (please refer to 1.3)

2.3.4 Pause

Params: setPlayerCmd:pause

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:pause

2.3.5 Resume

Params: setPlayerCmd:resume

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:resume

2.3.6 Toggle pause/play

Params: setPlayerCmd:onepause

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:onepause

If the state is paused, resume it; otherwise, pause it.

2.3.7 Previous

Params: setPlayerCmd:prev

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:prev

2.3.8 Next

Params: setPlayerCmd:next

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:next

2.3.9 Seek

Params: setPlayerCmd:seek:position

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:seek:position

Position is from 0 to duration in second.

2.3.10 Stop

Params: setPlayerCmd:stop

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:stop

2.3.11 Set volume

Params: setPlayerCmd:vol:value

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:vol:value

Value can be 0 to 100.

2.3.12 Mute

Params: setPlayerCmd:mute:n

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:mute:n

Mute: n=1

Unmute: n=0

The slave mute state will be set at the same time when it's in group play.

2.3.13 Loop mode set

Params: setPlayerCmd:loopmode:n

https://10.10.10.254/httpapi.asp?command=setPlayerCmd:loopmode:n

n

0	Sequence, no loop
1	Single loop
2	Shuffle loop
-1	Sequence loop

2.4 EQ

2.4.1 Turn on the EQ

Params: EQOn
https://10.10.10.254/httpapi.asp?command=EQOn

JSON Response:

{"status":"OK"} or {"status":"Failed"}

2.4.2 Turn off the EQ setting

Params: EQOff
https://10.10.10.254/httpapi.asp?command=EQOff

JSON Response:
{"status":"OK"} or {"status":"Failed"}

2.4.3 Check if the EQ is ON or OFF

Params: EQGetStat

http://10.10.10.254/httpapi.asp?command=EQGetStat

JSON Response:
{"EQStat":"On"} or {"EQStat":"Off"}

2.4.4 Check all the possible EQ settings

Params: EQGetList

http://10.10.10.254/httpapi.asp?command=EQGetList
Response:
["Flat", "Acoustic", "Bass Booster", "Bass Reducer", "Classical", "Dance", "Deep", "Electronic", "Hip-Hop", "Jazz", "Latin", "Loudness", "Lounge", "Piano", "Pop", "R&B", "Rock", "Small Speakers", "Spoken Word", "Treble Booster", "Treble Reducer", "Vocal Booster"]

2.4.5 Set the specific EQ with name

Params: EQLoad

http://10.10.10.254/httpapi.asp?command=EQLoad:xxx

JSON Response:
{"status":"OK"} or {"status":"Failed"}
Note: xxx is the one of the name in the list returned by EQGetList, i.e., EQLoad:Flat

2.5 Device control

2.5.1 Reboot

Params: reboot

http://10.10.10.254/httpapi.asp?command=reboot

JSON Response:
{"status":"OK"}

2.5.2 Shutdown

Params: setShutdown:sec

http://10.10.10.254/httppapi.asp?command=setShutdown:sec

Shutdown device in sec

sec:

0: shutdown immediately

-1: cancel the previous shutdown timer

JSON Response:

{"status":"OK"} or {"status":"Failed"}

2.5.3 Get the shutdown timer

Params: getShutdown

http://10.10.10.254/httppapi.asp?command=getShutdown

Return the seconds

2.6 Alarm clock

2.6.1 Get network time

If the device has no internet access, you need to sync its time with:

http://10.10.10.254/httpapi.asp?command=timeSync:YYYYMMDDHHMMSS

YYYY is year（such as 2015)，MM is month (01~12)，DD is day (01~31)，HH is hour (00~23)，MM is minute (00~59)，SS is second (00~59)

In UTC

2.6.2 Set Alarm

http://10.10.10.254/httpapi.asp?command=setAlarmClock:n:trig:op:time[:day][:url]

n: 0~2，currently support max 3 alarm

trig: the alarm trigger：

0 cancel the alarm, for example: setAlarmClock:n:0

1 once，day should be YYYYMMDD

2 every day

3 every week，day should be 2 bytes (00”~“06”), means from Sunday to Saturday.

4 every week，day should be 2 bytes, the bit 0 to bit 6 means the effect，for example, “7F” means every day in week, “01” means only Sunday

5 every month，day should be 2 bytes (“01”~“31”)

op: the action

0 shell execute

1 playback or ring

2 stop playback

time: should be HHMMSS, in UTC

day:

if trigger is 0 or 2, no need to set.

if trigger is 1, should be YYYYMMDD (%04d%02d%02d)

if trigger is 3, day should be 2 bytes (“00”~“06”), means from Sunday to Saturday.

if trigger is 4, day should be 2 bytes, the bit 0 to bit 6 means the effect，for example, “7F” means every day in week, “01” means only Sunday if trigger is 5, day should be 2 bytes (“01”~“31”)

url：the shell path or playback url, should less than 256 bytes

2.6.3 Get alarm

http://10.10.10.254/httpapi.asp?command=getAlarmClock:n

n: 0~2，currently support max 3 alarm

```
{"enable":"1",

"trigger":"%d",

"operation":"%d",

"date"::"%02d:%02d:%02d",   //if not a “every day” alarm, no this

"week_day":"%d", //if not a “every week” alarm, no this

"day":"%02d",   //if not a “every month” alarm, no this

"time":"%02d:02d:%02d",

"path":"%s""}
```

2.6.4 Stop the current alarm

http://10.10.10.254/httpapi.asp?command=alarmStop

2.7 Source Input Switch

2.7.1 Switch the source input

http://10.10.10.254/httpapi.asp?command=setPlayerCmd:switchmode:%s

the mode can be the text as below:

line-in (it refers to aux-in too)

bluetooth

optical

udisk

wifi

2.8 Presets

The WiiM Home App allows users to configure 12 presets for quick access to preferred radio stations, playlists, mixes, albums, or artists. Each preset is accessible through its assigned number.

2.8.1 Play preset with preset number

http://10.10.10.254/httpapi.asp?command=MCUKeyShortClick:%d

%d: Range is from 1 to 12

2.8.2 Get Preset List

http://10.10.10.254/httpapi.asp?command=getPresetInfo

JSON Response

```
{
    "preset_num": 3,
    "preset_list": [{
        "number": 1,
        "name": "BBC Radio Norfolk",
        "url": "http:\/\/as-hls-ww-live.akamaized.net\/pool_904\/live\/ww\/bbc_radio_norfolk\/bbc_radio_norfolk.isml\/bbc_radio_norfolk-audio%3d96000.norewind.m3u8",

        "source": "Linkplay Radio",

        "picurl": "http:\/\/cdn-profiles.tunein.com\/s6852\/images\/logoq.jpg?t=638353933090000000"

    }, {

        "number": 6,

        "name": "Radio Paradise",

        "url": "http:\/\/stream.radioparadise.com\/flacm",

        "source": "RadioParadise",

        "picurl": "https:\/\/cdn-profiles.tunein.com\/s13606\/images\/logod.png?t=637541039930000000"

    }, {

        "number": 8,

        "name": "1. Country Heat",

        "url": "unknow",

        "source": "Prime",

        "picurl": "https:\/\/m.media-amazon.com\/images\/I\/51uR6AJUAQL.jpg"

    }]

}
```

Description

Field	type	Description
name	string	Playlist name

Field	type	Description
number	int	Preset index (Start from 1)
picurl	string	Cover picture url
preset_list	json array	Preset list information
preset_num	int	Total number of presets
source	string	Music source
url	string	Play url

2.9 Get Current Track Metadata

2.9.1 Command

http://10.10.10.254/httpapi.asp?command=getMetaInfo

2.9.2 JSON Response

```
{
  "metaData": {
    "album": "Country Heat",
    "title": "Old Dirt Roads",
    "artist": "Owen Riegling",
    "albumArtURI ": "https://m.media-amazon.com/images/I/51iU0odzJwL.jpg",
    "sampleRate ": "44100",
    "bitDepth": "16"
  }
}
```

2.10 Audio Output Control

2.10.1 Get audio output mode

https://10.10.10.254/httpapi.asp?command=getNewAudioOutputHardwareMode

JSON Response：

```
{"hardware":"2","source":"0","audiocast":"0"}
```

Description：

Field	Description
hardware	Hardware Interface output mode: 1: AUDIO_OUTPUT_SPDIF_MODE 2: AUDIO_OUTPUT_AUX_MODE 3: AUDIO_OUTPUT_COAX_MODE
source	BT source output mode: 0: disable 1: active
audiocast	Audio cast output mode: 0: disable 1: active

2.10.2 Set audio output mode

https://10.10.10.254/httpapi.asp?command=setAudioOutputHardwareMode:%d

Description：

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Field	Description
outputmode	Hardware Interface output mode: 1: AUDIO_OUTPUT_SPDIF_MODE 2: AUDIO_OUTPUT_AUX_MODE 3: AUDIO_OUTPUT_COAX_MODE

Response is 'OK'