

Checkmate HttpServer API v1 – Documentation

1. Overview

Checkmate HttpServer is a lightweight HTTP server built on NanoHTTTPD for Android, providing RESTful endpoints to control device features (camera, audio, streaming, recording, GPS) and to serve recorded media with range requests. It also exposes an endpoint to trigger in-app Magisk module updates.

2. Authentication

To secure access, the server supports API key authentication. Set an environment variable `CHECKMATE_API_KEY` when starting the server. All requests (except `OPTIONS` and `HEAD`) must include:

- `X-API-Key: your_api_key`

3. CORS and HTTP Headers

The server automatically handles CORS preflight requests (`OPTIONS`) and responds with the following headers:

- `Access-Control-Allow-Origin: *`
- `Access-Control-Allow-Methods: GET, POST, PUT, DELETE, OPTIONS, HEAD`
- `Access-Control-Allow-Headers: Content-Type, Range, X-API-Key`

4. Error Handling

- `400 Bad Request: Invalid parameters`
- `401 Unauthorized: Missing or invalid API key`
- `404 Not Found: Endpoint or resource not found`
- `416 Range Not Satisfiable: Invalid byte range`
- `500 Internal Server Error: Unexpected errors`

5. Request & Response Format

All endpoints consume and produce JSON. Include `Content-Type: application/json` for POST requests. Responses follow this structure:

```
{  
  "field": "value",
```

```
"field2": true,
...
}
```

6. Endpoints

Method	Endpoint	Body	Description
GET	/api/v1/system/info	-	Returns device info: model, serial, battery, app version
GET	/api/v1/camera/status	-	Current camera (Front/Back)
POST	/api/v1/camera/set	{"type":"Front"}	Set camera type
GET	/api/v1/audio/status	-	Audio enabled status and type
POST	/api/v1/audio/set	{"enable":true}	Enable or disable audio
GET	/api/v1/streaming/status	-	Streaming status
POST	/api/v1/streaming/set	{"action":"start"}	Start or stop streaming
GET	/api/v1/recording/status	-	Recording status
POST	/api/v1/recording/set	{"action":"start"}	Start or stop recording
GET	/api/v1/playback/list	-	List MP4 recordings
POST	/api/v1/playback/download	{"filename":"clip.mp4"}	Download recording with range support
GET	/api/v1/gps/status	-	GPS enabled status and coordinates
POST	/api/v1/gps/set	{"action":"start","interval":60}	Start/stop GPS or set interval
POST	/api/v1/app/update	{"url":"<module-zip-url>"}	Trigger download & install of a new app module

7. Example Usage

Trigger a Magisk Module Update

Request:

POST /api/v1/magisk/update HTTP/1.1

Host: localhost:8080

Content-Type: application/json

X-API-Key: your_api_key

```
{  
  "url": "https://example.com/mymodule-3.380.zip"  
}
```

Response:

```
{  
  "status": "Magisk update triggered"  
}
```