expelee

A Secure Place For Web3

SMART CONTRACT AUDIT OF

AUDIO

Contract Address

0xEf6B6859c13957cb927a9A34De3987c311f70885

Audit Summary

Expelee team has performed a line-by-line manual analysis and automated review of the smart contract. The smart contract was analysed mainly for common smart contract vulnerabilities, exploits, and manipulation hacks. According to the smart contract audit:

Audit Result: **PASSED**

KYC Verification: NOT DONE TILL DATE OF AUDIT

Audit Date: 26/08/2022

Audit Team: **EXPELEE**

Be aware that smart contracts deployed on the blockchain aren't resistant to internal exploit, external vulnerability, or hack. For a detailed understanding of risk severity, source code vulnerability, functional hack, and audit disclaimer, kindly refer to the audit.

DISCLAMER

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment. Team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document.

Always Do your own research and protect yourselves from being scammed. The Expelee team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools.

Under no circumstances did Expelee receive a payment to manipulate those results or change the awarding badge that we will be adding in our website. Always Do your own research and protect yourselves from scams.

This document should not be presented as a reason to buy or not buy any particular token. The Expelee team disclaims any liability for the resulting losses.

Contract Review

Contract Name	**Audio**
Compiler Version	**v0.8.16+commit.07a7930e**
Optimization	**No with 200 runs**
License	**default license**
Explorer	**https://bscscan.com/address/0xEf6B6859c13957cb927a9A34De3987c311f70885#code**
Symbol	**AUD**
Decimals	**18**
Total Supply	**28000000**
Domain	**https://audiotoken.net/**

Project Review

Token Name: AUDIO

Web Site: https://audiotoken.net/

Twitter: https://twitter.com/Audio_Token

Telegram: https://t.me/AudToken

Instagram:https://www.instagram.com/audioweb3/

Discord: https://discord.com/invite/c5Vk8qF7

Contract Address:
0xEf6B6859c13957cb927a9A34De3987c311f70885

Platform: Binance Smart Chain

Token Type: BEP 20

Language: SOLIDITY

Audit Methodology

The scope of this report is to audit the smart contract source code. We have scanned the contract and reviewed the project for common vulnerabilities, exploits, hacks, and back-doors. Below is the list of commonly known smart contract vulnerabilities, exploits, and hacks:

Category

Smart Contract Vulnerabilities	- Unhandled Exceptions - Transaction Order Dependency - Integer Overflow - Unrestricted Action - Incorrect Inheritance Order - Typographical Errors - Requirement Violation
Source Code Review	- Gas Limit and Loops - Deployment Consistency - Repository Consistency - Data Consistency - Token Supply Manipulation
Functional Assessment	- Operations Trail & Event Generation - Assets Manipulation - Liquidity Access

Vulnerability Checklist

Nº	Description.	Result
1	Compiler warnings.	Passed
2	Race conditions and Re-entrancy. Cross-function raceconditions.	Passed
3	Possible delays in data delivery.	Passed
4	Oracle calls.	Passed
5	Front running.	Passed
6	Timestamp dependence.	Passed
7	Integer Overflow and Underflow.	Passed
8	DoS with Revert.	Passed
9	DoS with block gas limit.	Passed
10	Methods execution permissions.	Passed
11	Economy model.	Passed
12	The impact of the exchange rate on the logic.	Passed
13	Private user data leaks.	Passed
14	Malicious Event log.	Passed
15	Scoping and Declarations.	Passed
16	Uninitialized storage pointers.	Passed
17	Arithmetic accuracy.	Passed
18	Design Logic.	Passed
19	Cross-function race conditions.	Passed
20	Safe Zeppelin module.	Passed
21	Fallback function security.	Passed

Manual Audit

🟢 **Low-Risk**

🟢 2 low-risk code issues found

🟡 **Medium-Risk**

🟡 1 medium-risk code issues found

🔴 **High-Risk**

🔴 0 high-risk code issues found

Audit Summary

```
Compiled with solc
Number of lines: 941 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 9 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 15
Number of informational issues: 18
Number of low issues: 2
Number of medium issues: 1
Number of high issues: 0
ERCs: ERC20
```

Name	# functions	ERCS	ERC20 info	Complex code	Features
SafeMath	8			No	
IUniswapV2Router02	24			No	Receive ETH
IUniswapV2Factory	8			No	
Audio	44	ERC20	No Minting	Yes	Receive ETH
			Approve Race Cond.		Send ETH

● Medium-risk

1) Reentrancy vulnerabilities.

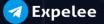Detection of the reentrancy bug.

```solidity
function addLiquidity(uint256 tokenAmount, uint256 ethAmount) private {
        // add the liquidity
        uniswapV2Router.addLiquidityETH{value: ethAmount}(
            address(this),
            tokenAmount,
            0, // slippage is unavoidable
            0, // slippage is unavoidable
            owner(),
            block.timestamp
        );
```

Recommendation

Apply the check-effects-interactions pattern.

🟢 Low-Risk

2) Unused Return

The return value of an external call is not stored in a local or state variable.

```
uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
        tokenAmount,
        0, // accept any amount of ETH
        path,
        address(this),
        block.timestamp
```

Recommendation

Consider ordering multiplication before division.

3) **Public Functions that could be declared externally**

Public functions that are never called by the contract should be declared external to save gas.

```
function setMaxTransactionAmount(uint256 maxTxAmount) public onlyOwner {
    maxTransactionAmount = maxTxAmount;
    require(maxTransactionAmount >= totalSupply().div(300), "value too low");
}

function setSwapAndLiquifyEnabled(bool _enabled) public onlyOwner {
    swapAndLiquifyEnabled = _enabled;
    emit SwapAndLiquifyEnabledUpdated(_enabled);
```

Recommendation

Use the external attribute for functions never called from the contract.

Important Points To Consider

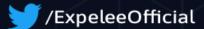|	
Can Take Back Ownership	Not detected
Owner Change Balance	Not detected
Blacklist	Not detected
Modify Fees	Detected
Proxy	Not detected
Whitelisted	Not detected
Anti Whale	Detected
Trading Cooldown	Not detected
Transfer Pausable	Not detected
Cannot Sell All	Not detected
Hidden Owner	Not detected
Creator Address	0x3e19217507328e9eb3819b377bbbf59309c6eff8
Creator Balance	28000000 AUD
Owner Address	0x3e19217507328e9eb3819b377bbbf59309c6eff8
Mint	Not detected

About Expelee

Expelee is a community driven organisation dedicated to fostering an anti-rug movement. We're here to keep investment safe from fraudsters. We've encountered several rug pulls and know how it feels to be duped, which is why we don't want anybody else to go through the same experience. We are here to raise awareness through our
services so that the future of cryptocurrency can be rug-free.
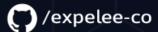
The auditing process focuses to the following
considerations with collaboration of an expert team:

- Functionality test of the Smart Contract to determine if proper logic has been followed throughout the whole process.
- Manually detailed examination of the code line by line by experts.
- Live test by multiple clients using Test net.
- Analysing failure preparations to check how the Smart
- Contract performs in case of any bugs and vulnerabilities.
- Checking whether all the libraries used in the code are on the latest version.
- Analysing the security of the on-chain data.

Social Media

/Expelee

/ExpeleeOfficial

/expelee-co