

# VIBE广播编码器维护手册

设备参数配置表

序号	参数名称	数值	说明
1	TS Packet Size	188	传输流组包大小
2	Output Clock	3110294Hz	输出带宽频率
	所有广播相同的配置		
	Type	Radio Service	服务类型（Television Service可选）
	Provider	JSBC	节目提供商名称
3	第一路广播		
	Service ID	2	节目ID号
	Name	Audio1	节目名称
	PID PMT	201	节目映射表ID
	PID PCR	101	每一路立体声广播的输出比特率
	Rate	256Kbit/s	每一路立体声广播的输出比特率
4	第二路广播		
	Service ID	3	
	Name	Audio2	
	PID PMT	202	
	PID PCR	102	
	Rate	256Kbit/s	每一路立体声广播的输出比特率

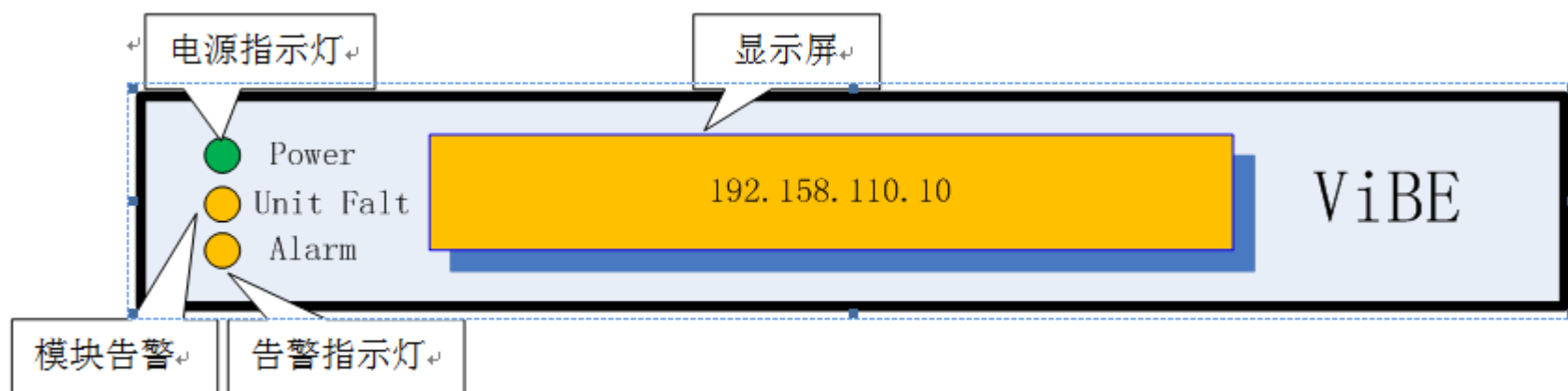
设备维护项目表（1）

序号	维护项目	参考值	实测值	维护周期
PCR、PTS间隔、表重复间隔技术要求和测试				
1	PCR抖动	$\pm 500\text{ns}$		
2	PCR间距	$0 \sim 40\text{ms}$		
3	PTS/PCR延迟	$-500 \sim 1000\text{ms}$		
4	PTS间距	$0 \sim 700\text{ms}$		
5	PAT	$\leq 500\text{ms}$		
6	PMT	$\leq 500\text{ms}$		
7	NIT	$\leq 10000\text{ms}$		
8	SDT	$\leq 2000\text{ms}$		
9	TDT	$\leq 30000\text{ms}$		

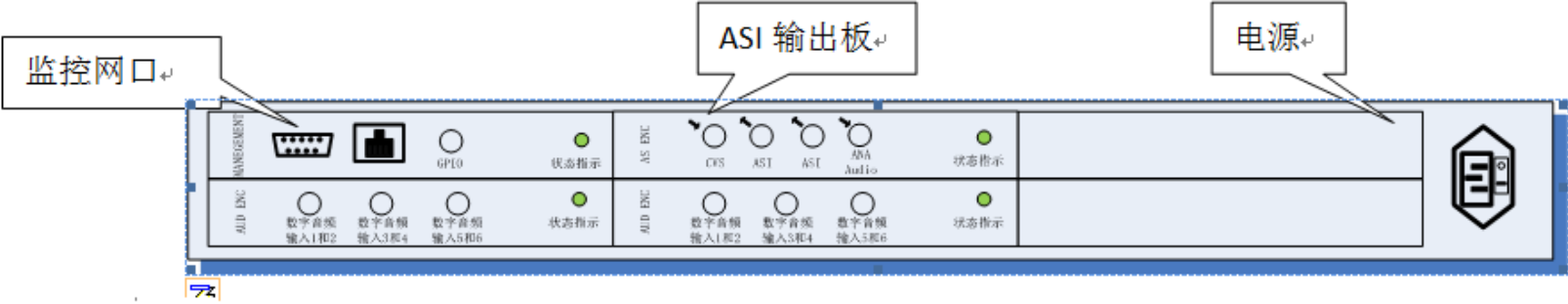
## 设备维护项目表（2）

码流监测（一级差错：一级差错会导致解码器无法正确解码）			
1	TS同步丢失	大于两个传输包连续出现同步字节错误	
2	同步字节错误	同步字节不等0x47	
3	PAT错误	PDI=0x0000的TS包出现如下错误： 1.table_id=0x00的section出现间隔>0.5s 2.出现table_id不是0x00的section 3.Scrambling_control_field不是00	
4	连续计数错误	1.TS包顺序错误 2.同一个TS包连续出现大于两次 3.TS包丢失	
5	PMT错误	1.table_id=0x02的section出现间隔>0.5s 2.在包含section（table_id=0x02）的TS包中 scrambling_control_field≠00	
6	PID错误	指定测试的PID没有在规定时间内出现	

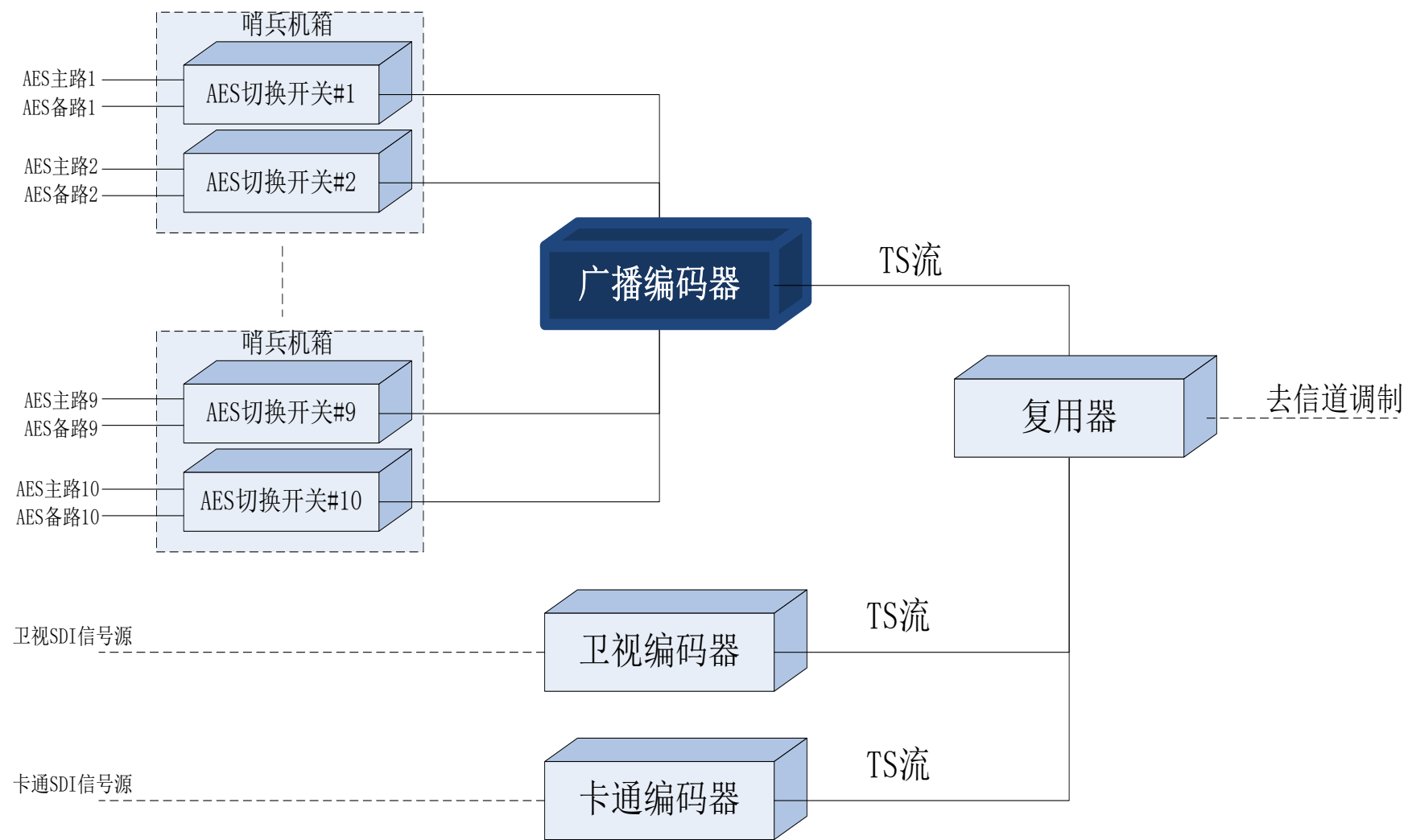
## 设备面板介绍



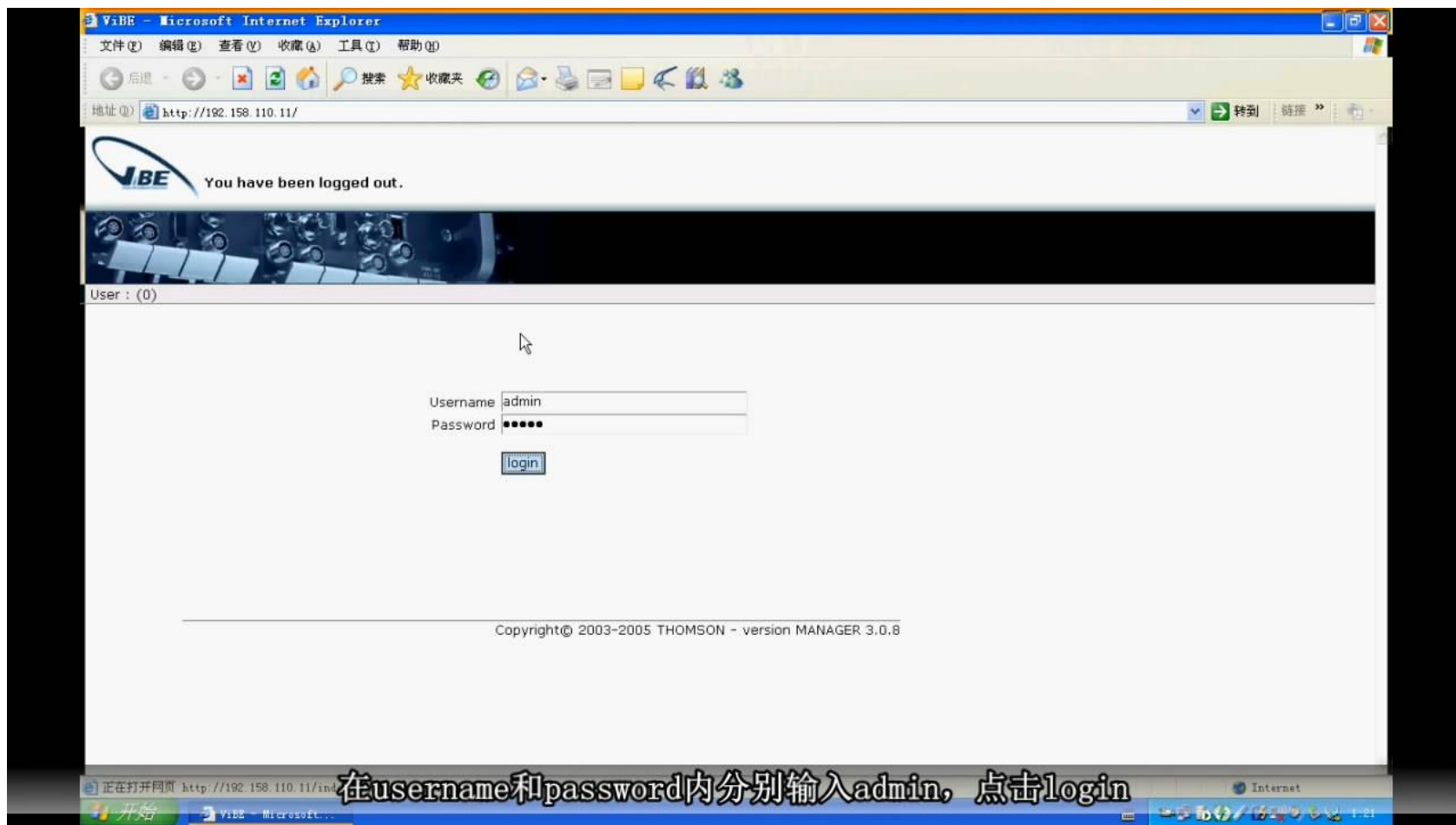
# 设备背板介绍



# 音频编码板设备在上行系统中的位置



# 设备简明操作——登录





# 设备简明操作——查看告警信息




User : admin/administrator(2) > [Logout](#)

### ViBE 1U Status

[Controller : 1](#)  
1

[Encoder : 4](#)  
4

Mode  
Rate

 [Alarms](#)

DVB Conformity  
3.110 Mbps

<a href="#">Audio1</a> Radio Service	2 On Air	<a href="#">Audio</a>	101	On Air	0.256 Mbps
<a href="#">Audio2</a> Radio Service	3 On Air	<a href="#">Audio</a>	102	On Air	0.256 Mbps
<a href="#">Audio3</a> Radio Service	4 On Air	<a href="#">Audio</a>	103	On Air	0.256 Mbps
<a href="#">Audio4</a> Radio Service	5 On Air	<a href="#">Audio</a>	104	On Air	0.256 Mbps
<a href="#">Audio5</a> Radio Service	6 On Air	<a href="#">Audio</a>	105	On Air	0.256 Mbps
<a href="#">Audio6</a> Radio Service	7 On Air	<a href="#">Audio</a>	106	On Air	0.256 Mbps
<a href="#">Audio7</a> Radio Service	8 On Air	<a href="#">Audio</a>	107	On Air	0.256 Mbps
<a href="#">Audio8</a> Radio Service	9 On Air	<a href="#">Audio</a>	108	On Air	0.256 Mbps
<a href="#">Audio9</a> Radio Service	10 On Air	<a href="#">Audio</a>	109	On Air	0.256 Mbps
<a href="#">Audio10</a> Radio Service	11 On Air	<a href="#">Audio</a>	110	On Air	0.256 Mbps

# 设备简明操作——查看告警信息

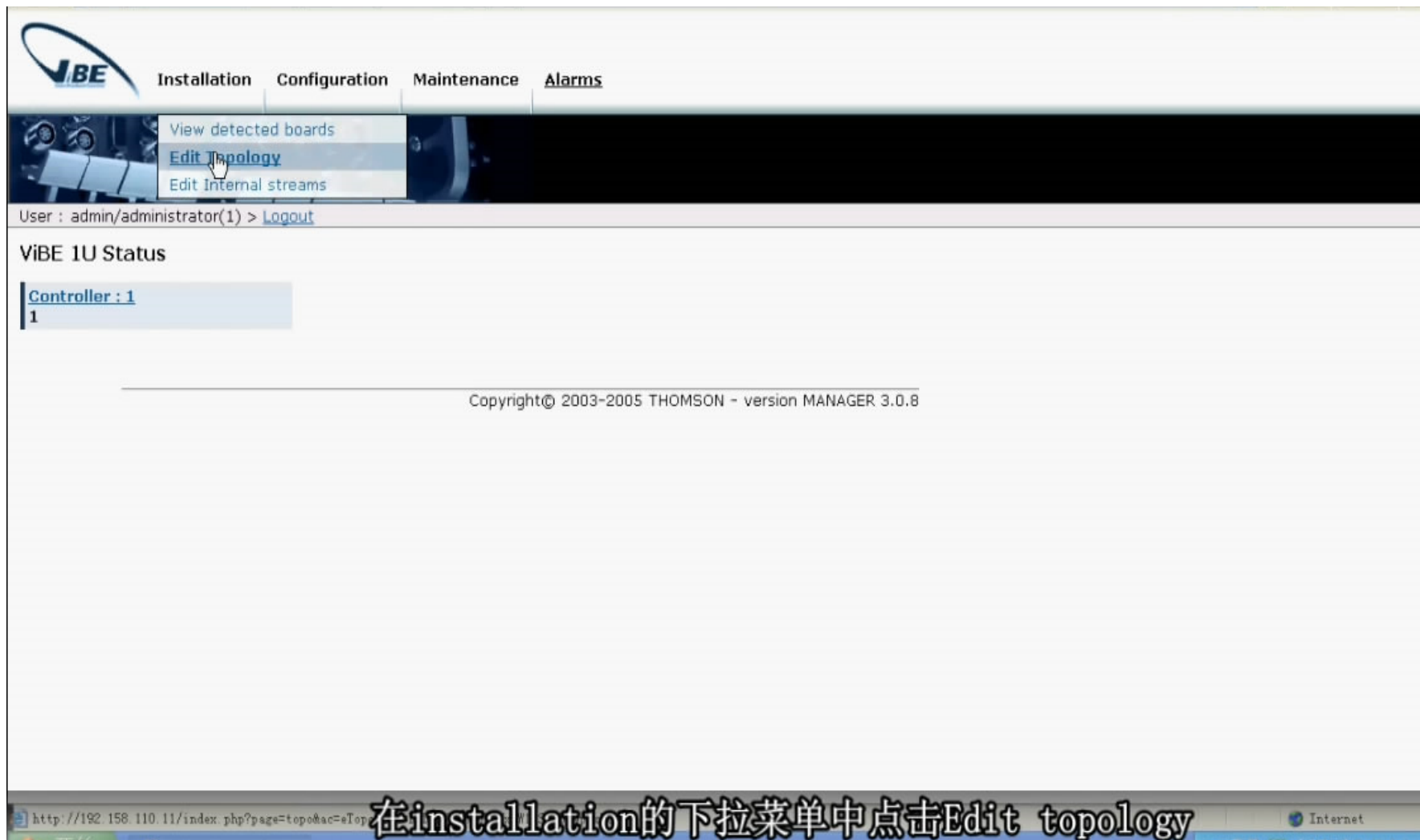
## ViBE Active Alarms

This page is used to view ViBE alarms.

### Encoder ID# 4: 4


104	[AUD/slot 2/RC_1] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_1] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_2] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_2] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_5] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_5] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_6] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_6] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_1] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_1] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_2] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_4] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_4] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_3] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_3] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_4] : detected silence on left channel	<a href="#">Help</a>
104	[AUD/slot 3/RC_4] : detected silence on right channel	<a href="#">Help</a>
104	[AUD/slot 2/RC_3] : detected silence on left channel	<a href="#">Help</a>

## 设备简明操作——配置已经安装的板卡（1）



The screenshot displays the ViBE 1U Status web interface. At the top, there is a navigation bar with the IBE logo and four tabs: **Installation**, **Configuration**, **Maintenance**, and **Alarms**. The **Installation** tab is active, and its dropdown menu is open, showing three options: **View detected boards**, **Edit Topology** (which is highlighted with a mouse cursor), and **Edit Internal streams**. Below the navigation bar, a status bar indicates the user is **admin/administrator(1)** and provides a **Logout** link. The main content area is titled **ViBE 1U Status** and contains a section for **Controller : 1** with the value **1** displayed below it. At the bottom of the page, a copyright notice reads: **Copyright© 2003-2005 THOMSON - version MANAGER 3.0.8**. The browser's address bar at the very bottom shows the URL **http://192.158.110.11/index.php?page=topo&ac=sTopo**. A large, bold, black text overlay at the bottom of the screenshot reads: **在installation的下拉菜单中点击Edit topology**.

## 设备简明操作——配置已经安装的板卡（2）

 Installation Configuration Maintenance **Alarms**



User : admin/administrator(1) > [Logout](#)


### ViBE Declared Topology

This page is used to edit the chassis topology.



ViBE 1U [More information...](#)

**Declared functions**


		1	Controller	1	<a href="#">More information...</a>
--	---	---	------------	---	-------------------------------------

[Add function](#) 

The following figure shows the boards declared in the chassis Topology.



Click on the boards to display function technical information.

<http://192.158.110.11/index.php?page=topo&ac=addFunc&id=85Df9GdcUTMVx5W1jSgCB> **点击add function** 

## 设备简明操作——配置已经安装的板卡 (3)

The screenshot displays the 'ViBE Edit Function' web interface. At the top, a user login bar shows 'User : admin/administrator(1) > Logout'. Below this, the page title is 'ViBE Edit Function' and a description states: 'This page is used to add a board or add an option to the chassis Topology.'

The main content area is titled 'Add a new function' and contains the following fields and options:

- Identifier:** 4 (1..1023)
- Name:** 4
- Slot:** 2 (Indicate the board slot, or the first board slot if the function features several boards)
- Type:** Encoder (dropdown menu)
- Boards:** A list of boards on the left (H264-CP, SP-Enc, DP-Enc, AD-Enc, Adv-Proc, AA-Enc) and a list on the right (Aud-Enc(1), Aud-Enc(2), AS-Enc). Arrows indicate selection and movement between the lists.
- Options:** A list of options on the left (N601S1X4, N601S1XT, N601S1XD, N601S1XA, N601S2X4, N601S2XT) and a list on the right (N601S1X6, N601S2X6). Arrows indicate selection and movement between the lists.

An 'Ok' button is located at the bottom left of the dialog box.

At the bottom of the interface, a copyright notice reads: 'Copyright© 2003-2005 THOMSON - version MANAGER 3.0.8'.

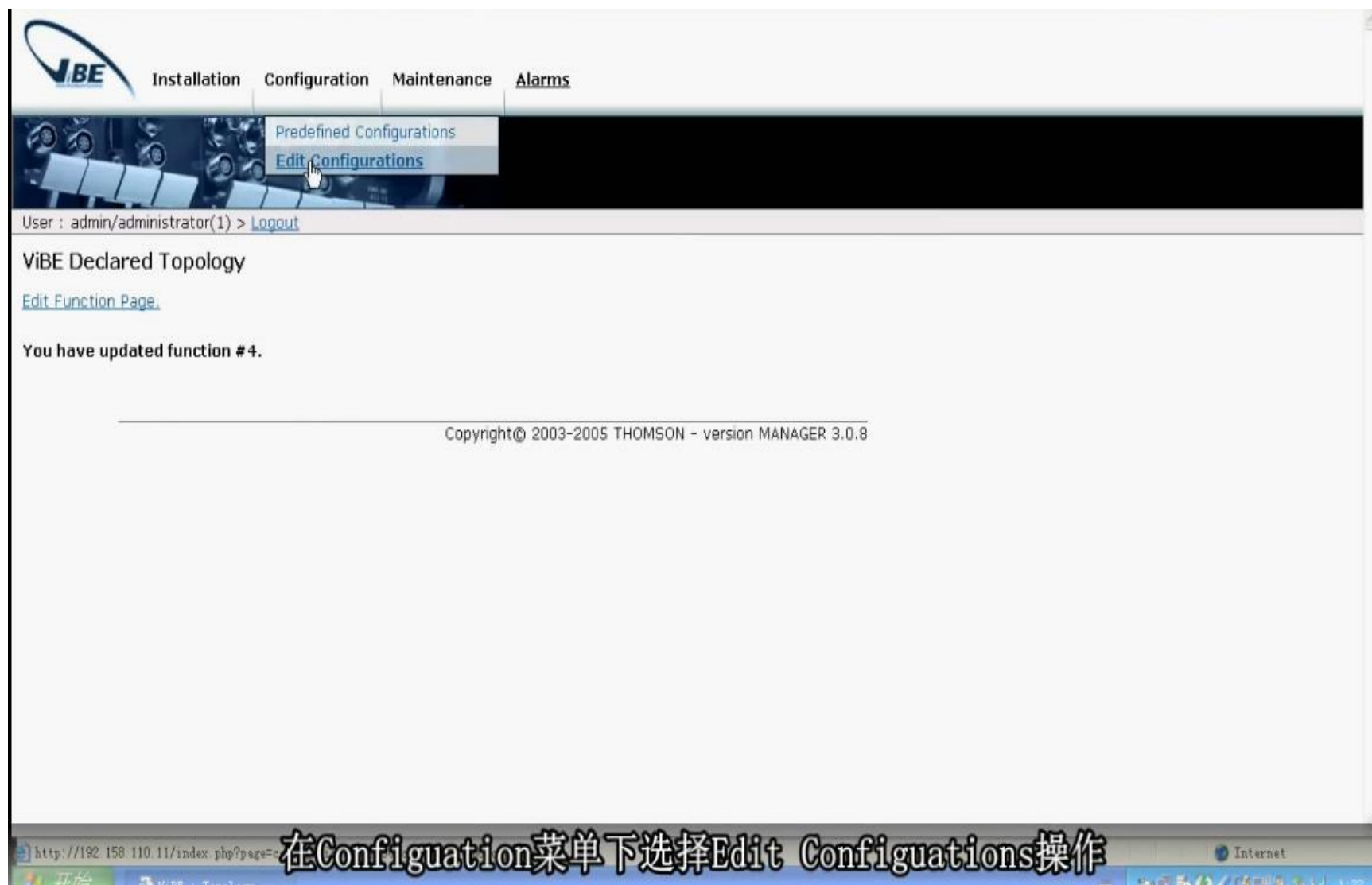
Overlaid on the bottom of the screenshot is a large, bold, black text box with white outlines containing the following instructions in Chinese:

在Boards里头选择Aud-Enc(1)、Aud-Enc(2)和AS-Enc  
在Options里头选择N601S1X6或N601S2X6选项卡

The Windows taskbar at the very bottom shows the '开始' (Start) button, the 'ViBE : Topology' application icon, and the system clock showing '1:22'.

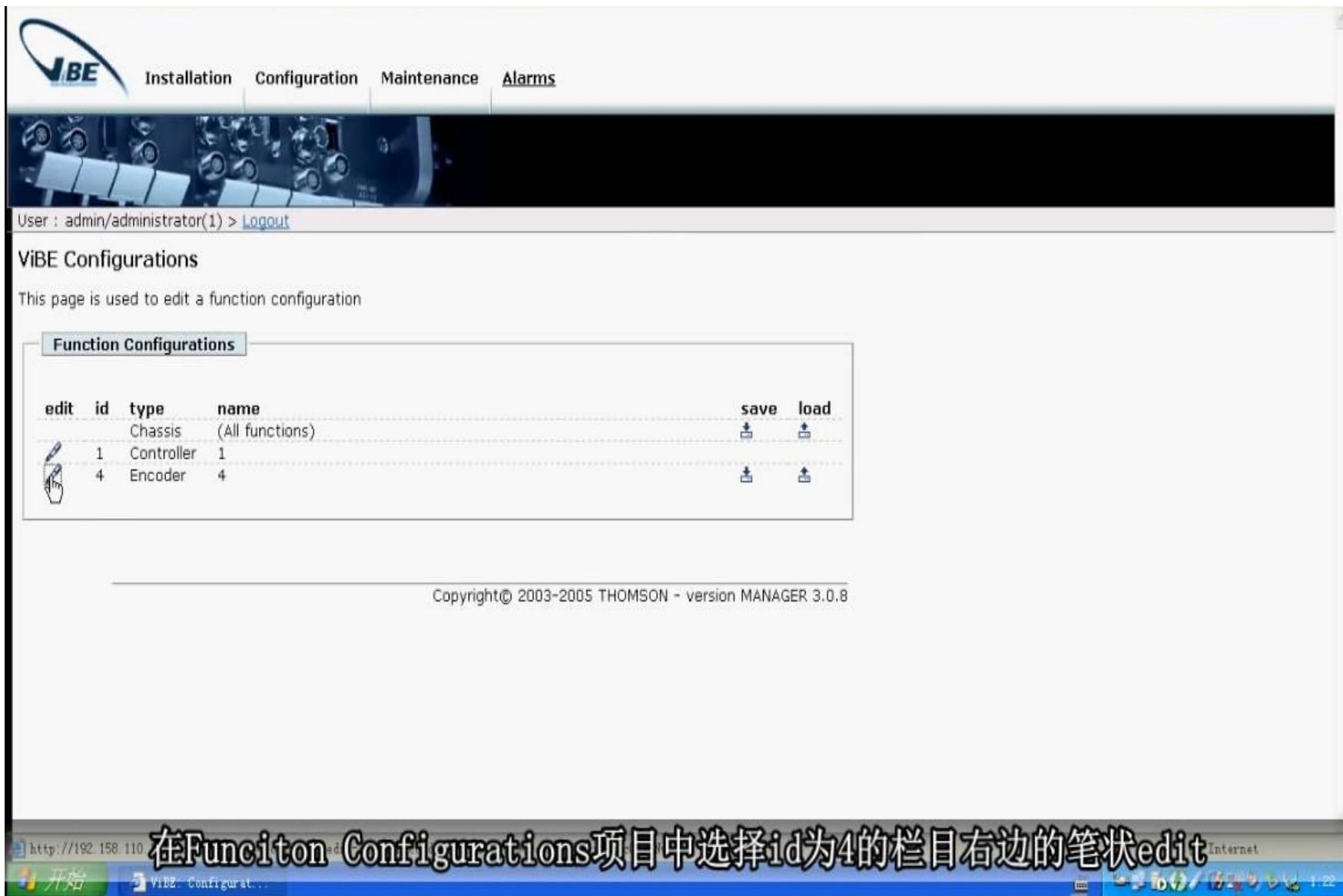


# 设备简明操作——配置广播编码器输出码率（1）



在Configuration菜单下选择Edit Configurations操作

## 设备简明操作——配置广播编码器输出码率（2）








Installation Configuration Maintenance Alarms

User : admin/administrator(1) > [Logout](#)

### ViBE Configurations

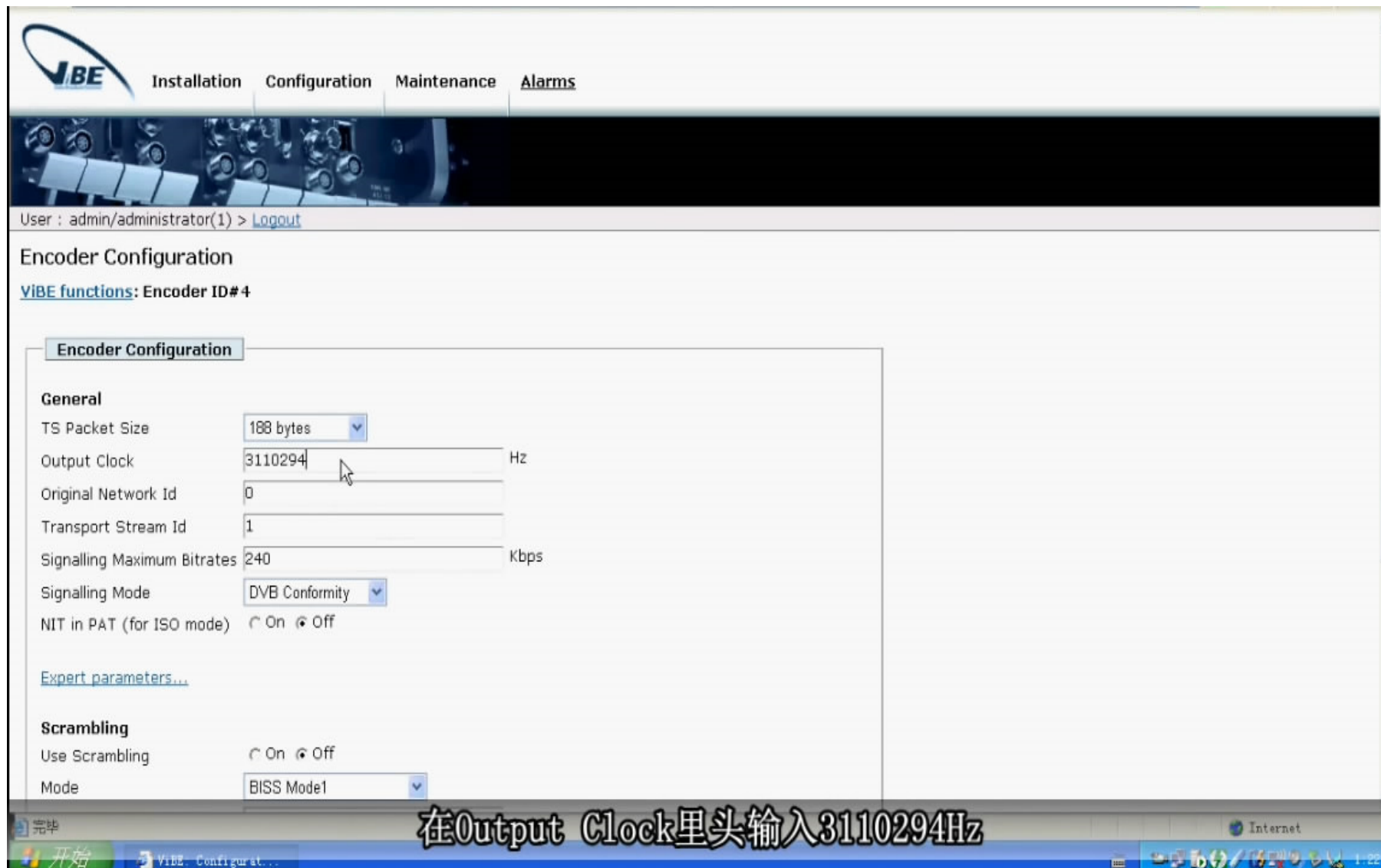
This page is used to edit a function configuration

edit	id	type	name	save	load
		Chassis	(All functions)		
	1	Controller	1		
	4	Encoder	4		

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在Function Configurations项目中选择id为4的栏目右边的笔状edit

## 设备简明操作——配置广播编码器输出码率（3）



The screenshot displays the IBE (Installation, Configuration, Maintenance, Alarms) web interface. The user is logged in as admin/administrator(1) and is viewing the Encoder Configuration page for Encoder ID#4. The General tab is selected, showing the following settings:

- TS Packet Size: 188 bytes (dropdown)
- Output Clock: 3110294 Hz (text input)
- Original Network Id: 0 (text input)
- Transport Stream Id: 1 (text input)
- Signalling Maximum Bitrates: 240 Kbps (text input)
- Signalling Mode: DVB Conformity (dropdown)
- NIT in PAT (for ISO mode): ☐ On ☒ Off

Below the General tab, there is a link for [Expert parameters...](#) and a Scrambling section with the following settings:

- Use Scrambling: ☐ On ☒ Off
- Mode: BISS Mode1 (dropdown)

A red text overlay at the bottom of the screen reads: 在Output Clock里头输入3110294Hz.



## 设备简明操作——配置广播编码器输出码率（4）

TS Packet Size: 188 bytes

Output Clock: 3110294 Hz

Original Network Id: 0

Transport Stream Id: 1

Signalling Maximum Bitrates: 240 Kbps

Signalling Mode: DVB Conformity

NIT in PAT (for ISO mode): ☐ On ☒ Off

[Expert parameters...](#)

**Scrambling**

Use Scrambling: ☐ On ☒ Off

Mode: BISS Mode1

Key: 00 00 00 00 00 00

**Services**

There is no service defined for this TS

[Add service](#)

然后在下方点击Submit按钮提交操作

# 设备简明操作——配置音频编码设置 (1)

**General**

TS Packet Size188 bytes

Output Clock3110294 Hz

Original Network Id0

Transport Stream Id1

Signalling Maximum Bitrates240 Kbps

Signalling ModeDVB Conformity

NIT in PAT (for ISO mode)☐ On ☒ Off

[Expert parameters...](#)

**Scrambling**

Use Scrambling☐ On ☒ Off

ModeBISS Mode1

Key00 00 00 00 00 00

**Services**

There is no service defined for this TS

[Add service](#)

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http://192.158.110.11/index.php?page=config&ac=new-service&cuid=4

开始

VIDE: Configur at...

Internet

1:22

点击Services内的Add service

## 设备简明操作——配置音频编码设置 (2)

Installation Configuration Maintenance Alarms

User : admin/administrator(1) > [Logout](#)

### Encoder Configuration

ViBE functions: [Encoder ID#4: New service](#)

#### Service Configuration

**General**

Service Id	2
Name	Audio1
PID PMT	201
PID PCR	101
Type	Radio Service
Provider	JSBC
Running Status	Running

**DPI (Digital Program Insertion)**

DPI specific parameters ☐ On ☒ Off

Port (SCTE104)	6022
PID (SCTE35)	800

在Service Id栏中输入2  
在Name栏中输入Audio1  
在PID PMT中输入201  
在PID PCR中输入101  
在Type中选择Radio Service  
在Provider中输入JSBC

开始 ViBE: Configurat... Internet 1:23

## 设备简明操作——配置音频编码设置 (3)

User : admin/administrator(1) > [Logout](#)

### Encoder Configuration

[ViBE functions:](#) [Encoder ID#4: New service](#)

**Service Configuration**

**General**

Service Id	<input type="text" value="2"/>
Name	<input type="text" value="Audio1"/>
PID PMT	<input type="text" value="201"/>
PID PCR	<input type="text" value="101"/>
Type	<input type="text" value="Radio Service"/> <input type="text" value="2"/>
Provider	<input type="text" value="JSBC"/>
Running Status	<input type="text" value="Running"/>

**DPI (Digital Program Insertion)**

DPI specific parameters	<input type="radio"/> On <input checked="" type="radio"/> Off
Port (SCTE104)	<input type="text" value="6022"/>
PID (SCTE35)	<input type="text" value="800"/>

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点击下方的Submit

## 设备简明操作——配置音频编码设置（4）

Name

PID PMT

PID PCR

Type

Provider

Running Status

257

256

Television Service

Running

1

DPI (Digital Program Insertion)

DPI specific parameters

Port (SCTE104)

PID (SCTE35)

☐ On ☒ Off

6022

800

submit

reset

Components

There is no component defined for this service

[Add video](#) - [Add audio](#) - [Add VBI](#) - [Add Downstream Data](#) - [Add shared](#)

Descriptors

There is no descriptor for this element

[Add PMT descriptor](#)

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在Components项目中选择Add audio添加音频

http://192.158.110.11/index.php?page=config&ac=...

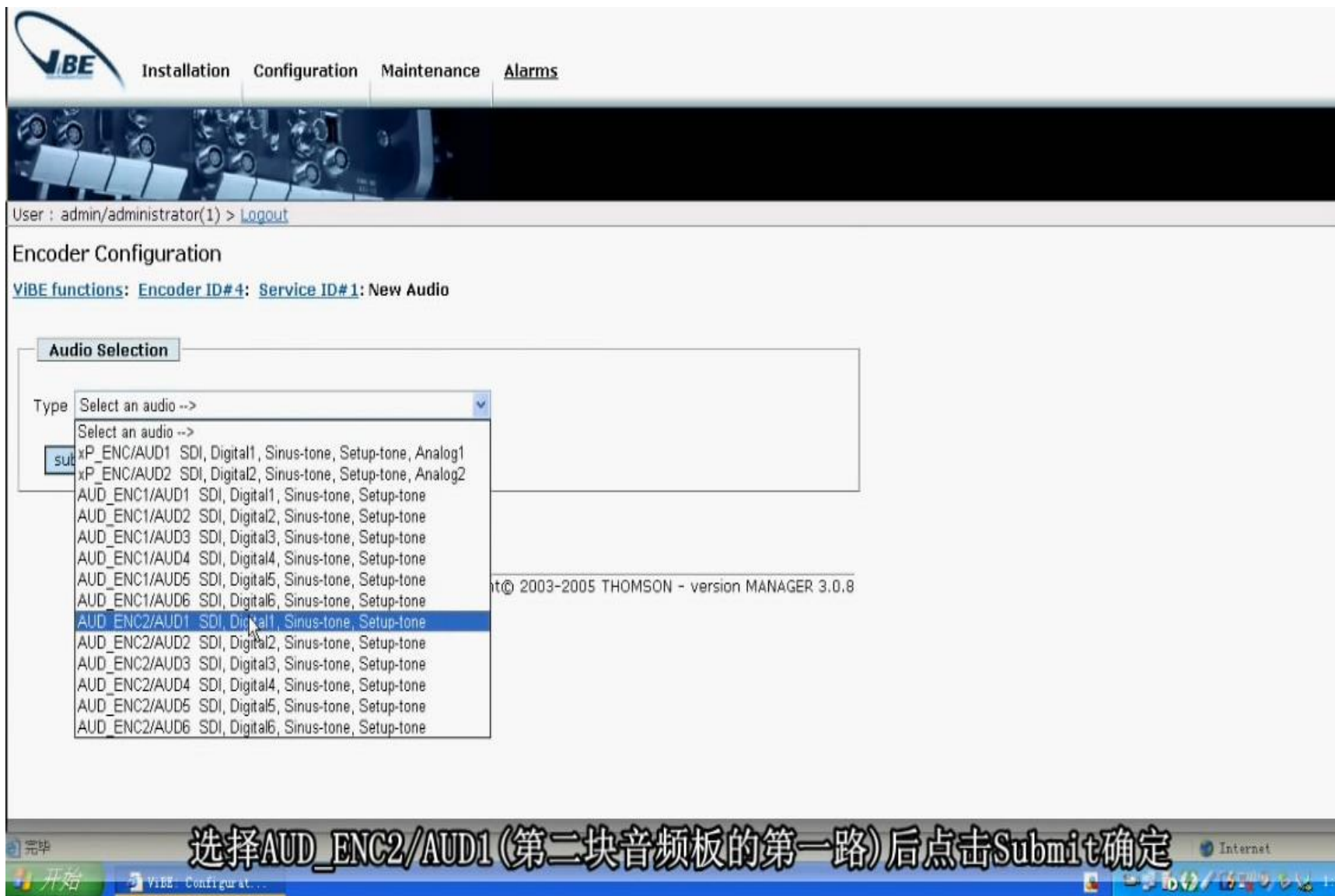
开始

ViBE: Configur...

Internet

1:23

## 设备简明操作——配置音频编码设置 (5)



The screenshot displays the ViBE Configuration web interface. At the top, there is a navigation bar with links for Installation, Configuration, Maintenance, and Alarms. Below this, a banner image shows a close-up of electronic components. The user is logged in as admin/administrator(1) and is viewing the Encoder Configuration page. The page title is "Encoder Configuration" and the sub-header is "ViBE functions: Encoder ID#4: Service ID#1: New Audio".

The "Audio Selection" section contains a "Type" dropdown menu. The dropdown is open, showing a list of audio options. The option "AUD\_ENC2/AUD1 SDI, Digital1, Sinus-tone, Setup-tone" is highlighted in blue. A "Submit" button is visible to the left of the dropdown.

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选择AUD\_ENC2/AUD1 (第二块音频板的第一路)后点击Submit确定



## 设备简明操作——配置音频编码设置（6）

Installation Configuration Maintenance Alarms

User : admin/administrator(1) > Logout

### Encoder Configuration

ViBE functions: Encoder ID#4: Service ID#1: New Audio

#### Audio Configuration (AUD\_ENC2/AUD1)

**General**

Source: Digital

Group Channel: Group 1/1

PID: 101

PCR: ☒ On ☐ Off

Status: On Air

Standard: MPEG-1 Layer II

Mode: Stereo

Rate: 256 kbits/s

Headroom: 18 dB

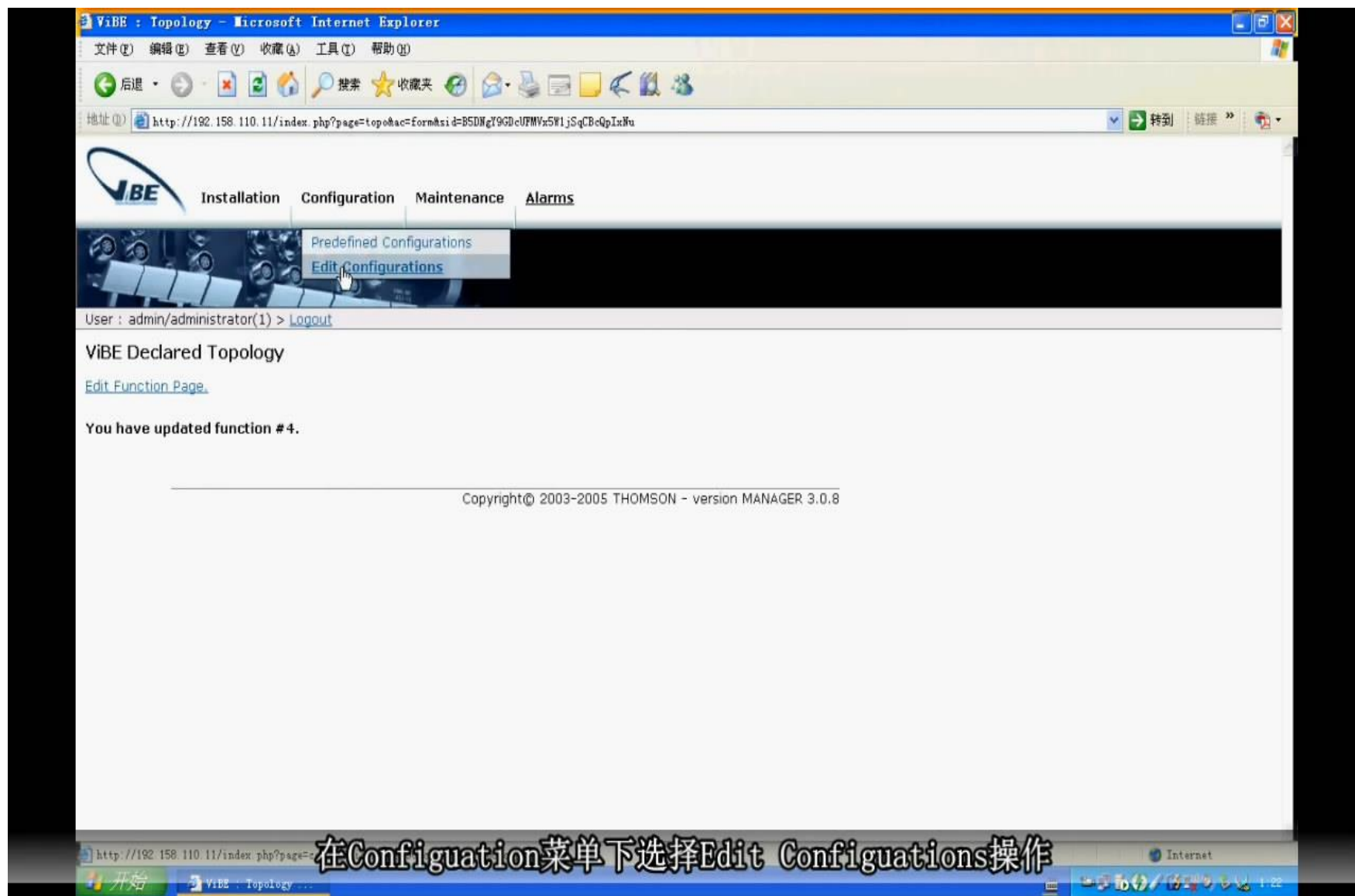
Alignment Level: 0 dBu

**Advanced**

Additional Delay: 0 ms

Source栏选择Digital  
PID栏输入101  
PCR开到On  
Rate栏选择256kbit/s  
其他设置不变

## 设备简明操作——保存配置文件操作 (1)





## 设备简明操作——保存配置文件操作（2）

ViBE: Configuration - Microsoft Internet Explorer

文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)

地址(Q) http://192.158.110.11/index.php?page=config&sid=B5DNgY9GDcUFMVz5W1jSgCBcQpLxNu

Installation Configuration Maintenance Alarms

User : admin/administrator(1) > [Logout](#)

### Encoder Configuration

[ViBE functions](#): Encoder ID#4

**Encoder Configuration**

**General**

TS Packet Size [v]  
Output Clock 3110294 Hz  
Original Network Id 0  
Transport Stream Id 1  
Signalling Maximum Bitrates 240 Kbps  
Signalling Mode [v]  
NIT in PAT (for ISO mode) ☐ On ☒ Off

[Expert parameters...](#)

**Scrambling**

Use Scrambling ☐ On ☒ Off  
Mode [v]

点击ViBE function

# 设备简明操作——保存配置文件操作 (3)

ViBE: Configuration - Microsoft Internet Explorer

文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)

地址( ) http://192.158.110.11/index.php?page=config&id=BSUNgY9GDeUFWVz5W1jSgCBcQpLxNu

ViBE Installation Configuration Maintenance Alarms

User: admin/administrator(1) > Logout

### ViBE Configurations

This page is used to edit a function configuration

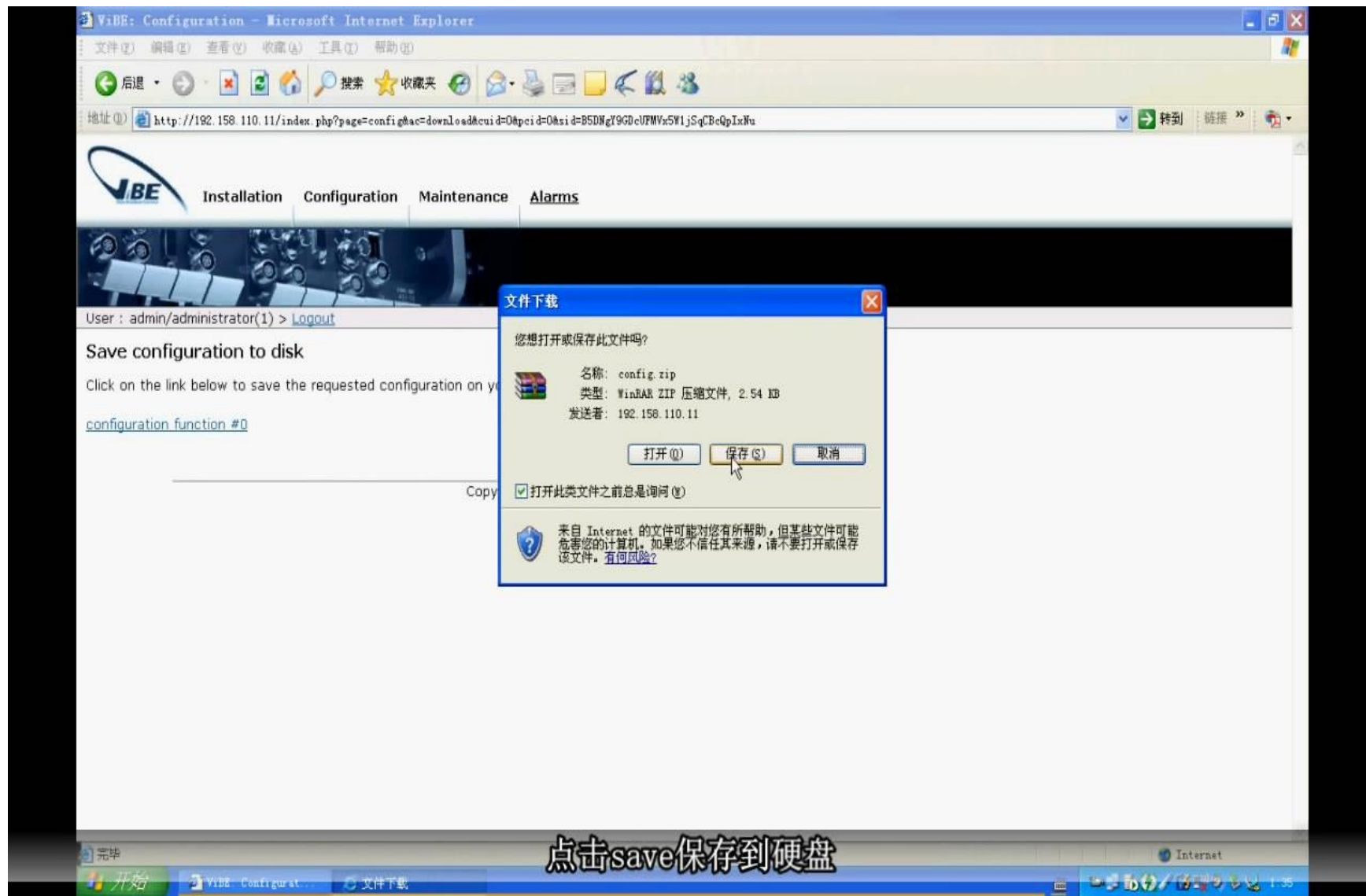
**Function Configurations**

edit	id	type	name	save	load
		Chassis	(All functions)		
	1	Controller	1		
	4	Encoder	4		

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点击save保存到硬盘

# 设备简明操作——保存配置文件操作（4）



# 设备简明操作——加载配置文件操作（1）

ViBE: Configuration - Microsoft Internet Explorer

文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)

地址: http://192.158.110.11/index.php?page=config&sid=pAMcRLnxpr54nnDjtjFMc5q0jgd100w

Installation Configuration Maintenance Alarms

User : admin/administrator(2) > Logout

### ViBE Configurations

This page is used to edit a function configuration

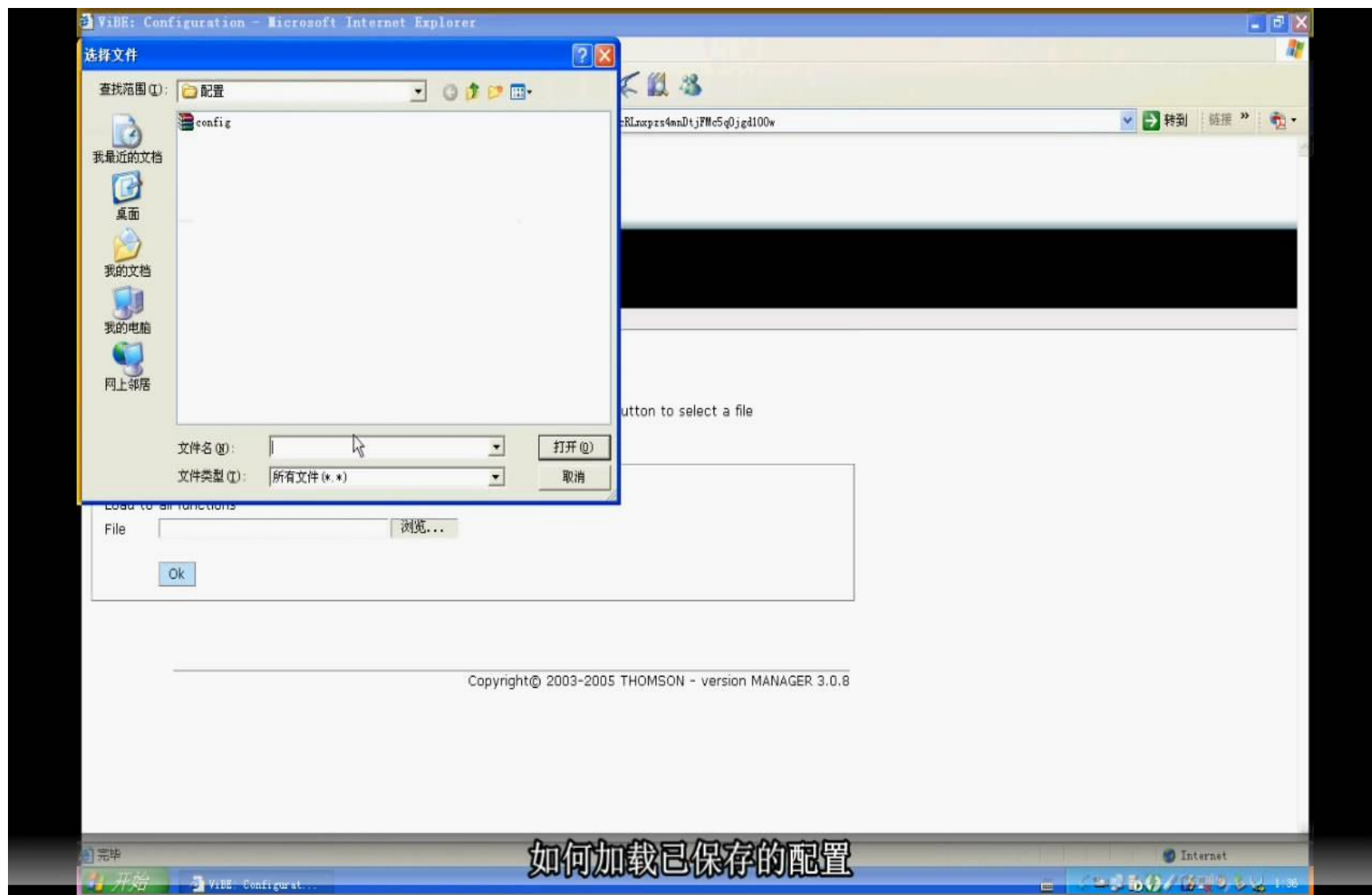
**Function Configurations**

edit	id	type	name	save	load
	1	Chassis	(All functions)		
	4	Controller	1		
		Encoder	4		

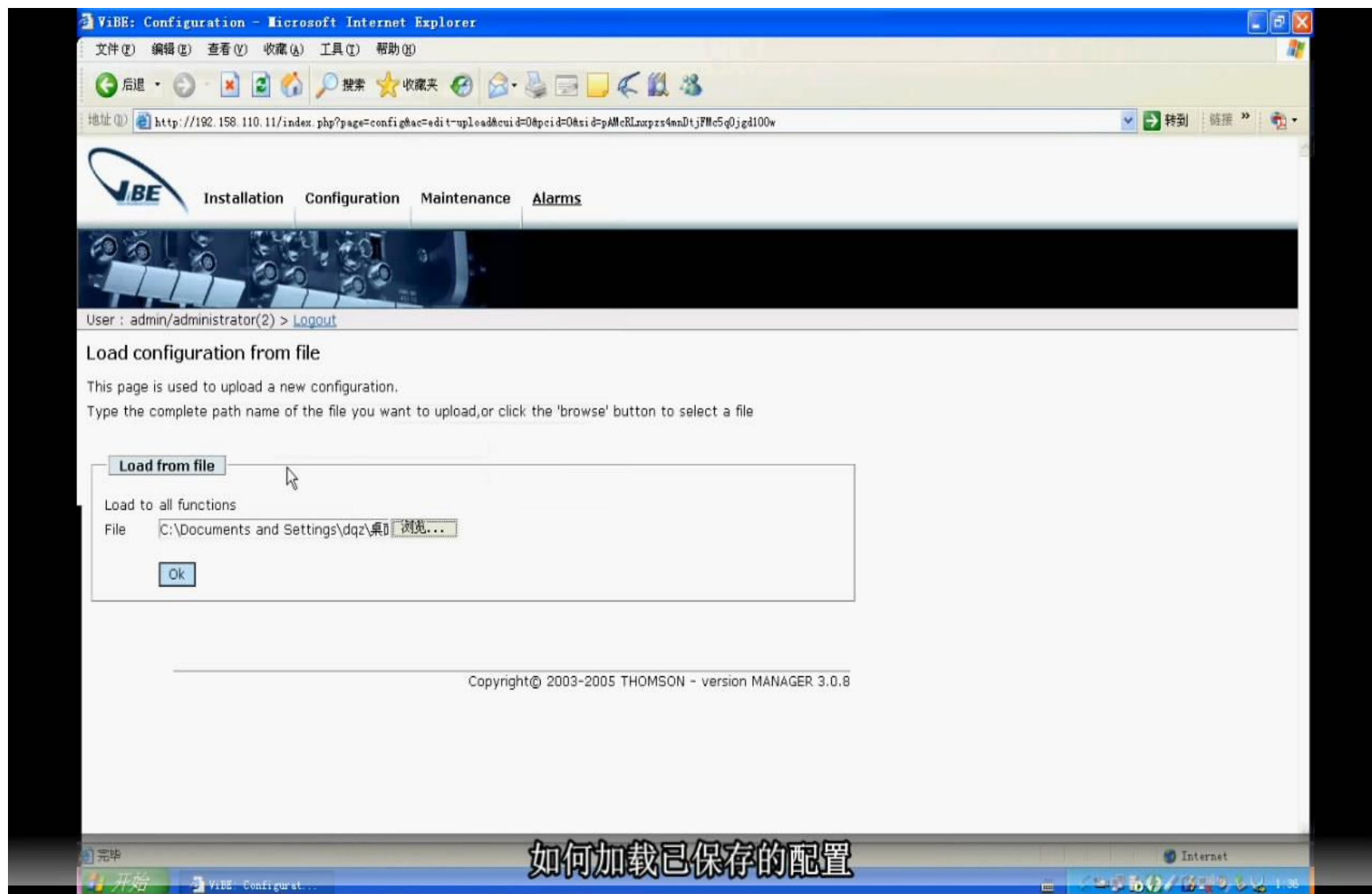
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如何加载已保存的配置

## 设备简明操作——加载配置文件操作（2）

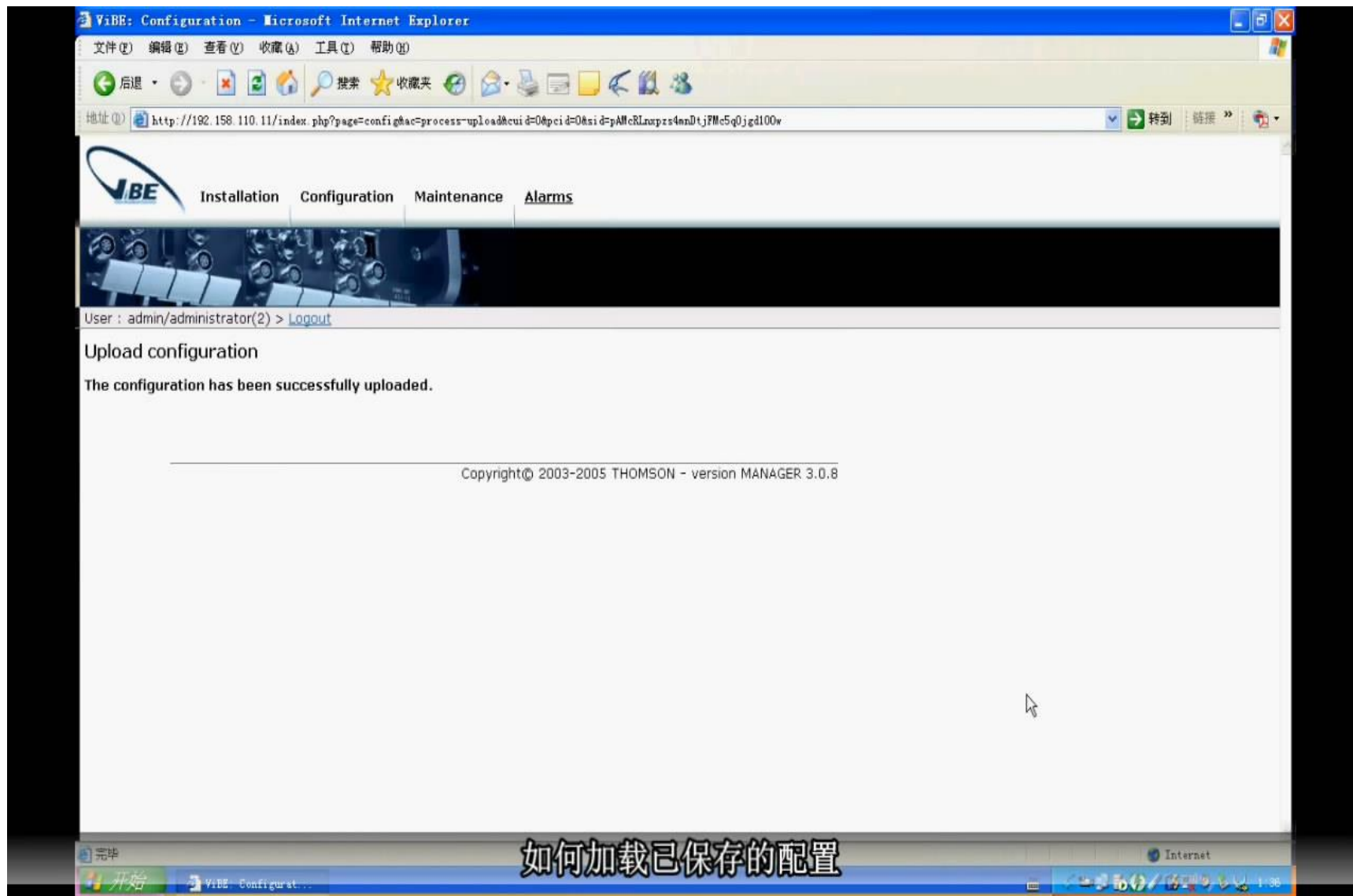


# 设备简明操作——加载配置文件操作（3）





## 设备简明操作——加载配置文件操作（4）



谢 谢！

2010-08