



Manual do Usuário

ACT800

VOD MEDIABOX



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1. Antes de usar

Obrigado por escolher o equipamento ACT800 VOD MEDIABOX (daqui em diante ACT800) da ACTIA.

Leia este manual cuidadosamente antes de usar o produto para obter o máximo de todos os recursos e funções.

Mantenha este manual de forma segura, pois pode ser uma ferramenta valiosa para ajudá-lo a entender todos os recursos do ACT800.

1.1. Referenced Documents

Table 1 – Referenced Documents

ITEM	DOCUMENT ID.	TITLE
1.	---	ACTIA Systems Quality Manual
2.	PG.04	Design Procedure
3.	PE.04	Management of Resources
4.	PE.08	Technical Documentation Procedure
5.	480221	VOD Client Manager Manual

1.2. Acronyms, Abbreviations and Definitions

3G	Third generation of wireless mobile telecommunications technology
APN	Access Point Name
FTP	File Transfer Protocol
FW	Firmware
GPIO	General Purpose Input / Output
GPS	Global Positioning System
HW	Hardware
LED	Light Emitting Diode
PoE	Power over Ethernet
SSID	Service Set Identifier
SW	Software
UMTS	Universal Mobile Telecommunications System
USB	Universal Serial Bus
VOD	Video on Demand

1.3. Note, Caution and Warning Messages



Note!

Notes show information of special interest or importance.

Notes contain any type of information, but not the information related to the safety which is always written in the notices of caution or warning.

Notices for procedures that can cause physical harms to the people or to equipment cannot be written in a note.



CAUTION

The notice of Caution marks special attention to tasks that could damage the equipment or could cause data loss.

Notices of Caution are always placed before the step of the procedure where could be caused the damage to the equipment.



WARNING

The notices of Warning marks special attention to tasks that can cause injury or death to the people (maintenance personnel or other people).

The notices of Warning are always placed before the step of the procedure where the injury or the death can be caused.

1.4. Conventions

- A text wrapped with the "lower than" arrow (<) and the "greater than" (>) arrow:
 - Highlighted **in bold** points out a **<menu>** or **<window>** offering a set of options.
 - No-highlighted (regular text) points out an **<option>** in a **<menu>**.
- A text enclosed in square brackets wrapping a text highlighted **in bold** points out a **[button]**, a **[selection box]** or a **[field]** which requires a user action: a click, check/uncheck an option or enter data.
- A text between double quotes emphasized **in bold** points out a **"text inside a window"** of the software application.

2. The ACT800 Equipment

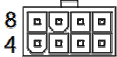
The ACT800 is entertainment equipment intended to passengers transport vehicles that allows users to enjoy movies and music on demand, real-time route information and Internet through an application on their mobile devices (tablets and smartphones).

Main features:

- Ultra compact design.
- Individual use.
- Friendly user interface.
- Audio and video player.
- Wi-Fi (with external access point).
- Internet (with external modem).
- GPS.

2.1. Connectors

Table 2 – ACT800 Connectors

ID.	NAME	TYPE	PIN No.	FUNCTION	SIGNAL
POWER SUPPLY + GPIO INPUT / OUTPUT					
X1	Power In GPIOs	DIN/ISO 	1	EXT OUTPUT	EXT OUT0 A
			2	ISO compliant INPUT	ISO IN 3
			3	ISO compliant INPUT	ISO IN 2
			4	ISO compliant INPUT	ISO IN 1
			5	EXT OUTPUT	EXT OUT0 B
			6	ISO compliant reference	ISO IN GND
			7	24VDC input (BAT INPUT)	24V (BAT INPUT)
			8	GND input (BAT INPUT)	GND
ETHERNET + POE					
X2	Ethernet Data + PoE	RJ45	---	Ethernet 100Mb port + PoE	100BASE-TX/10BASE-T 802.3af compliant
X3	Ethernet Data + PoE		---		
GPS					
X4	GPS	PS/2 	1	GND	GND
			2	5VDC output	5V (OUTPUT)
			3	---	---
			4	TX (Data from ACT800)	RS232 TX
			5	RX (Data to ACT800)	RS232 RX
			6	---	---
STEREO AUDIO					
X5	Audio Output R	RCA Red/White (Female)	1	Stereo audio output	AUDIO-SIGNAL
X6	Audio Output L		2		AUDIO-GND
VIDEO					
X7	Video Output	RCA Yellow (Female)	1	Video output	CVBS-VIDEO-SIGNAL
			2		VIDEO-GND
OTHER PORTS					
X8	USB 1	USB Type A Jack	---	For updating purposes and / or 3G modem	HOST USB 2.0 compliant
X9	USB 2		---		
X10	SD CARD	Push-Push SD Card Holder	---	SD / SDHC / SDXC (storage of movies, music, etc.)	SD slot v1.0/v1.1/v2.0 compliant
X11	USB 3	USB Type A Jack	---	For maintenance purposes only	SLAVE USB 2.0 compliant

2.2. LED

Table 3 – Status LED Indicators

LED	FUNCTION	ON		OFF
		PERMANENTLY	BLINKING	
	1 Not used	---	---	---
	2 Not used	---	---	---
	3 Not used	---	---	---
	4 Power supply	Correct	---	Disconnected
	5 System start-up	---	Correct	No activity
	6 Internet and GPS status	No internet nor GPS	Slow (each 4 seconds): No GPS (Internet OK)	Internet and GPS work correctly
			Fast (each second): No Internet (GPS OK)	
	7 Update process	---	Update in progress	No update in progress
	8 Application operation	---	Correct	Error
	9 Update result	Successful update	Error while update	No update in progress
	ETHERNET PORTS X2 AND X3			
Green	Ethernet activity in X2/X3	---	Correct	No activity
Yellow	PoE status	PoE powered device via the X2 / X3 port	PoE negotiation in progress	No activity / No PoE powered device (802.3af)

3. Update Multimedia Contents

To update ACT800 multimedia contents (movies, music, etc...) use the application "**ActiaClientMgr**" (only available for version 1.8 and higher).



Note!

The instructions for use the "**ActiaClientMgr**" application are described in the ACTIA VOD Client Manager Manual (480221).

4. ACT800 Configuration Web Page

The configuration web page is a tool to configure, update and verify the operation of the ACT800.

To access the web page:

1. Connect a PC to the Wi-Fi network created by the ACT800



Note!

The SSID of the Wi-Fi network created by the ACT800 is different for each device. This information is provided in the package with each device.

2. Once set the connection, open a web browser and type the following address to access the configuration web: <https://vodserver.actiasystems.com>
3. Enter the authentication data. By default are:
 - User: admin
 - Password: admin1234



Note!

It is recommended to change the password to prevent unauthorized access to the server.

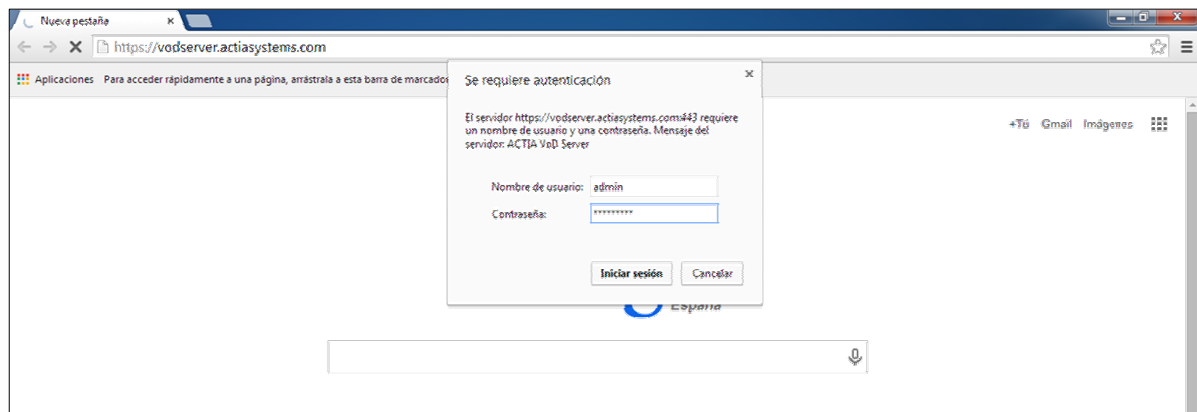


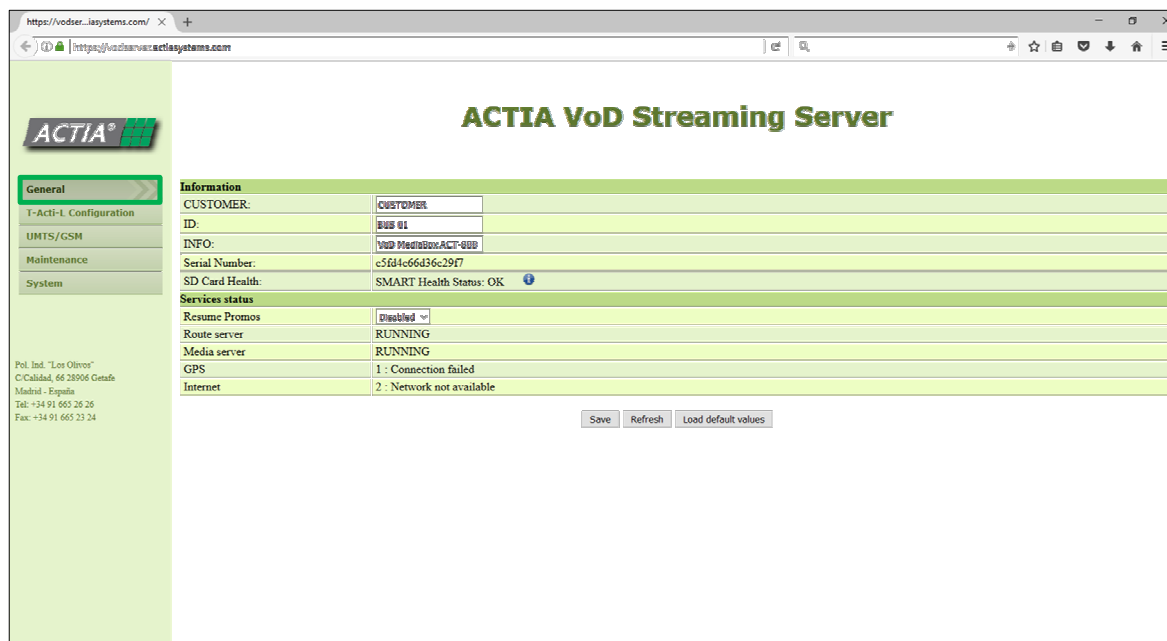
Figure 1 – Access to the Server

The web page has the following options:

- **<General>** panel. It displays the general status of the server: “**ACTIA VoD Streaming Server**”.
- **<T-Acti-L Configuration>** panel. It allows configuring the advertisements and surveys to show to the customers when viewing content through the application.
- **<UMTS/GSM>** panel. It allows configuring the SIM card of the external modem.
- **<Maintenance>** panel. It displays on real-time the processes running in the ACT800.
- **<System>** panel. It displays the SW and HW versions of the ACT800, as well as allows managing the system access passwords.

4.1. General Configuration

The **<General>** panel is displayed when accessing the ACT800 web page, showing the general status of the server under the epigraph "**ACTIA VoD Streaming Server**".



The screenshot shows the ACTIA VoD Streaming Server web interface. The left sidebar contains navigation links: General (selected), I-Acti-I Configuration, UMIS/GSM, Maintenance, and System. The main content area is titled "ACTIA VoD Streaming Server" and contains two sections: "Information" and "Services status".

Information	
CUSTOMER:	CUSTOMER
ID:	BUS 01
INFO:	VoD MediaBox:ACT-800
Serial Number:	c5f44c66d36c29f7
SD Card Health:	SMART Health Status: OK ⓘ

Services status	
Resume Promos	Disabled ▾
Route server	RUNNING
Media server	RUNNING
GPS	1 : Connection failed
Internet	2 : Network not available

At the bottom of the Services status section, there are three buttons: Save, Refresh, and Load default values.

Figure 2 – ACT800 Web Page – **<General>** Panel

Elements in the "**Information**" area:

- **[CUSTOMER]**: to enter the name of the customer.
- **[ID]**: to enter the vehicle identifier.
- **[INFO]**: to enter any additional information.
- **"Serial Number"**: displays the device serial number.
- **"SD Card Health"**: displays information on the SD card status. Click the icon ⓘ to get additional information.

Elements in the "**Services Status**" area:

- **[Resume promos]**: to manage playing of promotional videos.
 - **<Enabled>**: normal operation, no promotional video playing.
 - **<Disabled>**: at ACT800 boot time, a promotional video is always played.
- **"Route server"**: displays the status of the route information services.
- **"Media server"**: displays the status of the multimedia services.
- **"GPS"**: displays the GPS status:
 - **1**: GPS off.
 - **2**: GPS on, but there is no signal / coverage.
 - **3**: GPS OK. The GPS works correct.

- **"Internet"**: displays the status of the internet service:
 - **"0: Network available"**: the ACT800 has internet access. Therefore, the user has internet access service and the equipment can connect to the advertisement and surveys configuration remote site www.t-acti-l.com. Refer to 4.2.
 - **"2: Network not available"**: the ACT800 has no internet access. Accordingly, the user does not have internet access service, and there is no access to the advertisement and survey configuration remote site.

Action buttons:

- **[Save]**. Click to save any change done in the configuration.
- **[Refresh]**. Click to refresh the data displayed for the configuration.
- **[Load default values]**. Click to restore the factory settings. All changes will be lost.



Note!

If the button **[Load default values]** is clicked, all changes will be lost.

4.2. Advertisement and Surveys

When the internet access service is available, the ACT800 can connect to the portal www.t-acti-l.com.

This portal is a tool to configure the advertisements and surveys to be displayed in the vehicle. This configuration is done through a web browser and cannot be modified from the ACT800.

<**T-Acti-L Configuration**> panel allows entering the access data for the ACT800 can connect to the mentioned portal and get access to the ads and surveys previously configured.

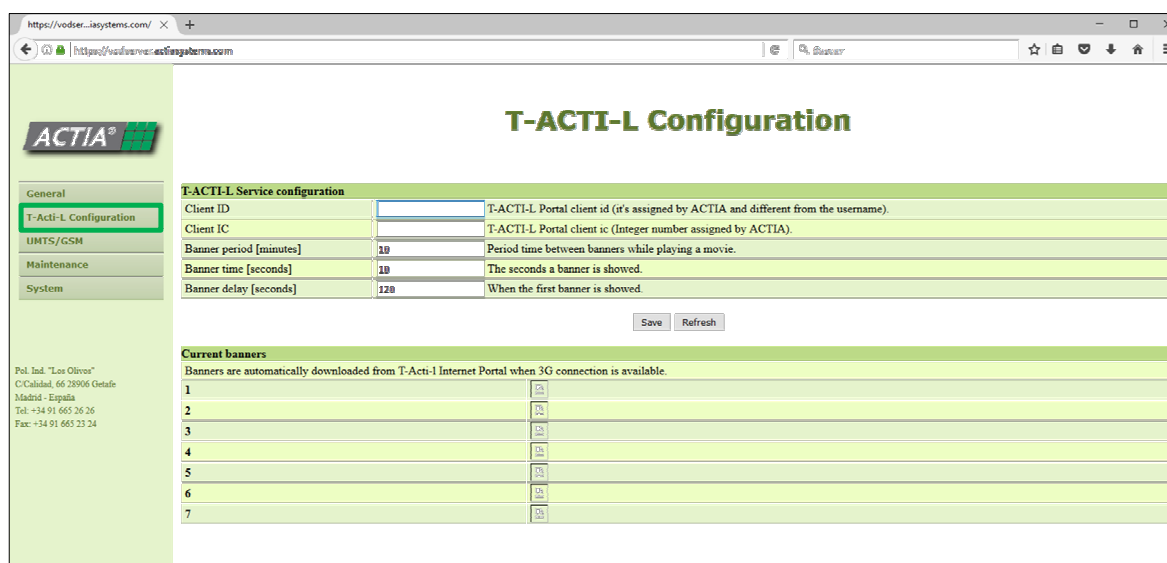


Figure 3 – ACT800 Web Page – <**T-Acti-L Configuration**> Panel (example without internet access)

Elements in the services configuration area ("**T-ACTI-L Service Configuration**"):



Note!

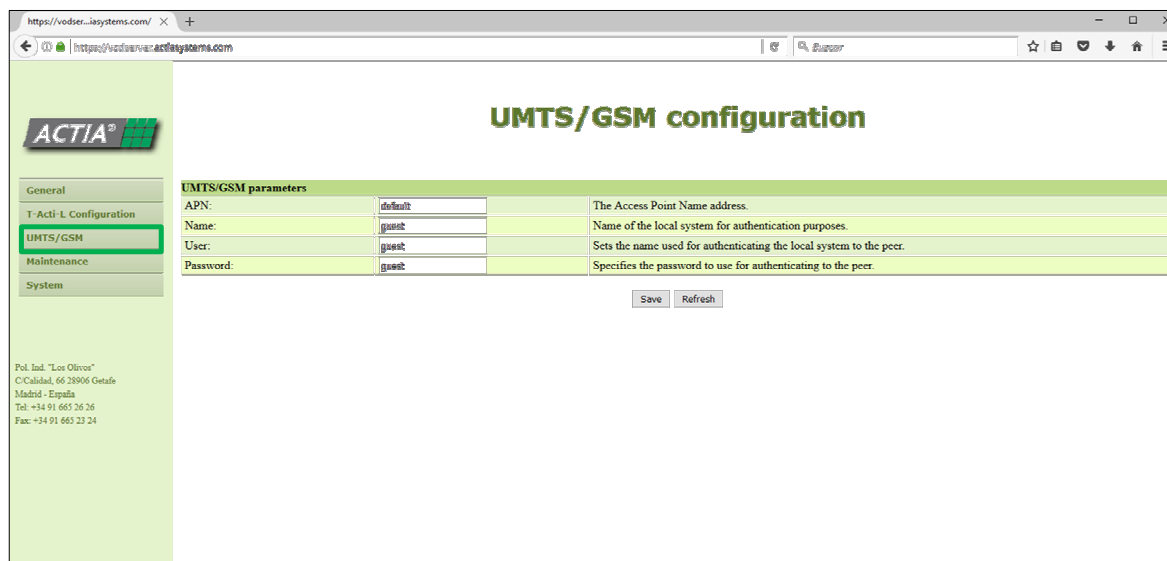
Data to access the portal www.t-acti-l.com are provided by ACTIA.

- **[Client ID]** and **[Client IC]**. Fields to enter the authentication data for the ACT800 can access to the advertising settings and surveys previously defined by the customer on the **T-ACTI-L** web portal.
- **[Banner period [minutes]]**: time (in minutes) between banners while playing a movie.
- **[Banner time [seconds]]**: time (in seconds) that a banner is displayed.
- **[Banner delay [seconds]]**: time (in seconds) until the first banner is displayed.
- **[Save]**. Click to save any change done in the configuration.
- **[Refresh]**. Click to refresh the data displayed on the screen.

The "**Current Banners**" area displays all the banners downloaded from the portal www.t-acti-l.com.

4.3. Internet Connection

Use the <UMTS / GSM> panel to configure the SIM card of the external modem.



The screenshot shows a web browser window with the URL <https://vodser-lasystems.com/>. The page title is "UMTS/GSM configuration". On the left, there is a sidebar menu with options: General, T-Acti-L Configuration, UMTS/GSM (highlighted), Maintenance, and System. The main content area is titled "UMTS/GSM parameters" and contains a table with the following fields:

UMTS/GSM parameters	
APN:	default
Name:	guest
User:	guest
Password:	guest

Below the table are two buttons: "Save" and "Refresh".

Figure 4 – ACT800 Web Page – <UMTS/GSM> Panel

This panel has the following elements:

- **[APN]**. To enter the address and name of the access point.
- **[Name]**. To enter the name of the local system for authentication purposes.
- **[User]**. To set the username for local system access authentication.
- **[Password]**. To set the system access password.

Action buttons:

- **[Save]**. Click to save any change done in the configuration.
- **[Refresh]**. Click to refresh the data displayed on the screen.

To configure the internet connection, enter the APN connection data of the SIM card operator and click **[Save]**.



Note!

It is possible that the internet connection works correctly with the default data.



Note!

The modem and SIM card are not distributed with the ACT800.

4.4. System Maintenance

<Maintenance> panel displays in real-time the last 100 lines of the log of processes running in the ACT800.

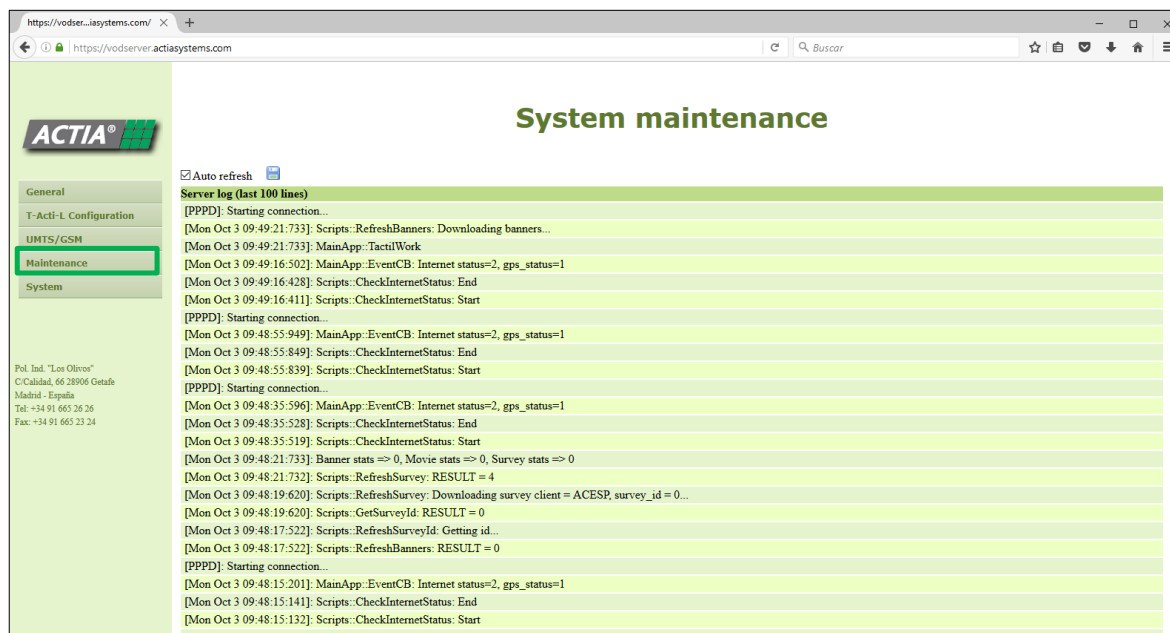
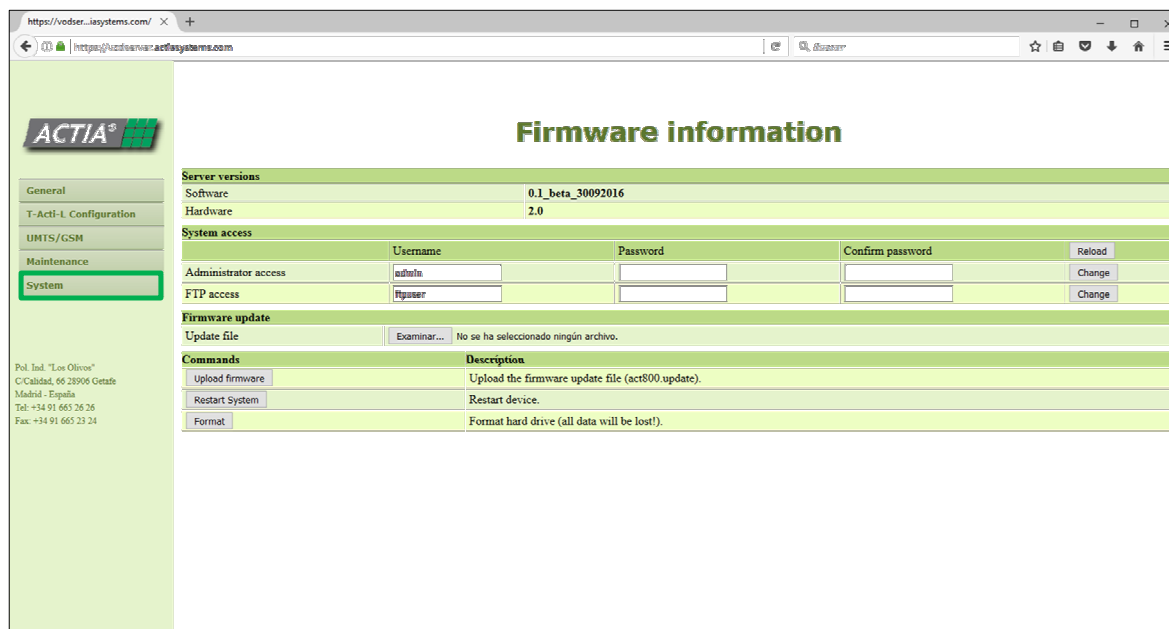


Figure 5 – ACT800 Web Page – <Maintenance> Panel

- **[Auto refresh]**. Check this box to enable the auto refresh function.
- **[Download icon]**. Click this icon to download and save all the information to a text file.

4.5. Information and FW Update

<System> panel displays the SW and HW versions of the ACT800. At the same time, this panel allows modifying the equipment access passwords by both FTP and web page.



The screenshot shows the ACT800 web interface. The left sidebar contains a menu with options: General, T-Acti-4 Configuration, UMTS/GSM, Maintenance, and System (highlighted). The main content area is titled "Firmware information" and contains several sections:

- Server versions:** A table showing Software version (0.1_beta_30092016) and Hardware version (2.0).
- System access:** A table with columns for Username, Password, Confirm password, and a Reload button. It includes rows for Administrator access (username: admin) and FTP access (username: ftpuser).
- Firmware update:** A section with an "Update file" button and a message "No se ha seleccionado ningún archivo."
- Commands:** A table with columns for Command and Description. It includes buttons for "Upload firmware", "Restart System", and "Format".

Figure 6 – ACT800 Web Page – <System> Panel

Elements in the “**Server versions**” area:

- “**Software**”: displays the software version installed in the ACT800.
- “**Hardware**”: displays the hardware version of the ACT800.

Elements in the “**System access**” area:

- “**Administrator access**”: allows changing the administrator password.
- “**FTP access**”: allows changing the FTP access password.



Note!

The usernames “**admin**” for the administrator and “**ftpuser**” for FTP access cannot be changed.



Note!

It is advisable to change the access passwords to prevent unauthorized access to the ACT800 equipment.

To change any of the passwords:

- Type the new password in the related **[Password]** field
- Type again the same password in the related **[Confirm password]** field
- Click the related **[Change]** button.

- **[Reload]**: click to refresh data on the screen.

Elements in the “**Firmware update**” area:

- “**Update file**”: allows locate and select the folder of the update file using the **[Examinar]** (browse) button.

Elements in the “**Commands**” area:

- **[Upload firmware]**: allows upload the update file selected in “**Update file**”.
- **[Restart system]**: click to restart the system after loading the update file.

4.5.1. ACT800 Update Procedure

1. Click **[Examinar]** button on the right of “**Update file**”
2. Locate and select the update file “**act800.update**”
3. Click **[Upload firmware]** to upload the file to the ACT800
4. When prompted, click **[Restart system]** to reset the system and changes take effect
5. Close the web page
6. Open the web page again and check that the SW and HW versions have changed according to the update made.

5. APP Download

To access the services provided by the ACT800, each end-user (passenger) must install the ACTIA application in the mobile device. This App is available for iOS and Android devices.

5.1. Installation in Devices with Internet Connection

1. Connect to Google Play (Android devices) or App Store (iOS devices) and download the ACTIES app:

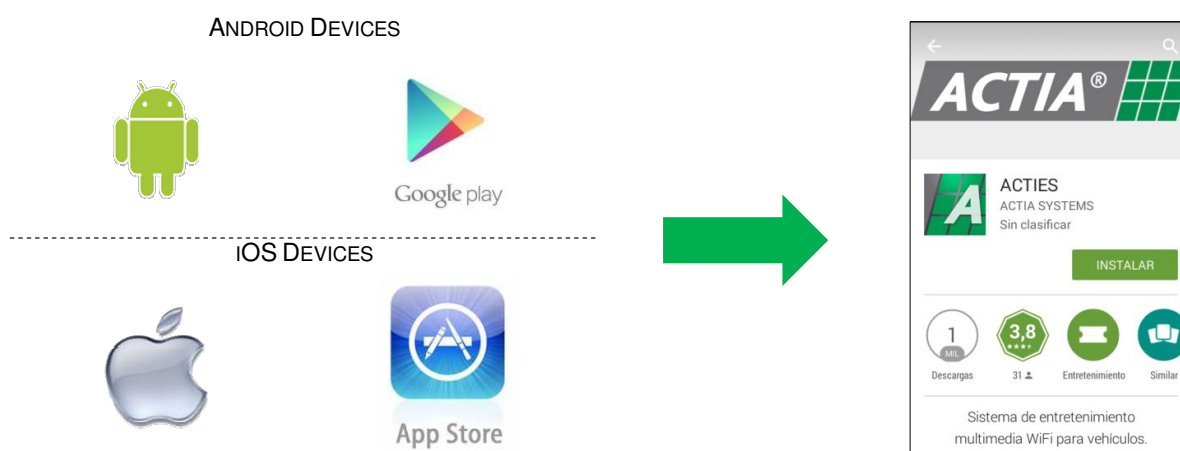


Figure 7 – Download of the ACTIES App

2. Once installed the app in the mobile device, connect to the vehicle Wi-Fi network
3. Open the ACTIES app and choose among the contents.

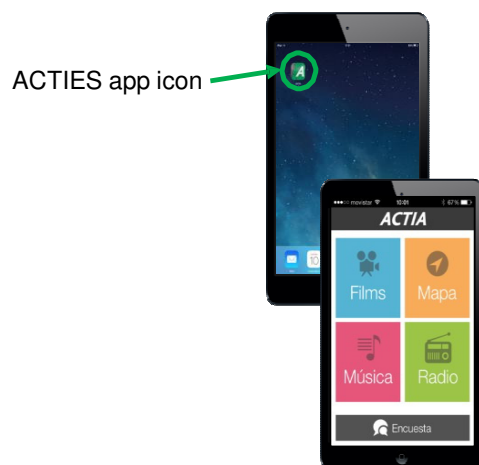


Figure 8 – Contents Selection from the ACTIES App

5.2. Installation Devices without Internet Connection

1. On the mobile device, find and connect to the Wi-Fi network generated by the ACT800



Figure 9 – Connecting the Device to the ACT800 Red Wi-Fi Network ACT800

2. Open a web browser and enter the address: <http://10.0.0.1>, then click the 'Android' or 'Apple' icon, according to the device

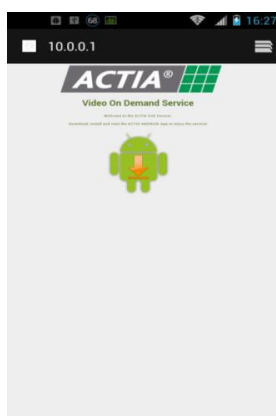


Figure 10 – Downloading the ACTIA App

3. Download and install the ACTIA application



Note!

It may be necessary to enable the **[Unknown origins]** option in the menu **<Settings → Security>** of your device.



Figure 11 – Enable Unknown Origin Applications

4. Wait until the application connects to the server and press **[Aceptar]**.

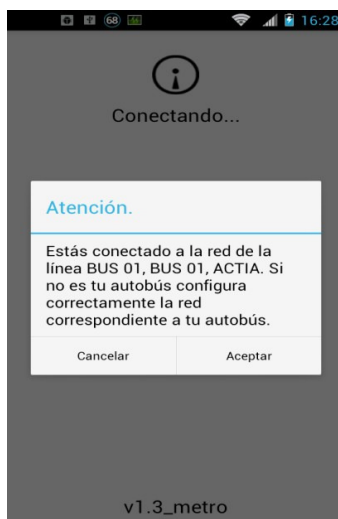


Figure 12 – Application Connected to the Server

6. Especificações Técnicas

Table 4 – Technical Specifications

PARAMETER	VALUE	OBSERVATIONS
Operating voltage range	24 V _{DC}	Typical
	9 V _{DC}	Minimum
	36 V _{DC}	Maximum
Power	8 W	Typical
	15 W	Maximum
Weight	350 gr	±5%
Working temperature	-25°C to +70°C	
Ethernet ports	2 x 100Mb+PoE RJ45	
PoE	Compatible with 802.3af @ 48V	Pins: ▪ 1-2: Data + PoE (+) ▪ 3-6: Data + PoE (-) ▪ 4-5 : not used ▪ 7-8 : not used
GPS	With external module	
Inputs	24 V digital input to silence	
UMTS/3G	With external module	
Processor	ARM11 32 bits @ 1GHz	
RAM	512 Mb	
Storage	with SD memory	
Memory requirements	Class: 10 Capacity: 16Gb – 128GB	Compatible types: SD, SDHC, SDXC



Note!

The SD memory may be not distributed with the ACT800.



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