

REMOTE CONTROL SILVER USER MANUAL Version 1.1.x



Date: 2008/03/31

Silver ® is a registered trademark of the Audemat Group.

Audemat sa – Audemat INC WEB: www.audemat.com - E-MAIL: contact@audemat.com



TABLE OF CONTENT

1. INTRODUCTION	.3
 1.1. General information	.3 .3 .3 .3
2. PRODUCT PRESENTATION	.4
 2.1. List of included accessories. 2.2. Technical specification. 2.3. Front panel. 2.4. Rear panel	.4 .5 .6 .7 .7 .9
3. STARTING UP THE STAND ALONE REMOTE CONTROL SILVER1	10
3.1. Connection	10 11
4. THE EMBEDDED WEB SITE1	12
4.1. Product Id's 1 4.2. Date / Time 1 4.3. Users 1 4.3. Users 1 4.4. Network 1 4.5. PPP dialout 1 4.6. PPP dialin 1 4.7. Phone Alerts (OPTION) 1 4.8. Webcam 2 4.9. Support 2 4.10. SMTP Mail client 2 4.11. SNMP agent 3 4.11.1. Supported SNMP versions 2 4.11.2. Notification modes 2 4.11.3. MIB structure 2 4.12. Notifications 3 4.12.1. Principle of re-transmissions / acknowledgements functioning 3 4.12. Events leading to SNMP notification sending 3 4.13. Event log 3 4.14. ScriptEasy Alarms 3 4.15. I/O Layouts 3 4.16. Download 3	123456788901122333345678 0
5. API SCRIPILEIS	39
6. API XMLRPC	12
APPENDIX 1: OBJECT DEFINITIONS AND APPLICATION EXAMPLES	+0 48
APPENDIX 2: FOR MORE INFORMATION	56



1. INTRODUCTION

1.1. General information

1.1.1. About Audemat

25 years of experience in the field have enabled the Audemat Group to come up with a complete range of devices, both for monitoring and for measuring AM, FM, TV and DVB.

The range consists of embedded dynamic measurements, broadcast quality and continuity monitoring (managing complex sensors, communication, centralization and interactivity), RDS data encoding and FM and TV signal broadcasting/re-broadcasting.

The Audemat Group only offers products with strong technological value and which integrate functional innovation.

Since 2000, the Audemat Group has won 11 Awards at NAB for its innovative products.

The head office is in Bordeaux Mérignac (France).

The Audemat Group has a subsidiary company in the United States, based in Miami (Florida).

1.1.2. About the Remote Control Silver

The Remote Control Silver, the product you have just acquired, is a system enabling analog and digital input/output monitoring and remote management. Thanks to this device, you will be able to monitor 16 digital inputs, 8 analog outputs AND 8 relay outputs, and have access to one serial port.

All devices linked to the Remote Control Silver are accessible with a single telecommunication line (Ethernet, standard telephone line, GSM...).

It can be integrated into a global system of supervision comprising event centralization with the Broadcast Manager (see site www.audemat.com).

ScriptEasy, the integrated software, offers a user-friendly graphic interface for configuring scripts and managing their automatic action (for more details see the ScriptEasy manual on the website www.audemat.com).

1.2. Before beginning

Make sure that the power supply voltage is the one indicated at the rear of the equipment (100/240VAC)



2. PRODUCT PRESENTATION

2.1. List of included accessories

In your package, you should have received:

- 1 power supply cable
- 1 straight RJ45 cable (A letter)
- 1 crossed RJ45 cable (B letter)
- 1 folder including a CD-ROM, a quick start, a control quality and a customer survey

2.2. Technical specification

General features:

Dimensions	1U
RS-232	1
USB	4
Port Ethernet	2 (1 reserved for future expansion)
Power Supply	100-240VAC Full range – 47-63 Hz

Operating conditions

Humidity	0 to 95%
Temperature	0° to 45°C; 32° to 113°F

Power supply input of the equipment

Power supply	115-230VAC – 50-60 Hz



Remote Control Silver User manual – English version

2.3. Front panel



LEDs on the front panel:

<u>RUN:</u>

On: Normal operation

- Off: the Remote Control Silver is turned off
- HDD: hard drive activity
- <u>ON</u>:
 - **On:** the Remote Control Silver is turned on
 - Off: the Remote Control Silver is turned off





Remote Control Silver User manual – English version

2.4. Rear panel





2.5. **System**

12 available slots ≻

Interface type	Analog	Digital	Relay	Port RS232
Number of boards	1	1	1	1
Number of I/O per board	8	16	8	NA

2.6. Hardware configuration

2.6.1. **Digital inputs module**

This module provides 16 digital inputs on a SUB-D 25 female. Inputs are designed to be supplied with voltages between 5V and 25V in either positive or negative polarity.





000

> Internal power supply mode:

Two jumpers shall be installed on the selected pins. In this configuration, each input's COM signal is connected to internal ground and the external common is connected to internal 12V power supply.

To activate an input, contact has to be established between external common and the input.

> External power supply mode (from 5 to 25 V):

Only one jumper in the middle of selected pins. Each input's COM signal is connected to external common

One side of the external power supply shall be connected to external common, the other one on each input to be activated.



Pin out:

External common is present on pins 9,10,11,12,22,23,24 & 25.





2.6.2. Relay outputs module

This module provides 8 relay closures on a SUB-D 25 male. For each output, common, normally opened and normally closed contacts are provided.

Internal +12V power supply is provided on pin 13.

Each circuit can support 5A@ 125V



2.6.3. Analogic input module

This module provides 8 analog inputs on a SUB-D 25 female.

Inputs are designed to measure voltages up to 50V. The measurement range for each input is selectable by software within 4 ranges.

For each input, the high level alarm and low level alarm are programmable.

Input's impedance: 100Kohms Ranges: 0-5V, 0-10V, 0-25V & 0-50V. ADC's resolution: 12 bits

> Pin out:





3. STARTING UP THE STAND ALONE REMOTE CONTROL SILVER

3.1. Connection

Connect the equipment to the power using the power supply cable.

Connect the Ethernet cable on the rear panel (crossed for direct connection) of the Remote Control Silver by connecting it on the secondary interface of the equipment; use a straight cable for a switched connection.



Configure the PC IP address in the 172.17.2.xx range (for instance 172.17.2.1)/ Netmask 255.255.0.0

- This is done by navigating to: Control panel/Network and Dial-up connections/local area connection/ Properties
- > Click on "Internet Protocole (TCP/IP)" in the list and click on "properties", then enter a PC address.

Propriétés de Protocole Internet (TC	P/IP)	? ×
Général		
Les paramètres IP peuvent être détermi réseau le permet. Sinon, vous devez de appropriés à votre administrateur résear	inés automatiquement si votre emander les paramètres IP u.	
O Obtenir une adresse IP automatiq	vement	
🕞 Utiliser Padresse IP suivante : —		
Adresse IP :	172 . 17 . 1 . 172	
Masque de sous-réseau :	255.255.0.0	
Passerelle par défaut :	192.168.0.254	
C Obtenir les adresses des serveurs	DNS automatiquement	
🕞 Utiliser l'adresse de serveur DNS	suivante :	
Serveur DNS préféré :	192.168.0.99	
Serveur DNS auxiliaire :	194.2.0.20	
	Avancé.	
	OK An	nuler



⇒ From now on, the configuration can be done using the embedded website over Ethernet and Internet networks.

Open a web browser (Internet Explorer, Mozilla...) and enter the address 172.17.2.172. The default login and password are "Admin" and "admin".





4. THE EMBEDDED WEB SITE

The quick links on the left side of the page will enable easy navigation to the areas you want to change or analyze.

4.1. Product Id's

		» Product Id					
E-Audemat-Aztec	» FM Monitoring Silver Identif	» FM Monitoring Silver Identifiers					
	Product name	Remote Control Silver Update					
	Product description	Remote control service					
	Serial number	1234					
	Software version	1.0.0					
	Hardware version	1.0					
Home Product ID Date / Time Users Network PPP dialout PPP dialin Support SMTP mail client SMTP mail client SNMP agent SNMP notifications Event log Alarms I/O layout Downloads							

On this page of the embedded website, the user can:

- ➢ Configure:
 - Product name: it can be used for connecting to the equipment from the java application. It is therefore recommended to use a unique and easily recognizable name.
 - Product description (optional)
- ➤ <u>View:</u>
 - Serial number
 - Software version
 - Hardware version

<u>Note</u>: whenever the user enters new parameters, he/she must click on "Update" to save the changes. This applies to all Remote Control Silver parameters.



4.2. Date / Time

chiar		» System Date & Time	
E-Audemat-Attec	» Set system date		
	System Local Date	Year/Month/Day : 2005 /12 /20	Update
	System Local Time	Hour:Minute:Second : 16 17 48	
 Home Product ID Date / Time Users Vetwork PPP dialout PPP dialin Support SMTP mail client SNMP agent SNMP notifications Event log Alarms I/O layout Downloads 			

<u>"Set system date"</u>: date and time update. The user may enter the date (year/month/day) as well as the time (hour/minute/second).

> <u>"Set system time zone"</u>: updates the geographical time zone

The user selects the geographical zone from the list. Important to have this set correctly when using an NTP server.

<u>"Network Time Protocol</u>": NTP update

The user can enter a time server address to update the equipment's internal clock automatically.

Example: 192.88.30.1



4.3. Users

	» Web accounts		
	Administrator	Login Admin	Update
		Password admin	
	Guest	Login guest	
	Guest	Password user	
	» FTP accounts		
Home Product ID	CovintEncy	Login seasy	Update
<u>— Date / Time</u>	Scriptcasy	Password easy	
- Users - Network		Login web	
- PPP dialout	webmaster	Password html	
— PPP dialin — Support	6 d	Login Admin	
- SMTP mail client	Administrator	Password admin	
- SNMP agent - SNMP notifications		Login update	
- Event log	update manager	Password maj	
— I/O lavout			
— Downloads			

- **Web accounts:** there are 2 user levels on the equipment: Administrator and Guest.
 - <u>"Administrator"</u>: any user with the Administrator level has the possibility of changing any of the parameters.
 - <u>"Guest"</u>: a user connected with the Guest level will be able to view measurements and settings but will not be able to change any configuration or settings.

FTP accounts:

- <u>"ScriptEasy" account</u>: access to downloading a script into the device with ScriptEasy.
- <u>Webmaster account</u>: access to HTML pages. The Webmaster can personalize the embedded web pages (for example, by inserting company logos).
- o <u>Administrator account</u>: access to the equipment's entire directory.
- <u>Update Manager account</u>: access to the equipment's update directory.



4.4. Network

chun	» Networking configuration						
Audemat-Aztec	» Ethernet Configu	uration mode					
		Primary Interface	3 Secondary	Secondary Interface 🔞			
		Static 💌	Inactive 🔽]			
	» Static Ethernet o	onfiguration					
		Primary interface	Secondar	y Interface	Update		
- Home	IP address	192.168.1.2	192.168.0	.1			
- Product ID	Netmask	255.255.0.0	255.255.2	55.0			
— Date / Time — Users	Gateway address	0.0.0.0	192.168.0	.254			
- Network - PPP dialout							
— PPP dialin	» DNS Servers						
- Support	IP address	First : 192.168.0.99	Second : 0	.0.0.0	Update		
- SMTP man client - SNMP agent							
 SNMP notifications 	» Current network	status					
— Event log		Primary Interface	Secondary Interface	PPP Client	PPP Server		
— I/O layout	Interface Status	Running	Not running	Disabled	Disabled		
— Downloads	IP address	192.168.1.2	192.168.0.1	0.0.0	0.0.0		
	Netmask	255.255.0.0	255.255.255.0	0.0.0	0.0.0		
	MAC address	00:40:63:DF:53:65	00:00:00:00:00:00:00:0	0 n/a	n/a		

Ethernet configuration mode The interface can be configured for dynamic or static IP.

Static Ethernet configuration

If the IP address is a static address, enter the parameters in this window.

- > <u>DNS Servers</u>: DNS configuration.
- > <u>Current network status</u>: present network table.

Note: the help button shows the diagram for the primary and secondary interface slots.





4.5. PPP dialout

makes man			>> PPP Client			
E-hudamat hates	» Dialout configura	tion				
	Dial-out enabled		No 💌		Upda	ite
	» Calling quotas					
	Max calls / day (0 for unlimited)	0	(current day calls number : 0)			Update
	Max calls / hour (0 for unlimited)	0	(current hour calls number : 0)			
— Hullie — Braduct ID	Reset counters			Pecet		
	Keset counters			Kesee		
- Users						
— Net <u>work</u>	» Dialout accounts					
- PPP dialour	Enabled	Name	Phone Number	Delete	Move	Modify
— P PP diali n			New account			
— Support						
- SMTP mail client						
- SNMP agent						
- SNMP notifications						
Dominoaus						

> To configure outgoing calls:

- <u>Dialout configuration</u>: installation of "outgoing calls" functions.
- <u>Ethernet ↔ PPP backup configuration</u>

The Ethernet \leftrightarrow PPP backup configuration allows to switch to the PPP interface to send alarms if the primary Ethernet interface (eth0) doesn't answer anymore (it's the case if an IP reference address doesn't answer to a ping).

This verification is done regularly and can be changed by the user: it can be the case if the network cable is disconnected or defective, if the equipment associated to the IP address doesn't answer or doesn't correspond to an equipment on the network.

To activate the PPP backup modem, in the "Dial out enabled" section, select "yes only if Ethernet goes down".

- ⇒ Enter a reference IP address in the field "Ping this address to test Ethernet connection"
- ⇒ Configure a PPP account
 - <u>Calling quotas</u>: number of calls
 - The user can limit the number of daily outcalls. He/she should put 0 if this service is not required.
 - The user can limit the number of hourly outcalls. He/she should put 0 if this service is not required.
 - The user can reset to put the calling counter back to zero.

<u>Dialout accounts</u>: the user can add a new customer account. For this, click on "account" and enter parameters for the new customer account (name, number, login, password...) and then click on "add". The Remote Control Silver can manage several accounts.



4.6. PPP dialin

column -			;	» PPP Server			
	» Dialin confi	guration					
	Dial-in enabled			No 💌		Upd	ate
	» Account				» Modem config	juration	
	Login	user			Modem	None	•
	Password	pass			Speed	3840	O bps 💌
	Local IP	10.10.10.1			Idle timeout	60	
— Home — Product ID	Remote IP Netmask	10.10.10.2 255.255.255.0			Filtering enabled	No	1
— Date / Time — Lisers				Update			
- Network							
- PPP dialout	» Callers filte	ring					
	Allowed	Name		Phone Number		Delete	Modify
— Support — SMTR mail cliant				New account			
- SNMP agent			-				
 SNMP notifications 							
Event log							
- Downloads							

- > To configure calls coming from the server:
 - o <u>Dialin configuration</u>: installation of "incoming calls" functions.
 - o <u>Account</u>: the user configures account information.
 - <u>Modem configuration</u>: the user selects the modem (if necessary) and its features.
 - The "filtering enabled" function enables incoming calls to be filtered (the incoming telephone line must be set for this).
 - <u>Callers filtering</u>: the user can enter a new account by clicking on "new account" and entering its parameters. This enables authorized or non authorized incoming calls to be managed.





4.7. Phone Alerts (OPTION)

* Phone Alert Availability Home Home Alert Availability Phone alert availability Participation * Identification Wave File Users Phone Alert Parameters Phone Alert Parameters Phone Alert Parameters Phone Alert Parameters Users Network PPP dialout Home Alert Parameters Webcam Support SMTP main client Support SMTP main client SMTP main client Support SMTP main client Support Support Support Support Support Suport Sup				» Phone Alert configura	ition
Home Phone alert availability False Home Phone Alert Parameters Uddate Phone Alert Enabled No Uddate Phone Number 4-Digit access code 0000 Stars Severity threshold 3 - error Meximum retries 1	E Audemat-Aztec	» Phone Alert Availability			
Home Product ID Product ID Date / Trime Users Phone Alert Parameters Vetwork PPP dialout PPP dialout 3 - error Maximum retries 1 Recall delay 10 Phone Control Parameter Update SMMP agent Joint SMMP agent Joint SMMP agent Joint Yo layout Dial-in DTMF control enabled No Prote Control Parameter Update SMMP agent Joint Update Sharms Yo layout Joint Update Stripteasy Object List Script Id Script Id Script Id Script Id Script Easy Alarm name Associated Wave File		Phone alert availability		False	
 Home Product ID Date / Time Users Network PPP dialout Home AlartE Severity threshold Severity threshold<!--</td--><td></td><td></td><td></td><td></td><td></td>					
Home Product ID Date / Time Users Network PPP dialout PPP dialout Produm Bunno Alert Support SMPP agent SMMP notifications SMMP notifications Even log Atarms Vo layout Downloads * Scripteasy Object List 3 Alarm 3		» Identification Wave File			Listen Replace
Home Phone Alert Parameters Product ID Date / Time Users Alern 3					
Home Phome Alert Enabled No Update Product ID Date / Time Users 000 Users Network PPP dialout Severity threshold 3 - error Webcam Support Maximum retries 1 SMMP agent SMMP notifications Event log SMMP notifications Iol V/O layout Downloads No Script Easy Object List ScriptEasy Alarm name Associated Wave File 3 Alarm 3		» Phone Alert Parameters			
Home Product ID Date / Time - Users Users Severity threshold Network - Severity threshold PPP dialout - error Maximum retries 1 Support - Recall delay SMPP mail client - Diel-in DTMF control Parameter Diel-in DTMF control enabled No V/O layout - Scripteasy Object List Script Id ScriptEasy Alarm name 3 Alarm 3		Phone Alert Enabled	No		Update
 Product ID Date / Time Date / Time Users Network PPP dialout PPP dialout PPP dialout PPP dialout Primai Client SMP mail Client SNMP notifications Event log Alarms I/O layout Downloads Script Easy Object List Script Id Script Easy Alarm name Alarm 3 	— Home	Phone Number			
Users Users Users Users Users Network PPP dialout Aiximum retries TPP origin 1 Pbone Alert Naximum retries Support 1 Support SMP pagint SNMP agent SNMP nail client SNMP agent No SNMP out log No Volains Vipdate Volayout Scripteasy Object List Script Id ScriptEasy Alarm name Alarm 3 Upload	Product ID Date / Time	4-Digit access code	0000		
Network PPP dialout PPP dialout PPP dialout Provident Alarts Network Support Staffer and the second and the secon	— Users	Severity threshold	3 - error		
Prip diam Phone Alert Webcam Support Support SMP nail client SNMP agent No SNMP notifications Event log Alarms VO layout Downloads Scripteasy Object List 3 Alarm 3 Upload	— Network — PPP dialout	Maximum retries	1		
Webcam Support SMTP mail client SNMP notifications Event log Alarms I/O layout Downloads Script Id Script Easy Alarm name Alarm 3	PPP dialini	Recall delay	10		
 Support SMTP mail client SNMP agent SNMP notifications Event log Alarms I/O layout Downloads Script Id ScriptEasy Alarm name Alarm 3 Upload 	— Webcam	Recon delay	10		
SMIP mail client * Profe Control Parameter SNMP agent Dial-in DTMF control enabled No Event log Alarms Volgyout I/O layout * Scripteasy Object List 3 Alarm 3	- Support	··· Bhave Control Barrowston			
SIMP optifications Dial-in DTMF control enabled No Update SIMP optifications Event log Alarms - I/O layout ScriptEasy Object List ScriptEasy Alarm name 3 Alarm 3	SMTP mail client SNMP agent	» Phone Control Parameter			
- Event log - Alarms - I/O layout * Scripteasy Object List - Downloads Script Id ScriptEasy Alarm name 3 Alarm 3	- SNMP notifications	Dial-in DTMF control enabled		No	Update
Scripteasy Object List Downloads Script Id ScriptEasy Alarm name Associated Wave File 3 Alarm 3 Upload	- Event log				
Downloads Script Id ScriptEasy Alarm name Associated Wave File 3 Alarm 3 Upload	— I/O layout	» Scripteasy Object List			
3 Alarm 3 Upload	- Downloads	Script Id		ScriptEasy Alarm name	Associated Wave File
		3		Alarm 3	Upload

Activation of the option

1/ First contact the sales department to activate this option.

Before calling, prepare the MAC ADDRESS of the equipment (from the "Network" page). They will need it to send you the ".lic" file to activate the option.

2/ Connect the modem:

You will find in the packaging the following modem with its accessories.









3/ Configuration

silver					» Inputs / Outputs		
Elidene Aax			Lister Costi A USB 2 USB		In the set of the set		
	» Motherboa	rd					
— Home	Version:	SFT41164 Audemat A	ztec build: 002				
- Product ID	Slot A:	Digital input (1.0)		Slot C:	Analog input (AZT41171 Audemat Aztec)		
- Date / Time	Slot B:	Relay output (1.0)		Slot D:	Empty (-)		
— Users							
- Network	w COM manta						
PPP dialout	Name		lleage		TCP Tunnel Port	Scriptlet file	
— PPP dialin	COMI		Madam		7401	Near	
— Phone Alerts	COMI		Modern		7401	None V	
— Webcam							Update
— Support							
— SMTP mail client							
— SNMP agent	» USB-Serial	ports					Rescan USB
 SNMP notifications 	Name		Usage		TCP Tunnel Port	Scriptlet file	
— Event log							Update
Alarms							
— I/O layout							
— Downloads							

> Go in the "I/O Layout" page and select "modem" from the COM1 pull-down menu:

> Go in the "PPP Dialin" page and select "COM1" from the Modem pull-down menu:

			» PPP Server		
Silver	» Dialin configurat	ion			
	Dial-in enabled		Yes 💌	Update	
	» Account		" mode	m configuration	
	Login	Admin	Modem	COM1 🗸	>
	Password	admin	Speed	38400 bps	*
	Local IP	10.10.10.1	Idle time	eout 60	1
	Remote IP	10.10.10.2			_
	Netmask	255.255.255.0	Filtering	enabled No 💙	
			Update		
- Home	» Callons filtering				
Product ID Date / Time	Allowed	Name	Phone Number	Delete	Modify
— Users			New account		
- Network					
PPP dialout PPP dialout					
- Phone Aleris					
- Webcam					
- Support					
- SMTP mail client					
 SNMP notifications 					
— Event log					
— Alarms					
- I/O layout					
Downloads					



4/ Launch the FILEZILLA application (or any other FTP application). It is located on the Silver CD provided in the folder.

- Insert your IP Address, the user and password, select port "21" and click on "quick connect"
- > Select the file ".lic" (previously delivered by Audemat) and put it in the "etc." directory

Con Par Daroies Ten A	brac Ser	e Geb									
💇 · b. b. Q 📰	0 º, C) 🖉 R 🛛 🖁 🔇	Address: 192.168.0	118	User; Admin	Password:	•••••	Port: 2	1 Quick	connect	
esponse: 200 Type set to A command: PASV lesponse: 227 Entering Pas command: LIST esponse: 150 Opening ASC Response: 226 Transfer com Ratus: Directory listing si	l. sive Mode (1 III mode dati plete uccessful	92, 168.0, 118.35, 73) a connection for direc	tory listing.								
Local Ste: C:\				*	Renote Ste: /etc/	$\mathbf{>}$					
🖹 😼 Poste de travai				~	Filename /		Filesize	Filetype	Date	Time	Permissions
🖯 🥌 C:				Y	-						
Filename /	Filesize	Filetype	Last Modified	^	comports		11	Fichier	03/15/2006	16:28	478-4-4
3boot.ini	212	Paramètres de	10/1/2005 16:5	-	Sconfig.csv		160	Fichier de v	03/16/2006	15:03	-fw-fw
Bootfont.bin	4 KB	VLC media file	8/5/2004 13:00		defaultvalues.xm	ł	29910	Document	03/15/2006	16:22	-110-110
CONFIG.SYS	0	Fichier système	6/1/2005 15:34		i empty.xmi		36406	Document	03/15/2006	16:22	4.00-4.00
ffastun.ffa	4 KB	Index de Reche	3/6/2006 11:33		fserver.conf		787	Fichier CONF	03/15/2006	16:22	4W-FW
ffastun.ffl	1 MB	Index de Reche	3/6/2006 11:33		goldenEagleHDR	V1r0.mb	57513	Fichier MIB	03/15/2006	16:22	-111-111
ffastun.ffo	1 MB	Fichier FFO	3/6/2006 11:33		nsmtprc 🕅		58	Fichier	03/16/2006	15:03	484-4-+
ffastun0.ffx	3 MB	Index de Reche	3/6/2006 11:33		PhoneAlert.lic		49	Fichier LIC	03/16/2006	16:36	484-4
garage.doc	20 KB	Document Micro	10/14/2005 15:		relays_states.cfg	1	24	Fichier de c	03/16/2006	16:15	484-4
garage 1.doc	23 KB	Document Micro	10/23/2005 19:		schema.xml.gz		10252	Fichier WinZp	03/16/2006	16:00	-TW-TW
garage2.doc	23 KB	Document Micro	10/20/2005 21:		values.xml.gz		2459	Pichier WinZip	03/16/2006	16:00	
garagefc.doc	22.18	Document Micro	3/14/2006 12:4		1						
GoogleDesktopSetup.exe	1 MB	Application	11/16/2005 14:								
GoogleEarthSetup.exe	11 MB	Application	11/3/2005 16:5.								
hberfil.sys	1022 MB	Fichier système	3/16/2008 9:26								
TO.SYS	0	Fichier système	6/1/2005 15:34								
MSDOS.SYS	0	Fichier système	6/1/2005 15:34								
NTDETECT.COM	46 KB	Explication MS	8/5/2004 13:00								
ntdr	215 KB	Fichier système	8/5/2004 13:00								
TE Payene-sys	1533 MB	Fichier système	3/16/2006 9:26								
A DESCRIPTION OF TAXABLE PARTY.		Eichige 1 10	0-31 300C 31LC								





5/ Reboot the equipment from the "support" page of the embedded website.

6/ The "Phone alert availability" status is now "TRUE".

	» Phone Alert config	uration
» Phone Alert Availability	,	
Phone alert availability	True	
» Identification Wave File	2	Listen Replace
» Phone Alert Parameters	s 	
Phone Alert Enabled	ю	Update
4-Digit access code	0000	
Severity threshold	3 - error	
Maximum retries	1	
Recall delay	10	
» Phone Control Paramet	er	
Dial-in DTMF control enabled	No	Update
» Scripteasy Object List		
Script Id	ScriptEasy Alarm name	Associated Wave File
3	Alarm 3	Upload

Page description:

Phone Alert Availability

» Phone Alert Availability	
Phone alert availability	True

<u>True</u>: option is activated <u>False</u>: option is not active

> Identification Wave File



It concerns the identification of the product.





> Phone Alert Parameters :

Settings for the alarm management via the phone can be modified on this page.

- You can enable or disable alerts by phone.
- Enter the telephone number to be dialed in case of an alarm.
- The 'Severity threshold' is used to filter alarms according to their priority.
- Set the maximum number of retries in case the first attempt does not go through.
- Set the delay between retry attempts (in minutes).

The maximum number of retries is 20. Maximum interval between the retries is 60 minutes. It is therefore impossible to receive a voice alarm after 20 hours, this being sufficient considering that

voice alarms are designed for emergency situations.

The time given in messages is always in relation to the last 24 hours.



- 1) On the Remote Control Silver configuration page, activate the dial-out function in alarm and enter the number to be called. Leave the other parameters on their default settings.
- 2) Launch ScriptEasy Software (provided on the CD-Rom), create a script and send it to equipment (see ScriptEasy user manual). Come back to the "Phone alerts" page.





Quick start with the Creator module : create a new script

In order to use following pages, JAVA runtime environment is necessary. You will find it on the CDROM.

Launch "Scripteasy":

• "File" menu → "New script"



Equipement

Type :

IN :

IP:

OUT :

IN Ana :

EDIT USER PAGE SLOTS Site : Unknown

> GoldenEagleHD GoldenEagleHD

ioldenEagleDVB

OVB monitoring silver Relio 9016

emote control si r monicoring site

2 Choir

- TAB EDIT :
 - Enter the site name
 - · Select "Remote Control Silver" in the Type list

Note: Password and login are automatically inserted

TAB EDIT : Then, enter "IP address"



You can now create a new script and send it to the equipment: Go to the "Script" menu \rightarrow "Send script to the equipment".







[0] S:1 H:0 📄 View Objects 🖹 View Links Action 1 Alarm 前 Delete Properties Tags Properties 🗙 Cancel [0] Alarm O To choose the way the alarm is to be sent: Name : Alarm 0 × Mail : sends an email Channel : None ~ Trap : sends an SNMP TRAP Transmitter : None ~ Log : writes in the log. In every case, the phone alarm is sent as well. ¥ Alarms : With 'none', no alarm will be sent, including the phone alarm. . Transport Triggering 🔘 Mail O ON 💿 Mail - Trap ○ OFF 🔿 Trap ON/OFF O Log O None Priority level : 0 ¥ 3- Major Severity : ¥ If necessary, choose whether the alarm should be sent at the beginning (ON), or at the end (OFF) or both at the beginning and end (ON/OFF).

Finally, set the same severity as in the Remote Control Silver dans le FM monitoring Silver ('Severity threshold' menu in the 'Phone Alert Parameters' section of the "Phone Alert" page).



Example: click on the 'ON' button: the alarm is activated and so is the relay.



3) The alarm display in Scripteasy Object list

» Scripteas	» Scripteasy Object List					
Alarm	Script Id	ScriptEasy Alarm name	Associated Wave File			
1	4	Alarm	Listen Del Upload			

Note : only alarms are listed here (no relay).

- 4) You can associate a way file to the alarm. Listen to check
- 5) Launch ScriptEasy play mode and activate the alarm.

6) The Remote Control Silver should dial the configured number and give the hour and the content of the associated wave file. Deactivate the alarm in ScriptEasy.

Phone Control Parameter

» Phone Control Parameter		
Dial-in DTMF control enabled	No	Update

As the control system via DTMF and the pppd server use the same module (vgetty), the working of the control system and of PPP Dialin have to be validated together.

1) Put "Dial in enabled" on "no" and "Dial in DTMF control enabled" on "no". A Dial out of the Remote Control Silver should not work.

2) Put "Dial in enabled" on "no" and "Dial in DTMF control enabled" on "yes". The DTMF menu should be accessible.

3) Put "Dial in enabled" on "yes" and "Dial in DTMF control enabled" on "no". The connection on the Remote Control Silver is possible via a PPP connection.

4) Put "Dial in enabled" on "yes" and "Dial in DTMF control enabled" on "yes". The menu DTMF is accessible and the connection on the Remote Control Silver via PPP connection too.

Validate the DTMF menu: numbers from [0] to [9] and symbols [*] and [#] are the DTMF signals to use.





Remote Control Silver User manual – English version

DTMF menu diagram: DTMF menu process steps



Check that an invalid value for the ScriptEasy action object sends a non validity message. Check that the equipment sends a non reception message after waiting or proposes choices again (if no answer after 3 times, the equipment disconnects automatically).

Voice messages indicate, by default, the alarm number corresponding to the associated object identification number in ScriptEasy (Script Id) as well as the event time.

List and contents of the audio files; these files can be downloaded by an administrator from the FTP server (/spool/voice/prompts):

This list corresponds to the different messages in the DTMF menu.

The action has been completed
The action failed
To use an output relay, press 1
To use ScriptEasy action object, press 2
To restart ScriptEasy, press 3
To reboot, press 4
Alarm
This is an automatic alarm report from
""
Warning, cannot connect to ScriptEasy
I'm sorry, I don't understand that command
Enter Input number
Enter Output number
Enter ScriptEasy ID number
Enter Slot Number
Goodbye
Happened at
Welcome to
Input number
That is not an input slot
Invalid Number

Page 26

Head Office : Parc d'activites Kennedy - 20, avenue Neil Armstrong – F-33700 Bordeaux-Merignac (France) Tel +33 (0)5 57 928 928 – Fax +33 (0)5 57 928 929 – contact@audemat.com – www.audemat.com





"InvalidOutputSlot.wav"	I hat is not an output slot
"InvalidScriptEasyID.wav"	That is not a valid ScriptEasy object ID
"IsOff.wav"	Is off
"IsOn.wav"	ls on
"MainMenu1.wav"	To go to the report status menu, press 1
"MainMenu2.wav"	To go to the action status menu, press 2
"NoAlarm.wav"	No ScriptEasy alarm object is defined
"NoScriptEasyActionObject.wav"	No ScriptEasy action object is defined
"OnSlotNumber.wav"	In slot number
"OutputNumber.wav"	Output number
"PressStarToBegin.wav"	press star to begin
"RebootingNow.wav"	Rebooting now
"ReportMenu1.wav"	To hear the ScriptEasy alarm, press 1
"ReportMenu2.wav"	To hear the output status, press 2
"ReportMenu3.wav"	To hear the input status, press 3
"ToCancelPressStar.wav"	To cancel press star
"ToListenAgainPress1.wav"	To repeat, press 1.
"ToListenAgainPressStar.wav"	To listen to this menu again, press star
"ToListenMessagePressStar.wav"	To listen to the message, press star
"ToReturnToMainMenuPress0.wav"	To return to the main menu, press 0
"ToSwitchOffOn.wav"	To switch off, press 1. To switch on, press 2.
"ToValidatePress#.wav"	To confirm press pound.

The audio files are in wav 8000 Hz, 16 bits, mono format.

To generate the hours of the alarms, store the audio files of all numbers between 0 and 59 and the numbers between 0 and 23 following by "hours".





4.8. Webcam

maken mark		» Webcam configuration	
EAudemat-Aztec	» Webcam Availability		
	Webcam availability	No	Recheck
	» Webcam Parameters	No. 20	
	webcam enabled		Opdate
	Motion sensibility		
	Mark motion location	Yes 🗸	
llomo	Image quality	75	
- Product ID	Time between snapshots (second	ds) 60	
- Users	Erase snapshots older than (day	s) 1	
- PPP dialout			
Phone Alerts			
- Webcam - Support			
SMTP mail client SNMP agont			
- SNMP agent			
— Event log — Alarms			
— I/O layout			
— Downloads			

The webcam support is only compatible with webcams sold by Audemat. The webcam is detected on start up. Click on the "Recheck" button to force a re-detection after connection.

The different options are available:

- Webcam enabled: activate or deactivate the webcam support.
- Motion sensitivity: sensitivity of movement detection from 1000 to 32000 ("1000" is the highest sensitivity).
- Mark motion location: circles the zone with a red frame (where the movement has been detected)
- Image quality: from 50 to 100 (100 is the best quality).
- Time between snapshots: minimum time between 2 savings of snapshots.
- Erase snapshots: purge files automatically (in days).





4.9. Support

	» System support	
	» System software update	
	Patch filename	Apply
	System patching may have to stop all monitoring operations and restart the equipment.	
	» System monitoring	
	View system status	View
- Home		
- Product ID	» Stop / restart	
- Date / Time - Users - Network	Restart application	Restart
- PPP dialout - PPP dialin	Reboot equipment	Reboot
Support	Power off equipment	Halt
- SNMP agent - SNMP notifications		
- Event log	» Default configuration	
– Downloads	Reset configuration to default	Reset

System software update: To update the equipment with the latest software versions. The user will put the name of the patch file in the window: by clicking on "apply", the update is automatic.

> <u>System monitoring</u>: by clicking on "view", the user can check the system status table (temperature, date, ram disk, etc.).

STOP/Restart:

- <u>Restart application</u>: this function causes an application restart to re-initialize the parameters.
- o <u>Reboot equipment</u>: this function causes a total reboot of the equipment.
- <u>Power off</u>: turns the equipment off remotely.

<u>NOTE</u>: it is not possible to turn on the equipment on remotely.

<u>Default configuration</u>: Restores the original default configuration.

Caution: All configuration (except network settings) will be deleted!



real and and and			
-Audemat-Aztec	» Mail		
	SMTP server address	0.0.0.0	Update
	From address	me@address.com	
	Main dest	rcma@audemat-aztec.com	
	Carbon-Copy 1	rcma2@audemat-aztec.com	
	Carbon-Copy 2		
	SMTP Authentication needed	No 💌	
- Home	SMTP Login	user	
– Product ID	SMTP Password	password	
- Date / Time	Send mail every	5 (minutes)	
– Users – Network			
- PPP dialout			
- PPP dialin			
SMTP mail clien			
- SNMP agent			
 SNMP notifications Event log 			
- I/O lavout			
- Downloads			

- Email configuration:
 - Set email account and addresses (sender and recipient).
 - Set how often messages are sent in the "Send mail every" zone: messages will be sent every "X" minutes. The Digiplexer will stock messages in the meantime.
 - o Ask the network administrator for setting information.
 - The "Send test mail" will send a trial e-mail.
 - $\circ~$ The "Mark all pending mails as deleted" deletes e-mails which are on hold in the outbox.

Note:

If a text address is set, DNS must be configured so as to ensure proper name resolution. Check that the configured gateway can reach this server (Network page, Gateway option).



4.11. SNMP agent

		» SNMP agent				
	» SNMP					
	SNMP manager IP address	192.168.0.55 Main manager	Update			
		0.0.0.0 Optional mirror 1				
		0.0.0.0 Optional mirror 2				
		0.0.0.0 Optional mirror 3				
	SNMP community GET	private				
	SNMP community SET	public				
- Home	Download FM Monitoring Silver MIB file FM Monitoring Silver MIB					
- Product ID						
— Date / Time — Usors	» SNMP Traps					
– Osers – Network	SNMP notifications type	Inform SNMPv2c	Update			
- PPP dialout	Trap Community	public				
- PPP dialin	SysDescription	Audemat-Aztec's FM Monitoring S				
— Support — SMTP mail client	Life sign Trap	On 💌				
- SNMP agent	Minutes between Life Signs	10				
 SNMP notifications 						
- I/O layout	» SNMP Test					
— Downloads	Test Trap sending (WarmStart)		Send			

- > **SNMP parameters**: The user has the possibility to download the Digiplexer's "MIB".
- 1. **Configure SNMP Traps** that the user chooses to send. Traps can be sent to 4 addressees (Main Manager and optional mirrors). *
 - SNMP notification type (see section 4.7.2 below)/ Trap community/ SysDescription: trap parameters
 - Life sign Trap/ Minute between life signs: sending life sign trap every "X" minutes.
 - Test Trap: to carry out a test according to the trap setting.

* CAUTION:

With the Digiplexer, multiple addresses may be configured for notifications. However, only the Main Manager has the authority to acknowledge notifications. In the case of INFORMS messages, secondary managers' automatic replies are ignored by the Digiplexer.

4.11.1. Supported SNMP versions

The Digiplexer implements an SNMP agent conform with SNMPv1 and SNMPv2c versions. GET and SET commands are supported, as are GETBULK in SNMPv2c. Notifications can be transmitted in TRAP V1 or V2c form or INFORM V2c type.

4.11.2. Notification modes

- To ensure that the traps reach their destination via the protocol, the Digiplexer offers two methods based on the principle of notification retransmission until acknowledgement is received by the addressee manager.
- Acknowledgement is automatic, via INFORM type notifications. These notifications are only available with the protocol's 2c version. The protocol ensures that the manager immediately returns the received notification to the transmitting agent. This mechanism is very simple and reliable, requiring no specific configuration from the addressee manager.
- Manual acknowledgement: a specific OID ("alarmPendingAlarmsalarmAck") is extracted from variables transmitted inside the trap, on which the manager will have to carry out a SET command. This method is difficult to set up, but is the only possible method for managers limited to the protocol's version 1.

Acknowledgement mode selection (Trap V1, Trap V2c or Inform) is set for all alarms. See section 4.8, "**Notifications**" for additional configuration specific to notification type.

4.11.3. MIB structure

Most MIB elements which can be viewed and modified are presented on the embedded web site. The MIB also has diverse unique and specific tables.

- ScriptEasy alarm table
- > Table of notifications awaiting acknowledgement
- Input-output table



4.12. Notifications

		>	Notifications Types				
E-Audemai-Aztec	Trap	Description	Mode	Ack timeout	Max retries	Туре	
	1	Equipment ON	send and forget	30	3	Info	
	4	Equipment log full	send and forget	30	0	Info	
	8	Heartbeat	send and forget	30	3	Info	
	9	Equipment configuration evolution	send and forget	30	3	Info	
	10	Equipment Fault	send and forget	30	0	Info	
- Home - Product ID - Date / Time - Users - Network - PPP dialout	10000	ScriptEasy Alarm (info)	send and forget	30	1	Info	
	10001	ScriptEasy Alarm (On/Off)	send and forget	30	1	On/Off	
	20000	Snmp-IO Bridge : Digital Input Changed	send and forget	30	1	On/Off	
- PPP dialin - Support	20001	Snmp-IO Bridge : Digital Output Changed	send and forget	30	1	On/Off	
- SMTP mail client SNMP agent			Update				
- Event log							
— I/O layout	» SNM	P Actions					
– Downloads	Replay	Traps not acknowledged			Replay Trap	s	
	Reset 1	Fraps not acknowledged			Reset Traps		

- > Enables each configuration type to be configured individually (see chapter SNMP agent, 4.7.2)
 - <u>"Do not send":</u> Useful if some alerts have to be temporarily suspended.
 - <u>"Send and Forget"</u>: standard SNMP mode, no acknowledgement expected, notifications are destroyed immediately after being sent.
 - <u>"Resend until acknowledged</u>": standard mode of standalone Digiplexer alarms. Notifications are re-transmitted until acknowledgement has been received. Acknowledgement mode as such depends on the sending mode:
 - automatic acknowledgement for sending in INFORM
 - manual acknowledgement for V1 Traps and V2c Traps

4.12.1. Principle of re-transmissions / acknowledgements functioning

As long as its acknowledgement has not been received, the notification will be re-transmitted at a rate of one sending every <d> seconds, a maximum of <n> times; where <d> and <n> are the fields respectively <Ack Timeout> (1) and <Max Retries> (2).

If acknowledgement does not arrive following $\langle n \rangle$ attempts, the notification is "frozen", that-is-to-say, it is put on standby until a new notification of the same type occurs. It can also be manually "unfrozen" using the "Replay Traps" button (3).

It is important to note that non transmitted notifications are not lost. They are kept to be re-transmitted when conditions permit it once again. When a new notification occurs the "frozen" notification is reactivated, and a cycle of sending attempts starts up again.





4.12.2. Events leading to SNMP notification sending

- <u>ColdStart</u>: this is the very first message sent via the stand alone Digiplexer following its starting up. This trap is part of the SNMP protocol, it cannot be acknowledged, and is never re-transmitted.
- <u>EquipmentOn</u> (identifier: 1): it is equivalent to ColdStart except that it can be acknowledged and re-transmitted if necessary. Transmitted just after ColdStart.
- <u>HeartBeat (identifier: 8)</u>: notification sent at regular intervals to give equipment sign of life. Configurable on page "SNMP agent".
- ConfigurationChanged (identifier: 9): transmitted when system configuration is modified.
- EquipmentFault (identifier: 10): transmitted on application critical error or system breakdown.

> Specific applicative alarms (ScriptEasy)

- <u>ScriptEasy Info alarm</u> (identifier: 10000): ScriptEasy INFO type alert (event having no distinct beginning or end)
- <u>ScriptEasy On/Off alarm</u> (identifier: 10001): ScriptEasy ON/OFF type alarm (event marking beginning or end of a state)

Three tables display the current state of a device's inputs and outputs.

The slot configuration table which shows the layout of the mini boards (.sys.io.slots.slotsLayoutTable)

slotsLayoutSlotNumber	Slot number (10 or 11)
slotsLayoutHWVersion	Hardware version of mini board
slotsLayoutSWVersion	Software version of mini board (if applicable)
slotsLayoutCardType	Type of mini board: "Analogic input" "Digital input" "Digital output" "empty"

Table of digital Inputs

(.sys.io.dig.digStatusTable)

digStatusSlotNumber	Slot number (10 or 11)
digStatusInputNumber	Port number (counted from 0)
digStatusInputName	Input name
digStatusNormalState	Normal state (0 or 1)
digStatusstartOfIncident	Date and time of beginning of incident
digStatusendOfIncident	Date and time of end of incident
digStatusErrCode	Free error code
digStatusErrMessage	Free error message
digStatusValue	Current value (0 or 1)

Table of relay Outputs

(.sys.io.rel.relStatusTable)

relStatusSlotNumber	Slot number (10 or 11)
relStatusOutputNumber	Port number (counted from 0)
relStatusOutputName	Relay name
relStatusNormalState	Normal state (0 or 1)
relStatusLastChange	Date and time of last change of state
relStatusValue	Current value (0 or 1)



4.13. Event log

	» Event Log						
And E.Audemat-Aztec	# Date	Time	Origin	Event		Info	TM
	4 12/20/2005	17:09:52	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	17:04:36	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:59:20	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:54:04	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:48:48	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:43:32	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:38:16	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:33:00	Alarms Manager	Software error	ALarm mail	sending failed	
	4 12/20/2005	16:27:44	Alarms Manager	Software error	ALarm mail	sending failed	
- Home	4 12/20/2005	16:22:28	Alarms Manager	Software error	ALarm mail	sending failed	
– Product ID	4 12/20/2005	16:17:12	Alarms Manager	Software error	ALarm mail	sending failed	
- Date / Time	4 12/20/2005	16:11:56	Alarms Manager	Software error	ALarm mail	sending failed	
- Users	4 12/20/2005	16:06:40	Alarms Manager	Software error	ALarm mail	sending failed	
– Network	4 12/20/2005	16:01:24	Alarms Manager	Software error	ALarm mail	sending failed	
- PPP dialout	4 12/20/2005	15:56:08	Alarms Manager	Software error	ALarm mail	sending failed	
- PPP dialin							
- Support							
- SMTP mail client							
- SNMP agent							Ĩ
- SNMP notifications			System 🔽	Severity 4 - warning	-		
Event log		- C	ScriptEasy 🔽				-
	< Prev page	e	1/0			Next page	8 >
- Downloodo			Lines 15	Refresh			
- Downloads							

- > Review of events. The user can sort:
 - ⇒ By checking "System" to view the system alarms, and / or "ScriptEasy" for application alarms, and / or "I/O" for inputs-outputs. The number of lines per page can also be set.
 - ⇒ The user can also choose to view events according to the severity (0 being the highest level of severity). Click on "refresh" to display the selection:
 - 0: emergency
 - 1: alert
 - 2: critical
 - 3: error
 - 4: warning
 - 5: notice
 - 6: information

If 3 "error" is chosen, for example, the user will have all the alarms from 0 to 3.



4.14. ScriptEasy Alarms

			» Alarms		
EAudemat-Aziec	Script ID	Script ID			
	Application		Started		
	Alarm Id	ScriptEasy Alarm name	Script Id	Value	Event time
	1	Alarm sur une action	2	Alarm start	Tue Dec 20 11:42:32 2005
 Home Product ID Date / Time Users Network PPP dialout PPP dialin Support SMTP mail client SNMP agent SNMP notifications Event log Alarms Jownloads 					



The error condition stays active.

> This table shows the current state of the script alarm objects while operating the equipment

Details of table fields

ScriptEasyAlarmsidScriptObject	Object identifier in the script
ScriptEasyAlarmsName	Number of alarm associated with this object
ScriptEasyAlarmsseverity	Severity affected to alarm
ScriptEasyAlarmsValue	1 = INFO,ON
	2 = ON/OFF,BEGIN
	3 = ON/OFF,END
	4 = INFO,OFF
ScriptEasyEventTime	Date and time of last event



4.15. I/O Layouts

			» Inpu	ts / Outpu	ts		
EAudemat-Aztec							
		Interface 2	Interface 1			RF input	
			1 :/	ann al	Barri Ekterak		
		COM1 USB 2	USB 4	I/O Boards			
		USB 1	USB 3				
- Home - Bradust ID							
— Date / Time							
— Users	» Mother	board					
— Network	Version:	SFT41164 Audemat Aztec b	uild: 002				
- PPP dialout	Slot A:	Empty (-)		Slot C:	Empty (-)		
	Slot B:	Empty (-)		Slot D:	Empty (-)		
— Suppon — SMTP mail client							
- SNMP agent	» COM po	rts					
 SNMP notifications 	Name	Usage				TCP Tunne	l Port
— Event log	COM1	Console	-			7401	
							Update
	» USB-Se	rial ports					Rescan USB
	Name	Usage				TCP Tunne	l Port
							Update

- Motherboard: the user can view the type of boards (relay, digital) and their place on the slots.
- > **<u>Com port</u>**: COM0 and COM1 by default.
 - Modem: configuration of serial port in modem port.
 - <u>Console</u>: configuration of serial port in console port.
 - <u>Scriptlet</u>: selection of a JavaScript program for the selected Com port (the program has to be selected in the combo list of the column "Serial Script").
 - ⇒ To upload the Scriptlets , connect to the unit with FTP, under ScriptEasy username and password (see Users page); put the scriptlet file in the /serial directory. It will now appear in the drop-down selection list.
 - <u>Scriptlet debug</u>: associates an interactive JavaScript interpreter to the selected COM port. This interpreter can be used to test the Scriptlets, by being connected by ssh on the equipment with the login "jstest<x>" or <x> corresponding to the COM PORT.
 - ➡ For example, if the COM3 is in "Scriptlet debug" mode, we can connect the interactive interpreter by ssh with the login « jstest3 ». The common password is « jstest ».
 - o <u>Unset</u>: non attributed serial port (inactive).
 - <u>Support</u>: support port. Reserved for Audemat.
 - o Tunelling: configuration of serial port by tunelling.

<u>Caution</u>: if you disable the console port, you will no longer have access to the Remote Control Silver terminal mode.

USB Serial ports: Enables dynamic addition of serial ports. Contact Audemat to check for compatibilities.





4.16. Download

	» Downloads
	» Downloads
	Scripteasy
	Sun J2SE Runtime Environment (http://java.sun.com)
Home Product ID Date / Time Users Network PPP dialout PPP dialout PPP dialin Support SMTP mail client SNMP agent SNMP notifications Event log Alarms I/O layout	

- From this page, download:
 - ⇒ The ScriptEasy portal: it will give you access to the Creator module and Viewer module Please see the ScriptEasy manual available on the Silver CD and on www.audemat.com. *Note: The Viewer module is only available if the Viewer option is activated.*
 - ⇒ 'Java Run time', required to run the ScriptEasy application.

Installing the Viewer option

- Contact the sales department or support services to get the CD containing the files you will need to install the option.
- Insert the CD to launch the ScriptEasy portal and click on "ScriptViewer",
- Enter your equipment IP address, login and password,
- > Click on "Get option" on the "Script Viewer" line, insert the product key (1) and click on "Submit".



Click on "connect".

NOTE: "Yes" will appear on the "Script viewer" line in the "About" window.





5. API SCRIPTLETS

The Scriptlets are small JavaScript programs written by the user, which enable control of equipment linked to the Remote Control Silver by RS232 or RS485 port.

These scripts enable the user to define objects in ScriptEasy like "software inputs" similar to the logic inputs.

Specific Scriptlets functions:

Each Scriptlet is linked to a specific COM port (via the I/O Layout page). This port is accessible from the JavaScript program by **a serial** object automatically created at launching.

This object has the following properties:

- serial.status: state of the port (open/closed)
- serial.speed: defines the port speed (between 600 and 230400)
- serial.parity: defines the flow parity ("none", "even" or "odd")
- serial.fluxControl: defines the flow control ("CTRSCTS", "XONXOFF" or "NONE")
- serial.bits: the bits number (5,6,7 or 8)
- serial.stopBits: positioned on TRUE, indicates that we have to use a bit stop.

The methods of serial object are:

- serial.open() to open the port
- serial.close() to close it.
- serial.readLine(endChar, timeout): reading of a "line" of data. The parameters are:
 - end: ascii value of the trailling character.
 - \circ timeout: maximum time (seconds) to wait for this end character.

Example: myLine = serial.readLine(20, 10); assign to "myLine" the result for the reading on the current COM Port of all characters until the characters ascii20 (' '). If after 10 seconds, the character ' ' is not received, readLine finishes and myLine is equal to an empty string.

- serial.write(size,string): writing of a string on the COM PORT.
 - string: an ordinary string (native JavaScript type).
- serial.readBytes(size,timeout): reading of byte array on the COM port.
 - Size: byte number to read
 - Timeout: maximum during (sec) to wait for the characters before giving up.
- serial.writeBytes(array): writing of a byte array on the COM port.
 - o array: a byte array.

The Scriptlet API exposes a specific object to communicate with ScriptEasy: the object serialInput.

This object has 3 properties:

- serialInput.name: the name of the object
- serialInput.info: complementary information on the object.
- serialInput.value: a Boolean value which will be visible in the ScriptEasy and accepted as a logic entry.

To use it, you have to instantiate in the Scriplet the serialInput objects that you will need:



```
MySerialInput1 = new serialInput("nom","info");
MySerialInput2 = new serialInput("autre nom","autreinfo");
```

Then, to change the state object throughout the program:

```
If( condition == 1) {
    MySerialInput1.value = TRUE ;
} else {
    MySerialInput2.value = FALSE;
}
```

These value modifications will be immediately taken in account in the ScriptEasy.

Useful functions and update functions:

- print(string): displays the string on standard error output stream.
- hprint(string): displays the hexadecimal value of the string on standard error output stream.
- exec(filename): load and execute the JavaScript program in argument.
- sleep(seconds): suspends the execution for the number of seconds specified in argument.
- string2array(string): converts the string to a bytes array.
- array2string(array): converts a bytes array to a string.
- To upload the Scriptlets , connect to the unit with FTP, under ScriptEasy username and password (see Users page); put the scriptlet file in the /serial directory. It will now appear in the drop-down selection list.

API Inputs :

API inputs are logic inputs linked to the API script functions which have been created.

To make them available in ScriptEasy, you first have to synchronize with the equipment.

For that, first configure the IP address (password and login), then go to the menu "Tools" and click on "get API objects from equipment ':



Once synchronized, new objects are available:







And you can include them in your script:







6. API XMLRPC

To enable access to the equipment data from programs or external web pages, the Remote Control Silver exposes an 'API' under the format XMLRPC (cf http://www.xmlrpc.org). The advantage of this format is to be simple, platform independent and well supported by a variety of standard tools (php, etc...).

sys.getEventLog

```
parameters :
     - firstID (<int>)

    eventTypeMask (<int>)

        maxNumberOfLines (<int>)
        minimumSeverity (<int>)
Description :
        firstID : set the lower limit in databases idEvent. As the events
numbering is strictly growing, you can use this parameter to fetch only newer
entries from base.
- eventTypeMask :
         SYSTEM EVENT 0x1
         APPLI EVENT
                       0x2
         IO EVENT
                       0 \times 4
Use a logical OR to combine these values to select which one to fetch
- maxNumberOfLines : self-explanatory, limit the number of lines in the reply
- minimumSeverity : filters out event with a lesser severity. Remember that
you can qualify the alarms severity in the ScriptEasy application. So if you
use '3' as value for minimumSeverity, you'll fetch only the most serious
events (1,2,3 ranks)
 reply :
        <array>
          <array>
             <string> idEvent
             <string> eventType
             <string> eventDateTime
             <string> severity
             <string> sysEventDescription
             <string> sysEventType
             <string> sysEventMessage
             <string> ioObjectName
             <string> ioValue
             <string> appliObjectName
             <string> appliObjectValue
             <string> appliObjectMessage
             <string> RFU-1
             <string> RFU-2
             <string> RFU-3
             <string> RFU-4
             <string> RFU-5
           </array>
                [... may be repeted several times]
        </array>
```

Description :

idEvent : event id (sequence number)



Page 42



eventType : 0: system 1: i/o 2: ScriptEasy eventDateTime : event's date of effect severity : event's severity qualifier sysEventDescription : if eventType = 0 : subsystem name ; else empty sysEventType : if eventType = 0 : description of system event ; else empty sysEventMessage : if eventType = 0 : additionnal information on system event ; else empty ioObjectName : if eventType = 1 : I/O sender name ; else empty ioValue : if eventType = 1 : I/O logical state (0/1); else empty appliObjectName : if eventType = 2 : ScriptEasy alarm name ; else empty appliObjectValue : if eventType = 2 : ScriptEasy alarm value ; else empty appliObjectMessage : if eventType = 2 : additionnal information on ScriptEasy alarm ; else empty RFU-1 : reserved for future use RFU-2 : reserved for future use RFU-3 : reserved for future use RFU-4 : reserved for future use RFU-5 : reserved for future use

ScriptEasy.getAlarms

parameters : none

```
reply :
```

```
<array>
  <struct>
    <member>
      <name>alarmId</name>
      <value><int>1</int></value>
     </member>
     <member>
       <name>alarmName</name>
       <value><string>Alarm</string></value>
     </member>
     <member>
       <name>alarmValue</name>
       <value><string>Alarm start</string></value>
     </member>
     <member>
        <name>alarmStatusCode</name>
        <value><int>2</int></value></member>
     <member>
        <name>alarmTime</name>
        <value><string>Thu Feb 9 10:26:08 2006</string></value>
     </member>
  </struct>
        [... may occurs several times]
</array>
```

The reply is composed of an array of structs, one struct for one Alarm object. Every Alarm struct is built from 3 members :

- alarmId (<int>) is the ScriptEasy object id
- alarmName (<string>) is the ScriptEasy object name
- alarmStatusCode(<int> is the current status. Value range is : $1: \mathsf{INFO}, \mathsf{ON}$
 - 2: ON/OFF, BEGIN
 - 3: ON/OFF, END
 - 4 : INFO,OFF

ScriptEasy.getAlarmById

parameters :





- alarmId (<int>) : (as fetched with ScriptEasy.getAlarms, it's also the little number displayed in the upper left corner inside square brackets on ScriptEasy application's Alarms objects)

reply :

```
<struct>
  <member>
    <name>alarmId</name>
    <value><int>1</int></value>
   </member>
   <member>
     <name>alarmName</name>
     <value><string>Alarm</string></value>
   </member>
   <member>
     <name>alarmValue</name>
     <value><string>Alarm start</string></value>
  </member>
   <member>
      <name>alarmStatusCode</name>
      <value><int>2</int></value></member>
   <member>
      <name>alarmTime</name>
      <value><string>Thu Feb 9 10:26:08 2006</string></value>
   </member>
</struct>
```

A single struct for the alarmId passes as parameter, same format as in getAlarms

ScriptEasy.getActions:

parameters : none

reply:

```
<array><data>
        <value>
          <struct>
            <member>
              <name>actionId</name>
              <value><int>35</int></value>
            </member>
            <member>
             <name>actionName</name>
             <value><string>Action</string></value>
            </member>
            <member>
              <name>actionState</name>
              <value><int>0</int></value>
            </member>
          </struct>
        </value>
        [... may occurs several times]
</data></array>
As for getAlarms, the reply is formed of an array of structs, each one built
as :
      - actionId (<int>) : the ScriptEasy object id
      - actionName (<string>) : the ScriptEasy object name
      - actionState (<int>) : the ScriptEasy object logical state
```

ScriptEasy.getActionmById:





03/2008

- actionId (<int>) : (as fetched with ScriptEasy.getActions, it's also the little number displayed in the upper left corner inside square brackets on ScriptEasy application's Actions objects)

reply :

Reply is a single struct for the actionId given in parameter, same format as getActions.

```
ScriptEasy.setActionmById
```

Parameters :

actionId (<int>) : (as fetched with ScriptEasy.getActions, it's also the little number displayed in the upper left corner inside square brackets on ScriptEasy application's Actions objects)
 state (<int>) : state to set (0 or 1)

```
reply :
```

```
int , 0 meaning OK
```

php script examples

The following example modifies the state of inputs / outputs.

Create an HTML form and a script linked to the button that will in turn call a specific script for each option.

	Sc	riptEasy Web Access
	IP :	
Acti	ons :	۲
Alar	rms :	0
Digital Inp	out :	0
digital out;	out :	0
Analog in	out :	0
		Action

The script "action.php" is executed when the 'Actions' option is selected.

action.php

?php

```
$h2 = 'Actions';
$htmlTabResult = ''; //results to be displayed in html page
```





Remote Control Silver User manual - English version

```
03/2008
```

```
$scriptRpc = 'scriptEasy.getActions'; //script name that xml rpc must get by
default
$param = array(); //parameter to transmit when xml rpc object is created
$actionId = ''; //action button id
$actionName = ''; // action button name
$actionState = ''; //button state
$ip = $ POST["ip"];
$type = $ POST["type"];
 if($ POST['idAction'] == TRUE)
{
            //current state is switched if ON=>OFF if OFF=>ON (bool)
            if($ POST['etat'] == 1)
             {
                        \$etat = 0;
            }
            else
             {
                        $ etat = 1;
            }
            //script to call
            $scriptRpc = 'scriptEasy.setActionById';
            // parameter to transmit when new xmlrpcmsg object is created
            $param = array(new xmlrpcval($ POST['id'], 'int'), new xmlrpcval($etat,
 'int'));
$message = $xmlrpc->createRpcMessage($scriptRpc, $param);
$result = $xmlrpc->sendMessage($message);
if($ POST['idAction'] == TRUE) {
            //initial script is sent to display the table again after state has been
changed
            $message = $xmlrpc->createRpcMessage('scriptEasy.getActions', array());
            $result = $xmlrpc->sendMessage($message);
//table headers
 t = "  n" . 
            <strong>Identifier</strong><strong>Name</strong><strong>Name</strong><strong>Name</strong><strong>Name</strong><strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name</strong>Name
trong>Change status</strong>"
                                                              "";
if ($xmlrpc->displayError($result) == null) {
            $array = $xmlrpc->value($result);
            $size = $array->arraysize();
            for($i=0; $i<$size; $i++) {</pre>
              //taken again from here
              $struct = $array->arraymem($i);
              $actionId = $struct->structmem("actionId");//extraction of ID value
               $actionId = $actionId->scalarVal();//Transformation of xmlrpc object
into php friendly data
               $actionName = $struct->structmem("actionName");//name extraction
               $actionName = $actionName->scalarVal();
```





```
03/2008
```

```
$actionState = $struct->structmem("actionState");//state
                                                                        extraction
(bool, 0 or 1)
       $actionState = $actionState->scalarVal();
       if($actionState == 0)
            $buttonName = " Off ";
       else
            $buttonName = " On ";
            $htmlTabResult .= "\n"
                   $actionId\n"
                ..
                ...
                   $actionName\n" .
                ...
                   n".
                ...
                   <form action='../accueil/scriptview.php' method='post' >\n" .
                ...
                   <input type='hidden' value='1' name='idAction'>\n" .
                   <input type='hidden' value='$actionId' name='id'>\n"
                ...
                "
                   <input type='hidden' value='$actionState' name='etat'>\n" .
                   <input type='hidden' value='$type' name='type'>\n" .
                "
                   <input type='hidden' value='$ip' name='ip'>\n" .
<input type='submit' value='$buttonName'>\n" .
                "
                "
                ...
                         </form>\n".
                    \n".
                ...
                "\n";
      }
}
else {
      $msgError = $xmlrpc->displayError($result);
}
?>
```





APPENDIX 1: OBJECT DEFINITIONS AND APPLICATION EXAMPLES

=> see all the script examples on the website www.audemat.com ("download" page of the Remote Control Silver product) 1) Equipment used : =>IP2CHOICE:

-Slot 0: Relay -Slot 1: Relay -Slot 2: Relay -Slot 3: Relay -Slot 3: Relay -Slot 5: Dig -Slot 5: Dig -Slot 6: Dig -Slot 7: Empty -Slot 8: Dig -Slot 9: Dig -Slot 9: Dig -Slot 10: Ana -Slot 11: Ana

2)And : And.sio



D	С	В	А	S1	S2	S3
0	0	0	0	0	0	0
0	0	0	1	0	0	0
0	0	1	0	0	0	0
0	0	1	1	1	0	0
0	1	0	0		0	0
0	1	0	1		0	0
0	1	1	0		0	0
0	1	1	1		1	0
1	0	0	0			0
1	0	0	1			0
1	0	1	0			0
1	0	1	1			0
1	1	0	0			0
1	1	0	1			0
1	1	1	0			0
1	1	1	1			1

3)Or : OR.sio



 Page 48

 Head Office : Parc d'activites Kennedy - 20, avenue Neil Armstrong – F-33700 Bordeaux-Merignac (France)

 Tel +33 (0)5 57 928 928 – Fax +33 (0)5 57 928 929 – contact@audemat.com – www.audemat.com



Remote Control Silver User manual – English version



4)XOr: Xor.sio



В	А	S
0	0	0
0	1	1
1	0	1
1	1	0



03/2008



5) Reverser : Inverseur.sio



6) Nor : NOr.sio



А	S
0	1
1	0

D	С	В	Α	S1	S2	S3
0	0	0	0	1	1	1
0	0	0	1	0	0	0
0	0	1	0	0	0	0
0	0	1	1	0	0	0
0	1	0	0		0	0
0	1	0	1		0	0
0	1	1	0		0	0
0	1	1	1		0	0
1	0	0	0			0
1	0	0	1			0
1	0	1	0			0
1	0	1	1			0
1	1	0	0			0
1	1	0	1			0
1	1	1	0			0
1	1	1	1			0







7) Nand : Nand.sio



D	С	В	Α	S1	S2	S3
0	0	0	0	1	1	1
0	0	0	1	1	1	1
0	0	1	0	1	1	1
0	0	1	1	0	1	1
0	1	0	0		1	1
0	1	0	1		1	1
0	1	1	0		1	1
0	1	1	1		0	1
1	0	0	0			1
1	0	0	1			1
1	0	1	0			1
1	0	1	1			1
1	1	0	0			1
1	1	0	1			1
1	1	1	0			1
1	1	1	1			0

8)XNor: XNor.sio



В	А	S
0	0	1
0	1	0
1	0	0
1	1	1







Remote Control Silver User manual – English version

9)Timer :

9-1) Single Timer: TimerSimple.sio

For T=5s





9-2) Pulse Timer: TimerPulse.sio

For T=5s









The 'Delay' object can manage a hysteresis (guard interval), ie. the output will be triggered only if the input remains TRUE during the specified minimum duration (5 seconds on the example).





Remote Control Silver User manual – English version



10)Counter : Counter.sio

For 3 impulsions in 5s (T)







Remote Control Silver User manual – English version



11) Diagram Tests:

11-1) Test1.sio







Remote Control Silver User manual – English version





12-1)Test3.sio



Qn	R	S	Qn+1	/Q
0	0	0	0	1
0	0	1	1	0
0	1	0	0	1
0	1	1	Х	Х
1	0	0	1	0
1	0	1	1	0
1	1	0	0	1
1	1	1	Х	Х





12-2)Test4.sio



Qn	Set	Reset	Qn+1	/Q		
0	0	0	0	1 -	► Normally: Qn+1=1	/Q=0
0	0	1	0	1		
0	1	0	1	0 -	Normally: Qn+1=0	/Q=1
0	1	1	Х	Х		
1	0	0	1	0		
1	0	1	0	1		
1	1	0	1	0		
1	1	1	Х	Х		

14) Rocker D: Test6.sio



D on rising front:

D	Q	/Q
0	0	1
1	1	0

This type of logic diagram keeps a state in "memory".



15) Priority of the relay: Test9.sio



If Input0 is TRUE, the Relay2 is the only one to commute because its priority is greater than the priority of the other relays.

16) Diagram test:

<u>17-1)-</u> Test10.sio





Remote Control Silver User manual – English version

Input3	Input19	Input24	Input33	Input 46	Relay14	Alarm2	Relay16	Alarm21	Relay27	Alarm26	Relay36	Alarm37	Relay47
1	Х	Х	Х	Х	1	0	0	1	0	1	0	1	0
0	1	Х	Х	Х	0	1	1	0	0	1	0	1	0
0	0	1	Х	Х	0	1	0	1	1	0	0	1	0
0	0	0	1	Х	0	1	0	1	0	1	1	0	0
0	0	0	0	0	0	1	0	1	0	1	0	1	0
0	0	0	0	1	0	1	0	1	0	1	0	1	1

16-2)-Test10b.sio



Input Relay1	Input Relay2	Input Relay3	Input Relay4	Relay Haut	Relay Bas	Relay1	Alarm Relay1	Relay2	Alarm Relay2	Relay3	Alarm Relay3	Relay4	Alarm Relay4	Cligno	Giro
1	Х	Х	Х	0	0	1	0	0	1	0	1	0	1	0	0
0	1	Х	Х	0	0	0	1	1	0	0	1	0	1	0	0
0	0	1	Х	0	0	0	1	0	1	1	0	0	1	0	0
0	0	0	1	0	0	0	1	0	1	0	1	1	0	0	0
Х	Х	Х	Х	0	1	Х	Х	Х	Х	Х	Х	Х	Х	0	1(après 15s)
Х	х	Х	х	1	0	х	Х	х	Х	Х	Х	х	х	0	1(après 15s)
0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1(après 15s)
0	0	0	0	1	0	0	1	0	1	0	1	0	1	С	C
0	0	0	0	0	1	0	1	0	1	0	1	0	1	С	С





17) Alarm priority: Test11b.sio



When E is TRUE, Alarms 14 and 17 are the only ones to be sent because their priority level is the greatest.





Remote Control Silver User manual – English version

18) Test12.sio



Equipment: IP2CHOICE

-Slot 0: Dig -Slot 1: Dig
-Slot 2: Dig
-SIOL 3: DIG
-Slot 5: Dig
-Slot 6: Dig
-Slot 7: Dig
-Slot 8: Empty
-Slot 9: Relay
-Slot 10: Empty
-Slot 11: Empty





Remote Control Silver User manual – English version



 Page 62

 Head Office : Parc d'activites Kennedy - 20, avenue Neil Armstrong – F-33700 Bordeaux-Merignac (France)

 Tel +33 (0)5 57 928 928 – Fax +33 (0)5 57 928 929 – contact@audemat.com – www.audemat.com



03/2008



20) Example with 2 IP2CHOICE (crossed cable):

Equipment specifications:

Equipment 1: (IP2CHOICE)

Slot 0: Dig Slot 1: Dig Slot 2: Dig Slot 3: Dig Slot 3: Dig Slot 5: Dig Slot 5: Dig Slot 6: Dig Slot 6: Dig Slot 7: Dig Slot 8: Empty Slot 9: Relay Slot 10: Empty Slot 11: Empty

Equipment 2: (IP2CHOICE)

Slot 0: Relay Slot 1: Relay Slot 3: Relay Slot 3: Relay Slot 4: Relay Slot 5: Relay Slot 6: Relay Slot 7: Dig Slot 8: Empty Slot 9: Empty Slot 10: Ana Slot 11: Ana

Script Equipment 1:Test_2ip_mach1.sio





Remote Control Silver User manual - English version

Script Equipment 2: Test_2ip_mach2.sio



Equipment state1:







Remote Control Silver User manual – English version







APPENDIX 2: FOR MORE INFORMATION

Please contact



The Audemat Group

20, avenue Neil Armstrong - Parc d'Activités J.F. Kennedy 33700 BORDEAUX – MERIGNAC FRANCE

Tel: +33 (5)57 928 928 | Fax: +33 (5)57 928 929

Hotline: services@audemat.com

USA :

Audemat Inc 19595 NE 10th Ave, Suite A

Miami FL 33179 USA

Tel : +1 (305)249 31 10 | Fax: +1 (305) 249 31 13

Hotline: ussupport@audemat.com

