Azetheca AZbox ETHErnet Cable Adaptor

User's Manual Version 1.1.7

Azetheca is a Serial-Ethernet converter (dongle) that can be used to bring card sharing possibilities to the Azbox's STBs. The protocol that is for now implemented is the Newcamd so the used servers must comply with this protocol. The setup is quite simple; just connect a null-modem serial cable between the AZbox and the dongle; connect an Ethernet cable to the other end of the dongle and power it. Finally, place the "Card Sharing Module" option on $C/S \rightarrow EMU$ in the AZbox's "System Setup" menu.

After running the Azetheca.exe application the window shown below will appear. We can see immediately the list of dongles connected in the LAN with their names and IP addresses. Sometimes it is needed to hit "Refresh" button to make them appear in the list.

🖶 Azetheca			
	Address		Open
	Dongle's Name	IP	
	Room	192.168.1.90	
(Ω)	Azetheca	192.168.1.13	
B. Com B			
Allow a			Refresh
ОК			

In order to access one of the dongles, insert its address and click "Open" button or simply make a double-click in the proper row in the list.

But first we need to choose one of the two possible users (User A or User B) and its access password (the default value is: azbox).

Insert Password	Open
User: User A 💌 Password: *****	
OK Cancel	Refresh

Only if the correct password is inserted we can access the following dongles data window where all the network and card sharing server's information is stored. This window has several tabs with multiple functionalities.

The first one simply shows a date/time information obtain from the Internet using SNTP protocol.



The second one can be used to change the network information used to access the dongle. Besides the dongle's name (used in the main window's list), we can select the IP, Gateway and DNS server addresses or choose them automatically through DHCP.

It is also in this tab where we can see the MAC address (a unique identifier of each dongle) and also change the user's access password (that must be typed twice).

Data from 192.168.1	.90 to User A				\mathbf{X}
Clock Network Sharing Advanced Debug					
Dongle's Name: Room		1	MAC address: 00:A2:B0:40:03:F4		
C Obtain addresses automatically					
Use the following addresses					
IP	192.168.1.90		User		
Mask	255.255.255.0		Туре:	User A	
Gateway	192.168.1.1		Password:	****	
DNS	192.168.1.1		Again:	****	
				Save Close	
ОК					

The third tab (Sharing) is for setting the card sharing servers. On the left it is possible to see a list of servers, on the right the connection data for the server currently selected. That data includes:

- Name: the server's name.
- **Priority**: from 1 highest to 5 lowest (OFF means that the server will not be used).

- Host: server's IP address or domain name.
- **Port**: server's port.
- User: server's client username.
- **Pass**: server's client password.
- **DES**: 3DES key (14 hexadecimal characters)
- **Card**: the provider supplied by the server (choose between the several options or simply select "Detect" to start a automatic detection).

The dongle can store a maximum number of 10 servers that can be added, deleted, edited with buttons "New", "Delete" and "Edit" respectively. Note that the server's data added by one user can not be seen by the other,

Data from 192.168.1.90 to User A				
Clock Network Sharing Adv Sky UK Nova UPC inXtc Cabo D+ Sky Italia Canal+ NL D+ Seca	Vanced Debug Name D+ Host 00.105.1.157 Port 9998 User 00.102030405060708091011121314 DES 0102030405060708091011121314 Card D+ Nagra			
New Delete	Cancel Edit Save Close			

The forth tab holds 3 buttons to "Reset" the dongle, "Update" its firmware through the Net, or show the virtual "IR command" respectively.

Data from 192.168.1.90 to User A 🛛 🔀	₩
Clock Network Sharing Advanced Debug Reset Update IR command	
Save Close	
OK	♥ @ @ ₩

The final tab is used for "debug" purposes. All the actions are shown in the memo window and are also stored in a log file (Azetheca.log). The "Change Ch" button as its name suggest can be used to change the AZbox channel for the one typed in the above editbox.

Data from 192.168.1.90 to User A
Clock Network Sharing Advanced Debug CW0 = 87C627746FF3B012 CW1 = D237737C0B2D5C94 Received 1 of 1 ECMs Sent to server Cabo ECM (146) = 80308F078D02382F86E2521B8BAFCC0D133C5D6D Reply from Server = 80101087C627746FF3B012C989126416B6 elapsed time = 2110ms Cmd \$F2 = F2001087C627746FF3B012C989126416B618E4 CW0 = 87C627746FF3B012 CW1 = C989126416B618E4
Save Close

To send all the data changes (network and card sharing servers) to the dongle, we must hit in the end the "Save" button that also makes a reboot in the dongle and return to the application main window. There we can also access a set of other options hitting the right mouse button on top of the Azetheca's logo.

۲	Azetheca			
	Update firmware	Address		Open
	Force DHCP	Dongle's Name	IP	
	Reset Flash Data	Azetheca	192.168.1.13	
K	COM1 COM2	Room	192.168.1.90	
	СОМЗ			Befresh
_	COM4			
	COM5			
	COM6			
	COM7			
	About			

The preferable way of updating the dongle's firmware is thought the Net (it is more rapid and we do not need to bring the dongle near a computer). But in case we can not access the dongle to hit the "Update" button on the "Advanced" tab, it is always possible to perform the same update through "serial port". For that, start choosing the right COM port and then select "Update firmware" menu option with the dongle turned off.

After choosing the right .dat file on a dialog window the following window will appear after which we will turn on the dongle and the process will begin. When the progress bar arrives to 100% the dongle will reboot with the new firmware.



In general a firmware update does not delete the previous dongle's data (stored in its flash memory), but sometimes, during a major version upgrade, this data is in fact deleted and left in its default values (something that also can be done with the "Reset Flash Data" menu option.



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