



Принцип совершения звонка:

Для звонка с телефона №1 на телефоны офисной АТС поднимаем трубку, набираем прямой телефонный номер «102» и ждем сигнала вызова абонента. Для звонков в ТфОП поднимаем трубку, набираем префикс выхода в город (настраивается на АТС, обычно 0 или 9), затем набираем прямой городской номер.

Для звонков с телефонов офисной АТС №2 на телефон №1 набираем номера нужной линии «101» соответственно. Так мы обеспечиваем «прозрачный» для пользователей режим работы VoIP канала, работающего через IP сеть.

Необходимо обратить внимание, что номера портов, прописанные на шлюзах, а именно 601, 701 и используются только для служебной адресации, пользователям доступны реальные номера линий АТС.

Настройка DVG-7111S

1. Настраиваем WAN адрес:

Setup → Internet Setup

<ul style="list-style-type: none"> Wizard Internet Setup VoIP Setup LAN Setup Time and Date Logout 	<div style="background-color: #f4a460; padding: 5px; font-weight: bold;">WAN SETUP</div> <p>Use this section to configure your Internet Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.</p> <p> <input type="radio"/> DHCP <input checked="" type="radio"/> Static IP <input type="radio"/> PPPoE <input type="radio"/> PPTP </p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>STATIC IP</p> <p>IP Address : 192.168.15.71</p> <p>Subnet Mask : 255.255.255.0</p> <p>Default Gateway IP : 192.168.15.122</p> <p>MTU : 1400</p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>DNS</p> <p>Domain Name Server Assignment : <input type="radio"/> Auto <input checked="" type="radio"/> Manual</p> <p>Domain Name Server (Primary) IP : 192.168.15.54</p> <p>Domain Name Server (Secondary) IP : </p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>MAC</p> <p>Factory Default MAC Address : 00:22:B0:4F:54:8E Restore</p> <p>Your MAC Address : 00:22:B0:DE:0E:AD Clone</p> <p>Current MAC Address : <input type="text"/> (xx:xx:xx:xx:xx:xx)</p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>VLAN</p> <p><input type="checkbox"/> Enable VLAN Tagging</p> </div> <p style="text-align: center; margin-top: 10px;"> <input type="button" value="Apply"/> <input type="button" value="Cancel"/> </p> <p style="text-align: center; font-size: small; color: red;">New settings will take effect after Save & Restart.</p>	<p>Helpful Hints...</p> <p>When configuring the VoIP router to access the Internet, be sure to choose the correct Internet Connection Type.</p> <p>If you are unsure of which option to choose and having trouble accessing the Internet through the router, Please verify them with your Internet Service Provider (ISP) if needed.</p> <p style="color: red; font-weight: bold;">More...</p>
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2. Отключаем регистрацию на всех SIP Proxy серверах, задаем порту FXO номера 601;

Site Map Firmware Version: GE_1.00

D-Link

DVG-7111SSETUPADVANCEDMAINTENANCESTATUSHELP

Wizard

Internet Setup

VoIP Setup

LAN Setup

Time and Date

Logout

VOIP SETTINGS

The device can set up multiple SIP proxy servers for load balancing on the same ITSP to get the better response, and high availability.

PROXY SERVER

Proxy Status	ITSP Name	Proxy Server IP	Proxy Server Port	
Disable		192.168.1.1	5060	
Disable		192.168.15.200	5060	
Disable		192.168.1.1	5060	

Edit

Helpful Hints...

As there are various Proxy Server providers, according to RFC standard, it has designed the gateway to be compatible with them. If any registration problem occurs, please consult your Internet telephony Server Provider.

More...

BROADBAND

PHONE 2 - FXO

Number :

Register

Invite with ID / Account

User ID / Account :

Password :

Confirm Password :

3. Задаем в адресной книге номера для перевода звонков на шлюз FXS
(Advanced → VoIP → Phone Book)

Site Map Firmware Version: GE_1.00

D-Link

DVG-7111S // SETUP **ADVANCED** MAINTENANCE STATUS HELP

VoIP

Access Control
Firewall and DMZ
Advanced Network
Logout

PHONE BOOK

It has 100 phone numbers to restore into a phone book and provides an IP address query when calling to other gateway(s).

Gateway Name	Gateway Number	IP / Domain Name	Port		
fxs2102	701	192.168.15.221	5060		

Add

Gateway Name :

Gateway Number :

IP / Domain Name :

Port :

Apply Cancel

New settings will take effect after [Save & Restart](#).

BROADBAND

Helpful Hints...

Gateway Name: Enter another gateway's code or an easy-to-remember name. This parameter is optional.

Gateway Number: Enter the desired number of another gateway.

IP/Domain Name: Enter the IP address or URL (Uniform Resource Locator) of another gateway.

Port: Enter another gateway's listen port.

[More...](#)

4. Включаем режим HotLine, указываем номера портов FXS удаленного шлюза (Advanced → VoIP → Hot Line)

DVG-7111S	SETUP	ADVANCED	MAINTENANCE	STATUS
VoIP	HOT LINE			
Access Control	Hot Line No.: Enter the hotline number for an automatic dialing function.			
Firewall and DMZ	Warm Line: When the Warm Line function is in use, user can dial a number. Otherwise the system will divert incoming calls from an outside line to the Hot Line Number after a set wait time.			
Advanced Network	PHONE 1 - FXS			
Logout	<input type="checkbox"/> Hot Line			
	Hot Line No. : <input type="text" value="5402"/>			
	Warm Line (Hot Line Delay) : <input type="text" value="0"/> (0 - 60 s)			
	PHONE 2 - FXO			
	<input checked="" type="checkbox"/> Hot Line			
	Hot Line No. : <input type="text" value="701"/>			
	Warm Line (Hot Line Delay) : <input type="text" value="0"/> (0 - 60 s)			
	Dial-Out Prefix : <input type="text"/>			
	FXO Line Default Dial-Out : <input type="text" value="701"/>			
	FXO Line VoIP call in option : <input type="text" value="Caller Indicate Dial-Out"/>			
	Trunk Incoming Prompt Voice : <input type="text" value="Default Greeting"/>			
	<input type="checkbox"/> Enable FXO / Trunk Extension Number			
	<input checked="" type="checkbox"/> Pick up Line by Dialing Extension Number			
	Ring count before FXO pick up : <input type="text" value="1"/> (0 - 999 s)			
	Transit In Busy Tone Limit : <input type="text" value="3"/> (0 - 60 s)			
	<input checked="" type="checkbox"/> Detect FXO Line Presence			

перезагружаем шлюз.

Настройка DVG-2102s:

1. Настраиваем WAN адрес

The screenshot shows the WAN Setup page in the D-Link web interface. The left sidebar contains navigation options: Wizard, Internet Setup, VoIP Setup, Time and Date, and Logout. The main content area is divided into several sections:

- WAN SETUP:** Includes instructions and radio buttons for connection types: DHCP, Static IP (selected), PPPoE, PPTP, and L2TP.
- STATIC IP:** Contains input fields for IP Address (192.168.15.122), Subnet Mask (255.255.255.0), Default Gateway IP (192.168.15.71), and MTU (1500).
- WAN ALIAS:** Contains input fields for IP Address (192.168.8.254) and Subnet Mask (255.255.255.0).
- DNS:** Includes a radio button for Domain Name Server Assignment (Manual selected) and input fields for Primary IP (192.168.15.56) and Secondary IP.

On the right side, there is a 'Helpful Hints...' section with text about configuring the router and a 'More...' link.

2. Отключаем регистрацию на всех SIP Proxy серверах, задаем порту FXS номер 701:

The screenshot shows the VoIP Settings page in the D-Link web interface. The left sidebar contains navigation options: Wizard, Internet Setup, VoIP Setup, Time and Date, and Logout. The main content area is divided into several sections:

- VOIP SETTINGS:** Includes instructions about setting up multiple SIP proxy servers.
- PROXY SERVER:** Contains a table with columns: Proxy Status, ITSP Name, Proxy Server IP, Proxy Server Port, and an Edit button. A red arrow points to the Edit button.

	Proxy Status	ITSP Name	Proxy Server IP	Proxy Server Port	Edit
1	Enable		192.168.15.200	5060	
2	Disable		sipnet.ru	5060	
3	Disable		192.168.1.1	5060	

On the right side, there is a 'Helpful Hints...' section with text about proxy server providers and a 'More...' link.

- Wizard
- Internet Setup
- VoIP Setup**
- Time and Date
- Logout

FIRST SIP PROXY SERVER/ SOFTSWITCH HOST SETTING.

As there are various Proxy Server providers, according to RFC standard, it has designed the gateway to be compatible with them. If any registration problem occurs, please consult your Internet telephony Server Provider.

Enable Support of SIP Proxy Server / Soft Switch

ITSP Name :

FXS REPRESENTATIVE NUMBER

Number :

Register

User ID / Account :

Password :

Confirm Password :

PHONE 1 - FXS

Number :

Register

Invite with ID / Account

User ID / Account :

Password :

Confirm Password :

PHONE 2 - FXS

Number :

Register

Invite with ID / Account

User ID / Account :

Password :

Confirm Password :

Helpful Hints...

As there are various Proxy Server providers, according to RFC standard, it has designed the gateway to be compatible with them. If any registration problem occurs, please consult your Internet telephony Server Provider.

[More...](#)

3. Задаем в адресной книге номера для перевода звонков на FXO порт шлюза DVG-7111s

The screenshot shows the D-Link web interface for a DVG-2102S device. The top navigation bar includes 'D-Link' logo and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', and 'STATUS'. The left sidebar contains 'VoIP', 'DoS Protection', 'Advanced Network', and 'Logout'. The 'VoIP' menu item is highlighted. The main content area is titled 'PHONE BOOK' and contains a description: 'It has 100 phone numbers to restore into a phone book and provides an IP address query when calling to other gateway(s)'. Below this is a table with one entry:

Gateway Name	Gateway Number	IP / Domain Name	Port
7111	601	192.168.15.71	5060

An 'Add' button is located below the table. Below the table is a form for adding a new gateway entry with the following fields:

Gateway Name :

Gateway Number :

IP / Domain Name :

Port :

'Apply' and 'Cancel' buttons are at the bottom of the form. A red note at the bottom states: 'New settings will take effect after [Save & Restart](#)'.

4. Включаем режим HotLine, указываем номера портов FXO удаленного шлюза (Advanced → VoIP → Hot Line)

The screenshot shows the D-Link web interface for a DVG-2102S device. The 'ADVANCED' tab is selected, and the 'VoIP' sub-tab is active. The 'HOT LINE' section is highlighted, containing instructions for Hot Line No. and Warm Line. Below this, two phone sections are visible: 'PHONE 1 - FXS' and 'PHONE 2 - FXS'. In the 'PHONE 1 - FXS' section, the 'Hot Line' checkbox is checked, and the 'Hot Line No.' is set to 601 and 'Warm Line (Hot Line Delay)' is set to 2 seconds. In the 'PHONE 2 - FXS' section, the 'Hot Line' checkbox is unchecked, and the 'Hot Line No.' and 'Warm Line (Hot Line Delay)' are both set to 2. At the bottom, there are 'Apply' and 'Cancel' buttons, and a note that new settings will take effect after a save and restart.

D-Link

DVG-2102S //

SETUP **ADVANCED** MAINTENANCE STATUS

VoIP

DoS Protection

Advanced Network

Logout

HOT LINE

Hot Line No.: Enter the hotline number for an automatic dialing function.

Warm Line: When the Warm Line function is in use, user can dial a number. Otherwise the system will divert incoming calls from an outside line to the Hot Line Number after a set wait time.

PHONE 1 - FXS

Hot Line

Hot Line No. : 601

Warm Line (Hot Line Delay) : 2 (0 - 60 s)

PHONE 2 - FXS

Hot Line

Hot Line No. : 2

Warm Line (Hot Line Delay) : 2 (0 - 60 s)

Apply Cancel

New settings will take effect after [Save & Restart](#).

Перезагружаем шлюз.

Все остальные параметры, включая кодеки, задержки, имена и пароли, и т.д. настраиваются по своему усмотрению, в зависимости от условий эксплуатации.