

# DIGITCOM

**DVR** System

**Quick installation MANUAL**

Smart Industries

Smart Group

[www.smarthomebus.com](http://www.smarthomebus.com)

## Methods of remote Access:

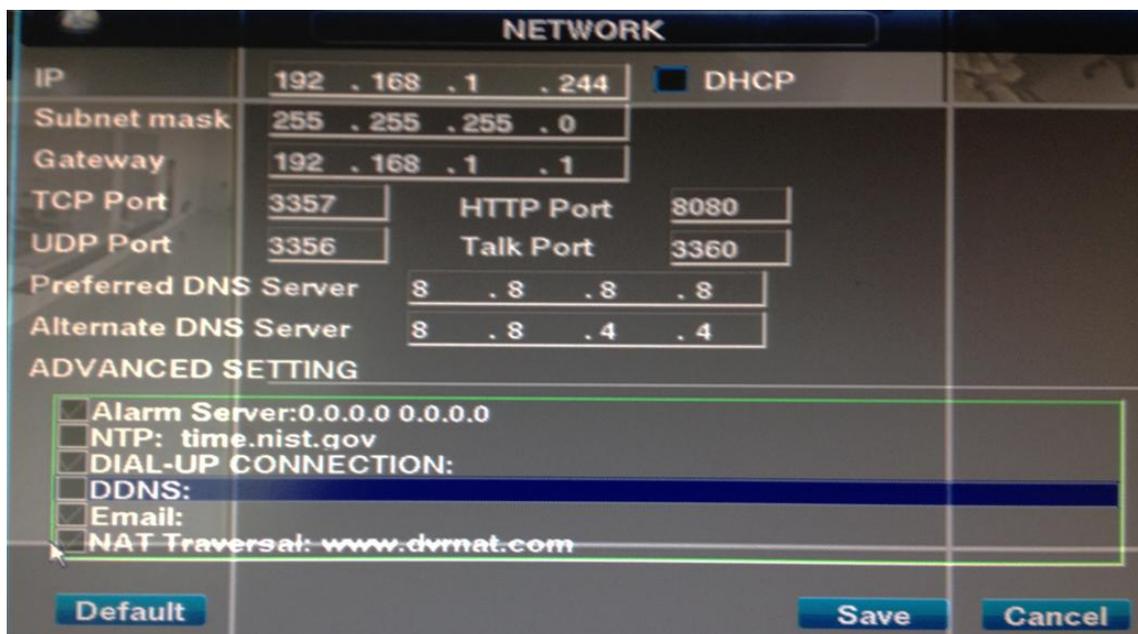
- 1- Using a Static IP address provided by your ISP
- 2- Using the Online server [www.dvrnat.com](http://www.dvrnat.com)
- 3- Using Dynamic Domain Name System (DDNS)

## Configuration steps:

- 1- Configure DVR Network Setting
- 2- Configure Router Settings
- 3- iOS app for WAN Access (ZM-EYE software)

### 1- DVR Network Settings:

- After connecting the DVR to a screen using the VGA input port. Connect a USB mouse to the USB port. Then right click where ever on the screen.
- Go to Main Menu -> Settings -> Network
- You should have the screen shown here:



**IP:** Choose an IP Address for your DVR, it should be unique in your network. You can also activate the DHCP and the DVR will automatically obtain its IP address from the Router (Not recommended when using Static IP Remote Access or DDNS Remote Access methods)

**Subnet Mask:** it should be 255.255.255.0 (Local IP Address)

**GATEWAY:** The your Main Router IP Address (The router that is connecting you to the internet)

**TCP/UDP/HTTP/TALK ports:** By default they are 3357/3356/80/3360

Choose the proper HTTP port for your network EX. 80 or 8080, and TCP3357 is the port that the iOS app is going to be using.

**DNS Server:** Leave it as default. 8.8.8.8/8.8.8.4 (Google Public DNS IP addresses (IPv4) )

### **Advanced Settings box:**

**DDNS** has to be checked when using DDNS, and by double clicking on it will open another configuration box, where you have to enter your DDNS account information, and press test to check that everything is okay. There is another way of using the DDNS and it is configure DDNS on the router and then configure port forwarding on the router for the mentioned ports to the local IP Address of the DVR.

**NAT Traversal** has to be enabled when using the online server. And by double clicking on it, will open a configuration box, enter the server [www.dvrnat.com](http://www.dvrnat.com) and the port number is by default 3368.

### **Checking Network Connection:**

After you setup your DVR to your network, try accessing it using any computer on the same network. This DVR web based interface is run by the ActiveX Control plugin by Microsoft, Internet explorer can access it, and other browsers need to download additional plugin in order to access it. Enter the IP Address you chose for the DVR. NOTE that Browsers use HTTP port to access the DVR, and most browsers consider port 80 as default for HTTP, so if you have chosen different port number for HTTP you need to enter for example:  
192.168.1.244:8080.

You should be able to reach the User name and password page of the DVR, use the default Username: "admin" and password: "admin".

## 2 - Router Settings:

### 1- If using Static IP method:

When you have registered for an Internet account with a static IP address, it means that the whole internet can recognize your router external port (Internet port) using this IP address.

In order to access the DVR remotely you have to tell the router to forward all the traffics received from the internet on the ports you are using, to the DVR IP Address.

Depending on the Router in hand, you'll be able to find the Port Forwarding page under the main setup or advanced setup tabs.

Check the following example: NETGEAR N750 Router:

### Port Forwarding / Port Triggering

Please select the service type.

- Port Forwarding  
 Port Triggering

Service Name

FTP

Server IP Address

192 . 168 . 0 .

|                       | # | Service Name  | External Start Port | External End Port | Internal Start Port | Internal End Port | Internal IP address |
|-----------------------|---|---------------|---------------------|-------------------|---------------------|-------------------|---------------------|
| <input type="radio"/> | 1 | DVR TCP       | 3357                | 3357              | 3357                | 3357              | 192.168.1.244       |
| <input type="radio"/> | 2 | DVR TALK port | 3360                | 3360              | 3360                | 3360              | 192.168.1.244       |
| <input type="radio"/> | 3 | DVR UDP       | 3356                | 3356              | 3356                | 3356              | 192.168.1.244       |
| <input type="radio"/> | 4 | Anothe http   | 8080                | 8080              | 8080                | 8080              | 192.168.1.244       |
| <input type="radio"/> | 5 | FTP           | 20                  | 21                | 20                  | 21                | 192.168.1.241       |
| <input type="radio"/> | 6 | remotsmart    | 6000                | 6000              | 6000                | 6000              | 192.168.1.245       |

The table shown above shows the Port forwarding that has been configured to this router before.

For example: all traffics received on TCP port 3357 is going to be forwarded to the internal local IP address of the DVR which is 192.168.1.244

To add a new port forwarding configuration, you can use presets that is already designed by the Router manufacturer, like FTP, IP IPHONE and NETMeeting. They're only predefined profiles for some common ports and its applications.

You can also add custom configuration like shown in picture below:

**NETGEAR SMARTWIZARD™** router manager  
N750 Wireless Dual Band Gigabit Router model WNDR4000

Select Language: Auto Apply

**Ports - Custom Services**

Service Name: DVR HTTP  
Service Type: TCP/UDP  
External Starting Port: 8080 (1~65535)  
External Ending Port: 8080 (1~65535)  
 Use the same port range for Internal port  
Internal Starting Port: 8080 (1~65535)  
Internal Ending Port: 8080  
Internal IP address: 192 . 168 . 1 . 200  
Or select from currently attached devices

|                       | IP Address    | Device Name              |
|-----------------------|---------------|--------------------------|
| <input type="radio"/> | 192.168.1.253 | --                       |
| <input type="radio"/> | 192.168.1.241 | SMART                    |
| <input type="radio"/> | 192.168.1.245 | --                       |
| <input type="radio"/> | 192.168.1.18  | 83CKNO30JFC7016          |
| <input type="radio"/> | 192.168.1.3   | HELENS-IPAD              |
| <input type="radio"/> | 192.168.1.69  | SMART-ANDY               |
| <input type="radio"/> | 192.168.1.15  | ANDROID-4656E58C3D362D21 |
| <input type="radio"/> | 192.168.1.244 | --                       |
| <input type="radio"/> | 192.168.1.11  | SMARTSALES               |
| <input type="radio"/> | 192.168.1.27  | EVAS-IPHONE              |
| <input type="radio"/> | 192.168.1.4   | APPLE-TV                 |

In this example:

**Service Name:** Only a remark to remind yourself why you did this.

**Service Type:** The traffics you are forwarding are using TCP, UDP or if not determined choose TCP/UDP.

**External Starting/Ending port:** The Range of Ports that you want to forward the traffics they're receiving. By putting the same number in both, it means it will forward only one port.

**Internal Starting/Ending port:** If you want to forward the traffics to different internal port. Check "Use the same port range for internal port" to forward to the same port.

**Internal IP address:** The IP address of the device you want to forward traffics to. This is in our case the DVR local IP address.

After finishing the configuration, when you enter your static public IP address in the browser, calling your router from the internet, the internet will forward your request to your router directly, and the router will detect that your traffics are HTTP Port 8080 for example, and it will forward it to the IP Address you provided in the previous configuration, to the DVR, The DVR will reply to the Router with proper traffics and the router will forward it through the internet to the requesting computer.

## 2- Using DDNS:

If you are not using the DDNS inside the router settings menu. You can use DDNS service in your router.

Same as mentioned in the previous case, the DDNS will only resolve the Dynamic IP address that you have from your ISP to a fixed URL. When you enter this URL in the browser it will be matched in the DDNS database to get the most recent IP address that this URL is connected to. And the Router will forward the traffics and so on.

One popular DDNS service is the dyndns, after you register for an account on dyndns, assigning one host name, one domain name and linking it to the current IP address provided to your router by the ISP DHCP.

In the snapshot show here an example on Cisco WRVS4400N Wireless-N DDNS configuration box.

User Name and password are your Dyndns account credentials. The hostname is the URL Domain that you assigned to your IP address while creating the account.

You have to press connect and wait till you get success message indicating your connection is okay.



DDNS Service: DynDNS.org

Username: smartbasem

Password: .....

Host Name: digitcom.dvrdns.org

Custom DNS:

Status: Waiting...

Connect

Save Cancel

### 3- Using Online server dvrnat.com:

In this case no need for port forwarding. Because the DVR will be logged in the online server and any computer can access this server using the internet and the proper credentials.

Go to the website: [www.dvrnat.com](http://www.dvrnat.com), it will open the following webpage:



**NAT ID:** the NAT ID of your DVR that you can find in the DVR Main menu -> Info -> Version

In the open list you will find the number NATID.

**Password:** the default password is 88888888

(NOTE: Leave the Config button as default)



The picture above shows the DVR Web interface after log in.

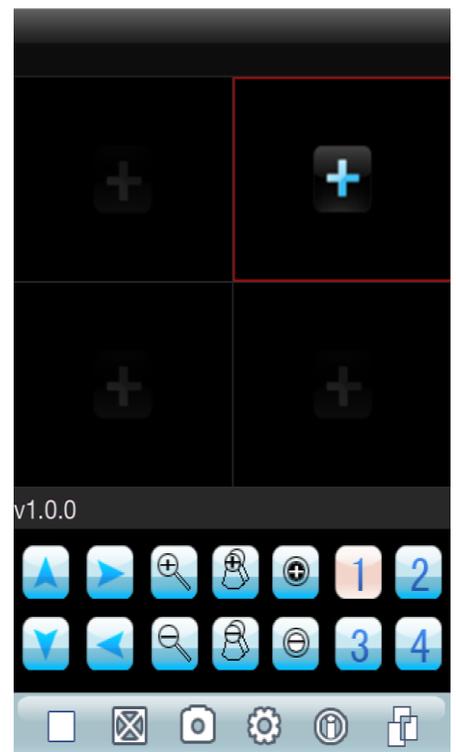
### 3 - iOS app:

There is plenty of application for the Apple device operating system iOS.

One recommended application is the ZM-EYE plus. Search for it on the app store and download it for free.

Open the app, Press on the small gear icon in the bottom. It will open the Device manage box.

To add a new device press on the Edit button and then on the add button to open the device adding configuration:



**Device Name:** Name of the device you are adding.

**Address:** your router's Static IP address in case using static IP address method (Example 121.12.130.155), or your URL domain name, if using the DDNS method

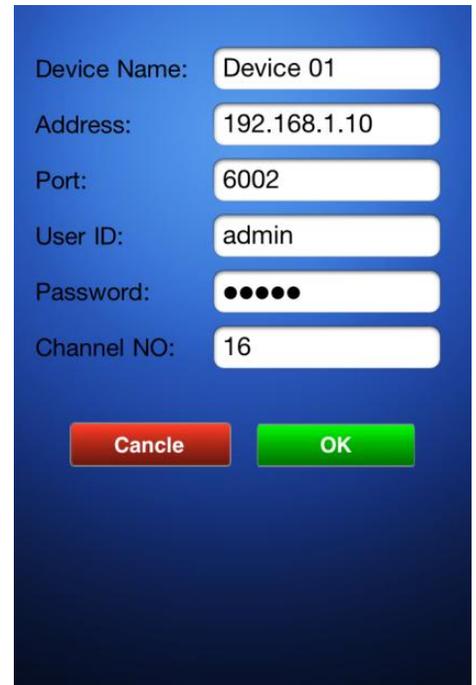
(Example: digitcom.dvrDNS.org)

**Port:** The port number for the actual camera feed, in our case it is 3357

**User ID/Password:** Your DVR credentials. Our defaults are

User name: admin, password: 88888888

**Channel NO:** You are adding a DVR device here. Choosing how many channels will set how many camera channels you can open with this particular device.



The image shows a configuration dialog box with a blue gradient background. It contains the following fields and buttons:

- Device Name: Device 01
- Address: 192.168.1.10
- Port: 6002
- User ID: admin
- Password: ●●●●●
- Channel NO: 16
- Buttons: CANCEL (red), OK (green)

Press okay to save.

Back to the home page of the app, pressing on the plus button on the middle of each channel screen, choose your device from the list, and choose which channel you'd like to view.

**NOTE:** You can also use the application for local access also, you just need to put the local ip address of the DVR instead of the public static IP address or DDNS domain.