Connecting Your System

| Power | Cat5/6 | Cat5/6 | USB | HDMI |

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Using the Mouse

Left Click
Select item, apply changes
Right Click
Access Quick Menu, back / previous screen
Scroll Wheel
Zoom in / out on video or playback timeline

Wiring

| Power | Cat5/6 | USB |

| HDMI | Cat5/6 | 12V DC |
| (or VGA) | (camera end) | (rarely used) |

Initializing / Password

Initializing Your NVR
First, set your region / country and language. Then set your time zone, time, and date.
Password and Unlock Pattern
Set a password between 8-32 characters that includes 2 of the following: numbers, characters, and special characters. Confirm the password by typing it again. Record your password here:

If you'd like, enter a prompt question / hint for your password. Finally, set your optional unlock pattern and enter it again to confirm.

Startup Wizard

Auto check for updates
Leave this checked to receive regular firmware updates
Language, device name, and mouse sensitivity:
Adjust as necessary or leave on defaults
Date & Time
Set your time zone first, then set the time. Adjust the DST (Daylight Savings Time) to match your local rules. NST and holiday rules can be left alone for now.
TCP/IP
If your NVR is connected to your router you will see its IP address here. Enable DHCP. Unless you have a complicated network the the rest of the default settings are great.
P2P
A P2P (Peer to Peer) connection is how you'll connect to your system remotely. The right QR code is your NVR serial number, and the left QR code is a link to our mobile app.
Camera Registration
All of the cameras connected to your NVR will be shown here.
Recording Schedule / Snapshots
By default your NVR will be set to record 24/7. Snapshots can be used to push still images to your mobile device. The defaults here are fine and can be adjusted later.

Adding Cameras to Your NVR or POE Switch

Cabling
Before you mount a camera, test it to make sure it works as expected. It's best to label your cables so that you can connect them in the order you'd like them displayed. Avoid changing the port a camera is plugged in to. If you change the camera port, select ok when prompted to update the port. Camera power & data is transferred over a single Cat5/6 cable (preferred), if you do not utilize power from the NVR or POE Switch there is an optional 12V DC socket (adapter not included). New cameras plugged directly into the NVR will automatically initialize using the NVR username and password. The NVR will automatically assign the camera an IP address of 10.1.1.X (**A**). This completes adding cameras for most people.

Connecting Your POE Switch (less common, only applies if you have an external POE Switch)
To wire a POE Switch, you will run an ethernet cable from one of the ports on your router (the same router your NVR is connected to) to a LAN (10/100/1000) port on your switch. Then, plug the cameras into the PoE ports on your switch.

POE Switch Device Search / Initializing Cameras
Once the switch is wired, navigate to Main Menu > Management > Camera and select 'Registration'. Select 'Device Search,' then check the box next to any unititialized / new cameras (**B**) you'd like to add and select 'Initialize' (**C**). Select 'Using current device password and email info' to allow the cameras to get the credentials from the NVR. On the next screen, select 'Static' for IP address so that the camera does not obtain a new IP address if it loses power or reboots.

Adding Initialized Cameras to a POE Switch
Initialized cameras will have a green check mark (**D**) instead of a red 'X' next to them. Check the box next to these cameras again and select 'Add' (**E**). These cameras should populate the lower portion of the page and start displaying in your live view.

Using the Quick Menu

Accessing the Quick Menu
The quick menu can be accessed by right clicking in the live camera view.

A) Access Main Menu
B) Search / Review Footage
C) Pan / Tilt / Zoom Controls
D) Change View Mode
E) Change Camera Order
F) Adjust Auto Tracking Settings (select models)
G) Add / Remove Cameras
H) Manually Record Stream
I) Automatically Adjust Camera Focus
J) Adjust Image Quality Settings

PTZ Controls include Zoom, Focus, Iris adjustment, Presets, Tour, Pattern, Auto Scan, Auto Pan, and PTZ Configuration.

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Playback & Export

Playback

To review recorded footage select 'Search' from the Quick Menu or 'Playback' from the Main Menu.

A) Select the day that you want to review footage from.
B) Select the camera or cameras (up to 4) to review.
C) Click on the time that you want to see the footage from.
D) The color on the timeline will depend on the record type (green is continuous, yellow is motion, etc.).
E) If you only want to see specific types of recordings, check the colored boxes next to the record types you want.

Exporting Footage

Navigate to Main Menu > Backup. Plug your USB drive in.
F) Select your USB drive in the 'Device Name' drop down list.
G) Choose the folder on the USB drive you'd like to export to.
H) Select the channel, then choose the recording type (General, Motion detect, etc.). 'All' is recommended.
I) Select the stream to export. Main Stream is recommended.
J) Enter the start and end times for the footage. One hour is the minimum.
K) Select the file format. MP4 is recommended.
L) Select Search, then choose Backup (**M**) to export your footage.

Recording Schedule

Setting the Recording Schedule

The NVR will have a default recording schedule of 24/7 recording on all channels. If you wish to change or customize your recording schedule you need to go to the Main Menu, select Storage under Management on the bottom row, and then choose Schedule from the left-hand column.

A) The **Channel Dropdown** will let you choose the camera you want to set the schedule for (or choose all).
B) **Pre-Record** can record footage a few seconds before the event occurs.
C) **Redundancy** allows you to record footage to multiple hard drives for backup (Only available with multiple hard drives).
D) **Check the box** for the type of recording you wish to add / remove. Regular, MD , and IVS are most common.
E) **Click the box** for 'All' to set the same schedule for every day.
F) Click and drag on the **Timeline** to "paint" in the schedule for the recording type you chose. Repeat this for all recording types you wish to use
G) To copy the recording schedule to other channels select '**Copy**' on the bottom and select the channels
H) The **Gear Icon** will allow you to break each day's recording into different 'periods' (uncommon)
I) When the schedule is complete choose **Apply**.
J) Repeat for **Snapshot** to set the schedule for still images (uncommon).

Motion Detection Settings

Motion Detection

To enable Motion Detection you will go to the Main Menu, select Alarm, and choose Video Detection on the left hand column
A) Make sure the Motion Detection tab is selected
B) Enable Motion Detection
C) Select the Region 'Setting' button and click on any parts of the red grid that you do not want motion detection active (trees, flags, etc.)
D) Sensitivity determines movement responsiveness. Higher sensitivity will trigger on motion more often.
E) Threshold determines the minimum object size. Higher threshold will trigger on larger objects.
Right click to go back, then choose 'Apply'. Repeat for all cameras.

SMD (Smart Motion Detection)

Some cameras are equipped with SMD (Smart Motion Detection). SMD allows the camera to filter notifications to events caused by a human or vehicle. To enable SMD you will select 'AI' from the main menu and then choose 'Parameters' from the left hand column. Then select 'SMD' below the parameters. Enable SMD and then choose if you want it to apply to Human, Vehicle, or Both. Finally select 'Apply' to save your configuration. Masking can be found in standard Motion Detections settings.

Tripwires / AI / IVS (Intelligent Video Surveillance)
For more information on setting up Tripwires / AI / IVS visit
http://montavue.com/ivs

Camera Encode Settings

A) The **Main Stream** is high resolution for recording.
B) The **Sub Stream** is bandwidth friendly and lower resolution for mobile devices
C) **Smart Codec** will enable variable bitrate.
D) **Type** is the stream type. Default is recommended.
E) **Compression** type will dictate storage needs. In most cases it should be set to H.265 for all channels.
F) **Resolution** will default to the camera's maximum.
G) **Frame Rate** is the number of images per second.
H) **Bitrate** CBR (constant bitrate) is recommended.
I) **Quality / I Frame Interval** should be left on default.
J) **Bit Rate** is stream Kb/S and should be left on default.
K) **More Setting** button will allow you to enable audio on the Main Stream and Sub Stream (recommended).

Image Settings

A) The camera can have 3 config files (auto, day, and night). It is recommended to leave it on config 1 (auto)
B) These are all the image color adjustments. It is recommended to leave them on default.
C) **Mirror** will mirror the current image (rarely used).
D) **Flip** will rotate the image (varies by camera).
E) **BLC** is light compensation (backlight, highlight, and wide dynamic range).
F) **3D NR** is the camera's noise reduction for night vision. Recommended to be left on.
G) **WB** is the white balance for different lighting situations. Auto is recommended.
H) **Day and Night** is for color and black and white IR. Auto is recommended.

Adding Your NVR to MontavueGo Mobile

- Navigate to Home screen (**A**) and select 'Device' (**B**)
- Click the '+' icon in the top corner (**C**) and select 'SN/Scan' (**D**)
- Scan your NVR's QR Code or enter the Serial Number Manually
- Click 'Next', then select 'NVR' from the device types list
- Enter a name for your NVR (**E**) - Anything will work.
- Enter your username (usually 'admin') (**F**) and the password you created during NVR setup (**G**).
- Click the floppy disk icon in the top corner (**H**) to Save your device

Reviewing Recorded Footage in MontavueGo Mobile

- Navigate to Home Screen (**A**) and select 'Video' (**B**)
- Click any '+' icon (**C**) in the 4 channel view
- Click the the Start Date (**D**) to set it, then click the check mark (**E**)
- Set the Start Time (**F**), then click the check mark (**G**)
- Repeat for End Date and End Time.

- Select the Record Types you'd like to view (**H**)
- Click your NVR name (**I**)
- Select the Camera you'd like to review (**J**)
- Repeat the same process for any additional cameras you'd like to review
- Double click a camera to see it in single channel view

Viewing Your Live Feed in MontavueGo Mobile

How to View Your Live Camera Feeds
- Navigate to Home screen (**A**) and select 'Preview' (**B**)
- Click any '+' icon (**C**) in the 4 channel view
- Click your NVR name, then select the camera you'd like to view
- Repeat the same process for additional cameras
- Double click a camera to see it in single channel view

Subscribing to Notifications in MontavueGo Mobile

- Navigate to Home Screen (**A**) and select 'Message' (**B**)
- Click the '+' icon in the top left corner (**C**)
- Select your NVR.
- Set the notification switch for your NVR to 'On' (**D**)
- Select your Prompt Type (Video is recommended) (**E**)
- Select the Notification Type (usually IVS or Motion) (**F**)

- Select the camera(s) you'd like this notification for (**G**)
- Click back until you see the floppy disk icon in the top right corner (**H**). Click it to save your notification.

* Please note that the notification type you subscribe to must be enabled on your NVR to function.

MontavueGo Desktop (Windows / Macintosh)

Downloading MontavueGo Desktop
MontavueGo Desktop for Windows and Macintosh can be downloaded at http://montavue.com/desktop

Main Menu
The main menu for MontavueGo Desktop can be accessed by clicking the '+' icon (**A**) at the top of the app. The most commonly used Main Menu items are highlighted in the list below.

Operations
- **Live View** (**B**): View your live video feed
- Access (**C**): Access Control (unsupported)
- Intercom (**D**): Intercom / Remote Unlock (unsupported)
- Video Wall (**E**): Real time video wall (rarely used)
- Event (**F**): Real time alarm / event information

Search
- **Playback** (**G**): Review previously recorded footage
- People Counting (**H**): Human traffic info (rarely used)
- Heat Map (**I**): Object density info (rarely used)
- Log (**J**): Client and Device log information

Configuration
- **Devices** (**K**): Add, delete, or modify devices
- **Device CFG** (**L**): Configure devices and channels
- **Event Config** (**M**): Alarm setup and configuration
- Tour & Task (**N**): Set tour task (rarely used)
- PC-NVR (**O**): Use your PC as an NVR (not recommended)
- User (**P**): User management

Adding your NVR to MontavueGo Desktop
To add your NVR to MontavueGo Desktop, navigate to the Main Menu and select 'Devices' (**K**) under 'Configuration'.

- Select '+ Add' (**Q**)
- Enter your NVR name in 'Device Name' (**R**)
- Change 'Method to add' dropdown (**S**) to 'SN (For Device Support P2P)'
- Enter your NVR serial number in the 'SN' field (**T**) (be sure to use all capital letters)
- Enter your User Name (**U**) (usually 'admin')
- Enter your Password for your NVR (**V**)
- Click 'Add' (**W**) to complete adding your device

Frequently Asked Questions

How do I factory reset my camera / NVR?
To factory default the NVR , navigate to Main Menu > Operation > System Maintain > Default. Select the Factory Reset button and choose Ok. The cameras can be reset by pressing the reset button inside them for 30 seconds while they are plugged in. Visit https://wiki.montavue.com/faq/ to find where the reset button is located on your camera.

How do I protect my camera cables and connections?
Cables and connections need to be protected from the elements or camera failure can result. If you cannot drill a hole directly behind the camera for the wiring, your best bet is to use a junction box and conduit to protect the wiring. To protect the socket from moisture it is best to use dielectric grease. Make sure that your weather resistant connector is firmly tightened and sealed with silicone or electrical tape. Water damage in connections are not covered under warranty. For more information visit http://montavue.com/connections

I forgot my password - How do I reset it?
To reset your password navigate to the login screen and select 'Forgot Password' and follow the on screen instructions. During the reset be sure to click 'Yes' when asked if you would like to sync remote device IPC to give the cameras the new password.

How do I set the screen resolution for my NVR?
To change your NVR's screen resolution, navigate to Main Menu > Display > Display. Make sure to select a screen resolution that is supported by your display or you will no longer be able to see your NVR with that display.

How do I set my NVR up to reboot on a regular schedule?
Weekly system reboots are recommended to keep things running smoothly. To set this up navigate to Main Menu > Operation > System Maintain > Auto Maintenance and select a day for your weekly reboot.

Contacting Support

Have a question that wasn't covered in this guide?
If you have a question that wasn't covered in this guide, get ahold of us! Our support team is available Monday - Friday, 8am - 6pm Mountain Standard Time, and we're always happy to help with any issue big or small.

- Phone: 406-272-3479
- Toll Free: 888-508-3110
- Email: support@montavue.com
- Wiki: http://wiki.montavue.com