

IR Remote Control Guide for PolyVision

Model: DVR-V100 Linux

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A. System Set-up Section

A.1 How to use IR remote control (Optional Feature with Specific Model V100R only)

The IR remote control has four gray triangle buttons around the Ok button. It resembles a “baseball diamond”. On most VCR’s, the OK button gains access to whatever is highlighted, but the OK button on PolyVision is used to save information into the system. So, the top and bottom triangle buttons highlight and the right triangle button is then pressed to enter that particular highlighted section. All though there are many buttons on the remote, the basic buttons that you will use the majority of the time are the “baseball diamond” buttons.

Gray “baseball diamond” arrow button functions:

1. **Top and bottom** gray triangle buttons are for highlighting.
2. **Right** triangle button accesses highlighted line.
3. **Left** triangle button in certain circumstances is used to go backwards.
(For example: if you’ve typed in 01:00:00 and want to change it to 02:00:00, you would press the left triangle button to back-up and change the 1 to a 2.

This section of the on-screen menu accesses the “nuts and bolts” of the system. System set-up, IP set-up, passwords and settings.

Press “menu” button

Highlight “System Set-up” and press right gray arrow button.

A.2 Password Protection for IR remote control

Allows you to password protect the IR remote control. Simply type in a password and anyone who doesn’t have the password is blocked from using the remote to access the unit.

1. Enable
2. Use keypad button to type in password
3. Highlight “lock Now” and press right gray arrow button

Use the keypad to type in letters or numbers. Press keypad button.

A.3 How to use the Keypad/Keyboard

Keypad functions:

Gray arrow buttons control direction. “OK” button sets the letter or number on line. Back button erases selection.

Use this to input text for OSD or for account names and passwords.

1. Press “**Key pad**” button. The keypad will now appear on the screen. Using the arrow keys, highlight letters, numbers and symbols that you want to use. Press the “**OK**” button to put each selection on screen.
2. Once you have the text that you want, press the “**cancel**” button to take the keypad off the screen.
3. Press the “**OK**” button, then press again to save.

To erase selection, press left arrow button.

A.4 Video (Camera) settings and bandwidth configuration

This section enables you to adjust individual camera settings and bandwidth configuration.

1. Standard - keep on “auto”
2. Brightness - adjust to preference
3. Contrast - adjust to preference
4. Saturation - adjust to preference
5. Hue - adjust to preference
6. Quality - default setting is 80. **It is recommended not to set it at 100**. This will use up a significant amount of hard drive space unnecessarily and slow down video transmission.
7. Compression boost- this allows you to compress video to extend recording duration. It is recommended to keep setting on “**NONE**”. (*Note: If setting is on “low, medium or high”, video resolution will be effected.)
8. Auto gain-set to “on”.
9. Mirror horizontal/Mirror vertical-makes a camera appear right side up if mounted upside down or on its side.
10. Max connection-limits the number of connections at one time. Leave on 0 for the maximum number of connections. *Note: Leave on 0 for maximum connections.
11. Max bandwidth-maximum bandwidth you want for unit.
12. Max connection bandwidth-max bandwidth divided by max connection
13. Video input-change the position of cameras on local monitor.
14. Video loss detection-If connection is lost, this will try to re-establish connection. Recommended when using wireless cameras.
15. PTZ control-this is where you can control you PTZ camera using IR remote control or mouse.

A.5 How to control PTZ camera with IR remote control

1. Press **menu** button.

- Highlight “**video**”-press right arrow button to access line.
2. Press the “**Next**” button until you get to the video channel (camera) that you want to control.
 3. Now, go all the way down to “**PTZ Control**” at the bottom of the page. Highlight and press right arrow button.

There are six functions in this section to control.

The first one is Pan/Tilt.

Use arrow buttons to control this function.

Press the “**Next**” button:

Control the zoom capabilities

Press the “**Next**” button:

Control the focus

Press the “**Next**” button

Control the speed of the camera movements.

Press the “**Next**” button:

Activate the “**Presets**”-preset movements of the camera.

Press the “**Next**” button:

This allows you to set the preset movements. Pan/Tilt, zoom in or out to the movement you want, then select it as a preset.

A.6 TV Output, camera switching, camera position, time/date stamp

PolyVision’s default setting is VGA. Two ways to set-up unit for TV monitor.

1. You first must attach a VGA monitor, then set to TV. **OR**
2. You can attach a TV monitor directly to the unit. Once the unit has booted up, you will hear a beep. Press the TV button on your IR remote and hold button for five to ten seconds to set unit to TV.

- Select VGA or TV monitor
- Select Composite or S-Video
- Set Delay time
- You can select which of the 16 cameras you want to sequential camera switch. You can have cameras 1-16 switch at a specified time on the screen or only certain cameras.
- Camera (from-1 This sets up which cameras you want to switch on screen.
- Camera (to)-16
- Screen split-number of cameras appearing on local monitor.

- ❑ Time stamp-enable or disable time stamp on local monitor.
- ❑ Time format- position of date. Example: 12/30/03 30/12/03 03/12/30

To set sequential camera switching in motion for the PolyVision 400 series:

After setting delay time, leave menu entirely.

On remote: press the icon with four solid boxes (different from PolyVision 500 series)

Select: sequence

To stop sequential camera switching: press four solid box icon and select anything else but sequence.

A.7 OSD Text

This allows you to set on-screen display test on the local monitor for each camera.

1. **Enable** OSD Test
2. X,Y allows you to position OSD test on the screen.
3. Press the “**Next**” button to select camera.
4. Highlight “**Text**” and press right arrow button.
5. Press “**Key pad**” button. The keypad will now appear on the screen. Using the arrow keys, highlight letters, numbers and symbols that you want to use. Press the “**OK**” button to put your selection on screen.
6. Once you have the text that you want, press the “**cancel**” button to take the keypad off the screen.
7. Press the “**OK**” button, then press again to save.

A.8 GPIO

General purpose inputs and outputs. Alarm trigger events. Allows you to set up each trigger event. (PolyVision 400 series only. You need to purchase a separate external alarm input/output module.)

Setting up GPIO

Press “**Menu**” button

Highlight “**System Set-up**”, press right gray arrow button to access.

Highlight “**COM Ports**”, press right gray arrow button to access.

Please make the following changes:

Select COM port. Press “Next” button to go to the next COM Port.

Important. You can not use COM Port 2 for GPIO on PolyVision 404 and 4048.

Change COM port to “**Device**”.

Change COM Port speed to **9600**.

Press “**OK**” button to save changes.

Once the external modules are installed with PolyVision, “**GPIO**” will appear under “System Set-up”.

A.9 PTZ Set-up

Allows for set-up of eligible PTZ cameras. Select which camera you are using. Currently you can use Pelco with protocol D. (For example: Spectra series, Esprit, etc.) Canon VCC3 and VCC4, Sony EVI-D30 and EVI-D100, Kalatel.

1. For Pelco, you will need to purchase the PVI-130 which converts RS-422-RS-232.
2. For Kalatel, you will need to purchase the KTD-312 converter.
3. For Sony, you will need to purchase a separate control cable.

First, select the PTZ camera that you will be using.

1. Press Menu

Highlight “System Set-up”-press right arrow button to access line.

2. Highlight “PTZ Set-up”

3. Highlight “PTZ Device”

Now select your PTZ camera. (Pelco protocol D, Kalatel cyberdome, Canon VCC3 & VCC4 and Sony EVI-D30 &100.)

4. Select “Timeout”-how long a user is allowed to control camera before being kicked out.

5. Select where the PTZ camera will be located. (*Remember, you have to install the first PTZ camera on channel one, then you can daisy-chain the rest.*)

6. Press “OK” button to save.

Next:

Under “COM Ports”:

1. Press “Menu” button.

2. Highlight “System Set-up”, press right gray arrow button to access.

3. Highlight “COM Ports”, press right gray arrow button to access.

Press “**OK**” button to save changes.

Please select which COM Port you want to use. Press “Next” key to select.

Select “**PTZ camera**”. For all other settings, consult your camera guide or call our technical department for further assistance.

A.10 TCP/IP (Set IP/Gateway/Subnet mask)

Set up IP, Gateway and Subnet Mask into the system by using the remote control. The DNS is only used if you use the E-mail notification.

1. Highlight IP line; press right gray arrow button. Input your IP address. Press OK button to save.
2. Do the same with the Gateway and Subnet Mask, making sure you press OK after each.
3. When finished highlight “Save and reboot”, press right gray arrow button.

Note: Use numbers on remote to input IP, Gateway and Subnet Mask.

A.11 Account (Administrator/user names and passwords)

This section set up Administrator’s name and password. “**Webmonitor**” is the default login name and “**oyo**” is the default password. Users should change this to their own login name and password. Administrator has access to the entire system and can control all the rest of the users name and passwords.

Important: Next you need to put in a password for the user, you can think of this as the “super user”. **This super user password needs to be filled in inorder to set-up all the rest of the 256 user names and passwords.** The super user should be different from the Administer name and password. If you don’t put a name and password to the super user, you can’t have other user passwords. The super user password would allow access to the video only.

Once the super user is set-up, you can then highlight “more users” to set up to 256 additional passwords. Tailor each of these passwords to meet that specific user’s level of security. Block, cameras, PTZ control, audio and playback.

To input numbers and letters, press keypad button on remote.

Keypad functions:

Gray arrow buttons control direction. OK button set’s the letter or number on line. Back button erases selection.

A.12 Audio settings /COM port settings

Set audio and speaker settings.

COM ports

Set COM port parameters. Most users do not need to change the settings. If you are using the GPO (general-purpose output) you will need to configure it accordingly. (Contact technical department for assistance.)

A.13 System information & Set date/time

Display system settings

Start time of unit

IP, Gateway, Subnet Mask information

Firmware version

Date/Time

Change date/time

Date time configuration

Set proper time zone.

Registry

If you are on a dynamic IP you can allow your PolyVision to post it's IP to the PolyVision registry server. You then look up your IP from the MAC address or server name. You can name your PolyVision in the "Set User name and Authority" section of the unit. (Remotely log into your PolyVision to access this section.)

A.14 Running Mode

Two things can be set in this section:

1. Change from Network Mode to ISP. Unit should stay on Network Mode unless otherwise specified by technical department.
2. Change local operation of unit to IR remote control or mouse.
 - IR Control*- when set, operates unit with IR remote control
 - Mouse*- when set, unit operates using a mouse.

A.15 Algorithm

Change between H.263/JPEG/MJPEG. Recommend H.263. You can also change the recording size from 320X240 to 640X480 (PolyVision 400 series only.) The system is designed to work optimally on 320X240.

A.16 NTP Server

Allows you to access the Atomic Clock to set or reset your unit to the proper time in your time zone. Please make sure to set your correct time zone in the "Date and Time" section and make sure you have inputted your DNS number in the "TCP/IP" section as well. **To access** Atomic Clock, highlight "Test/Save" and press "OK".

A.17 Default Setting

Restores to the original factory settings

B. Record Set-up section

B.1 DVR Set-up

The DVR can either record over and over on the hard drive or set to stop recording when hard drive(s) is full

Cyclic recording- allows hard drive to record over itself continuously.

Auto stop- Hard drive stops recording when full.

B.2 Record Schedule

Highlight “Record Schedule” and press right gray arrow button.

16 schedules can be set-up. To go to the next schedule, press the next button.

Let’s take schedule one for example. The first page of schedule is essentially an overview of schedule 1. **To edit this schedule**, press right gray arrow button. Now you are in **Edit schedule 1**.

Use the up and down right gray arrow buttons to scroll page. Highlight each line and then press right gray arrow button to change line.

You can select the days that you want to record. Select “start” and “stop” time. ***By leaving hour, minute and second time at 00, the unit will record continuously.**

Press the “next page” button to access edit schedule 2 and 3.

You are able to set each individual camera on:

Normal record-*continuous recording* or

Motion Detection or

GPI-triggered event (*alarm input*) or

Motion Detection + GPI- *the unit will record either if motion detection or a*

Triggered event is set off. (Only shows on PolyVision 400 series if external module is installed)

Remember the “OK button” saves information and changes into the system.

Note: Make sure you enable the record schedule you set.
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Important! Enable audio recording if you want to record the audio.

You will find this in the “Edit schedule”. Simply turn on or off audio. Audio recording follows the same recording schedule as video.

1. Highlight and enter recording schedule.
2. Press right arrow button.
3. Press next button.
4. You are now in “Edit Schedule 2/2
5. Turn on or off audio recording.
6. Remember to press OK Button to save changes.

B.3 Change frame rate

You can individually adjust frame rate per camera. *(You will find this in edit schedule 3.)*

1. Highlight and enter recording schedule.
2. Press right arrow button.
3. Press next button twice.
4. You are now in “Edit Schedule 3/3

“Auto Speed”

If left on “**no**”, the unit will evenly divide the recording frame rate amongst cameras. If set on “**yes**”, you will then be able to adjust frame rate per camera.

B.4 Set-up motion detection

Highlight and press right gray arrow button. You can enable or disable motion detection function. Using the IR remote control, you can adjust the motion detection area. You can set up several detection zones.

(From main menu) Press “menu” button.
Press “record set-up”.
Press “motion detection”

- Make sure you **enable** motion detection by changing it to “**yes**”.
- **Sensitivity**- normally keep the sensitivity level on the default setting. A good way to test if the sensitivity level is adequate is with the **orange square** that appears in the upper left-hand corner of the display monitor. Every time motion detection is set off, the orange square should appear. If not, adjust the sensitivity level accordingly.

Set Detection area-allows you to have multiple motion detection. **Red** is the area where the motion detection will be set off.

1. Use gray arrow keys to move red square.

2. Press “OK” to cut out any area where you **do not** want motion detection to function. If you want the whole screen to be motion detection, leave it completely red.

To save, press “cancel” button, then highlight “Save”. Press “OK” button to save.

B.5 GPI Trigger

1. Enable or disable.
2. Record time-length of recording.
3. Select which camera will be the triggered event.

Reminder: You need to install optional external I/O module to use GPI trigger.

B.6 Pre-Alarm

Pre-alarm allows you to record up to 300 frames of video prior to motion detection or a trigger event has been set-off.

C. Playback Section

C.1 How to playback recorded video/audio

Pick up the remote control and press menu.

Highlight playback.

Press right arrow button to access line.

- Now, you will find a listing of one-hour file periods. You can simply access anyone of these one-hour periods. Highlight the file of your choice and press the “OK” button.
- Or, to access a specific time or event, press the menu button again. Now input the correct time segment you want to access and press the OK button.

This is where you can also access CD burner. (*Please refer to C.3 how to burn a CD*)

Reminder: Once you are in the recorded file section, by pressing the menu button again, you will be able to search for a file by time or by event.
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Display button

The display button allows you to view where motion detection or a triggered event has been set off within an hour time-line.

(While you have accessed a recorded file...)

Press display button and “Progress”, “Recorded Data”, “GPI” and “Motion Detection” will appear in the top left-hand corner.

- **Progress:** One-hour time-line.
- **Recorded Data:** Aqua color bar-represents how much of that hour has been recorded. Full blue line means entire hour. Progress line below represents where in that recorded period you are now at.
- **Motion Detection:** Yellow color bar shows where motion detection has been set off.
- **GPI:** Shows where alarm triggers have gone off.
- To step forward to the next motion detection or alarm trigger event, press right gray arrow button. Press left gray arrow key to step backwards.

C.2 Playback video/audio down to minute/seconds

1. Press menu button to access on-screen programming.
2. Highlight playback, press right arrow button to access recorded files.
3. Press menu button once again. On-screen programming will appear allowing you to type in exact minute/seconds you want to find
4. Once you've typed in the minute/second you want to find, press O.K.
5. While playing back recorded files, you can always press menu button to access the advanced minute/seconds search.

C.3 How to burn a CD (Optional)

If the system is equipped with a CD/RW (optional), then you can access the CD burner functions through the playback. Press the menu button to access on-screen programming. Use the top and bottom gray triangle buttons to highlight **playback**. Press the right triangle button to access playback.

Once you've accessed playback, you will see a listing of one-hour file segments that you've recorded. You can choose to highlight one of those files and press the right triangle button to playback that segment or you can playback by an exact time or by an event.

To do this, simply press the menu button an additional time. When you do this, the on-screen programming will state: By time, event or **CD back-up now**.

You then highlight **CD back-up now** and press the right triangle button. You then input the time segment you want to copy to a CD.

So, the steps to back up to a CD are:

1. Press menu button.
2. Highlight **Playback**, then press right triangle button. (You will enter the saved one-hour file segments.)
3. Press the menu button again.
4. Highlight **CD back up now**, then press right triangle button.
5. Input the time segment you want to copy to a CD.

D. System Shutdown

D.1 System Shutdown

Remember: Before turning off the PolyVision 100 unit, be sure to shutdown system.

Highlight “System Shutdown” and press right gray arrow button.
Press the “OK” button to shutdown.