Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box

OWNER'S MANUAL

MODEL : PHD-VRX2

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CAUTION
RISK OF ELECTRIC

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PESONNEL

This lighting flash with arrowhead symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.

This symbol indicates “dangerous voltage” inside the product that presents a risk of electric shock or personal injury.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE

CAUTION: FCC regulations start that any unauthorized changes or modifications to this equipment may void the user’s authority to operate it.

Note to CABLE/TV Installer: This reminder is provided to call cable TV system installer’s attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

IMPORTANT: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.

Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference that may cause undesired operation.

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (Including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two Blades with one wider than the other. A grounding type plug has two blades and a third grounding prong .The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.

- Use only with the cart, stand tripod, bracket, or table specified by the manufacturer, or sold with the apparatus when a cart is used use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Contents

Congratulations on choosing PrimeDTV PHD-VRX2, *Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box*. Please read this manual carefully before operation. For your convenience, this manual will provide pictures and descriptions to make operation as easy as possible. In order to use and maintain the set better, please follow its operating instructions. Thanks for your cooperation.

IMPORTANT SAFETY INSTRUCTIONS 2

■ INTRODUCTION 5

..... 5

TECHNICAL OVERVIEW 5

What are Digital TV, NTSC, ATSC, QAM, SDTV, and HDTV? 5

What kinds of TV programming can I watch with the Digital HDTV Tuner? 5

What equipment is required to view HDTV programming? 6

Resolution and interlacing 6

Input formats 6

Video / Audio Switcher, Scaling and Enhancing 7

Video output 7

Aspect ratio 7

Screen format examples 8

UNPACKING 9

FRONT PANEL 10

REAR PANEL 11

REMOTE CONTROL 12

■ CONNECTIONS 14

CONNECTING ANTENNA/CABLE SIGNAL SOURCE 14

CONNECTING EXTERNAL USB STORAGE DEVICES 14

CONNECTING VGA/PC INPUT 14

CONNECTING HDMI INPUT 15

CONNECTING COMPONENT (YPBPR) INPUT 15

CONNECTING COMPOSITE VIDEO INPUT 15

CONNECTING NETWORK 16

CONNECTING HDMI, COMPOSITE VIDEO AND AUDIO OUTPUTS 16

■ POWER UP AND SETUP 17

☐ QUICK SET UP 17

☐ TIME ZONE 17

☐ DAYLIGHT SAVING TIME 18

☐ TUNER SOURCE SELECT 18

☐ TUNER MEDIUM SELECT 19

☐ AUTO TUNING 19

☐ Auto Tuning – Tuner1 19

☐ Auto Tuning – Tuner2 19

☐ Auto Tuning – Channel List 19

■ MAIN MENU: 20

PICTURE SETTINGS 21

AUTO ASPECT 22

VIEW MODE 22

RESET PICTURE 22

HDMI OUTPUT RESOLUTION 22

TREBLE & BASS 23

EQUALIZER 23

OPTICAL OUT (SPDIF) 24

DIGITAL PREFERENCE 24

BALANCE 24

MASTER LIST 25

FAVORITES 25

TUNER 25

SCAN CHANNELS 26

FIND CHANNEL 26

EPG TUNING MODE 26

INPUT LABELS 27

CLOSED CAPTIONS 28

☐ Caption Rendering 28

☐ Basic Selection 28

☐ Advanced Selection 29

☐ Advanced Appearance 29

☐ Caption Preference 30

☐ RESET CC 30

DATE & TIME 30

☐ Time Zone 30

☐ Daylight Saving Time 31

☐ Manual Time Setting 31

MENU LANGUAGE 31

SYSTEM INFO 31

NETWORKING 32

☐ Network Type 32

☐ Network Setup 32

☐ Test Connection 32

HOME NETWORK 33

RESET ALL 33

RATINGS LOCKS 34

☐ Block Unrated Shows 34

☐ USA - TV 34

☐ USA - Movie 36

☐ CAN - English 36

☐ CAN - English 36

CHANNEL LOCKS 37

FRONT PANEL LOCK 37

CHANGE PIN 37
RESET LOCKS 37
RECORDINGS 38
- File List Screen 38
- Preview Screen 39
- Video Time Line Screen 39
- Modify Recorded TV Program Titles: 39

..... 39
- Quick Menu 39
- Program Information Screen 40
- Closed Caption 41
- Aspect Control 41
- Quick Menu 42
- INFO key 42
- Resume Playback Feature 42

VIDEO 43
- File List Screen 44
- Preview Screen 44
- Video Time Line Screen 44

MUSIC 45
- File List Screen 45
- Album Picture Screen 45
- Music Details Screen 45
- Music Time Line Screen 45

PHOTO 46
- Thumbnail Mode 46
- List Mode 46

FORWARD SKIP TIME 47
BACKWARD SKIP TIME 47
USB POP UP MESSAGE 47
PROGRAM GUIDE 48
Program Guide 48
MANUAL SCHEDULE 49
Manual Schedule 49
RECORDING HISTORY 50
USB DISK STATUS 50
USB SPEED CHECK 51
USB DISK FORMAT 51

■ PHD-VRX2 ELECTRONIC PROGRAM GUIDE (EPG) 53

(1) CURRENT GUIDE STATUS 53
(2) CHANNEL NAME 53
(3) PROGRAM TITLE 54
(4) CURRENT CHANNEL VIDEO 54
(5) PROGRAM DETAIL DESCRIPTIONS 54
(6) GUIDE NAVIGATION KEYS 54

■ HOW TO USE PHD-VRX2 TIMESHIFTING FEATURES 55

TO USE PHD-VRX2 TIMESHIFT AND LIVE PAUSE FEATURES 55
TO START TIMESHIFTING 56

■ HOW TO USE PHD-VRX2 RECORDING FEATURES 58

TO RECORD TV SHOWS 58
TO START RECORDING 58
1. Record Now 58
2. Manual Recording 59
   - Weekly 60

TO CHECK OR MODIFY RECORD SCHEDULES 62
TO CHECK THE RECORDED TV PROGRAM 65
TO PLAY RECORDED SHOWS 66
TO RECORD TV SHOWS FROM BOTH TUNERS 67

■ HOW TO USE PHD-VRX2 TV PROGRAM PLAYBACK FEATURES 68

RECORDINGS SECTION 68
- File List Screen 69
- Preview Screen 69
- Video Time Line Screen 69
- Modify Recorded TV Program Titles: 69
- Quick Menu 70
- Program Information Screen 71
- Closed Caption 71
- Aspect Control 72
- Quick Menu 72
- INFO key 72
- Resume Playback Feature 73

Introduction

To ensure proper use of this product, please read this owner 's manual carefully and retain for future reference.

This manual provides information on the operation of your PHD-VRX2, Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box. This chapter explains the Technical overview, unpacking, front panel, Rear panel, and Remote control.

Technical overview

This paragraph explains the technical capabilities of the PHD-VRX2 and provides background information on digital television. Topics covered here include:

- What are Digital TV, NTSC, ATSC, QAM, SDTV, and HDTV?
- What kinds of TV programming can I watch with the Digital HDTV Tuner?
- What equipment is required to view HDTV programming?
- Video / Audio Switcher, Scaling and Enhancing
- Video output options
- Aspect ratio
- Screen formats

What are Digital TV, NTSC, ATSC, QAM, SDTV, and HDTV?

Digital TV

Digital television (sometimes called DTV) is a newer method of broadcasting TV signals that delivers higher quality audio and video. Digital TV is broadcast in two sets of formats, SDTV and HDTV.

NTSC

NTSC (National Television Standards Committee) refers to the group that first established the standards used for conventional analog television broadcasts and TV equipment.

ATSC

ATSC (Advanced Television Systems Committee) is the group who has been working to establish the standards for digital television broadcasts and digital television equipment – including both SDTV and HDTV.

QAM

QAM (Quadrature amplitude modulation) is a method of modulating digital signals on a cable television system in order to transmit digital cable TV channels.

SDTV

SDTV (Standard-Definition TV) is a digital TV format that provides a high quality picture at resolutions that can be displayed on standard TV sets (see more on resolutions later in this chapter).

HDTV

HDTV (High-Definition TV) is a digital TV format that provides the highest quality picture at resolutions that can be displayed on HDTV-ready TV displays, HDTV Monitors and, computer monitors.

What kinds of TV programming can I watch with the Digital HDTV Tuner?

The PHD-VRX2 has full feature of Digital HDTV Tuner, which provides you with the ability to receive television programs from a wide range of sources, and to display them on general HDTV or monitor.

Using either or both coaxial RF connectors on the back of the Digital HDTV Tuner, you can receive local television programs.

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- To view cable TV programming, programming subscriptions are also required.

What equipment is required to view HDTV programming?

To view HDTV programming, an addition to your PHD-VRX2, you will need an HDTV monitor or television set.

To receive digital over-the-air (OTA) television broadcasts, you'll need either an indoor or outdoor antenna.

To receive analog and digital cable TV programming, you'll need a cable TV connection (provided by your local cable TV service provider).

Resolution and interlacing

Two of the elements that determine the quality of a TV picture are resolution and interlacing.

Resolution

For TV equipment and broadcasts, resolution is defined by the number of horizontal lines displayed to make up each frame of a video image. The more lines of resolution used to draw each frame of video, the more detailed and sharp the picture will be. Standard TV resolution uses 480 horizontal lines to make up each of video.

HDTV uses either 720 lines, or 1080 lines to make each video frame.

Interlacing

When TVs display video, they display a new video frame at a rate that is faster than your eye can see (from 24 to 60 frames per second, depending on the TV and broadcast).

Interlacing refers to whether each of those frames contains all of the lines of video for each frame or every other line. Interlaced signals take every other line frame 2 frames of video (each lasting 1/60th of a second), and combine them into one frame lasting 1/30th of a second. In this way, interlacing tricks your eye into thinking it is seeing twice the resolution that is actually being displayed.

In non-interlaced video, (referred to as progressive scan video), video frames are displayed every 1/60th of a second containing all of the lines of video information for each frame.

The specifications for video resolutions are usually stated by giving the number of horizontal lines, followed by either the letter I, for interlaced video, or p for progressive scan (non-interlaced) video. Some DVDs and non-HDTV digital TV broadcasts use 480p.

The ATSC specification for HDTV broadcasts and equipment requires either 1080i or 720p.

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- One of the enhanced features of PHD-VRX2 is to allow scaling HD 1080i/720p video up to 1080p @ 60Hz video quality. The results, video has more fine pixels and vivid on many high-end TV display.

Input formats

The PHD-VRX2, Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box, is able to receive broadcasts in any of the resolutions mentioned above. It will then do the appropriate conversion from input signal format to general TV display format.

The table below details the results you get with each combination of input signal format.

	Type	Aspect Ratio	Compression Size Values	Frame Rate
18	H D T V	16:9	1920×1080	30p
17				24p
16				30i
15			1280×720	60p
14				30p
13				24p
12	S D T V		704×480	60p
11				30p
10				24p
9				30i
8		4:3		60p
7				30p
6				24p
5				30i
4			640×480	60p
3				30p
2				24p
1				30i

Video / Audio Switcher, Scaling and Enhancing

PHD-VRX2 is also a Media Center Box, which acts like video/audio switcher. PHD-VRX2 can accept many different individual A/V inputs including tuner 1, tuner 2, component (Y-Pb-Pr), RGB, HDMI, composite and USB inputs for playing video, photo and music files. With pressing INPUT button on remote control, PHD-VRX2 can quickly switch to any one input as desired.

PHD-VRX2 can scale all video resolutions up to 1080p from HDMI output. It equips superior color management system provides a great viewing experience using edge and color enhancements.

Video output

PHD-VRX2 is able to receive broadcasts in any of the resolutions mentioned above. It can also display programs on TVs capable of displaying any of those resolutions.

To set up your PHD-VRX2 to handle the combinations of incoming video formats and TV display capabilities, you simply press V.MODE button on remote control to set to match the highest resolution your TV is capable of displaying. (If you're not sure about your TV's resolution, see your TV's manual for this specification.)

PHD-VRX2 will then do the appropriate conversion from input signal format to display format.

Video output formats

Output Connection	Available Formats
Composite VIDEO	480i
HDMI	1080p/720p

Aspect ratio

In addition to resolution and interlacing, HDTV is also defined by the aspect ratio of its broadcasts.

Aspect ratio means the shape of the screen as defined by the ratio of the screen's width to its height. For analog TV and SDTV, the aspect ratio is 4 units wide by 3 units high (usually written 4:3).

This is familiar shape of conventional TVs----slightly wider than they are tall.

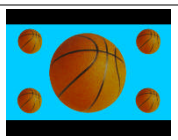
For HDTV broadcasts, the aspect ratio is 16:9 (nearly twice as wide as it is tall).

This is, not coincidentally, more like the shape of movies shown in theaters.

This makes HDTV an ideal format for broadcasting and viewing movies on a TV.

But what happens if you are watching a nearly square-shaped 4:3 broadcast on a rectangular 16:9 TV. The PHD-VRX2, Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box, allows you to choose from a variety of screen formats to help you dealing with those scenarios.

- PHD-VRX2 is providing several options to change to different screen formats as: Normal, Full Screen, Panoramic, Zoom1, Zoom2, 4:3 and Direct options.
- PHD-VRX2 is also providing custom aspect ratio adjustments to ease video over-scan issues on different TV sizes. User needs to bring up main MENU → Se ngs → Scale Window to fine adjust screen size.

Signal	4:3	16:9
	16:9 TVs showing	**4:3 TVs showing**
Normal		
Full		
Zoom		

Screen format examples

To deal with the mismatches that can occur between the shapes of TVs and the aspect ratios of program broadcasts, the Digital HDTV Tuner provides you with a set of screen format controls.

These controls allows you to pick a format to use for both 4:3 TVs showing 16:9 programs, and for 16:9 TVs showing 4:3 programs.

Here is an explanation of the options.

Unpacking

Make sure you have received all these items listed below with the PHD-VRX2, Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box.

PHD-VRX2

Full HD 1080p Dual Tuner Digital HDTV Recorder, Receiver and Media Center Box

Remote Control

PHD-VRX2

Batteries

HDMI Cable

Quick Start Guide

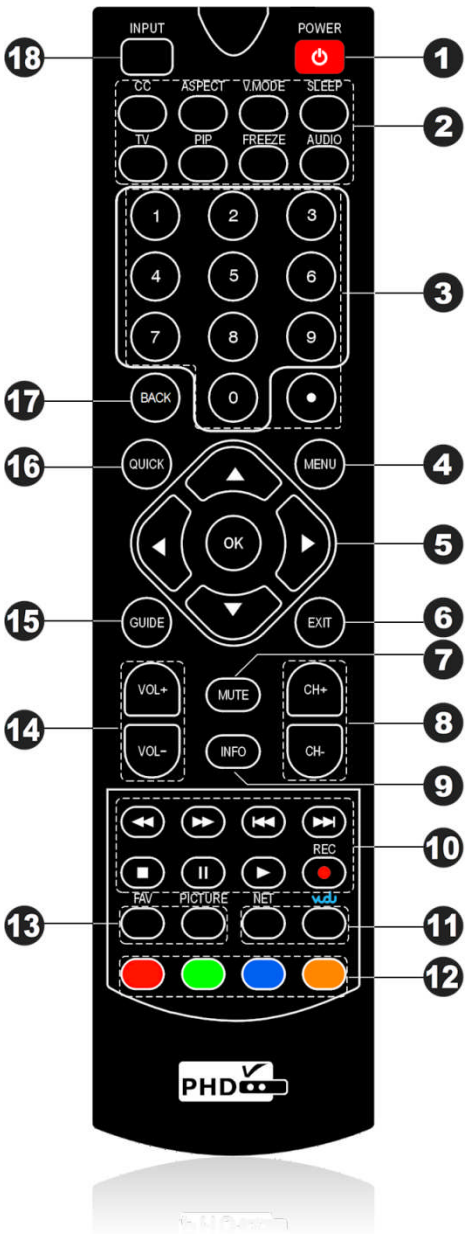
Front Panel

- Menu: Display On-screen (OSD) Main Menu.
- CH+: Move TV channel number up.
- CH-: Move TV channel number down.
- V+: Increase audio volume.
- V-: Reduce audio volume.
- ⏻: Switch unit in Standby or Operation mode.
- ● : Green light is in Operation mode. ● : Red light is in Recording Mode. No lights are in Standby mode.

Rear Panel

❶ Two Tuners (RF1, RF2)	• RF1 (Tuner 1), an ATSC/QAM/NTSC tuner to receive digital & analog channels. • RF2 (Tuner 2), an ATSC/QAM tuner to receive only digital channels. Note: PHD-VRX2 can only record or timeshift on digital channels only, not on analog channels.
❷ Two USB ports (USB1, USB2)	Use any of USB ports to connect external USB storage devices or optional USB WiFi adapters. • To record, connecting external USB Hard Drive (HDD) or USB Flash stick with either ext2 or NTFS format. PHD-VRX2 will record TV shows on the first USB device plugged in (assigned as "usba"). • To Playback, connecting any USB storage devices with either ext2, NTFS or FAT32 format. PHD-VRX2 will act as media player to play video, music and picture files. Note: PHD-VRX2 has built-in USB utility menu to test USB speed and partition USB to ext2
❸ VGA/ Audio in	Accept video (VGA/RGB) and audio inputs from PC VGA port.
❹ HDMI input	Accept HDMI input from external devices like Blu-ray player and etc.
❺ Composite Video and Audio input	Accept composite video (480i) and stereo audio inputs from external devices.
❻ Component video input	Accept component (Y-Pb-Pr) video (720p/1080i) input from external devices.
❼ 10/100 Ethernet Port	Connecting to external network. • Connect NTP (Network Time Protocol) server to synchronize the time for accuracy. • On-line video streaming capable.
❽ Composite Video and Audio output	Composite video (480i) and audio output to analog TV or monitor. This video is outputting simultaneously with HDMI output.
❾ HDMI output	HDMI output (720p / 1080p). It is outputting simultaneously with composite video output.
❿ Optical Digital Audio Output	Connecting to digital (optical) audio equipment. Supporting 5.1 surround sound.

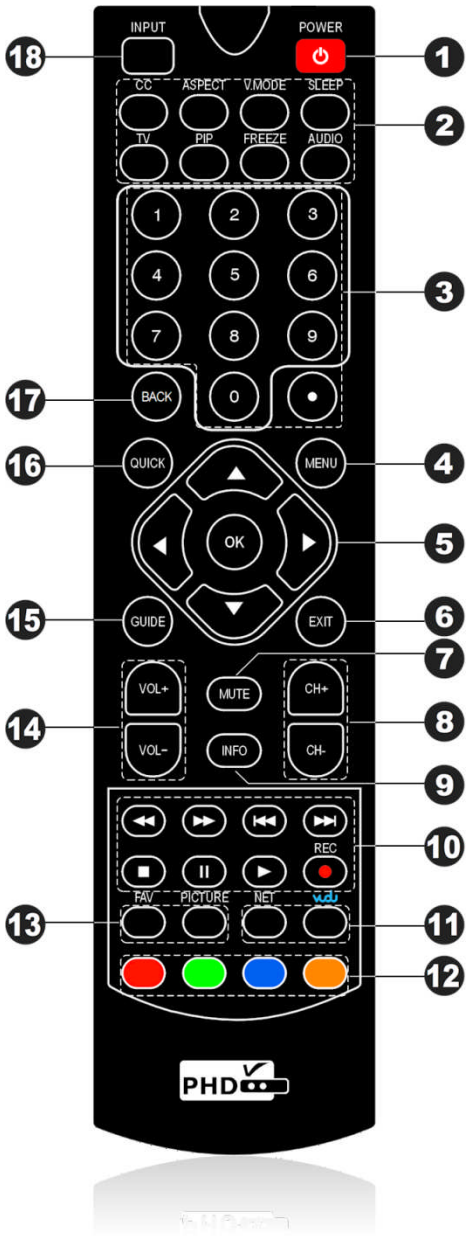
Remote Control



1 POWER	Switch unit ON or standby mode.
2 FUNCTION KEYS	• CC: turn closed caption on or off. • ASPECT: change screen size. • V.MODE: change video resolution (720p/1080p). • SLEEP: select preset timer for auto shut off. • TV: directly jump to Tuner 1 or Tuner 2 when unit is in other input. • PIP: (future option) • FREEZE: Pause video • AUDIO: digital/analog audio sound mode change.
3 NUMBERS & DOT	Press to enter numbers or change channel numbers.
4 MENU	Display On-Screen (OSD) main menu
5 NAVIGATION	Directions (Up, Down, Right, Left) and OK keys to navigate menu.
6 EXIT	Exit the current menu or operation.
7 MUTE	Temporarily turn off sound.
8 CH+/CH-	Change channel up and down.
9 INFO	Show current input status. In TV Mode, show channel status and quick program guide.
10 ACTIONS	To play video/audio programs for recorded TV show, timeshift, media player, video streaming. RWD: Rewind program quickly. FF: Fast Forward program quickly. PREVIOUS: Move to previous or slow RWD. NEXT: Move to next, or slow FF in timeshift. STOP: Stop playback. PAUSE: Pause current program. PLAY: Play or resume a paused program REC: Start recording program.

Remote Control

11 ON-LINE KEYS	On-line video streaming access (future option).
12 SHORTCUT KEYS	4-color keys correspond to different features and quick access. In TV mode, press to enable timeshift function, which can pause live TV program as well as instantly rewind, fast forward, slow motion on live TV program.
13 FUNCTION KEYS	• FAV: Add or delete favorite channels • PICTURE: Select preset video picture settings.
14 VOL+/VOL-	Increase or reduce audio volume.
15 GUIDE	Show full screen Electronics Program Guide with schedule program recording capability.
16 QUICK	Display quick access menu. It comes with different quick access features during different operation modes. Note: Quick menu is very useful and handy without bringing up main menu and steps for accessing a specific function.
17 BACK (also RETURN key)	This key will bring the current menu or function to the previous state (acts as RETURN key). In TV mode, this key will jump back to the previous channel tuned to.
18 INPUT	Press this key to bring up input selection. PHD-VRX2 has following inputs to switch from: (1) Tuner 1, (2) Tuner 2, (3) CVBS – composite video, (4) Component – YPbPr, (5) HDMI, (6) VGA –PC input.



Installing Batteries: before the remote control can be used, two batteries (size AAA) need to be installed. First, open battery cover from the back of the remote. Install 2x fresh batteries in the battery compartment. Next, snap the cover back onto the remote control.

Remote Control Operation: point the remote control directly at the unit front panel with no solid objects blocked in between, and then presses the desired buttons.

Connections

This paragraph tells you connecting the PHD-VRX2 Dual Tuner Digital HDTV Recorder, Receiver and other inputs to TV, Display, and home theater.

Connecting Antenna/Cable signal source

1. Connect an outdoor or indoor antenna directly to either Tuner 1 or Tuner 2 jack with a coaxial cable. This is to receive over-the-air digital TV signals from TV broadcasters.
2. Connect the cable signal source using a coaxial RF cable to either Tuner 1 or Tuner 2 jack.

Connecting external USB storage devices

1. To record TV shows, plug USB 2.0 support Hard Disk Drive (HDD) or Flash stick with the size from 2GB up to 2TB. PHD-VRX2 will record TV shows on the first USB device plugged in no matter which USB port is.
2. To playback TV, Movie, Music and Photo files, connect USB device to any one of USB ports.
3. To upload firmware, Plug USB flash stick in and follow the firmware upgrade guideline.

Connecting VGA/PC Input

PHD-VRX2 has one VGA input port, which can be connected to PC or external devices with RGB, H/V sync signals and audio.

Connecting HDMI Input

PHD-VRX2 has one HDMI input port. It can be connected to different HDMI devices such like Blu-Ray players, DVD players, PS3, HD cable or satellite boxes.

Connecting Component (YPbPr) Input

PHD-VRX2 has one Component (Y-Pb-Pr) video input and audio (R/L) input, which can be connected to external HD devices with YPbPr output.

Connecting Composite Video Input

PHD-VRX2 has one Composite video (CVBS) input port with associated audio (R/L) input, which can be connected to any 480i/ Analog video external devices such like VCR or DVD players.

Connecting Network

1. Connect PHD-VRX2 Ethernet port to wired network from DSL, Cable modem or home network router. The network connection will prompt the unit in sync with NTP (Network Time Protocol) for precise timing reference as well as on-line video streaming and home network video server connection.

2. Connect to wireless network by using USB WiFi adapter is achievable (future optional).

Connecting HDMI, Composite Video and Audio Outputs

1. For high quality video viewing, connect HDMI output to your HD TVs or HD Projectors. PHD-VRX2 has capacity to scale and enhance all input video/audio signals up to 1080p resolution. Output resolution can be adjusted among 720p/1080p by using remote key **V.MODE**.

2. PHD-VRX2 composite video and audio outputs are connecting to conventional analog TV for viewing and monitoring. There is no on-screen menu available in this output and composite video/audio will be simultaneously outputting with HDMI.

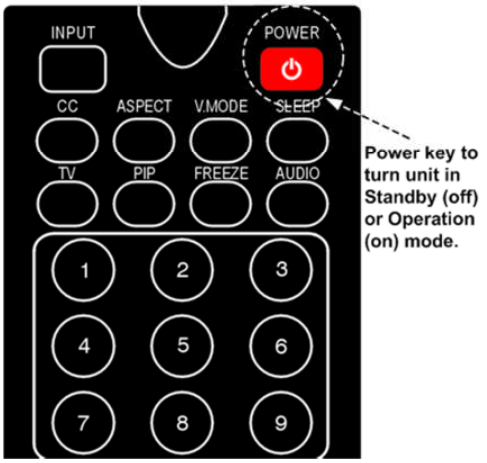
3. To receive highest quality audio sound, connect optical digital audio output port to your Home Theater A/V receiver.

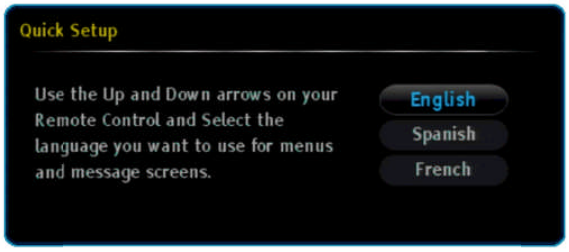
Power Up and Setup

After connecting PHD-VRX2 with proper input and output sources, you will need to power up the unit and run initial setup procedures including an automatic channel scan. This initial setup is required only during the first time using the unit, or after activating the "Reset All" feature to set the unit back to its initial stage.

To start:

1. Plug the Power cord from back of the unit into AC outlet.
2. The clock will light up "12:00A" on the unit front panel LED display to indicate it is in standby mode. Press either remote POWER key or front panel ⏻ button to turn on the unit.
3. Boot up time usually takes about 30 seconds and the front panel will display "BOOT". There will be NO video on TV screen during boot up time. After boot up is complete, the front panel shows "no ch" and a green light.
4. At this point, your TV screen should display the first initial set up menu from PHD-VRX2 HDMI output port. Then, follow several on-screen initial setups to complete the procedures:





- Quick Set up:

Press remote control ▲/▼, then OK to select the proper language you want to use for menus and message screens.

- Time Zone:

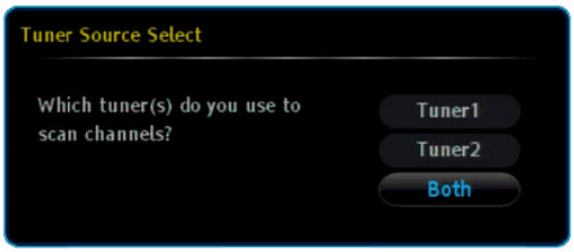
Press remote control ▲/▼ and then OK to select the proper time zone in your area.

- Daylight Saving Time:

Press remote control ▲/▼ and then **OK** to select yes or no for the daylight saving time option in your area.

- Tuner Source Select:

Since PHD-VRX2 has two built-in tuners, you can connect either over-the-air antenna signals or cable QAM signals with any of the following combinations:



(1) Tuner 1 (RF1): Antenna (ATSC/NTSC)
Tuner 2 (RF2): None

(2) Tuner 1 (RF1): Cable (QAM/NTSC)
Tuner 2 (RF2): None

(3) Tuner 1 (RF1): None
Tuner 2 (RF2): Antenna (ATSC)

(4) Tuner 1 (RF1): None
Tuner 2 (RF2): Cable (QAM)

(5) Tuner 1 (RF1): Antenna (ATSC/NTSC)
Tuner 2 (RF2): Antenna (ATSC)

(6) Tuner 1 (RF1): Antenna (ATSC/NTSC)
Tuner 2 (RF2): Cable (QAM)

(7) Tuner 1 (RF1): Cable (QAM/NTSC)
Tuner 2 (RF2): Antenna (ATSC)

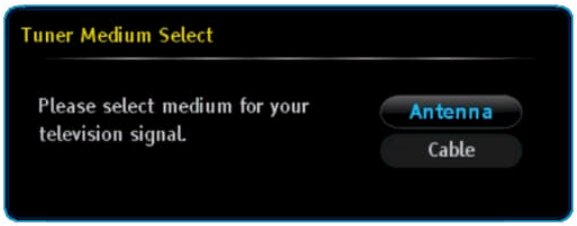
(8) Tuner 1 (RF1): Cable (QAM/NTSC)
Tuner 2 (RF2): Cable (QAM)

Select either the "Tuner 1" or "Tuner 2" option to connect only one signal to PHD-VRX2. Select the "Both" option to connect both tuners with signals.

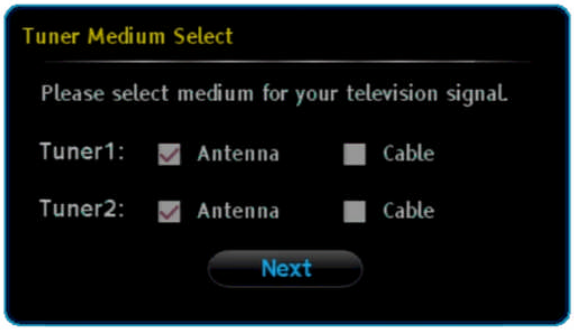
☞ ATSC refers to over-the-air (antenna) digital signal; QAM refers to cable digital signal. NTSC refers to analog signal, which can be either sent from a TV broadcaster or Cable Company.

- Tuner Medium Select:

If the single tuner option is chosen, then the Tuner Medium Select screen will prompt you to select either Antenna or Cable as your input RF signal source. Once selected, PHD-VRX2 will go to the next screen.

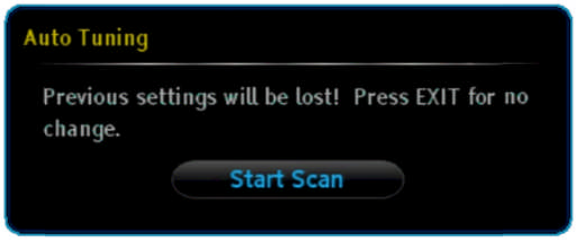


If you choose the "Both" tuners option, then the Tuner Medium Select screen will prompt you to select the signal source for each tuner input in detail.



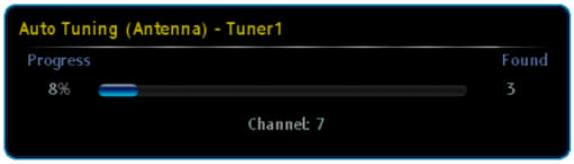
- Auto Tuning:

Once the RF signal source(s) has been selected, PHD-VRX2 is ready for auto scanning. This screen is to confirm the action.



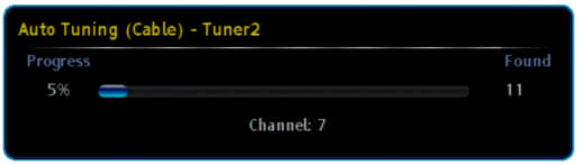
- Auto Tuning – Tuner1:

PHD-VRX2 is starting channel scanning based on Tuner 1 input signal source. The screen will show scanning progress and how many channels have been found.



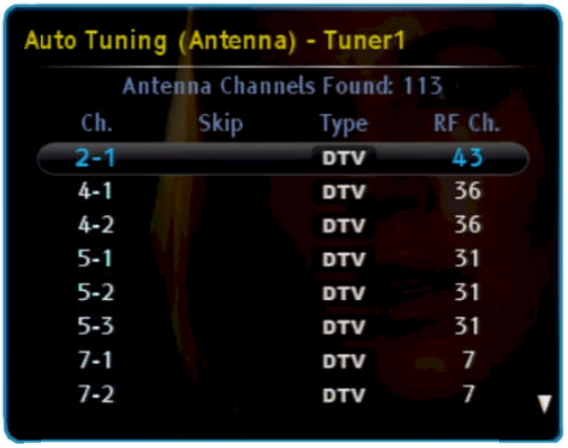
- Auto Tuning – Tuner2:

PHD-VRX2 is starting channel scanning based on Tuner 2 input signal source. The screen will show scanning progress and how many channels have been found.



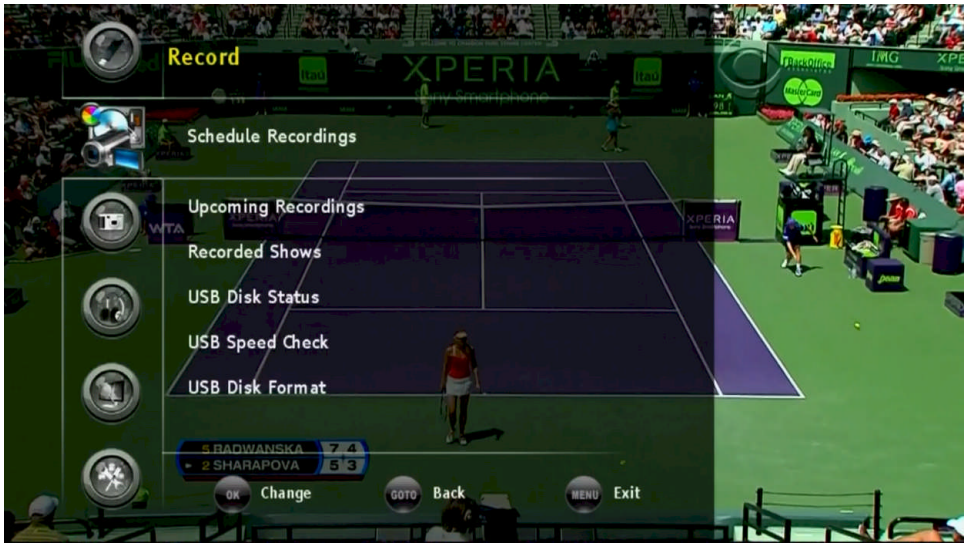
- Auto Tuning – Channel List:

After completing the channel scan, PHD-VRX2 will show first tuner channel master list. This includes channel number with sub number (e.g. 2-1), and indicates whether it is a digital channel (DTV) or an analog channel (ATV) as well as the physical RF channel number.



PHD-VRX2 provides the on-screen Main Menu to access all major features and the Quick Menu to get to certain key features easily. To access the Main Menu, press remote **MENU** key or the front panel MENU button. PHD-VRX2 will display menu graphics on your TV screen.

Main Menu:



The Main Menu consists of seven menu items:

: Picture

: Audio

: Channel

: Settings

: Locks

: Media Player

: Record

To navigate the Main Menu, use remote ▲/▼, ◀/▶ keys to choose a sub-menu or option. Or press the remote OK key to move to the next level.

☞

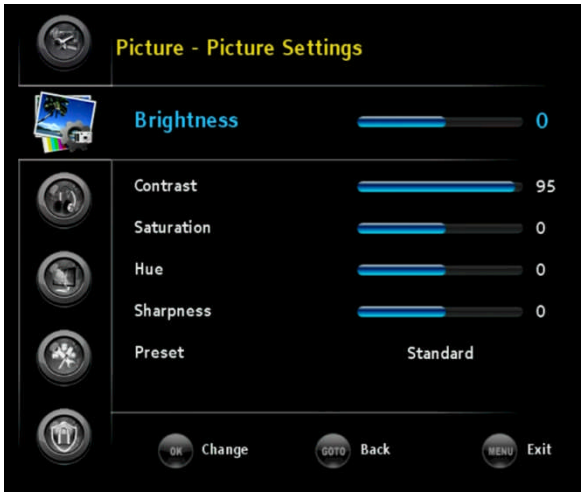
- During menu navigation, press the remote MENU key again or the EXIT key any time to exit the menu screen. Or press the remote BACK key as the return function to go back to the previous menu location.

Picture: The Picture menu option provides the picture color settings and adjustments.

1. Highlight "Picture" option and press OK or ►.
2. Press ▲/▼ to highlight the item: Picture Settings, Advanced Settings, Auto Aspect, View Mode, or RESET PICTURE.
3. Press OK or ► to select an option.
4. Press BACK key as the return function or ◄ key to go back to the previous menu location.
5. Press EXIT to exit.

Picture Settings

In this option, the user has full control over video Brightness, Contrast, Saturation, Hue, Sharpness, or you can select a Preset setting as well as color temperature.



Press ► and then ▲/▼ to select each option. Press OK to highlight the option and use ◄/► to adjust values.

Select "Preset" to choose several preset picture color settings:

- Sports
- Standard
- Movie1
- Movie2
- Store
- Game
- PC

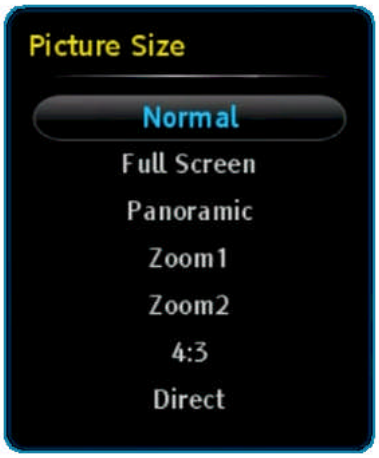
- You can also press the PICTURE key on the remote control to directly access color preset values and select the desired mode.
- During normal video viewing, you can press remote **QUICK** key to promptly select picture color settings from the Quick Menu.

Advanced Settings

Under Advanced Settings, you can control Dynamic Contrast value by highlighting this option and using ◀/▶ to adjust values.

Auto Aspect

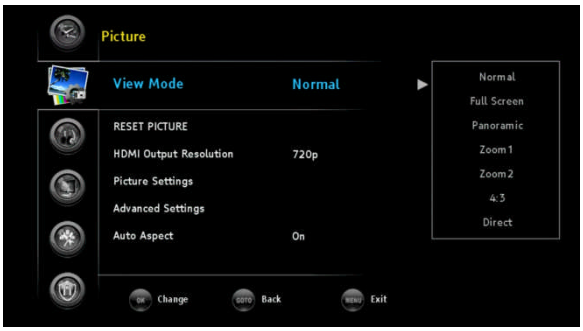
There are several video aspect ratio adjustments in order to change picture size using the remote ASPECT key. PHD-VRX2 also provides additional intelligent ways to control aspect ratio with the Auto Aspect feature. The default value is ON.



If "ON" is selected, every time you change the channel, PHD-VRX2 will detect video resolution source and automatically determine the proper aspect setting. For example, if tuned to a HD channel, PHD-VRX2 will set it to "Normal" video aspect. If tuned to a SD (480p) channel, PHD-VRX2 will set it to "4:3" automatically.

If "OFF" is selected, the Aspect setting still keeps the same as the previous setting no matter which channel it is tuned to. User can change it manually by pressing the ASPECT remote key to select desired mode if needed.

View Mode

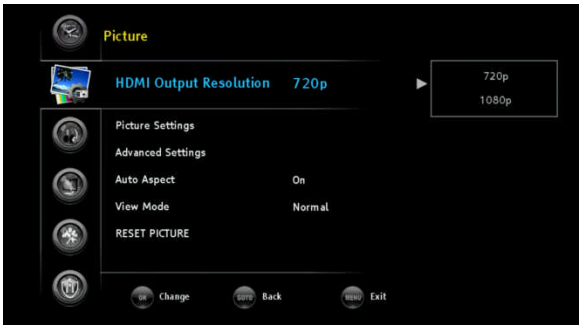


You can change the video aspect from this option. There are Normal, Full Screen, Panoramic, Zoom1, Zoom2, 4:3, and Direct modes to choose from. This is done the same way as using ASPECT remote key.

RESET PICTURE

PHD-VRX2 can individually set picture and audio settings based on different inputs. Select this option will reset all the picture settings to the original default values.

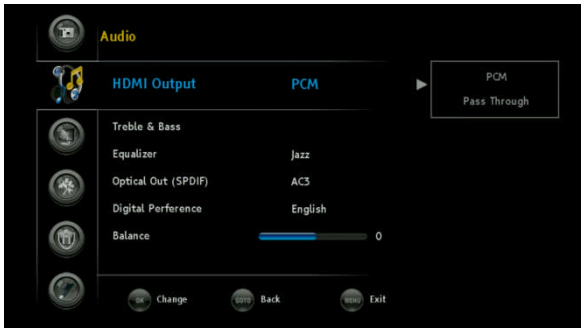
HDMI Output Resolution



Besides of setting output resolution from remote V.MODE key, you can also change output resolution from this menu option.

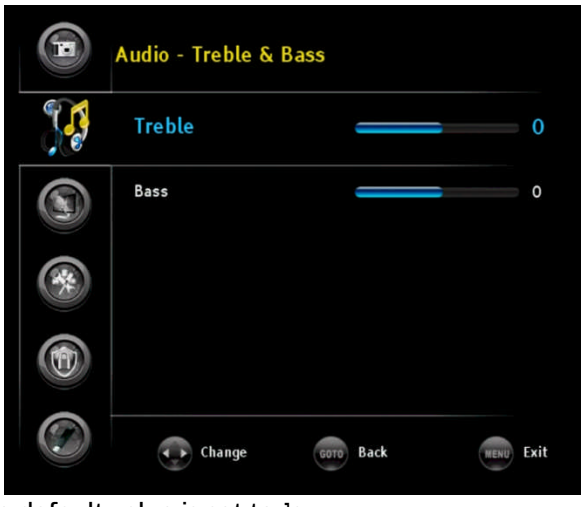
Audio: The Audio menu option provides all the audio related settings.

1. Highlight "Audio" option and press OK or ►.
2. Press ▲/▼ to highlight the item: Treble & Bass, Equalizer, Optical Out (SPDIF), Digital Preference, Balance, RESET AUDIO.
3. Press OK or ► to select an option.
4. Press BACK key as the return function or ◄ key to go back to the previous menu location.
5. Press EXIT to exit.



HDMI Output

By default, unit HDMI output is transferring PCM audio to either TV or sound system. This is the analog audio, which volume can be adjusted by PHD-VRX2 remote control. By selecting Pass Through option, unit will send out digital audio raw data (S/PDIF) directly from HDMI output to your sound system or TV, which can further decode the S/PDIF signal. This way, if AC3 is present, the sound system or TV will re-produce AC3 surrounding sound. By selecting this option, the volume control can be adjusted by your sound system or TV, but not from PHD-VRX2 remote control.



Treble & Bass

In this option, the user can control audio treble and bass values.

Press ► and then ▲/▼ to select each option. Press OK to highlight the option and use ◄/► to adjust values.

Equalizer

PHD-VRX2 provides several audio equalizer preset values such as Flat, Rock, Pop, Classical, Jazz and Off. The default value is set to Jazz.

Optical Out (SPDIF)

You can output PHD-VRX2 digital audio to a home theater or A/V Receiver devices. Using this feature, you can turn on or off the PHD-VRX2 optical output port and set the audio from optical output to either PCM or AC3 digital audio data.

Digital Preference

In the digital channel audio output, if a different speaking language is available, the user can select either one of the options. Default is English.

- English
- Spanish
- French

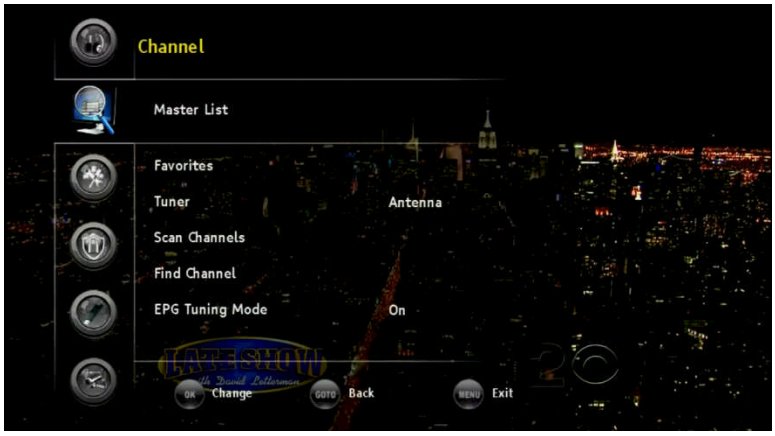
Balance

You can change audio balance by highlighting this option and using ◄/► to adjust values.

RESET AUDIO

PHD-VRX2 can individually set picture and audio settings based on different inputs. Select this option will reset all the picture settings to the original default values.

Channel: The Channel menu provides channel list, channel scanning and all other channel/tuner related features.



1. Highlight "Channel" option and press OK or ►.
2. Press ▲/▼ to highlight the item: Master List, Favorites, Tuner, Scan Channels and Find Channel.
3. Press OK or ► to select an option.
4. Press BACK key as the return function or ◄ key to go back to the previous menu location.
5. Press EXIT to exit.

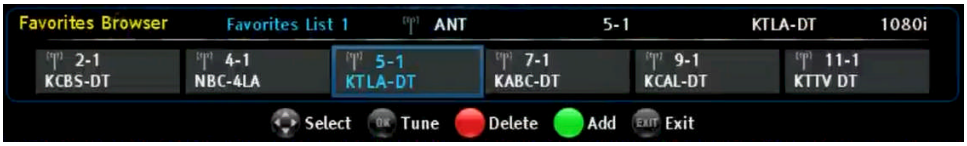
Master List

If you select this option, PHD-VRX2 will show channel master list from the current tuner. Under the master list table, all available channels are displayed, as well as the channel type (either digital channel "DTV", or analog channel "ATV"), the channel label (for an example, KABC-DT) and a check box. By default, all the available channels are check-marked in the check box. If you want to skip this channel so PHD-VRX2 won't display it when you press remote CH+ and CH-, then you can press the red button on the remote to uncheck (skip it). Once you use ▲/▼ to move and highlight to different channel number, PHD-VRX2 will also tune to that channel while the master list is still displaying on TV screen.

Favorites

Select this option to access the "Favorites Browser" screen. This is done the same way as pressing the FAV remote key to instantly bring up the "Favorites Browser". Inside of the favorites screen, you can press the green key to add the current channel as one of your favorites or press the red key to remove the current channel from the favorites list. Press ◀/▶ keys to browse through all the favorite channels and press OK key to tune to the highlighted channel. Use ▲/▼ to jump to different lists. PHD-VRX2 provides the following lists from the "Favorites Browser":

Favorites List 1
Favorites List 2
Favorites List 3
History List
Channels List
Input List



Tuner

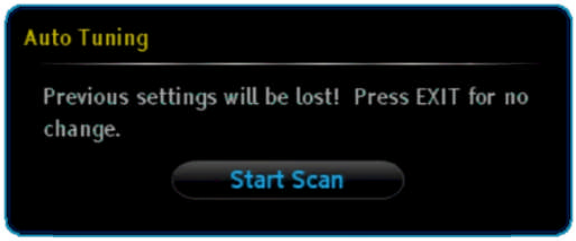
In this option, you can select the current tuner RF input as either antenna or cable signal.

☞

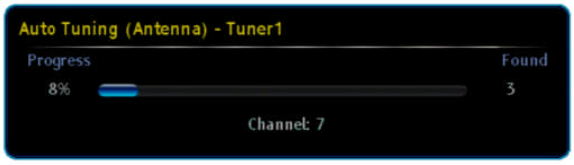
- PHD-VRX2 has built-in dual channel scanning capability for both tuners. Once it scans both Antenna and Cables channels, PHD-VRX2 can save both channel information into internal memory. Upon selection of a specific RF input, PHD-VRX2 can change all channel lists from memory without re-scanning channels.

Scan Channels

After selecting a type of RF Input (antenna or cable) from the current tuner, press the OK key to start scanning channels.



Auto tuning screen will pop out. Confirm "Start Scan" to continue for the channel scanning.

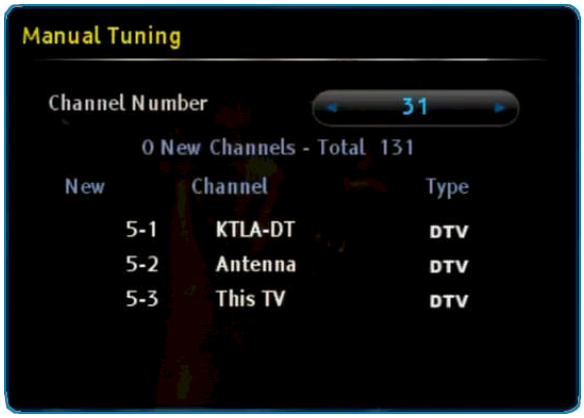


☞

- This step may take 10-15 minutes or more.
- All the current stored channels will be deleted or replaced with new channel information after doing "Start Scan".

Find Channel

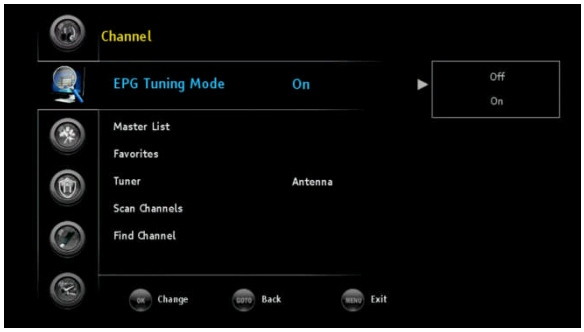
Using this option, you can find new channels and add them to the channel list on a particular frequency, which refers to physical channels, not the virtual channels.



For an example, enter the physical channel number 31, and it may find three virtual channels like 5-1, 5-2 and 5-3 and add them to the list.

EPG Tuning Mode

By default, EPG Tuning Mode is set to On. This way in Guide screen, unit will tune to the highlighted channel every time and retrieve the latest program information. If set to Off, unit won't tuneto the channel but display whatever available program information previously saved in the system memory.



Settings: The Settings menu provides Input Labels, Scale Window Closed Captions, Date & Time, Menu Language, System Info, Networking, Home Network and Reset All features.

1. Highlight "Settings" option and press OK or ►.
2. Press ▲/▼ to highlight the item.
3. Press OK or ► to select an option.
4. Press BACK key as the return function or ◄ key to go back to the previous menu location.
5. Press EXIT to exit.

<u>Input Labels</u>

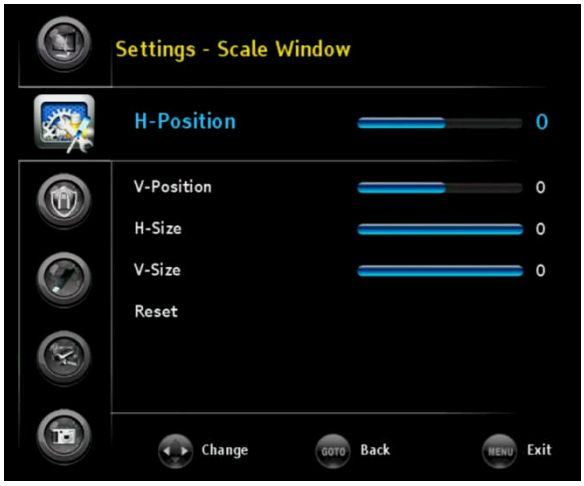
PHD-VRX2 has six (6) A/V inputs you can choose from. These inputs are Tuner 1, Tuner 2, CVBS, Component, HDMI and VGA as the default input name.

User can further define the name on each input by assigning a different label or creating one. Select this option and the Input Labels screen will pop out. Use ◄/► or ▲/▼ keys to select pre-set label names or press the key to enter your own label name.

Once complete, press the INPUT remote key to see if the input label has been changed or not.

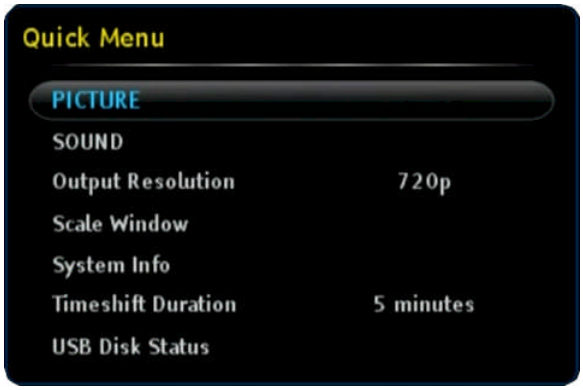
<u>Scale Window</u>

Select this option to fine-tune video screen size in order to ease video over-scan issues if your TV screen crops off a certain video portion and can't use other means to adjust back. This option is very useful. Also, use this option if the PC HDMI/VGA (RGB) input connected from your PC to PHD-VRX2 and the output size are not matched on the TV



screen.

Once selected, the Scale Window screen will come out. Use ◄/► or ▲/▼ and OK keys to choose individual adjustments (H- Position, V-Position, H-Size and V-Size, 4 different sizes and positions) or reset back to default value.

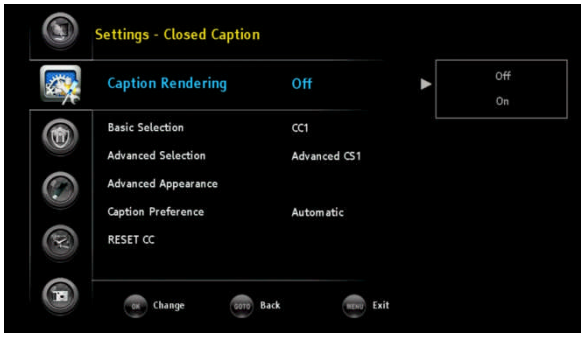


☞

- You can also bring up the Quick Menu by pressing the **QUICK** key to promptly access the Scale Window feature from there.

Closed Captions

Closed Caption feature is to display On Screen Text Messages while watching TV. This feature is available in the broadcast. PHD-VRX2 is equipped with an internal Closed Caption decoder engine. It allows you to view conversations, narration and sound effects as subtitles on your TV.



Digital Closed Caption service is a new caption service available only on digital TV programs (also at the discretion of the service provider). It is a more flexible system than the original Closed Caption system, because it allows a variety of caption sizes and font styles.

- Caption Rendering

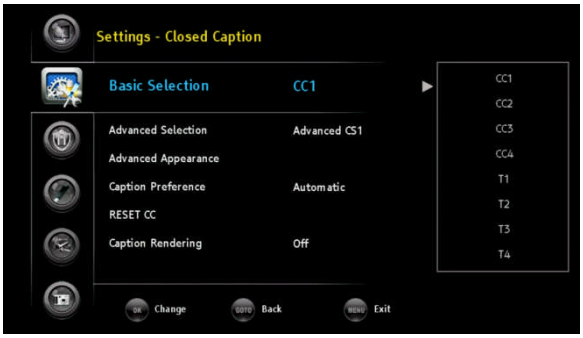
  Use this option to turn the Closed Caption (CC) feature on or off.

  ☞

  - You can also directly turn on or off Closed Caption by pressing CC key from remote control.

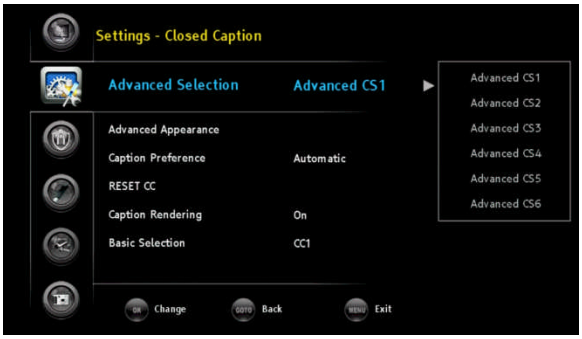
- Basic Selection

  You can select any one of these options when it is available. The default is set to CC1.



CC1: The Primary Synchronous Caption Service. These are captions in the primary language that must be in sync with the sound, preferably matched to a specific frame.
CC2: The Special Non-Synchronous Use

Captions. This channel carries data that is intended to augment information carried in the program.
CC3: Secondary Synchronous Caption Service. Alternate program-related caption data, typically second language captions.
CC4: Special Non-Synchronous Use Captions. Similar to CC2.
Text1: First Text Service. This may be various non-program related data.
Text2: Second Text Service. Additional data, usually not program related.
Text3/Text4: Third Text Service. These data channels should be used only if Text1 and Text2 are not sufficient.

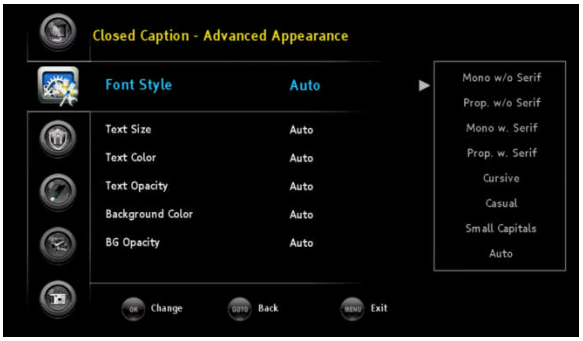


- Advanced Selection

You can select an available advanced caption option in DTV Caption.

This item includes

- Advanced CS1
- Advanced CS2
- Advanced CS3
- Advanced CS4
- Advanced CS5
- Advanced CS6



- Advanced Appearance

This will adjust advanced appearance settings such as font style, text size, etc.

It can be used on digital channels.

Font	
Style	Mono without Serif/ Prop. without Serif/ Mono with Serif/ Prop. with Serif/ Cursive/ Casual/ Small Capitals/ Auto

Text	
Size	Small/ Standard Size/ Large/ Auto
Color	Auto/ Black/ White/ Green/ Blue/ Red/ Cyan/ Yellow/ Magenta
Opacity	Solid/ Flashing/Translucent/ Transparent/ Auto
Background	
Color	Auto/ Black/ White/ Green/ Blue/ Red/ Cyan/ Yellow/ Magenta
Opacity	Solid/ Flashing/Translucent/ Transparent/ Auto
Edge	
Style	None/ Raised /Depressed/ Uniform/ Left Drop Shadow / Right Drop Shadow / Auto
Color	Auto/ Black/ White/ Green/ Blue/ Red/ Cyan/ Yellow/ Magenta

- Caption Preference

  Choose whether to use the "basic", "advanced" or "automatic" closed caption setting for digital TV channels. (Advanced closed caption is the priority).

  ☞

  - When an analog video is displayed, you can choose CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, TEXT4 or OFF.
  - When a Digital signal is received, you can choose from Adv.CS1, Adv.CS2, Adv.CS3, Adv.CS4, Adv.CS5, Adv.CS6, CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, TEXT4, or OFF.
  - Depending on the broadcast signal, some Basic Captions will function with a Digital broadcast signal.

- RESET CC

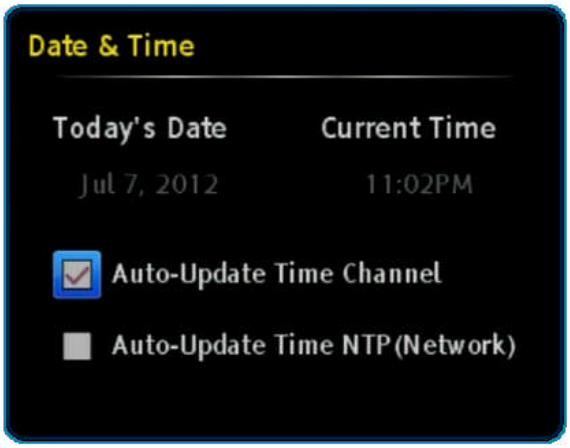
  Select this option to reset all the closed caption settings to the original default mode.

Date & Time

Use this feature to adjust time zone setting, etc.

- Time Zone

  Press remote control ▲/▼ and then **OK** keys to select proper time zone in your area.



- Daylight Saving Time
  Press remote control ▲/▼ and then **OK** keys to select yes or no for daylight saving time options in your area.

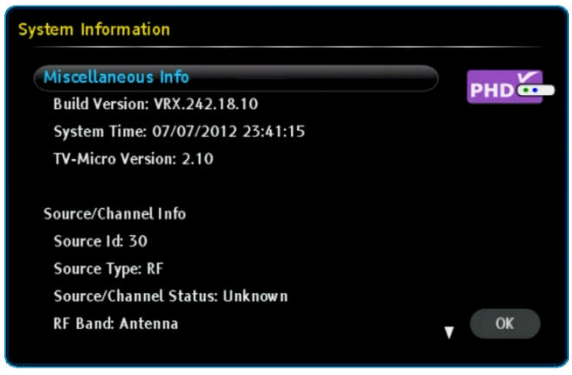
- Manual Time Setting
  You have three options to adjust date and time.

  - By default, the "Auto-Update Time Channel" option is checked. PHD-VRX2 will try to decode and use date/time information sent from TV channels. Once detected, PHD-VRX2 will update to its system date and time automatically.
  - You can also check "Auto-Update Time NTP (Network)" option. NTP (Network Time Protocol) provides more precise date/time reference packets sent via network. So, if you connect PHD-VRX2 Ethernet port through network to the internet, you can select this option to get a precise date/time.

    ☞

    - It is useful for doing schedule recording. Since it is precise timing, it will record a TV program on time.

  - If both "Auto-Update Time Channel" and "Auto-Update Time NTP (Network)" are unchecked, then the user will need to manually set "Today's Date" and "Current Time" with remote control digits and navigation keys.

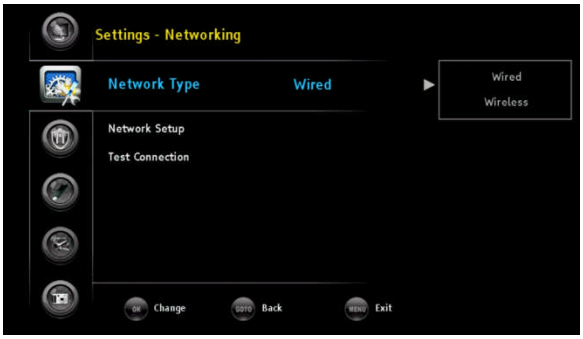


Menu Language
Press ▲/▼, and **OK** key to select the language of the menu from English, French and Spanish. The default selection is English.

System Info
Displays the important system information. The information includes:

- Miscellaneous Info including Firmware version, System time and TV micro version

- Source/Channel Info
- Audio/Video Stream Info
- Video Output Info
- Network
- USB Info

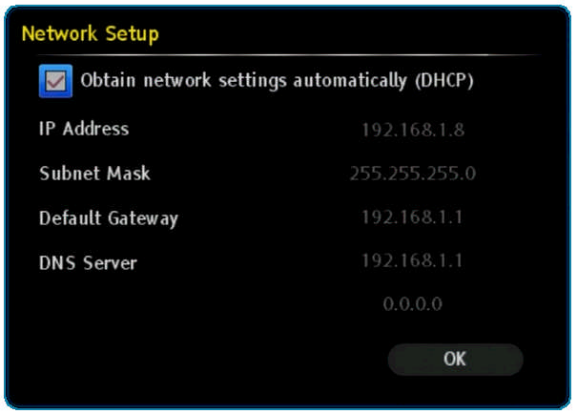


Networking

PHD-VRX2 has a built-in Ethernet port, which can connect to a home network or the internet. You can select a proper IP address during this option. When setting up the networking of PHD-VRX2, please make sure your network cable is plugged in and your internet and network hub/modem are working properly in your place.

- Network Type

  Current PHD-VRX2 will support wired network. Wireless network option requires a WiFi USB adapter plugged into the USB port and currently PHD-VRX2 does not support it.

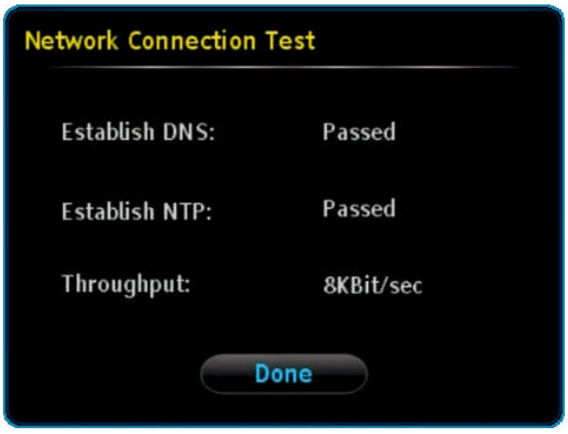


- Network Setup

  Select this option and the Network Setup screen will pop out. Default network settings like IP address, subnet mask, gateway IP and DNS server are automatically obtained by checking the DHCP option. You can also uncheck DHCP and manually enter your IP address. Once complete, press the OK key to go back to the previous screen.

- Test Connection

  Select this option and the Network Connection Test screen will pop out. PHD-VRX2 will be immediately testing the current network connection. It will test DNS, NTP and network throughput speed.



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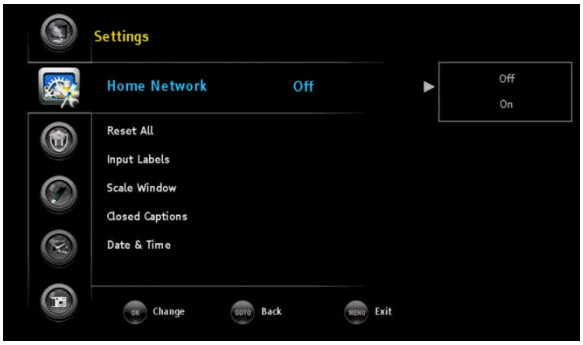
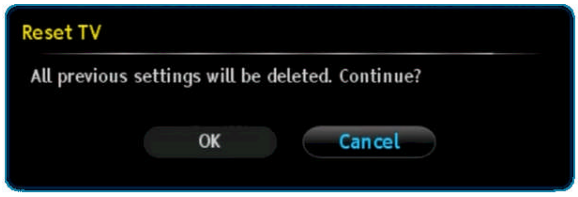
- By default, “Auto-Update Time NTP (Network)” is not set from Date/Time setting. Therefore, during network testing, “Establish NTP” will show Failed.



Home Network

PHD-VRX2 has the ability to connect to your home network media server, so PHD-VRX2 can play video, music, or display pictures not only from USB storage devices but also via network. If your PC is running a media server with on-line connection, then PHD-VRX2 can also play on-line media files through a media server program (for an example, TVersity Media Server). By default, this option is turned off. If your network connection is ready and media server is running, you can turn on this function and play media files using the "Media Player" menu.



Reset All

The user can decide to reset all settings back to factory settings. This includes the channel map, all Program Info, Favorite channel lists, etc. Once you select this option, the Reset TV screen will pop out and ask you to confirm reset all. Once confirmed, select OK to proceed. Then within a few seconds the TV screen will be blank and PHD-VRX2 front panel will show a clock and red light, meaning that the unit has been turned off to standby mode. You can then turn the unit on and the TV screen should display the initial Setup procedures, just as if it was turned on first time out-of-the-box.

Locks: In the Locks menu you can use Ratings locks (V-CHIP), Channel locks and Change PIN after setting your password.

When you first enter this menu, set up your password.

1. Highlight the "Locks" option and press OK or ►.
2. Enter 4 digits for New PIN number by using (0-9) remote keys.
3. Enter the same PIN (4 digits) again and access the Locks menu.

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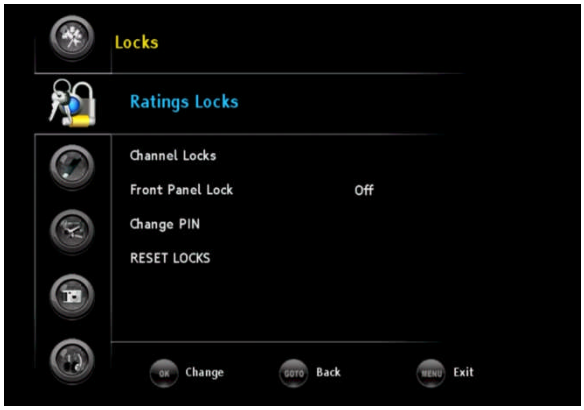
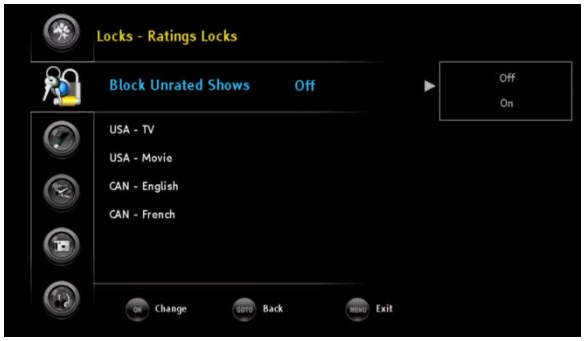
- On screen, ✶ appears instead of the number.
- As a precautionary measure, make a note of your password (PIN) and keep it in a familiar place.



The new Locks menu includes Ratings Locks, Channel Locks, Front Panel Lock, Change PIN and REST LOCKS features.

Ratings Locks

Enter this option to choose different rating locks.



- Block Unrated Shows

  You can block all programs and movies that are broadcasted without a rating. By default, this is off.

Unrated Shows	
Off	Blocks all programs and movies that are broadcasted without a rating.
On	Allows all programs and movies that are broadcasted without a rating.

- USA - TV

  The TV Parental Guidelines work in conjunction with the V-CHIP to help parents screen out inappropriate television shows from their children.

  *Restriction Categories based on six age-based categories.

Hierarchy of Age-based Ratings	
TV-Y	All Children
TV-Y7	7 years old and above
TV-G	General audience

TV-PG	Parental guidance
TV-14	14 years old and above
TV-MA	Mature audience only

☞

- If you block TV-Y, TV-Y7 will automatically be blocked. Similarly, if you block TV-G, TV-PG, TV-14 and TV-MA will be blocked.
- If you unblock TV-V7, TV-Y will automatically be unblocked. If you unblock TV-MA, TV-G, TV-PG and TV-14 will be unblocked.

Each Restriction Category has additional options.

sub-ratings	
ALL	All Restrictions
FV	Fantasy Violence
D	Sexually Suggestive Dialogue
L	Adult Language
S	Sexual Situations
V	Violence

V-Chip will automatically block certain sub-categories that are more restrictive. For example, if you block the "L" sub-rating in TV-PG, then the "L" sub ratings in TV-14 and TV-MA will also automatically be blocked.

USA-TV, TV Parental Guidelines

	ALL	FV	D	L	S	V
TV-Y	☑					
TV-Y7	☑	☑				
TV-G	☑					
TV-PG	☑		☑	☑	☑	☑
TV-14	☑		☑	☑	☑	☑
TV-MA	☑			☑	☑	☑

☑: Content rating can be set

- USA - Movie

Movie ratings are used for original movies rated by the Motion Picture Association of America (MPAA) as watched on cable TV and not edited for television. The V-CHIP can also be set to block MPAA-rated movies.

* Restriction Categories based on six age-based categories.

Voluntary movie rating system (MPPA)	
G	General Audience (No Restrictions).
PG	Parental Guidance Suggested.
PG-13	Parental Guidance for children under 13.
R	Restricted. Children under 17 should be accompanied by an adult.
NC-17	17 years old and above.
X	Adults Only

☞

- If you block G, higher categories will automatically be blocked.
- Similarly, if you unblock X, lower categories will automatically be unblocked.

- CAN - English

Restriction Categories based on five age-based categories.

Hierarchy of Age-based Ratings	
G	General programming.
8 and+	Not recommended for young children.
13 and+	Not recommended for ages under 13.
16 and+	Not recommended for ages under 16.
18 and+	Programming restricted to adults.

- CAN - English

Restriction Categories based on six age-based categories.

Hierarchy of Age-based Ratings

C	All Children.
C8+	Children 8 years and above.
G	General programming.
PG	Parental guidance.
14+	14 years old and above.
18+	Adult programming.

Channel Locks

You can lock specific channels with this feature.

Select this option and the Channel Locks screen will pop out. Use ▲/▼, and OK keys to lock a specific channel. The red lock symbol shown on the right side indicates that the channel has been blocked.

Front Panel Lock

You can lock the front panel keys using this option. The default is Off. When On is selected, the user can't control the PHD-VRX2 unit with any front panel keys. Once a front panel key is pressed, PHD-VRX2 will show a "Panel Lock" message on the screen. To disable the front panel lock, either select OFF again or completely restart the power by pressing the Power button located on the left side of the unit.

Change PIN

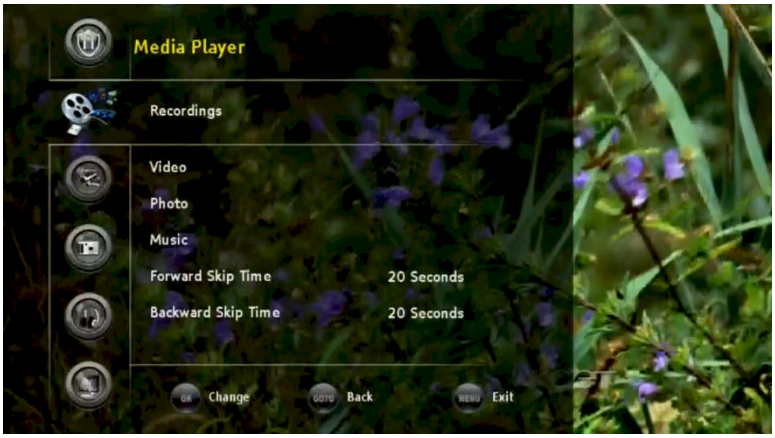
You can change the lock PIN by selecting this option.

1. Enter New PIN.
2. Confirm New PIN.

The new PIN has been updated to the system.

RESET LOCKS

To reset all the rating settings back to the default mode.



Media Player: The Media Player menu provides full-feature functions of playing video and music files as well as displaying pictures.

1. Highlight the "Media Player" option and press OK or ►.
2. Press ▲/▼ to highlight the item.
3. Press OK or ► to select an option.
4. Press BACK key as the return function or ◄ key to go back to the previous menu location.
5. Press EXIT to exit the menu.

Recordings

The PHD-VRX2 is capable to play many different types of video files from the external USB hard drive. However, in most cases, the user will only wish to playback their recorded TV programs instantly in a convenient way. Therefore, under this "Recordings" section, PHD-VRX2 will only display all the recorded TV programs. The user will be able to manage it by sorting these files in a different fashion, controlling forward and backward skip time, playback from the last viewing point, turning on/off closed caption, displaying TV program detail information and etc.

Recordings main menu contains:

o File List Screen appears on the left side. It lists all the recorded TV program names. Use ▲/▼ or CH+ (page up) or CH- (page down) to quickly search or highlight the specific TV program. You can also use the remote key to delete some files to save space.

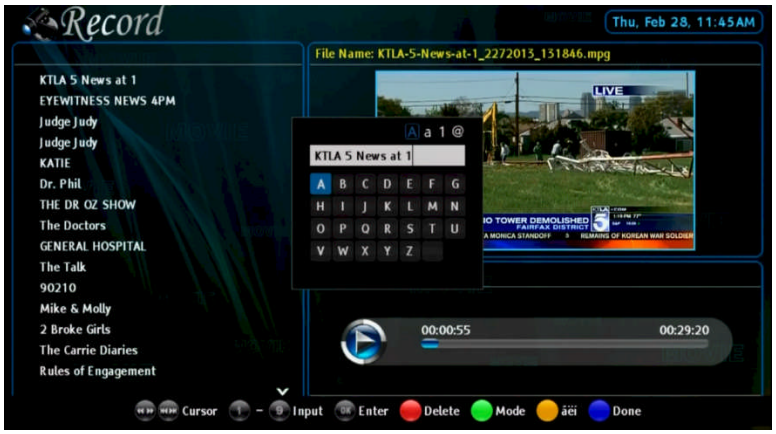
☞

- All these program names listed on the left side can be sorted out based on time, title or channel number per your choice.

- Preview Screen appears on the upper right portion. It shows the current highlighted program video in a smaller preview window. On top of this preview window, it displays this TV program full file name.
- Video Time Line Screen appears on the lower right portion. This screen gives you the duration of the TV program selected, program video file size, and the status for the action keys.

☞

  - From the preview window, the user will be able to play, stop, pause, skip and fast forward/rewind video by using these action control keys without moving to full size video screen.



- Modify Recorded TV Program Titles:

  User can rename the recorded files by highlighting the desired TV program title and pressing remote key.

  Keypad menu pops up in the middle of the screen. To change between characters, numbers or symbols using and keys. To select the desired letter, use navigation and OK keys. When complete the file rename, use key to confirm and close the Keypad menu.

In addition to the above screen features, PHD-VRX2 provides additional two useful menus:

- Quick Menu

  In Recordings main menu, press QUICK remote key to bring up Quick menu on the left corner. This menu has several features:

  - Sort: There are 6 different sorting methods to allow user to arrange the recorded program names in their choice.

1. Time DESC:
   Program names are sorted in descending order based on the file creating time.
2. Time ASC:
   Program names are sorted in ascending order based on the file creating time.
3. Title DESC:
   Program names are sorted in descending order based on the TV program title.
4. Title ASC:
   Program names are sorted in ascending order based on the TV program title.
5. CH Num DESC:
   Program names are sorted in descending order based on the associated channel number.
6. CH Num ASC:
   Program names are sorted in ascending order based on the associated channel number.

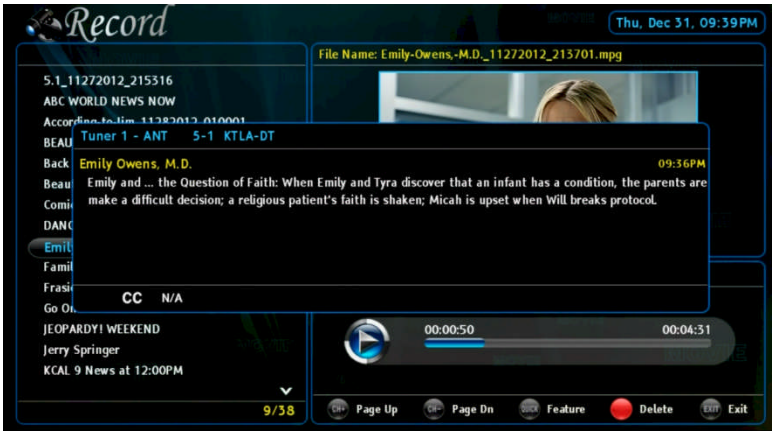
- Forward Skip Time: Each forward skip jump duration can be selected from 20 sec, 30 sec, 60 sec, or 120 sec.

- Backward Skip Time: Each backward skip jump duration can be also selected from 20 sec, 30 sec, 60 sec, or 120 sec.

- Scale Window: Use this option to fine tune video size in order to fit your TV screen nicely. Press OK key to bring up “Scale Window” menu for the adjustments. Please also refer to the details of scale window adjustments in PHD-VRX2 User Manual.

- USB Disk Status: Use this option to check the external USB storage device status.

o <u>Program Information Screen</u>
In Recordings main menu, press INFO key, PHD-VRX2 will bring up the “Program Information” pop-



out screen. This will display available detail program descriptions regarding the highlighted show in the File List screen.

In Recordings main menu, press **OK** key on the highlighted TV program. The full size video will be displayed.

During the full size video screen playback, many useful functions like closed caption, video aspect adjustments and playback action controls can be operated directly from PHD-VRX2 remote keys .

o Closed Caption

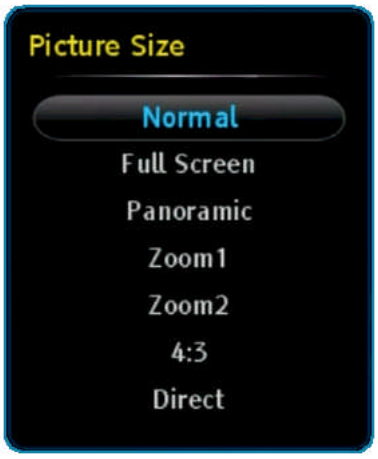
Only in the full size video playback, you can turn on and off closed caption based on the following actions:

- CC key: Press CC key during playback, top corner "Closed Caption" screen will pop out. Select On, the closed caption will be displayed if it is available in the program. Select Off to turn off the closed caption.
- MUTE key: Press MUTE key anytime during full size video playback, the closed caption will be automatically turned on if it is available in the program.

o Aspect Control

In the full size video playback, video aspect ratio can be adjusted by using the remote ASPECT key. After the key is pressed, the "Picture Size" menu will pop-out. There are 7 adjustments as Normal, Full Screen, Panoramic, Zoom1, Zoom2, 4:3, and Direct modes in this menu.

Please refer to the Auto Aspect section in PHD-VRX2 User Manual for more detail operations.



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- If recorded show is SD (Standard Definition) with 4:3 ratio, during playback, you will need to set "4:3" mode in aspect adjustments in order to set back to the correct SD screen, otherwise, the video size will be stretched out.

o Quick Menu

In the full size video playback, press QUICK remote key to bring up Quick menu on the left corner. There are several features including PICTURE controls, SOUND controls, set current video playback is repeatable or not. And the remaining features, Forward Skip Time, Backward Skip Time, Scale Window and USB Disk Status are the same items shown in the Quick Menu of the Recordings main menu.

o INFO key

During the full size video playback, you can press INFO key anytime to bring up current program information including the program file name, file size and time line progress bar. Press INFO key again, the information screen will be disappeared.

o Resume Playback Feature

In the full size video playback, you can stop in any point and back to the Recordings main menu. When you want to re-play this show, press PLAY ▶ key, then "Play Options" menu will pop-out. You can either select resume from the last viewing position or start playing from the beginning. PHD-VRX2 will memorize the previous playing location and resume from that point if the option is selected.

On the full size video screen, you can always use the remote control action keys to adjust the speed or stop the video at any time. These action control keys are:

- PLAY: Play or resume a paused video.
- PAUSE: Pause current video.
- STOP: Stop playback.
- FORWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a forward skip based on the re-set skipping time. Press and hold this key to create steady skipping time increments of continuous video forwarding.
- BACKWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a backward skip based on the re-set skipping time. Press and hold this key to create continuous skipping time decrements of video rewinding.
- RWD: Rewind video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128, and 256x different rewind speeds.
- FF: Fast Forward video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128, and 256x different fast forward speeds.

☞

- When playback those recorded shows, the PHD-VRX2 unit front panel LED display will show "PLAY" to indicate that the unit is in playback mode.
- Continuously pressing and holding the ⏭ or ⏮ keys will create smooth, quick forward or backward video search or commercial skipping.

All the file names listed in Recordings section are created once started with the new firmware. The previous recorded files and other video files won't be listed and shown in this section. However, you still be able to playback any video files from the Video section under Media Player function.

Video

The PHD-VRX2 will play video files from the external USB HDD or through a home network based on the following conditions:

(1) If two USB devices are connected or the home network function is enabled, PHD-VRX2 will show the "Select Device" screen and ask the user to pick the right device to play.
(2) If only one USB device is connected, PHD-VRX2 will promptly display the Video main menu. Use the remote control navigation keys to select the desired video file to play.
(3) If no devices are attached to any USB ports, PHD-VRX2 will show the message "No devices are connected" and prompt the user to re-connect a USB device or enable a home network.

Video main menu contains:

- File List Screen appears on the left side. It shows all the video files recognized by PHD-VRX2. Use ▲/▼ or CH+ (page up) or CH- (page down) to quickly search or highlight the file.
- Preview Screen appears on the upper right portion. It shows the video file you currently highlighted in a smaller preview window.
- Video Time Line Screen appears on the lower right portion. This screen gives you the duration of the video selected, video file size, and status for the action keys.

Press **OK** key for the highlighted file. The full size video will be displayed. During preview screen or full size video screen playback, you can use the remote control action keys to adjust the speed or stop the video at any time. These action control keys are:

- PLAY: Play or resume a paused video.
- PAUSE: Pause current video.
- STOP: Stop playback.
- FORWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a 20 second forward skip. Press and hold this key to create steady 20 second increments of continuous video forwarding.
- BACKWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a 20 second backward skip. Press and hold this key to create continuous 20 second decrements of video rewinding.
- RWD: Rewind video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, and 32x different rewind speeds.
- FF: Fast Forward video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, and 32x different fast forward speeds.

☞

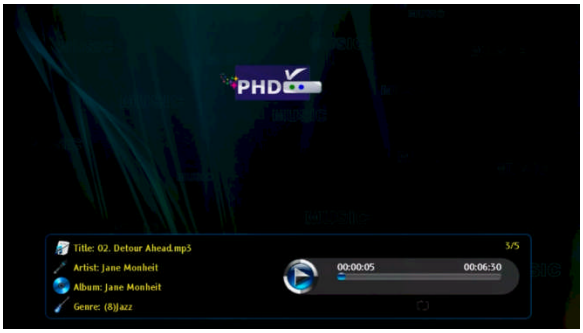
- When using the Media Player function to play back video, music, or photo files, the PHD-VRX2 unit front panel LED display will show "PLAY" to indicate that the unit is in playback mode.
- Continuously pressing and holding the ⏭ or ⏮ keys will create smooth, quick forward or backward video search or commercial skipping.
- In the Video main menu, the user can still access Quick Menu by pressing the "QUICK" key.

Music

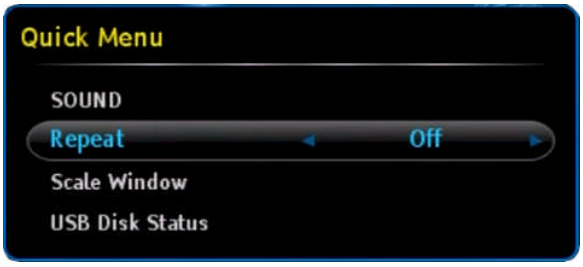
Select this option and PHD-VRX2 will play music files from the external USB HDD or through home network connections.

Music main menu contains:

- File List Screen on the upper left portion. It lists all the available music files in the current directory. Press ▲/▼ to highlight the desired music file.
- Album Picture Screen on the lower left portion. This screen will show the picture contained inside of the MP3 tags. Normally, it shows the album cover. If a cover is not available, then PHD-VRX2 will show a default picture.
- Music Details Screen on the upper right portion contains Title, Artist, Album name, Genre and other available information.
- Music Time Line Screen on the lower right portion displays the duration of the music and shows status for the action keys.
  - ▶ PLAY: Play or resume paused music.
  - ⏸ PAUSE: Pause playing music.
  - ■ STOP: Stop playback.



Press **OK** key for the highlighted music file. The Music Player full screen will be displayed.



You can press QUICK remote key anytime when music is playing. The Quick access menu will allow you to adjust audio (sound) settings, set music file

repeat conditions (default - off, repeat once, repeat all), adjust screen size, and check USB disk status.

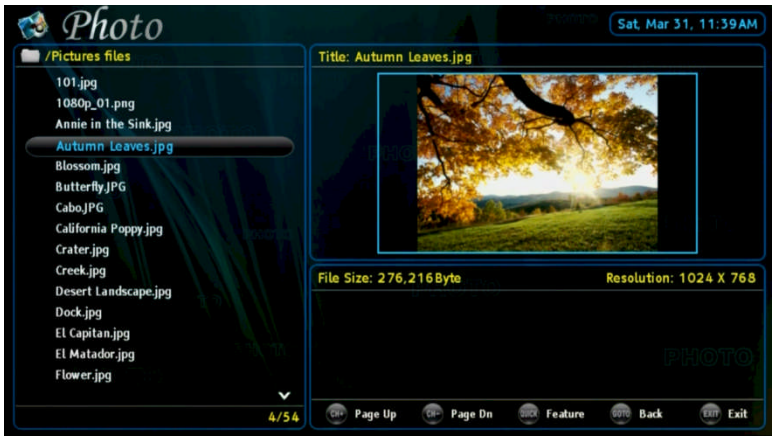
☞

- When using the Media Player function to play back video, music, or photo files, the PHD-VRX2 unit front panel LED display will show “PLAY” to indicate that the unit is in playback mode.

Photo

PHD-VRX2 will display picture files from the external USB HDD or through home network connections.

PHD-VRX2 provides two different ways to browse pictures.

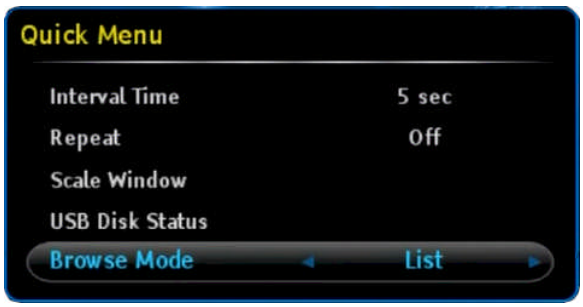


- Thumbnail Mode: In this mode, PHD-VRX2 displays thumbnail images of pictures so the user can have a quick view. Use ◄/► and ▲/▼ to select the desired picture and press OK to bring up the full screen picture.

- List Mode: Similar to the Video menu screen. On the left, all available picture files in the current directory are listed. On the upper right portion, the picture currently highlighted is displayed in a smaller preview window.

Press **OK** remote key for the highlighted photo file. The full screen

picture will be displayed. Use ◄/► key to select the previous or next picture. Use ▲/▼ key to rotate pictures. Press **OK** to start the picture slideshow automatically.



You can press the QUICK remote key any time during slideshow. The Quick access menu will allow you to adjust slideshow change time (default is 5 sec., up to 90 sec.), adjust screen size, check USB disk status, and select the browse mode type (Thumbnail or List mode).

☞

- In the full picture screen, the Quick menu also allows the user to set background music on or off and select which background music to play.

Forward Skip Time

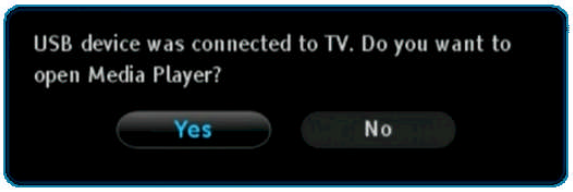
During playback, press ⏭ key will create a quick video forward skip or jump. User can adjust forward skip time from 20 sec, 30 sec, 60 sec, up to 120 sec. in this menu.

Backward Skip Time

During playback, press ⏮ key will create a quick video backward skip or jump. User can also adjust backward skip time from 20 sec, 30 sec, 60 sec, up to 120 sec. in this menu.

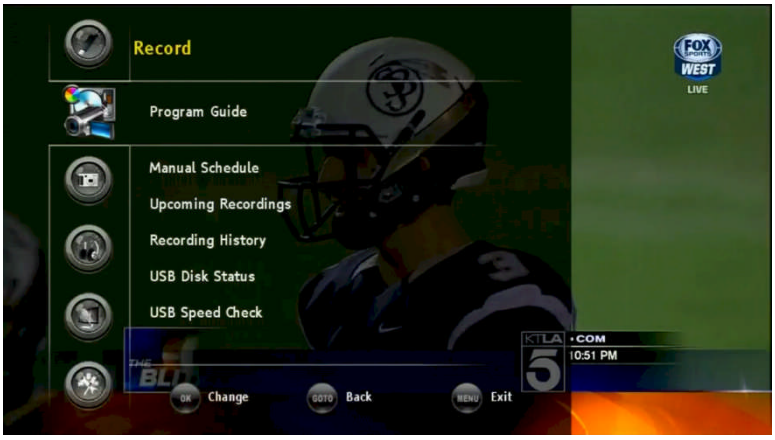
USB Pop up Message

By default, USB Pop up message is set to Off. If it is set to on, once unit detects the external hard drive connected during power on, the USB device connecting screen will pop out first if some files are already in the USB HDD.



Record: The Record menu provides recording related features as well as USB utility functions.

1. Highlight the "Record" option and press OK or ►.
2. Press ▲/▼ to highlight the item.
3. Press OK or ► to select an option.
4. Press BACK key as the return function or ◄ key to go back to the previous menu location.
5. Press EXIT to exit menu.

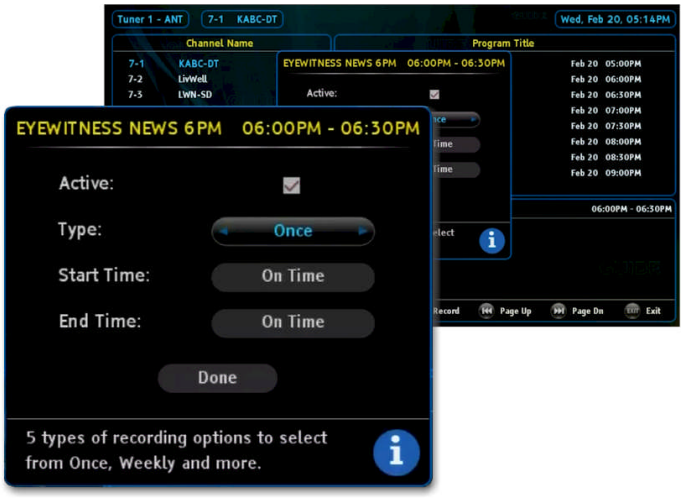


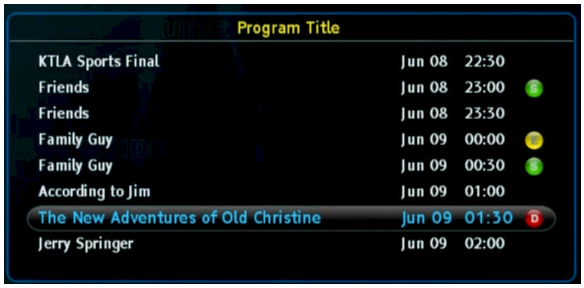
Program Guide

Program Guide recording relies on Electronic Program Guide (EPG) data from TV broadcaster or Cable Company to do future or current schedule recording. If there is no EPG data available for that channel, PHD-VRX2 will turn it to manual schedule recording screen.

Press OK to select this option. PHD-VRX2 will bring up its guide screen. You can use navigation keys to move to the Program Title screen on the right side. Continue to use navigation keys to highlight the desired program for recording.

Press the REC remote button, and a new "Record Schedule Timer" screen will pop out on top of the guide screen. In this screen, you can adjust Type, Start time and End time of the show per your preference. Once you select "Done" and confirm, the Program Title will be marked with type icons on the right side to indicate that this program is scheduled for recording.

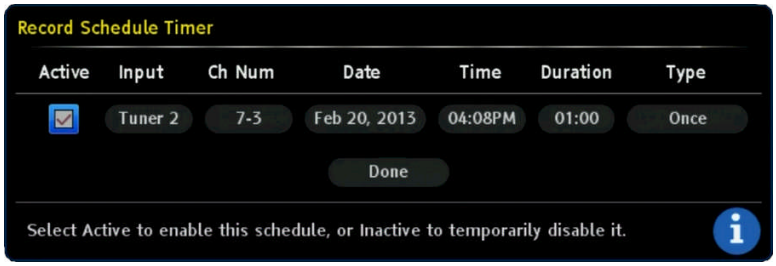




- Once scheduled recording is set, you can either turn off the unit to standby mode or keep the unit on. When time is up, PHD-VRX2 will automatically record the channel you previously set to.

Manual Schedule

Manual Schedule recording allows the user to manually set different recording schedules.

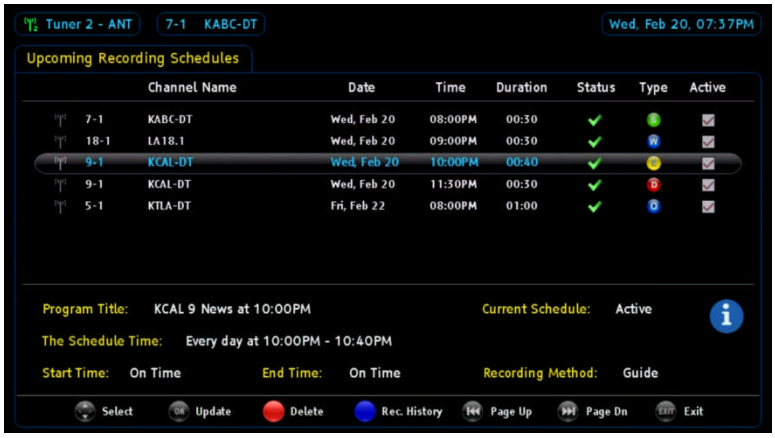


Press OK to select this option and the Record Schedule Timer screen will pop up. In this screen, majority options are open for the user to adjust.

You can set different record schedule types including Once, Everyday, Mon-Fri, Sat & Sun, and Weekly. Once selected, the "Upcoming Recording list" will mark this recording event with a different icon symbol according to a specific type.

Upcoming Recordings

All the current and future recording events are displayed under this option. You can also highlight the desired recording schedule to modify (Update) or delete it. The "Status" column indicates the recording status:



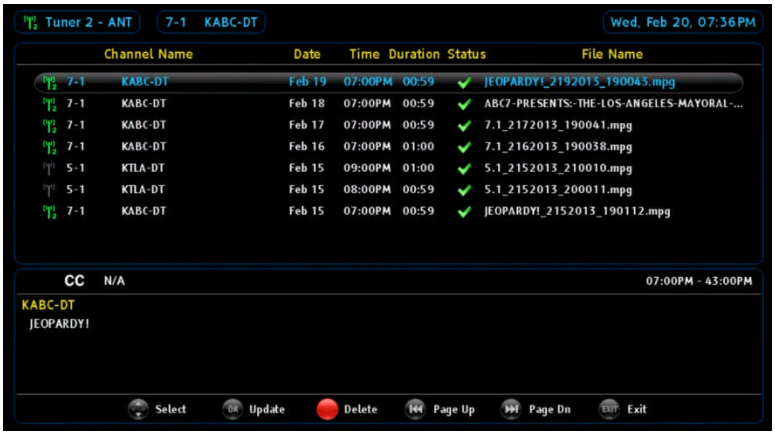
- R : Recording in progress.
- : Will record soon.
- : USB device unplugged.
- : Not enough memory size to record.
- : Recording is forced to stop.
- : Recording error.

☞

- You can set up to a maximum of 28 different recording schedule events. Once a recording is complete, then this recording information will be removed from the list.

Recording History

Select this option to display the history of all your recorded shows. It contains TV program status, file names, and detailed program descriptions if available from EPG data.



File names used for recorded shows are named by the following two conditions:

(1) If the show has Electronic Program Guide (EPG) data associated with it, the file name will add the program title first followed by the date and time. For example:

File name: KTLA-5-News-Sunday-Edition_5272012_200048.mpg
The recorded program title is "KTLA-5-News-Sunday-Edition", and it was recorded on May (05), 27th, 2012. The recording started at 8:00pm 48s.

(2) If the show has no EPG data associated with it, the file name will add the channel number first followed by the date and time. For example:

File name: 52.1_512012_221850.mpg
The program is recorded from channel number 52.1 on May (05), 1st in 2012. The recording started at 10:18pm 50s.

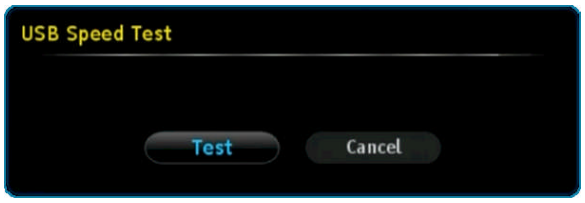
USB Disk Status

PHD-VRX2 can quickly check the external USB storage device status, which is the part of USB utility tools from PHD-VRX2 menu. Select this option, the USB Disk Status screen will pop up and display certain useful information like external USB storage size, available space, and the storage file system format like ext2, ntfs, or vfat (for FAT format). If PHD-VRX2

already previously tested the external USB device access speed, then USB Qualification will show the speed information as megabytes per second.

☞

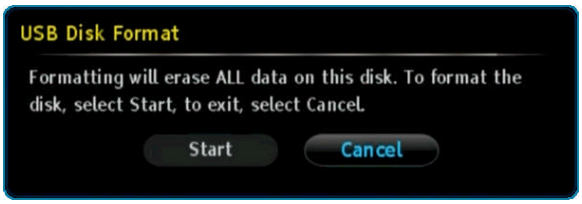
- PHD-VRX2 will only display status for the first USB device (usba) plugged into the unit.
- If there are no USB devices connected to PHD-VRX2 or unit has been turned off and on again, the screen will show "- - - - -" to indicate no information available.

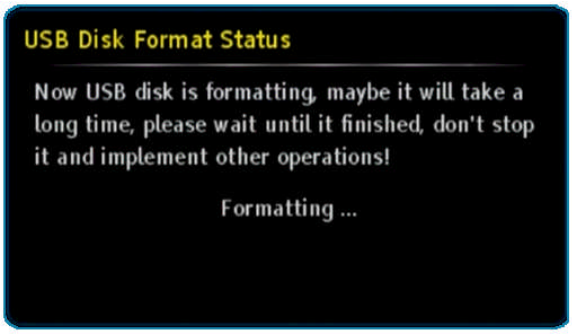


USB Speed Check

This is another PHD-VRX2 USB utility tool which checks the external USB access speed. The higher speed number, the better recording performance is. For example, NTFS format USB device speed is usually about 5MB/s, but ext2 format USB device speed can normally reach to 23~26MB/s. Therefore, for simple recording (one channel at a time), you can use either ext2 or NTFS format USB HDD. However, to record two channels from two tuners at the same time, you may need ext2 format USB HDD only.

If you select this option, the USB Speed Test screen will pop out. Select the "Test" option and PHD-VRX2 will start performing a read/write function to access your external USB HDD. After a while, PHD-VRX2 will display USB Speed Check Status screen to indicate the speed test result.





USB Disk Format

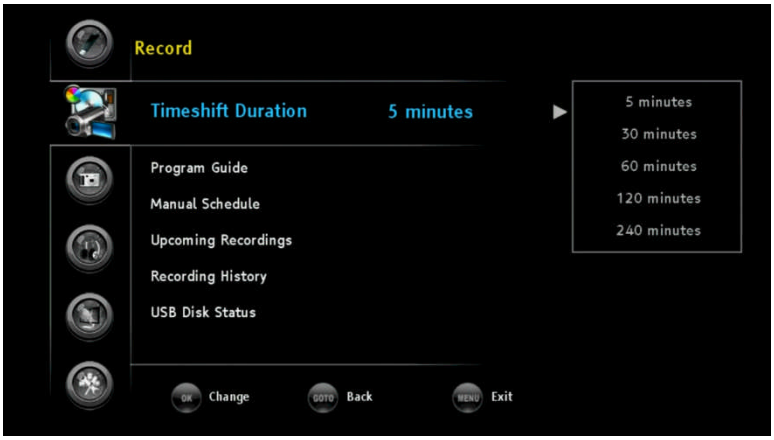
The PHD-VRX2 USB utility tool can also format an ext2 partition to the external USB HDD. Linux ext2 partition highly improves USB data access performance so the user can do more complicated recording tasks, such as: (1) recording two shows at the same time, (2) recording one TV show and time-shifting another show in the second tuner, (3) recording one show and playing a different video file at the same time, or (4) recording one show and switching to another input to watch videos, etc.

To format an ext2 partition, select this option. USB Disk Format screen will pop out. Select the Start option to start formatting. During formatting, you can't change channels since this is a dedicated task for PHD-VRX2.

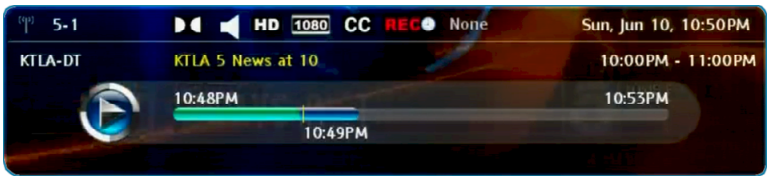
Once Start is selected, the USB Disk Format Status screen will come out and indicate that the formatting is in progress. After completion, the USB Disk Format Status screen will say the format is successful!

Timeshift Duration

PHD-VRX2 provides a timeshift function, which can instantly rewind, fast forward or pause live TV shows. Since timeshifting uses the external USB HDD as temporary storage space, the timeshift buffer size (or duration period) has to be pre-set in order to reserve storage space from USB HDD in advance.



The timeshift duration default setting is 5 minutes. This means that once timeshift is enabled, you can always rewind up to 5 minutes back. When rewinding, the timeshift progress bar will be displayed to indicate the current time line point.



Of course, you can set a different timeshift duration (from 5, 30, 60, 120, to 240 minutes) based on your external HDD storage size. Use this option to select a different duration.

☞

- To enable the timeshift function, during normal channel watching, press the remote button. The "Start Timeshift" screen will pop out. Once you select "Yes", you will see a red "R" running circle displayed on the top right-hand corner of the TV screen to indicate that the timeshifting is now in progress.

PHD-VRX2 Electronic Program Guide (EPG)

The Electronic Program Guide (EPG) from PHD-VRX2 provides users with TV program schedules and an overview of program content on each channel at a specific time. The Electronic Program Guide enables you to select programs to watch or record. PHD-VRX2 currently offers the PSIP (Program and System Information Protocol) program guide, which is free from TV broadcasters or some Cable companies. The 3rd party detail-rich EPG service will soon be linked with PHD-VRX2 via network connection. The following figure illustrates some key elements of the PHD-VRX2 Program Guide.

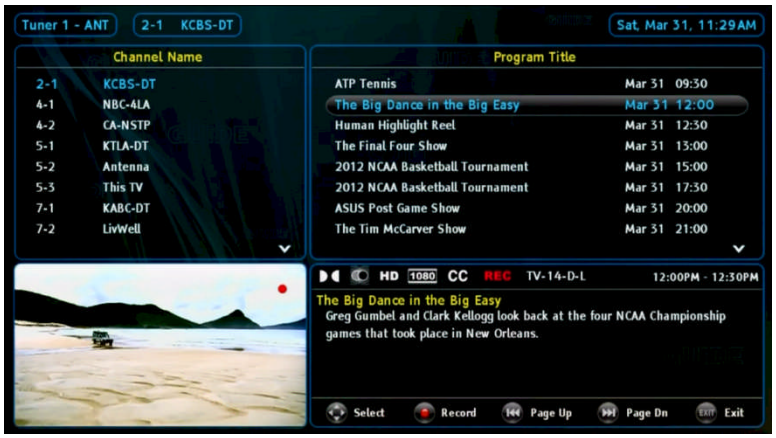
(1) Current Guide Status: This area includes the current tuner selected, the current highlighted channel, and the date and time.

(2) Channel Name: Lists all the available channels and station names from this tuner. Press navigation keys UP and DOWN to scroll through each channel or use ⏮ and ⏭ to quick jump many channels at a time.

☞

- After scrolling up or down to a different channel, PHD-VRX2 will start tuning to that channel. On the top right hand corner, the Guide screen will display to indicate that tuning is in

progress. Once complete, the lower left side will display a new channel video and the program title will be refreshed to the new channel program.



- If recording is in progress, the Guide screen can still be turned on. The lower left channel video will have a red dot showing the recording and lock the channel so the user can scroll to a different channel without tuning.

(3) Program Title: This area lists all the available TV programs from the current select channel. Since current PSIP data is free and sent from each TV station, how long the program data can be shown depends on each TV station. Use navigation keys UP and DOWN to scroll through each TV program or use ⏮ and ⏭ to quick jump many program titles at a time.

(4) Current Channel Video: This area displays live video from the current highlighted channel.

(5) Program Detail Descriptions: Each highlighted TV program has further detail description about the show displayed here. Right on the top of this area are also the channel indicators for audio, video and record setting status.

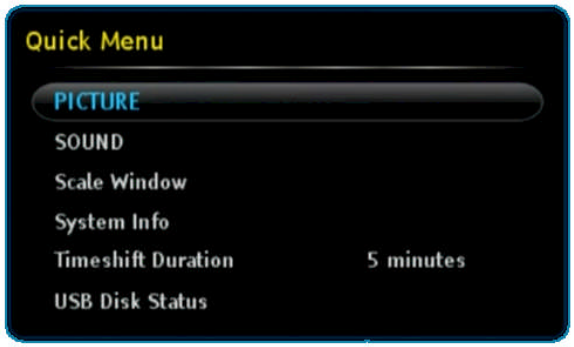
(6) Guide Navigation Keys: Use these remote keys to easily navigate the PHD-VRX2 Guide Screen.

☞

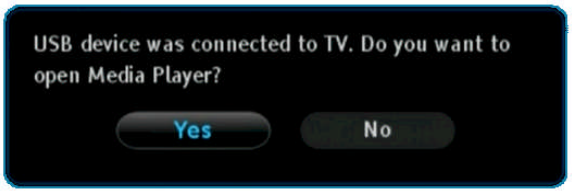
- If a program title is highlighted, pressing the REC ⏺ remote key will create a Program Guide Recording event. Please refer to the "How to use PHD-VRX2 Recording Features" section to learn details regarding Program Guide Recording.

How to use PHD-VRX2 Timeshifting Features

To use PHD-VRX2 timeshift and live pause features, first you will need to plug in external USB storage devices such as the USB HDD (Hard Disk Drive) or the USB flash stick into the PHD-VRX2 unit.



Once plugged, PHD-VRX2 will promptly detect and mount the USB device. You can then press **QUICK** remote button to verify USB device status from the Quick Menu, or the USB device connecting screen will pop out first if some files are already in the USB HDD.



In order to create timeshift on live TV program, PHD-VRX2 will generate and store a "timeshift.mpg" file first to the external USB device.

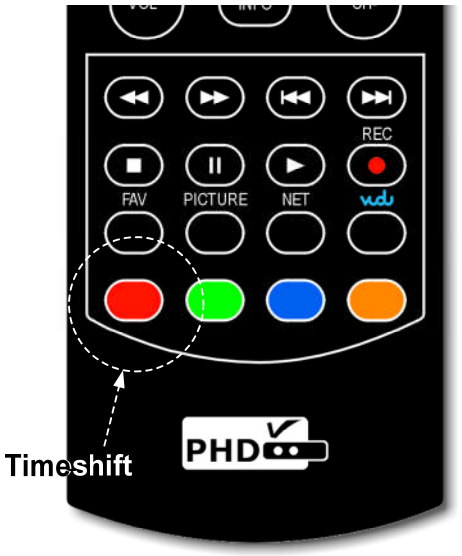
PHD-VRX2 also provides several timeshift durations (5, 10, 20, 30, and 60 minutes) to choose from. The timeshift duration is like a time buffer. Within this duration, you can shift the program backward, forward or pause at any point you prefer. You can also choose the proper timeshift duration based on your external USB HDD size since larger timeshift durations will generate bigger HDD storage space. The default duration is 5 minutes.

There are two ways to adjust timeshift duration. Press **QUICK** remote button to bring up the Quick Menu. In this menu, move to the "Timeshift Duration" option and then use navigation keys LEFT and RIGHT to change the proper duration time. Or, in the menu, select Record →Timeshift Duration. Then use navigation keys to choose the duration time.

☞

- PHD-VRX2 can access timeshift.mpg files only from the first USB device plugged in (internal system assigns it as "usba"). The second USB device plugged in (assigned as "usbb") will be used as a general media player device.
- Make sure USB HDD is formatted as either Linux ext-2 or Windows NTFS format for timeshifting. PHD-VRX2 provides an on-screen format utility tool so you can directly format your HDD to Linux ext-2 for the best performance.

To start timeshifting, watch a live TV show from either PHD-VRX2 tuner 1 or tuner 2. Then press the remote button. The "Start Timeshift" screen will pop out. Once you select "Yes", you will see a red "R" running circle displayed on the top right-hand corner of the TV screen to indicate that the timeshifting function is now in progress.

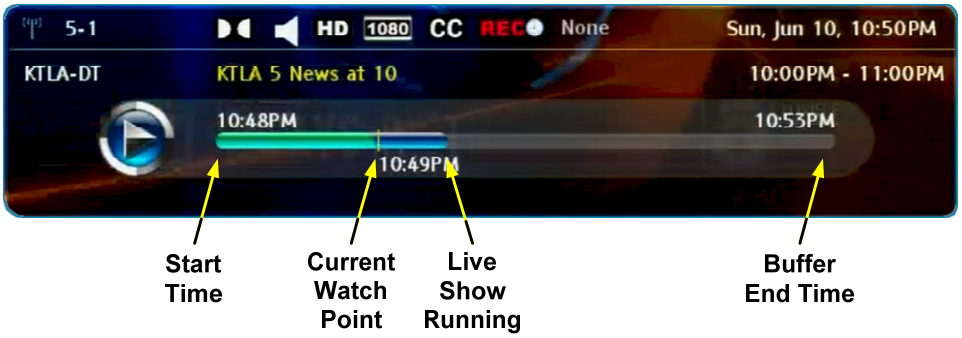


At the same time, you will see timeshift information screen displayed on the bottom of TV screen.

On the inside of the timeshift information screen, there is the timeline for timeshift progress bar. The green bar indicates the current moment that you are watching now from TV. The blue bar indicates the real live TV show displaying moment.

Now you can use remote control action buttons to adjust the speed and pause, or stop, the video at any point you prefer.

These action control buttons are:



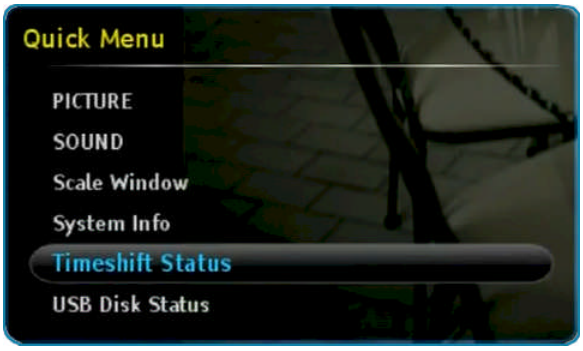
- PLAY: Play or resume current paused video.
- PAUSE: Pause live TV or pause current video.
- RWD: Rewind video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128x, and 256x different rewind speeds.
- FF: Fast Forward video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128x, and 256x different fast forward speeds.
- SLOW BACKWARD: Slow motion of rewind video. Press this key multiple times to create 1/2x, 1/4x, 1/8x, 1/16x, 1/32x different rewind speeds.
- SLOW FORWARD: Slow motion of forwarding video. Press this key multiple times to create 1/2x, 1/4x, 1/8x, 1/16x, 1/32x different forward speeds.
- STOP: Stop timeshift.

Either press the ■ or ● remote button again to stop timeshift function. "Stop Timeshift" screen will pop up. To confirm stopping timeshifting, select the "Yes" option.

☞

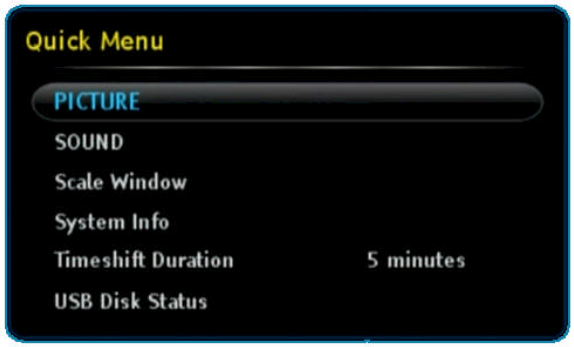
- To indicate timeshifting in progress, the PHD-VRX2 unit front panel LED display will show:
  - "rEC-1" and red light for tuner 1 timeshifting.
  - "rEC-2" and red light for tuner 2 timeshifting.

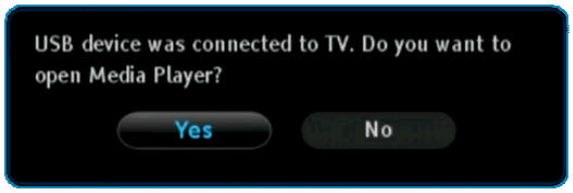
- If no action control button is pressed in a certain period of time, the timeshift information screen will automatically time out. Press any action control button again, and the timeshift information screen will re-appear. Or, press **QUICK** remote button to bring up the Quick Menu. Then select the "Timeshift Status" option to bring up the timeshift information screen again.



How to use PHD-VRX2 Recording Features

To record TV shows, first, you will need to plug in the external USB storage devices such as the USB HDD (Hard Disk Drive) or USB flash stick to PHD-VRX2.





PHD-VRX2 will promptly detect and mount the USB device. You can then press **QUICK** remote button to verify USB device status from Quick Menu, or the USB device connecting screen will pop out first if some files are already in the USB HDD.

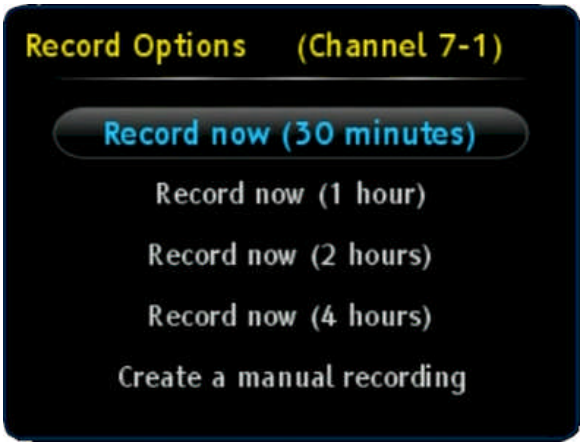
☞

- PHD-VRX2 can record TV shows on the first USB device plugged in (internal system assigns it as "usba"). Second USB device plugged in (assigned as "usbb") will be used as a general media player device.
- Make sure USB HDD for recording is formatted as either Linux ext-2 or Windows NTFS format. Do not use USB HDD with FAT or FAT32 format. PHD-VRX2 provides on-screen format utility tool so you can directly format your HDD to Linux ext-2 for the best performance.
- We recommend using the USB HDD for regular recording for reliability. For simple or one time quick recording, you can consider using USB flash stick.

To start recording, PHD-VRX2 provides three (3x) different recording methods in general:

1. Record Now:

   This is the simplest recording method. Press the REC remote button, and the Record Options menu will pop up. This menu indicates the current channel number you will record with the following recording options to choose:

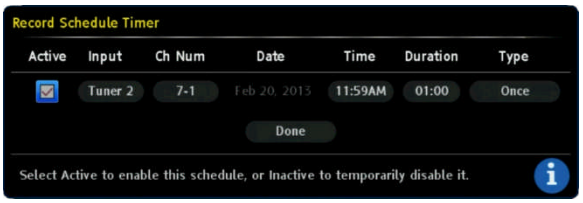


   i) Record Now (30 minutes):
   Select this option to instantly record 30 minutes on this channel.
   ii) Record Now (1 hour):
   Select this option to instantly record 1 hour on this channel.

iii) Record Now (2 hours):
Select this option to instantly record 2 hours on this channel.

iv) Record Now (4 hours):
Select this option to instantly record 4 hours on this channel.

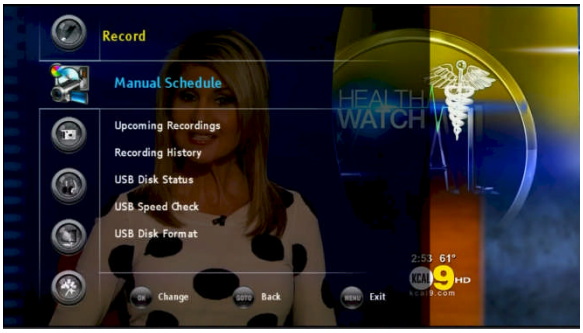
v) Create a manual recording:
Selecting this option will allow the user to set up a timer schedule manually. This is the same method of manual recording described below. A "Record Schedule Timer" screen will pop up for more settings.



Once the Record Now option is selected and confirmed, PHD-VRX2 will start recording immediately. You will see a red "R" running circle displayed on the top right-hand corner of the TV screen to indicate that the current show is recording now. PHD-VRX2 will continue recording until the timer runs out, or you can press the **STOP** remote button to stop.

☞

- To indicate recording in progress, the PHD-VRX2 unit front panel LED display will show:
  - "rEC-1" and red light for tuner 1 recording.
  - "rEC-2" and red light for tuner 2 recording.
  - "rEC-1-2" and red light for both tuner 1 and tuner 2 recording at the same time.



2. Manual Recording:

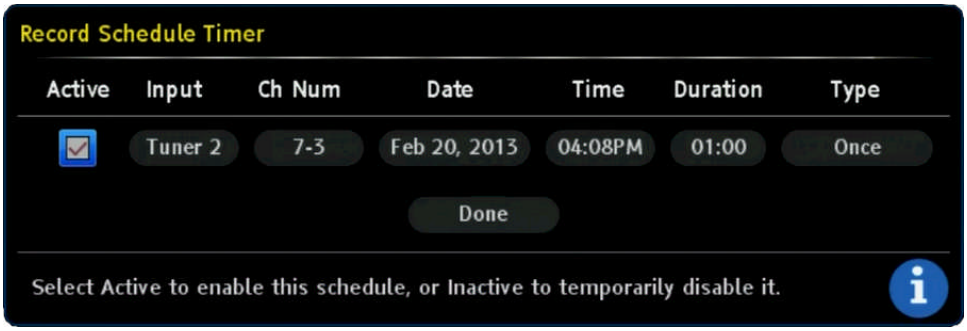
You can fully control how to schedule your recording manually from the "Record Schedule Timer" screen.

There are two ways to access this screen:

- Press MENU remote key to bring up on-screen menu. Navigate to Record section, then use ◄/► or ▲/▼ keys to select "Manual Schedule" option. Press OK key to enter Record Schedule Timer menu.

- Or, press blue remote key as a manual recording short cut key to access Record Schedule Timer screen immediately during normal operations.

Once selected, the Record Schedule Timer screen will pop out. At this point, all options are open up for user to adjust.



- Active: Select this option to turn the schedule timer active and ready to record. You can also unselect this option to reserve this schedule and check back later in the "Upcoming Recording list", see Page 5.
- Input: Select which tuner input (Tuner 1 or Tuner 2) to use for the recording schedule.
- Ch Num: Use this option to find the desired channel number you want to record to.
- Date: You can adjust the recording date here.
- Time: You can adjust the recording starting time here.
- Duration: You can also adjust the recording duration from this option. The minimum recording duration is 5 minutes (00:05).
- Type: You can set different record schedule types as shown below.
  - Once: This record schedule will be used for only one time. The "Upcoming Recording list" will show S for this type.
  - Everyday: Selecting this type will force PHD-VRX2 unit to record the show at the same time every day. The "Upcoming Recording list" will show E for this type.
  - Mon-Fri: Selecting this type will force PHD-VRX2 unit to record the show at the same time during weekdays only. The "Upcoming Recording list" will show D for this type.
  - Sat & Sun: This type will force PHD-VRX2 unit to record the show at the same time during weekends only. The "Upcoming Recording list" will show W for this type.
  - Weekly: Selecting this type will force PHD-VRX2 to record the show at the same date and time every week. The "Upcoming Recording list" will show O for this type.

Once you select "Done" and confirm, PHD-VRX2 will remember this schedule timer and display schedule information on the "Upcoming Recording list" " (see Page 5).

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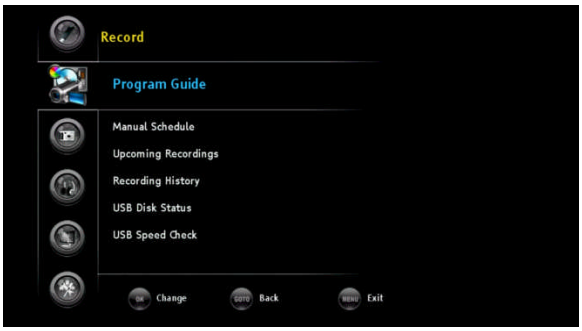
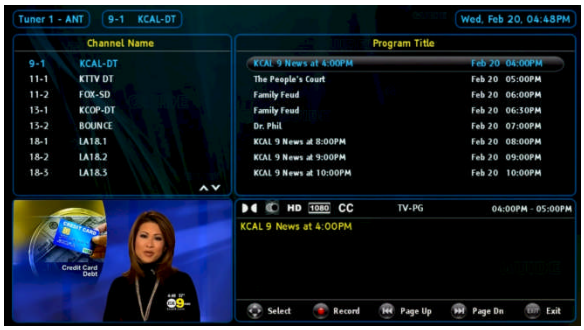
- You can either leave the unit on or turn off the unit to standby mode. Once the time is up, the unit will prompt a message and start recording, or wake up from the standby mode to start recording. The unit front panel will also show either “rEC-1” or -2 or both to indicate it is in recording progress.

3. Program Guide Recording:



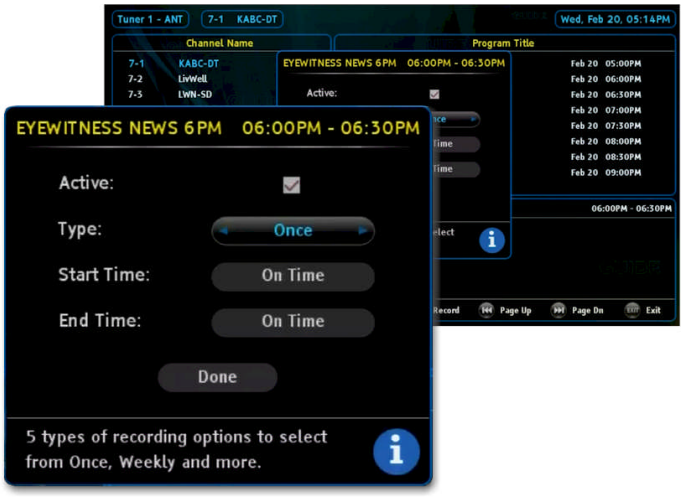
There are two ways to start program guide recording.

- In main menu, select Record → Program Guide. This way, PHD-VRX2 will bring up Program Guide screen.
- Or, you can directly press **GUIDE** remote button to bring up the same screen.



In the Program Guide screen, use navigation keys UP and DOWN to search the desired channel. Then use RIGHT key to move to proper program title for recording.

After highlighted the program title, then press REC remote button. The “Record Options” screen will pop out. It will indicate the current program name as well as the duration of the show.

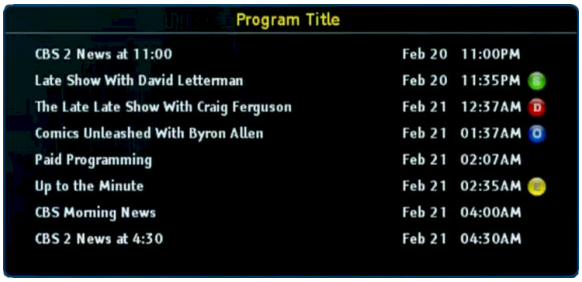


Use navigation keys to scroll up and down to select the options for this program schedule.

- Active: Select this option to turn the schedule timer active and ready to record. You can also unselect it to reserve this schedule timer and re-activate it later in the “Upcoming Recording list”.
- Type: You can set 5x different record schedule types, Once S, Everyday E, Mon-Fri D, Sat & Sun W and Weekly O, as mentioned on Page 3.

- Start Time: You can even set this schedule to start recording earlier. There are several options: On Time, 1 min- (earlier), 2 min-, 3 min-, 4 min-, 5 min-, 6 min-, 7 min-, 8 min-, 9 min-, and 10 min- (earlier).
- End Time: You can also set this schedule to finish recording later. These options are: On Time, 1 min+ (late), 2 min+, 3 min+, 4 min+, 5 min+, 10 min+, 15 min+, 30 min+, and 60 min+ (late).

Once you select "Done" and confirm, the schedule is set. The color Type icon will be automatically appended to the right side of program name.



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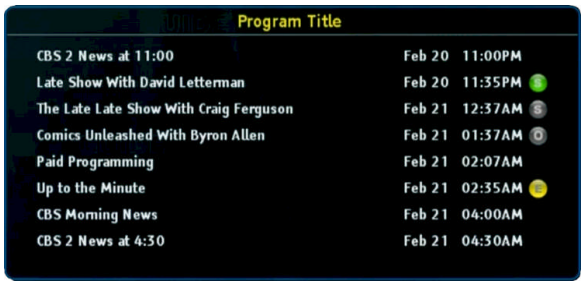
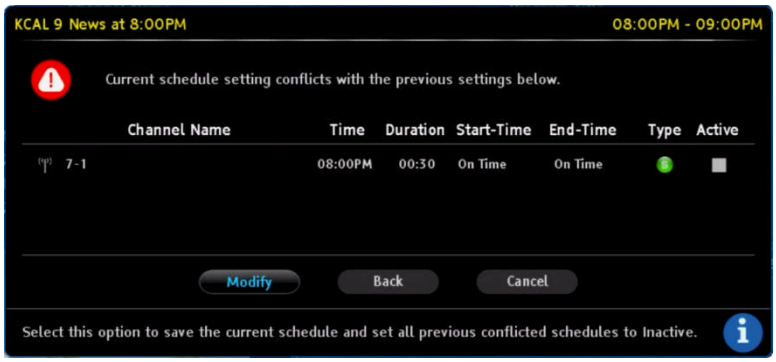
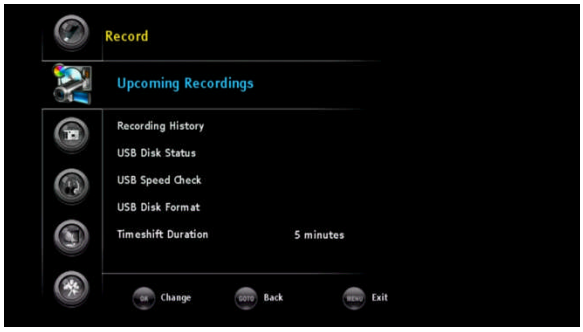
- To quick search channel numbers or program titles, you can use ⏮ or ⏭ key to scroll up and down page by page.
- Inactive program schedules will be displayed with grey color Type icons.



- If the current schedule overlaps with the previous schedules, the "Conflict Schedule Manager "screen will pop up. It will list all the overlapped schedules conflicted with the current one. The user have a choice to select "Modify" option to de-activate all the previous overlapped schedules, or confirm with "Back" option to go back the previous "Record Options" screen and re-change the settings. Or, the user can select "Cancel" option to cancel this schedule event completely.



<u>To check or modify record schedules</u> from the "Upcoming Recordings" screen:

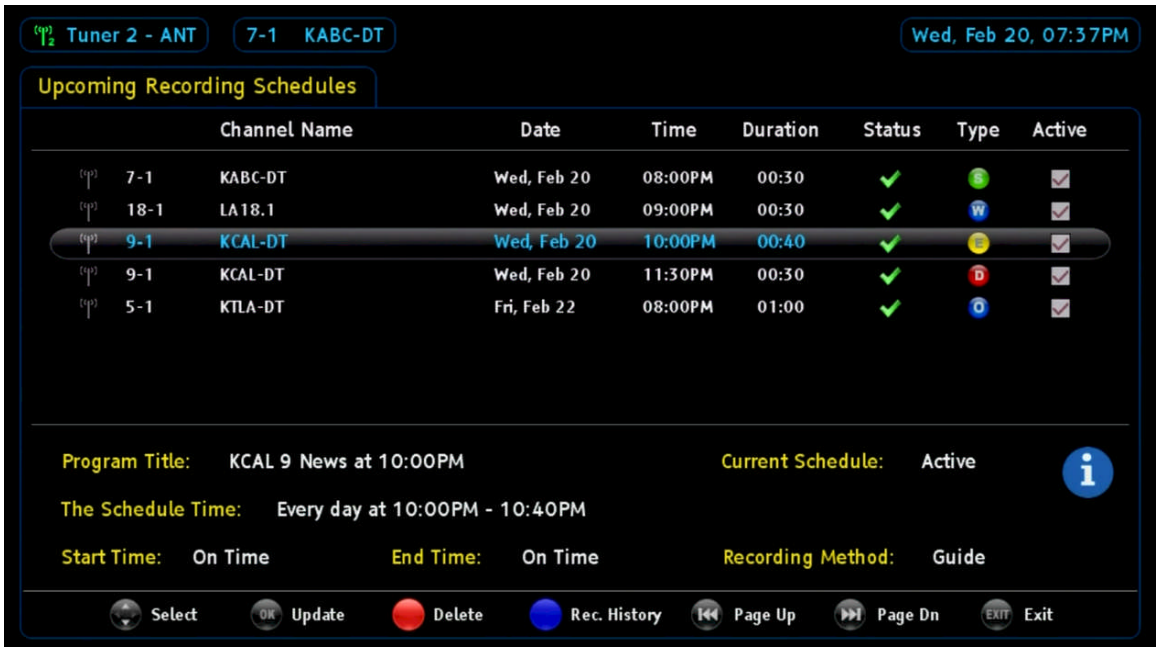


All recording activities including the current recording and future schedule recordings are all

displayed from the Upcoming Recording list.

There are two ways to access this screen:

- Press MENU remote key to bring up on-screen menu. Navigate to Record section, then use ◄/► or ▲/▼ keys to select "Upcoming Recordings" option. Press OK key to bring up this screen.
- Or, press the green remote key as an upcoming recordings list short cut key to access the Upcoming List screen immediately during normal operations.



The top portion of the Upcoming Recording Schedules screen lists each schedule detail including channel number, name, schedule time and duration, status, type and active information. Move to the desired recording schedule, then modify (Update) the schedule by pressing OK key or delete the schedule by pressing red remote key.

The "Status" column indicates the current recording status:

R : Recording in progress.

: Will record soon.

: USB device unplugged.

: Not enough memory size to record.

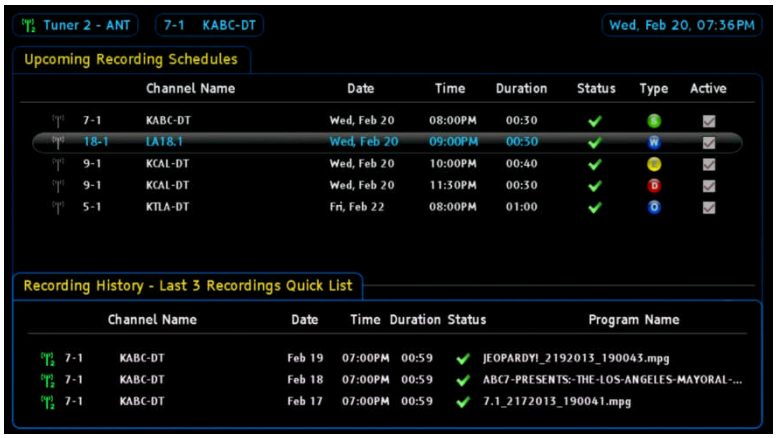
: Recording is forced to stop.

: Recording error.

On the desired schedule, the bottom portion of Upcoming Recording Schedules screen displays further details about the schedule:

- Program Title: If it is available, the program name of the show will be displayed in this area.
- Current Schedule: indicates if the current schedule is active or inactive.
- The Schedule Time: shows a better description of the current schedule time.
- Start Time: indicates on-time or earlier recording.
- End Time: indicates on-time or late to finish recording
- Recording Method: indicates this schedule is either Guide recording or Timer recording.

For the convenience, the user can quickly view the last three recorded TV shows information by pressing blue remote key without leaving this Upcoming Recording Schedules screen. Once pressed, the "Recording History – Last 3 Recordings Quick List" sub-screen will pop-up in the bottom area. You can press blue remote key again to clear out this "Recording History" screen or wait for a time-out to occur.



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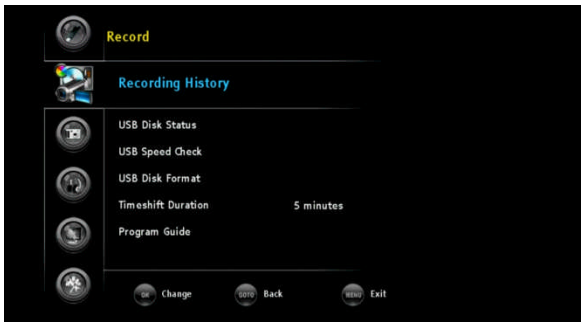
- Once you set a schedule from the Guide screen or manually, it is always good to check back from the "Upcoming Recordings" screen to confirm that you have successfully set up a timer recording schedule.
- You can set up to a maximum of 28 different recording schedule events. Once a recording is complete, then this recording information will be removed from the list.

To check the recorded TV program from "Recording History" screen:

This "Recording History" screen holds the history of your recorded shows and contains all TV program status, file names and detailed program description if it is available from program guide. To bring up this screen, press **MENU** remote button, then in menu, select Record →Recording History.



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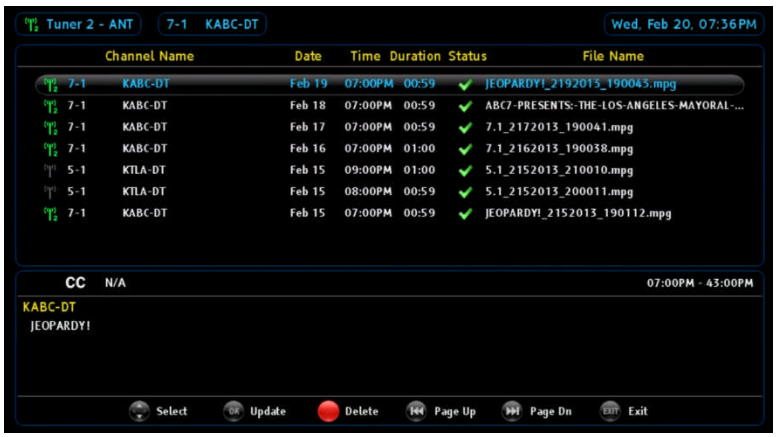


- File names used for recording shows are named by the following two conditions:
  (3) If the show has Electronic Program Guide (EPG) data associated with it, the file name will add the program title first followed by the date and time. For example,

  File name: KTLA-5-News-Sunday-Edition_5272012_200048.mpg
  The recorded program title is "KTLA-5-News-Sunday-Edition", and it is recorded on May (05), 27th in 2012. The recording started at 8:00pm 48s.

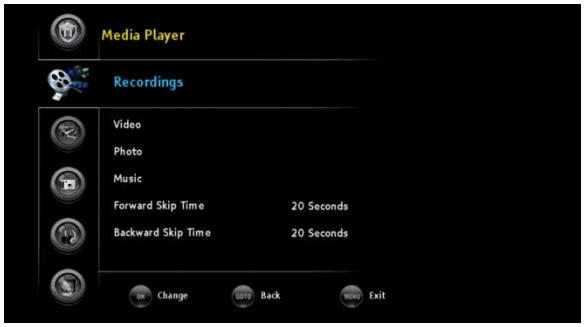
  (4) If the show has no EPG data associated with it, the file name will add the channel number first followed by the date and time. For example,

  File name: 52.1_512012_221850.mpg
  The program is recorded from channel number 52.1 on May (05), 1st in 2012. The recording started at 10:18pm 50s.

- To play back recorded programs, you will need to go to the "Media Player" menu and select "Recordings" to play. Please refer to "PHD-VRX2 TV Show Playback Features Guide" for complete details about features and operations.

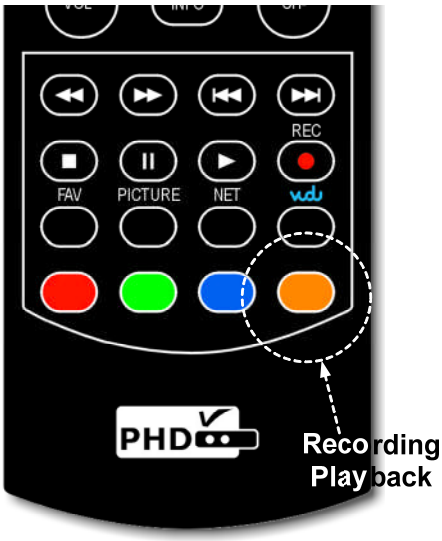
To play recorded shows from the Media Player menu:

You can access PHD-VRX2 Media Player menu to play back recorded TV shows from the external USB hard drive. The recorded TV shows from PHD-VRX2 are those files with the extension of .mpg, which can be accessed under "Recordings" section. To play these files:



- Press MENU remote key to bring up on-screen menu. Navigate to Media Player, then use ◀/▶ or ▲/▼ keys to select "Recordings" option. Press OK key to enter Recordings main menu, or

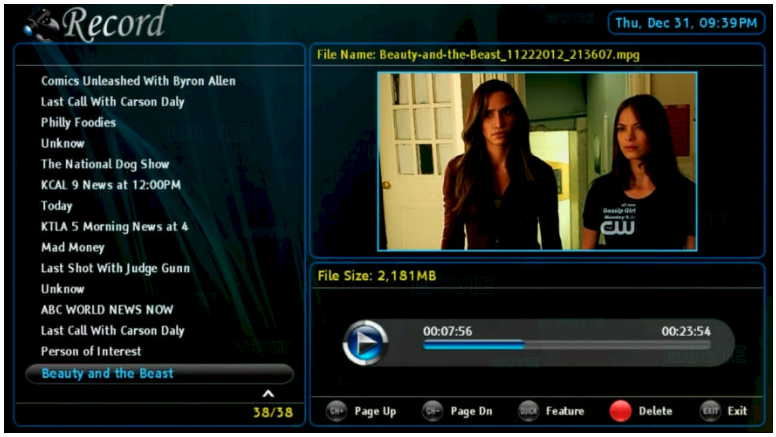
- Press key as the "Recording Playback" hot key to access "Recordings" section immediately in the normal operations.



A new "Recordings" menu screen will come out. On the left side of the screen is the list showing all the recorded TV program names. On the top portion of the right side is the preview window for the TV program that is currently highlighted. The right side bottom portion shows a video time line and action keys.

Press OK remote button for the highlighted file. The full size video will be displayed.

For both small preview video and full size video, you can use remote control action buttons to adjust the speed or stop the video at any time. These action control buttons are:



- PLAY: Play or resume a paused video.
- PAUSE: Pause current video.
- STOP: Stop playback.
- FORWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a forward skip based on the re-set skipping time. Press and hold this key to create steady skipping time increments of continuous video forwarding.

- BACKWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a backward skip based on the re-set skipping time. Press and hold this key to create continuous skipping time decrements of video rewinding.
- RWD: Rewind video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128, and 256x different rewind speeds.
- FF: Fast Forward video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128, and 256x different fast forward speeds.

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- When using the Media Player function to play back TV shows, video, music or photo files, PHD-VRX2 unit front panel LED display will show "PLAY" to indicate that the unit is in playback mode.

To record TV shows from both tuners:

No matter which recording methods you are using, you can record two shows from two tuners at the same time. After recording one show in tuner 1 for example, or setting up a schedule timer for a tuner 1 program, you can switch to tuner 2 by pressing the **INPUT** remote button. The "Inputs" screen will pop up. Use the UP or DOWN key to select either Tuner 1 or Tuner 2 and press **OK** remote button to switch.

Or, you can simply press **TV** remote button to toggle between Tuner 1 or Tuner 2 input. Switch to a different Tuner, then start setting up a recording method, as detailed on pages 1 to 4, as usual.

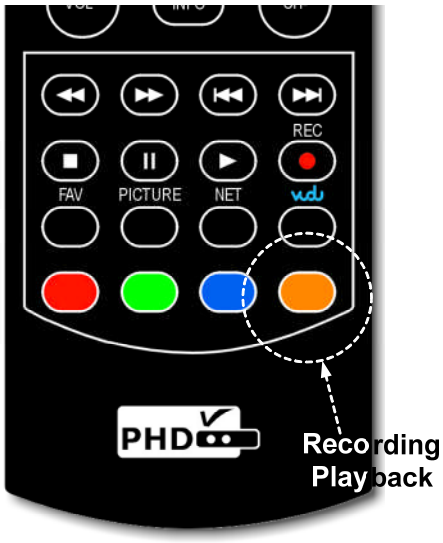
How to use PHD-VRX2 TV Program Playback Features

In addition to playback different types of video files from PHD-VRX2 Media Player Video section, PHD-VRX2 is now available to directly playback the entire recorded TV programs under "Recordings" section. Users can easily access this section, manage it and playback their favorite recorded shows.

There are three ways to access this section:

- Press MENU remote key to bring up on-screen menu. Navigate to Media Player, then use ◄/► or ▲/▼ keys to select "Recordings" option. Press OK key to enter Recordings main menu.

- Press key as the "Recording Playback" hot key to access "Recordings" section immediately in the normal operations.



- Or, after unit power up, if system detects the external USB HDD and asking to open the Media Player, then once confirmed, user will be able to access Recordings section from the first option.

Recordings Section

The PHD-VRX2 is capable to play many different types of video files from the external USB hard drive. However, in most cases, the user will only wish to playback their recorded TV programs instantly in a convenient way. Therefore, under this "Recordings" section, PHD-VRX2 will only display all the recorded TV programs. The user will be able to manage it by sorting these files in a different fashion, controlling forward and backward skip time, playback from the last viewing point, turning on/off closed caption, displaying TV program detail information and etc.

Recordings main menu contains:

- File List Screen appears on the left side. It lists all the recorded TV program names. Use ▲/▼ or CH+ (page up) or CH- (page down) to quickly search or highlight the specific TV program. You can also use the 🔴 remote key to delete some files to save space.

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  - All these program names listed on the left side can be sorted out based on time, title or channel number per your choice.
- Preview Screen appears on the upper right portion. It shows the current highlighted program video in a smaller preview window. On top of this preview window, it displays this TV program full file name.
- Video Time Line Screen appears on the lower right portion. This screen gives you the duration of the TV program selected, program video file size, and the status for the action keys.

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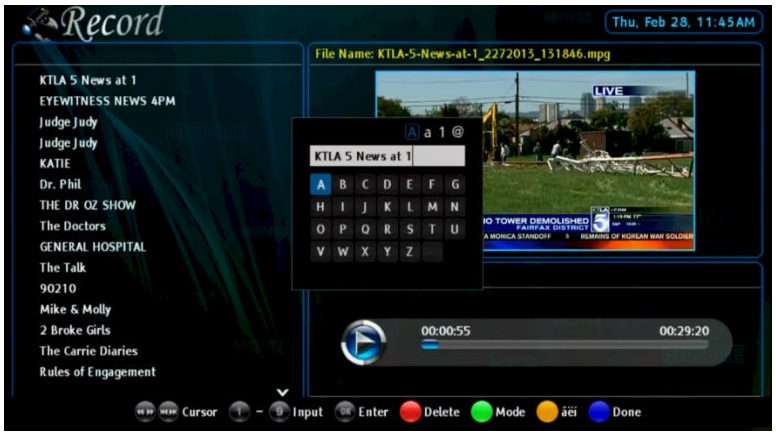
  - From the preview window, the user will be able to play, stop, pause, skip and fast forward/rewind video by using these action control keys without moving to full size video screen.



- Modify Recorded TV Program Titles:

  User can rename the recorded files by highlighting the desired TV program title and pressing 🟢 remote key.

  Keypad menu pops up in the middle of the screen. To change between characters, numbers or symbols using 🟢 and 🟠 keys. To select the desired letter, use navigation and OK keys. When complete the file rename, use 🔵 key to confirm and close the Keypad menu.

In addition to the above screen features, PHD-VRX2 provides additional two useful menus:

o Quick Menu

In Recordings main menu, press QUICK remote key to bring up Quick menu on the left corner. This menu has several features:

- Sort: There are 6 different sorting methods to allow user to arrange the recorded program names in their choice.

7. Time DESC:
   Program names are sorted in descending order based on the file creating time.
8. Time ASC:
   Program names are sorted in ascending order based on the file creating time.
9. Title DESC:
   Program names are sorted in descending order based on the TV program title.
10. Title ASC:
    Program names are sorted in ascending order based on the TV program title.
11. CH Num DESC:
    Program names are sorted in descending order based on the associated channel number.
12. CH Num ASC:
    Program names are sorted in ascending order based on the associated channel number.

- Forward Skip Time: Each forward skip jump duration can be selected from 20 sec, 30 sec, 60 sec, or 120 sec.

- Backward Skip Time: Each backward skip jump duration can be also selected from 20 sec, 30 sec, 60 sec, or 120 sec.

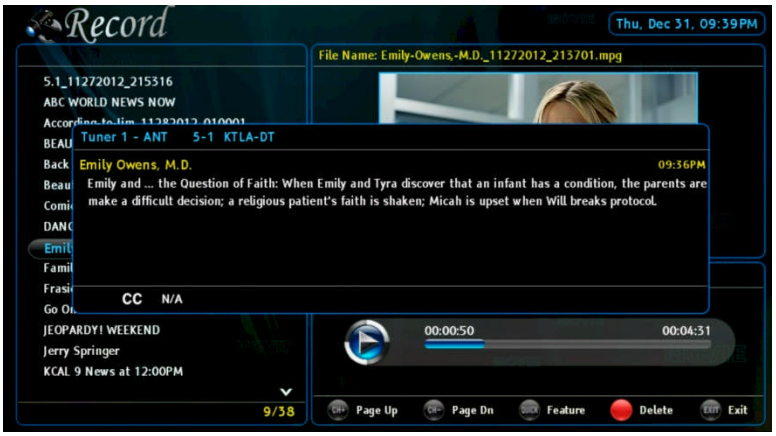
- Scale Window: Use this option to fine tune video size in order to fit your TV screen nicely. Press OK key to bring up “Scale

Window" menu for the adjustments. Please also refer to the details of scale window adjustments in PHD-VRX2 User Manual.

- USB Disk Status: Use this option to check the external USB storage device status.

o Program Information Screen

In Recordings main menu, press INFO key, PHD-VRX2 will bring up the "Program Information" pop-out screen. This will display available detail program descriptions regarding the highlighted show in the File List screen.



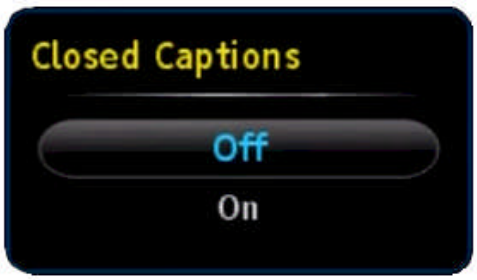
In Recordings main menu, press **OK** key on the highlighted TV program. The full size video will be displayed.

During the full size video screen playback, many useful functions like closed caption, video aspect adjustments and playback action controls can be operated directly from PHD-VRX2 remote keys .

o Closed Caption

Only in the full size video playback, you can turn on and off closed caption based on the following actions:

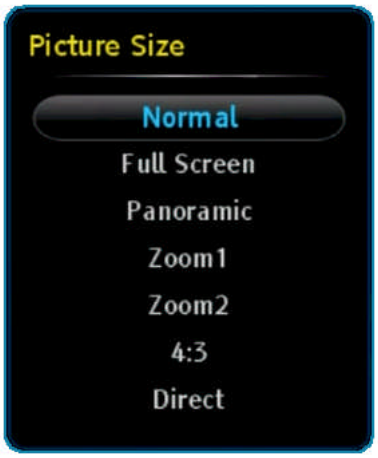
- CC key: Press CC key during playback, top corner "Closed Caption" screen will pop out. Select On, the closed caption will be displayed if it is available in the program. Select Off to turn off the closed caption.



- MUTE key: Press MUTE key anytime during full size video playback, the closed caption will be automatically turned on if it is available in the program.

o Aspect Control

In the full size video playback, video aspect ratio can be adjusted by using the remote ASPECT key. After the key is pressed, the "Picture Size" menu will pop-out. There are 7 adjustments as Normal, Full Screen, Panoramic, Zoom1, Zoom2, 4:3, and Direct modes in this menu.



Please refer to the Auto Aspect section in PHD-VRX2 User Manual for more detail operations.

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- If recorded show is SD (Standard Definition) with 4:3 ratio, during playback, you will need to set "4:3" mode in aspect adjustments in order to set back to the correct SD screen, otherwise, the video size will be stretched out.

o Quick Menu

In the full size video playback, press QUICK remote key to bring up Quick menu on the left corner. There are several features including PICTURE controls, SOUND controls, set current video playback is repeatable or not. And the remaining features, Forward Skip Time, Backward Skip Time, Scale Window and USB Disk Status are the same items shown in the Quick Menu of the Recordings main menu.

o INFO key

During the full size video playback, you can press INFO key anytime to bring up current program information including the program file name, file size and time line progress bar. Press INFO key again, the information screen will be disappeared.

o Resume Playback Feature

In the full size video playback, you can stop in any point and back to the Recordings main menu. When you want to re-play this show, press PLAY key, then "Play Options" menu will pop-out. You can either select resume from the last viewing position or start playing from the beginning. PHD-VRX2 will memorize the previous playing location and resume from that point if the option is selected.

On the full size video screen, you can always use the remote control action keys to adjust the speed or stop the video at any time. These action control keys are:

- PLAY: Play or resume a paused video.
- PAUSE: Pause current video.
- STOP: Stop playback.
- FORWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a forward skip based on the re-set skipping time. Press and hold this key to create steady skipping time increments of continuous video forwarding.
- BACKWARD SKIP: Use for commercial skipping or quick video jumping. Press this key once to generate a backward skip based on the re-set skipping time. Press and hold this key to create continuous skipping time decrements of video rewinding.
- RWD: Rewind video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128, and 256x different rewind speeds.
- FF: Fast Forward video quickly. Press this key multiple times to create 2x, 4x, 8x, 16x, 32x, 64x, 128, and 256x different fast forward speeds.

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- When playback those recorded shows, the PHD-VRX2 unit front panel LED display will show "PLAY" to indicate that the unit is in playback mode.
- Continuously pressing and holding the or keys will create smooth, quick forward or backward video search or commercial skipping.
- All the file names listed in Recordings section are created once started with the new firmware. The previous recorded files and other video files won't be listed and shown in this section. However, you still be able to playback any video files from the Video section under Media Player function.

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