**Panasonic AG-DVX100 24P Camera**

**CAMERA CASE**

1) Open the case with the top colored tape showing; otherwise, it is upside down.

2) Inside the case you will find the following ten items:
   A) Camera
   B) Batteries (4)
   C) AC Adaptor Unit with captive AC cord (black)
   D) AC Connecting Cable Unit to camera (beige)
   E) Tripod Mount Plate *(for shooting with tripod only!! When not using dolly/crane system).*
   F) Remote Control for camera
   G) Strap for camera

3) Leave the case in this upright position in order to store accessories that are removed from the camera. The top lid of case can be closed at this time to keep out dirt.

**ON FRONT OF CAMERA**

4) **Input 1** - switch to “MIC”
5) **Input 2** - switch to “MIC”
6) **Zoom** - switch to **“MANUAL”** for setting up shots. Switch to **“SERVO”** for practicing servo zooms.
7) **Lens Cap** - remove lens cap by squeezing in handles. *(Don’t lose lens cap! Store it in camera cut out section inside case).*

**MOUNTING THE BATTERY**

8) Lift the viewfinder all the way up.

9) Carefully place the battery *(with connector end facing downward)* into the compartment directly underneath the gray PUSH button. First push the battery inward to make it flush against the compartment wall and then make sure that the battery’s connector end is aligned with the gold prongs of the camera. Now push the battery downward all the way to make a good connection. *(Gold prongs no longer visible).*

10) **At Rear of Camera,** turn on power by pushing in the white button while pressing the black button up to power “ON”. If the battery is good, the battery icon in the viewfinder will not flash off and on. If the battery icon flashes off and on, then immediately power off the camera and recharge the battery as soon as it is possible to do so. Replace with a charged battery to power on camera.

11) **To Remove Battery** - press the gray PUSH button while lifting up on the battery itself.

**WAYS TO SAVE BATTERY POWER**

1. Keep the LCD Screen closed (Off) as much as possible. *(Use Viewfinder instead).*
2. Refrain from unnecessary “Servo Zooming”. *(Switch to “Manual” for adjusting the zoom while setting up shots).*
3. Refrain from playing back tapes to review scenes when shooting on location with battery power.
4. Turn off camera during long breaks in shooting.
5. Turn off camera when practicing mechanical aspects of dolly/crane movement, but power on when it is time to frame your shot.
ON LEFT SIDE OF CAMERA  (Outer Controls)

12) **Focus** - “M” (Allows you to focus manually). (For use on dolly/crane movement shots, you may want to switch to “Infinity” for “zoomed all the way out” wide angle shots. For some dolly/crane shots where manual focus is impossible, you may want to switch to “A” for automatic focusing).

13) **Push Auto** - hold this down for a quick auto focus on a subject, then release and the lens will go back to “Manual Focus” mode. (Similar in operation to the Magic Iris button on Betacam).

14) **Auto** - Ignore (Its functions have been defeated because you should control all the camera functions yourself).

15) **Index** - Ignore (Do not touch).

16) **User 1** - press for Color Bars. Press again to return to camera mode.

17) **User 2** - hold down for a Fade To Black. Release to return to camera mode.

18) **ND Filter** (Neutral Density Filter)
   - “1/64” *(sunny day)* Cuts light down to one sixty fourth the amount.
   - “1/8” *(overcast day)* Cuts light down to one eighth the amount.
   - “OFF” *(for indoor shooting)*

19) **Gain** - “L” *(for least amount of noise)*. Do not use “M” or “H” high gain modes because they add too much grain. Get more light.

20) **White Bal** - “B” *(stores your White Balance for a scene)*. Use “A” to store a different White Balance for another scene.

21) **Iris Dial** - turn clockwise (up) to close iris. Turn counter clockwise (down) to open up iris. *(As you turn the Iris Dial, notice that the corresponding f/stops are displayed in the viewfinder and LCD Screen)*. Remember to always find the zebras by opening the iris, then adjust the iris to the threshold of the zebras disappearing by closing the iris.

22) **Iris Button** - hold down for a quick auto iris setting, then release to set iris in that position. *(Use this function to get your exposure in the ballpark, but then fine tune the iris setting manually by using the Iris Dial and the zebras)*.

23) **CH 1 Audio** - put in straight up position. *(This channel will be used for the camera’s built-in microphone as a back-up mic)*.

24) **CH 2 Audio** - put in straight up position, then fine adjust for each scene by turning the dial while looking at the Ch2 VU meter in the viewfinder or LCD Screen. *(This channel will be used for your external BOOM Mic or LAV Mic)*.

ON LEFT SIDE OF CAMERA  (Above LCD Screen)

25) **Menu** - press to get menu options to appear on screen. Press twice to exit all menus.

26) **Transport Toggle Switch**
   - **Click Up** to: 1) Playback a tape in VCR mode; or 2) Move cursor upward on menu.
   - **Click Down** to: 1) Stop tape playback in VCR mode; or 2) Move cursor downward on menu.
   - **Click Right** to: 1) Fast Forward tape in VCR mode.
   - **Click Left** to: 1) Rewind tape in VCR mode.
   - **Push In** to: 1) Pause tape in VCR mode; or 2) Select or change a menu option.

*(Remember not to pause a tape longer than 30 sec to 1 minute so that you can avoid clogging the heads and tape drop outs).*

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ON LEFT SIDE OF CAMERA (Inner Controls Behind LCD Screen)

27) **Shutter** - press until you see “Shutter OFF” on LCD Screen. *(Activate only for use to “clear scan” a computer monitor).*

28) **Speed Sel** - when you turn the camera’s Shutter On, use this button to select the specific shutter speed (1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000).

29) **CH 1 Select** - switch all the way up to “INT (L)” for camera’s built-in mic used as a back-up microphone when shooting.

30) **CH 2 Select** - switch all the way down to “INPUT 2” for use with an external BOOM Mic or LAV Mic.

31) **Input 1** - switch down to “OFF” *(No 48 Volt phantom power).*

32) **Input 2** - switch down to “OFF”. *(Switch up to “ON” when using an external BOOM or LAV Mic powered by 48V phantom).*

33) **Counter** - press repeatedly until you see the white “TC 17;16;15;14” time code display in the viewfinder or LCD Screen.

34) **Reset** - Ignore

35) **Mode Check** - hold down to check the date, time, and status in viewfinder of any special modes that may be in use on the camera.

36) **Zebra** - press repeatedly until you see the zebra pattern on an overexposed section of a scene. *(Turns on zebra function).*

37) **OIS** - press until you see “OIS OFF”. *(Defeats camera shake compensation function on camera).*

ON REAR OF CAMERA (Back Side)

38) **End Search** - Ignore *(Finds the last recorded spot on tape, but you should manually shuttle the tape and view to make sure that you’re not going to record over any scenes that you want to keep).*

39) **Scene File** - turn dial to “F1” for normal “interlace shooting”. Turn dial to “F5” for 24P “progressive scan” shooting.

40) **Camera / VCR** - push in to select “CAMERA” *(Shooting Mode)* or “VCR” *(Tape Playback Mode).*

41) **PUSH** - to remove battery from camera, push in and then lift up on battery.

42) **Power** - press in white button while pressing black button up to power “ON”. Push in and press downward to power “OFF”. Press the Red Button to “Record”, then press again to “Pause” tape in standby record mode.

43) **Headphone Jack** - under the Power Button, remove the black plastic cover to expose the 1/8th inch mini Headphone Jack. The camera operator should plug in headphones to monitor the audio quality during recording. Monitor level inside the headphones can be adjusted using the **Audio Mon / Var** buttons located on top of camera above the LCD Screen.

ON TOP HANDLE OF CAMERA

44) **Rec Button** - press the Red Button to “Record”, then press again to “Pause” tape in standby record mode.

45) **Zoom Servo** - press “T” to zoom in *(longer focal length).* Press “W” to zoom out *(shorter focal length / wide angle).*
ON TOP OF TAPE COMPARTMENT

46) **Zoom Servo** - press “T” to zoom in (*longer focal length*). Press “W” to zoom out (*shorter focal length/wide angle*).

47) **Rec Check** - press to jam-sync the camera’s time code generator (TCG) to a previously recorded tape’s time code. (*Similar in operation to the “Record Review” function on the Betacam*).

48) **Blue Eject** - press down and push upward to open the tape compartment. Insert a “Record Enabled” tape with the **top side of the tape facing outward** and only close the inner black metal lid. Wait for the camcorder to thread the tape before closing the outer tape compartment door. After tape has stopped threading, gently shut the tape compartment door with both thumbs evenly on each end.

ON TOP OF LCD SCREEN

49) **Audio Dub** - Ignore.

50) **VCR Rec** - Ignore.

51) **Audio Mon / Var** - press - or + to increase or decrease the monitor volume in the headphones.

ON RIGHT SIDE OF CAMERA

52) **Input 1** - leave capped.

53) **Input 2** - plug in XLR connector from external BOOM Mic or LAV Mic. (*Don’t lose plastic cap! Store plastic cap in the large camera cut out section in the Camera Case*).
Operating the Camera

SHOOTING MODE SELECTIONS

1) At the rear of camera, install a battery or hook up the AC Adaptor unit to the camera.
2) Power on camera.

3) Select Aspect Ratio by pressing **MENU** and clicking down to: **2. CAMERA SETUP**. Push in Pause button to select “**SQUEEZE MODE**” so that your Standard Definition image can be stretched out proportionately to fill the entire screen of a 16x9 HDTV. *We no longer use the other aspect ratio choices of “**NORM**” (4:3), or “**LETTER BOX**” (16:9).* Press **MENU** twice to exit.

4) Select Scanning Mode by turning the black **SCENE FILE Dial** at rear of camera. Select “**F1**” for normal “interlace scanning”, or select “**F5**” for 24P “progressive scan” shooting.

TO WHITE BALANCE AND BLACK BALANCE THE CAMERA

5) On the Left Side of Camera, make sure that the White Balance switch is on “**B**”.
6) Fill the screen entirely with white and defocus to homogenize any light gradations.
7) Adjust iris to threshold of zebras disappearing.

8) On the Right Front of Camera, hold down the **AWB button** until the viewfinder says “**AWB OK**” and “**ABB End**”. This single step sets both the White Balance and the Black Balance.

SELECTING TIME CODE MODE

A) If you are using a new tape, then proceed to the procedure titled, “To Preset Time Code”.
B) If you are using a previously/partially recorded tape, then proceed to procedure titled, “To Jam Sync Time Code”.

TO PRESET TIME CODE (for New Tape)

1) Insert a “Record Enabled” tape with the top of tape facing outward.
2) At rear of camera, make sure you are in “**CAMERA**” mode.

3) Press green **Menu** button.
4) Select: “**5. Recording Setup**” by pushing downward on black Pause button.

5) Select **TCG**. (Make sure it is on “**Rec Run**”, if not push in Pause button to select it).
6) Click downward one more time to “**First Rec TC**”.
7) Select “**Preset**” by pushing in on Pause button.
8) Click downward one more time to “**TC Preset**” and push in Pause.

9) Now you’ll see the eight digit display of the white TC numbers in the viewfinder or LCD Screen.
10) Click up or down to assign numbers, then push in to shift to next digit.
11) When done assigning the TC numbers, press the green **Menu** button.

12) You’ll now see “**Preset OK?**”
13) Click down to “**Yes**” and push in Pause button.
14) To exit, hit green **Menu** button twice.
15) You should now see your preset Time Code in the viewfinder.
TO JAM SYNC TIME CODE (for Previously Recorded Tape)

1) Insert a “Record Enabled” tape that has been partially recorded with the top of tape facing outward.

   At rear of camera, make sure you are in “VCR” mode.

2) Cue your tape to the point you want to start recording and make sure that you are parked (stopped) on good time code.

3) Hit MENU and click down to: “2. RECORD SETUP”. Push in and click down to “FIRST REC TC”. Push in to select “REGEN”.

4) Press MENU twice to exit.

5) At Rear of Camera, switch back to “CAMERA” mode.

6) On Top of the Tape Compartment next to the blue Eject button, press the black “REC CHECK” button. In the top right corner of the viewfinder or LCD Screen, you will see “CHK” in white letters. The tape will back up, roll forward a few seconds, and then pause in the standby record mode ready to make a frame-accurate jam sync to the previous time code on the tape.

7) To begin recording, press the Red REC button and the camera will make a frame-accurate jam sync to the previous time code on the tape.

TO RECHARGE BATTERIES

1) Install a battery into the AC Adaptor unit by properly aligning the connector end of the battery with the gold prongs on the charger.

2) Plug in AC Adaptor to a hot AC outlet.

3) If the AC outlet is hot, the red power light and the green charging light will come on to indicate that charging is taking place.

4) The green charge light will go out when the battery is done recharging. Depending on the size and capacity of the battery, this can take anywhere from 90 minutes to 3 hours.

5) When recharging is completed, unplug the AC Adaptor unit from the AC outlet and remove the battery from the charger.