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Settings for tape to film transfer for the Panasonic AG-DVX100 DV camera with 25p/24p Option

The Panasonic DVX100 is a DV camera with the option of shooting in true progressive mode. There are several models of this camera: The DVX100, the DVX100A and the DVX100B.

Any other notation you see is a regional marking system, so DVX100AP is Pacific, meaning for countries that border the Pacific ocean (Japan, USA, Canada, etc...) it's the NTSC model. The DVX100AE is the PAL European model. The DVX102 is the Chinese PAL model.

The earliest model (DVX100) has some technical disadvantages when using the progressive mode:

Some of them are:

- a) Colorbars cannot be shown
- b) You cannot regulate the gain
- c) THE AUTOFOCUS DOES NOT WORK. And as there are no focusing indications on the focussing ring you depend on the LCD monitor or an external monitor for setting and pulling the focus. Danger of going out of focus!
- d) The white balance cannot be set in 25p mode

PLEASE CONSULT THE MANUAL FOR FURTHER INFORMATION.

Panasonic corrected all of these problems in the later models.

The settings recommended below can be applied to all of the models.

General settings:

DETAIL	-2 – 0
MASTER PED	+1
GAMMA	normal or high
CINELIKE MODE	do not use*
SKINTONE DETAIL	off (is sharper)

* Generally we consider such gamma modes more a tool to achieve a “film look” for projects which stay in the digital domain. Though the CINELIKE gamma settings can be used for film out too. Be aware that the CINELIKE gamma has a very harsh white clipping. Only use it under well controlled light conditions.

DETAIL FREQUENCY (available only in the progressive mode):

The DVX100 has the options THICK or THIN, the DVX100A has an additional intermediate option.

The THIN setting is only recommendable if you are explicitly shooting for transfer to film. It will introduce a line flickering when the tape is viewed on a standard interlaced monitor. The flickering will not be there if you convert your images into files for transfer to film. The resolution is slightly better with the THIN setting, but you will not be able to do a CRT transfer (only ARRI Laser) and the flickering will always be there on a tape version of your film.

Only use this option if you are absolutely sure of what you are dealing with!

Of both models a **PAL** and a **NTSC** version exist. The PAL version records in 25p or 50i. Transfer to film is possible with both of these modes. Progressive shooting will slightly enhance the sharpness of the image and does reproduce motion in a more film like way.

The NTSC version has more options for recording: 24p standard, 24p advanced, 30p, 60i

- NTSC, 60i:
Standard DV NTSC recording. The usual pulldown to 24p can be applied. A feasible way to go, but not good in motion reproduction.
- NTSC, 30p:
DO NOT USE if you want to transfer to film!
- NTSC, 24p Standard:
Material shot in this mode will be similar in motion reproduction like a telecine of a film (24 fps) onto NTSC 60i in standard definition and then recording back onto film. Feasible but not the optimum.
- NTSC, 24p Advanced:
USE THIS MODE FOR BEST RESULTS for transfer to film.
For the transfer to film of material shot in the 24p advanced mode a special pulldown is required. Your editing program needs to offer this feature (Final Cut Pro 4 and later versions do). YOU ABSOLUTELY HAVE TO edit in 24p! Else all the advantage of this mode is futile!
The following websites offer deeper insight into how to edit/postproduce:
<http://www.adamwilt.com/24p/index.html>
<http://www.mycen.com.my/dv/dvx100.html>

We usually recommend to shoot in PAL because of the superior resolution.

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