

As mentioned above, cameras generally have preset options for low-light and back-light settings (often employing a 'gain' control which boosts the electronic signal, giving you lighter but more noisy or grainy pictures). These can be used as quick alternatives to manually setting the exposure. Be especially aware that a low-light option sets up the camera to make the most of the available light, but does so at the expense of sensor resolution and/or shutter speed. The result can be very grainy images and/or images with disjointed motion. This might still be better than no image. (The audio recording is unaffected, of course.)

p. 41 **(iii) Shutter speed**

Unlike exposure, shutter speed rarely has to be adjusted manually for linguistic recordings. An exception could be the filming of some rapid gestures or other significant activity where high shutter speeds would be beneficial. (The difference may not be so apparent in the video itself, but will manifest itself as sharper still frames.) As with all photography, higher shutter speeds require wider exposures (resulting in shallower depth of field, which demands greater focussing accuracy) and/or more light. The optimal shutter speed for normal recording is 50, to maximize light but avoid blurred images.

**(iv) White balance**

Setting the white balance means essentially giving the camera a reference point of what white is, which makes all the other colours correct (and therefore avoids pink or green faces). This has to be redone for every recording session that takes place under different lighting conditions (e.g. moving from indoors to outdoors). Cameras usually have an auto white balance function as well as some preset modes (e.g. for artificial light or a sunny day), but manual calibration, if available, is the most reliable method. It is also a simple and quick process, requiring only a white surface, such as a sheet of paper or a white T-shirt, as a reference which should fill the entire screen during balancing.

**(v) Audio levels**

As mentioned, not all cameras provide adequate audio input controls. All professional models do, but even high-end prosumer ones may be somewhat deficient. A camera may accept external microphone input but still lack manual control for it.

Something to especially watch out for is 'auto-gain', a function on cheaper cameras which continually adjusts audio levels depending on the input at the time. We had this problem with such a camera: when the speaker was talking background noise was low, but whenever they paused the level would reset to the new ambient conditions, amplifying the background noise. The result was normal speech punctuated with crashing surf sounds. Make sure your camera does not have an auto-gain function, or that it can be switched off.

### 1.3.2 Equipment

The same criteria apply to video equipment as to audio regarding quality vs. other constraints such as budget, weight, and complexity of use. The situation with video is more extreme because of the extra paraphernalia associated with cameras (lenses, tripods, etc.). The reality is that professional film-making is less attainable than professional audio recording. The purpose of using professional equipment and techniques, as far as is reasonable, is simply to create the best possible record.

p. 42 As for audio recorders, we recommend using cameras that can record audio in uncompressed linear PCM. That rules out solid-state cameras of most grades and formats. We also do not necessarily recommend high-definition tape cameras, even those of professional or semi-professional grade. At present, most high-