1.3.2.5 Incidental cameras

We mentioned earlier ($\S1.2.2.1(i)$) the 'Zoom Q3' recorder which includes a video camera for basic QuickTime movies of 640×480 pixel resolution at 30fps. Such a device seems almost a gimmick, but could actually provide just the right balance of good audio plus reference video in a small package for on-the-run fieldwork.

The 'Flip' range of pocket sized camcorders are also worth considering as backup or go-everywhere devices. Although these cameras are not optimized for sound, they offer good video in a very compact format. Other devices that could be used to capture really basic audio/video in emergencies include some mobile phones, iPods, PDAs, and webcams.

1.4 Energy supply

p. 46

1.4.1 Things to consider

Different field sites have very different power constraints. In an urban setting, mains electricity may be regularly available but perhaps likely to suffer power outages or voltage spikes without warning. In this case a good UPS³⁶—or just a surge/spike protector—might be the only essential energy supply item to pack. A rural field site may well lack any regular source of electricity, in which case solar- and/or fuel-powered generators will be required along with regulators and storage batteries.

Which of these often heavy and bulky items need to be brought to the field and which can be bought locally will also vary. At our field site we had to bring in solar panels and auxiliary electronics but were able to buy a large truck battery in the nearest town. We needed a big battery because we had several computers, cameras, and other equipment to run. If one only needs to recharge the recording equipment periodically, one may get away with just a solar panel plus a regulator—so a storage battery is not always required.

Some recording equipment can be run from mains power. Even if the circumstances permit it, we avoid doing this, both to retain flexibility (i.e. so that the machine is not tethered to an outlet) and because with such a power source one may need to look into shielding to prevent interference in the audio.

Equipment, including battery chargers, will be designed to run on regular mains AC power³⁷ and/or 12 volt DC power. For many field setups the latter will be the only electricity source available. Adaptors for using such a source almost invariably come with a cigarette lighter-type plug (so that they can be used in a car, as with common mobile phone chargers). The most convenient way to connect these to a home-rigged power source is therefore to use the corresponding cigarette lighter sockets (available at any electrical supplies). For wiring these, the centre point is positive (+ve) and the cylindrical sleeve is negative (-ve).

Assuming that some kind of electrical competence, beyond simply attaching a plug to a socket, will be required, it is worth learning a bit about 12/24 volt DC circuits (e.g. from a boat maintenance book). If some ad hoc wiring will be needed (quite likely in the case of solar equipment), make and test the system before going to the field. A basic toolkit, including a multi-meter and soldering iron, will be helpful. Otherwise the power regeneration scheme can easily become the Achilles heel of the operation. Be aware that low-voltage