



Instant-Print



A low-cost publishing unit for developing countries

ICCE has developed a fast and economical way of producing printed materials for environmental organisations in developing countries. Based on digital-printer technology, combined with the power of desktop publishing, the unit is capable of producing a wide variety of printed materials including newsletters, brochures, educational booklets, small posters. Original artwork produced using a P4 computer and graphic design software such as Corel 11, Page-Plus or Microsoft Publisher, is transferred directly onto a low-cost stencil in the Duplo Duprinter which can produce up to 5000 copies from a single stencil at the rate of more than 120 copies per minute, for little more than the cost of the paper.

The system was originally developed with the *Wildlife and Environmental Conservation Society of Zambia* to produce KOBUS - the Society's regular newsletter - and a wide range of educational material for the WESM Chongololo Club Programme. Subsequently Environmental Publishing Units (EPUs) have been established in several other African countries and a major new EPU is just being launched in Malawi.

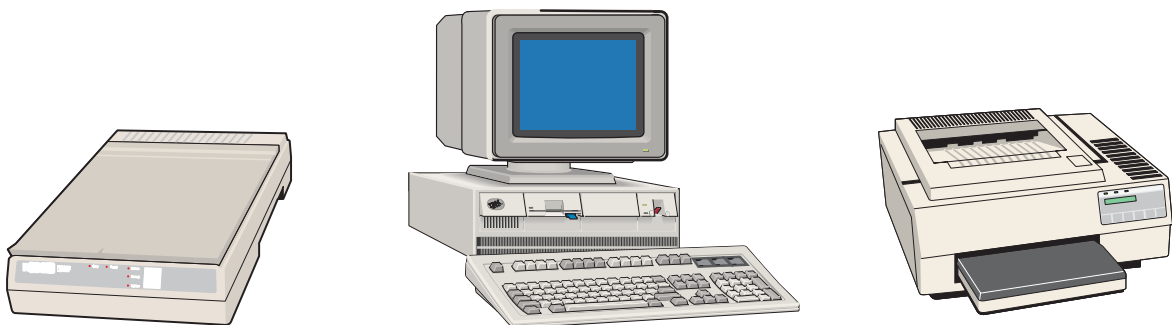
Background

For many years small organisations with modest resources have been faced with the problem of producing reasonable quality low-cost printed materials on a limited budget. Using commercial printers has often proved to be very expensive and unsatisfactory; in-house efforts using photocopiers proves to be expensive for anything other than a few dozen copies.

Digital printers now provide an effective and economic alternative. Combining three technologies - digital scanning, thermal imaging and stencil printing - digital printers provide a much more practical and cost-effective alternative to the photocopier and the offset printing machine. Their appeal is not only the

low cost of copies and their speed of production, it also their reliability and ease of operation.

The UWS Darwin Publishing Unit installed by ICCE at the Wildlife Society offices in Kampala, Uganda quickly resulted in a dramatic improvement in the quality of a wide range of printed materials. UWS also provides design and print services to many other conservation and development organisations, including Uganda National Parks and UWS has been able to generate substantial additional income (over US\$50,000 in the first three years) which helps to maintain the publishing unit and also contributes to the core cost of running the organisation.



The equipment

The basis of the EPU is a high-speed P4 computer with 512mb RAM, high resolution graphics, a 19" flat (TFT) screen, DVD-writer and plenty of storage space; quality machines with this kind of specification can now be bought for little more than UK £1000. Supporting equipment includes an A3 1200 dpi Hewlett Packard laser-printer, an A3 colour inkjet and a good quality flat-bed scanner. The most recent installation at WESM in Malawi includes a Nikon 35mm slide-scanner and digital camera, and comprehensive print-finishing equipment comprising a folder/stapler, comb-binder, A3 laminating machine and a professional (hand-operated) guillotine.

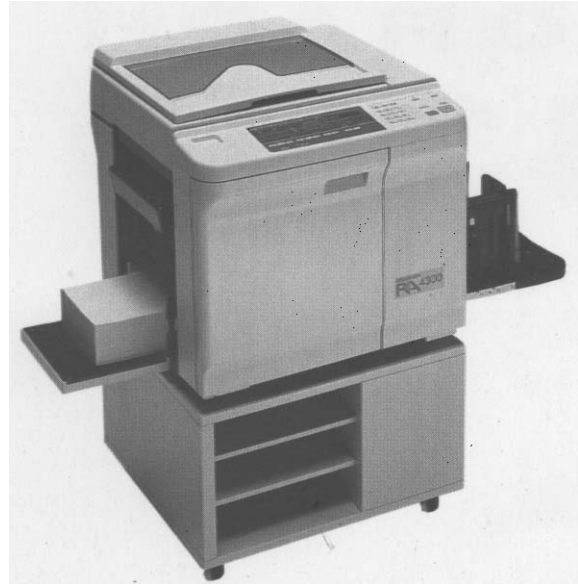
The digital printer

Digital printers are available from a number of manufacturers but ICCE has standardised on Duplo which has proved reliable in the field and is now available as a A3 600 dpi version which links directly to the computer and operates just like a normal printer. The special SCSI cards/cables used in earlier models are no longer necessary.

The DUPRINTER models have an almost instant drum change facility enabling the use of additional colours and the larger models will print up to full A3 - ideal for small posters.

The master stencil is produced automatically in 15 seconds and the operator can then carry out simple adjustments to ensure the image is correctly positioned on the paper. The required number of copies is then entered and delivered at between 40 and 120 per minute.

Apart from the paper, (digital printers can accept most types of paper up to 200gsm), the main consumables are the stencil rolls and the ink.



A typical digital printer

For more sophisticated systems there is a range of additional options including extra colour drums, automatic document feeders, bulk paper loaders and sorters.

Training & installation

ICCE runs specialised 3-week *Computer-aided Materials Production Courses* which provide practical instruction on computer installation & maintenance, desktop publishing, digital imaging and use of the various types of print-finishing equipment. Alternatively, installation and training may be carried out on-site after the equipment has arrived.

Cost

The exact cost depends on the final specifications - especially the print-finishing equipment selected; present installations have varied between £UK15,000 & £UK30,000 - the latter representing the total budget required to procure, air-freight, and install the equipment, including a special 3-week UK-based training course.

ICCE also offers a procurement and shipping service which sources top-quality equipment at substantially reduced costs.

Supporting conservation and development projects worldwide



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