

## User's Manual

### Installing Scanner and Leaf Area Measurement Software

1. Connect Scanner to Parallel(EPP) or USB port and mains supply.
2. Install scanner software from CD supplied with scanner.
3. Copy the files in leafarea.zip to a directory 'leafarea' on the hard disk.

### Using Scanner with Leaf Area Measurement Software

4. Run 'leafarea.exe' from the leafarea directory or from a shortcut to it.
5. Attach a white piece of paper to the scanner lid to provide a white background.
6. Arrange leaves on scanner.
7. Click on 'Scan...'. The scanners own scanning utility appears. Controls and options will vary.
8. If a prescan is not automatic, select a prescan and wait for the prescan to complete.
9. Use the mouse to select an area containing a leaf (or by adjusting position/size of selected area).
10. Make sure output mode is set to **black and white** and not colour, greyscale or half-tone.
11. Set resolution depending on size of leaf. (v. small >600 dpi, small **600 dpi**, Large <600 dpi).
12. **DO NOT USE ANY SCALING OPTIONS.**
13. Brightness, contrast and threshold options can be adjusted but will affect the results. (Use auto.)
14. Select the 'Scan' option (on the scanning utility – not the leaf area program) and wait for scan to complete. Scanner dialog box will close and the image will appear in the leaf area program.
15. Click on 'Measure...'.  
16. **IMPORTANT:** Check the resolution at which the leaf was scanned. (with some scanners this may not be automatic). If an incorrect resolution is selected, the result will be incorrect.
17. Click 'OK' and wait for result to appear on main window.
18. To scan another leaf, click on 'Scan...' again.
19. To set a calibration value, measure known areas. (e.g. printed shapes from a graphics program.)