

Document Title:		Part #	
Description file for LIT, MANUAL, LP-80, Pages		10242	
		Release Date:	
		9/7/07	
Rev.	Description	Revision By	Date
03	Add Bonhomme ref – Changed address	Bryce	1-11-07
05	<ol style="list-style-type: none"> 1. Identify "segment 1" as the segment of 10 LEDs closest to the controller, and "segment 8" as the segment at the tip of the AccuPAR (page 29). 2. Put a note in the section on Log Mode that says LAI and tau are not computed in this mode because manually sampling PAR beneath a canopy at random locations produces a more accurate LAI value than leaving the LP-80 in one place and collecting data in PAR mode (page 21). 3. In the calibration section, tell the user that the bubble level also doubles as an external sensor holder—they can use the hole next to the bubble level to mount their external sensor when performing the calibration step (pages 36-37). 4. Let's also add something in the calibration section that tells the user how often he/she should do this step. 5. Let's inform the user that when the external sensor is connected, only readings from the external sensor are used to calculate LAI, and though "ABV" data is generated whenever the up key is pressed, if the external sensor was connected at the time, the numbers displayed in the 8 segment columns are artifacts left over from a past above canopy reading when the external sensor was not connected, and have no bearing on the current LAI calculation; (it would be great if, instead of these confusing leftover numbers, we could communicate that the sensor array was not employed for above canopy readings with the external sensor connected). 6. Similar to point 4, we should let users know that, if they deactivate segments of the array, those segments will still show numbers when they dump their data; the numbers just won't mean anything; this is another area where communicating "not in use" would make things a lot clearer than displaying artifacts of a past read. 	Justin	9-10-07
06	Numerous changes for firmware update	Justin	3-12-08
07	Updated rev 5 files with rev 6 published file, reformatted manual, updated table of contents and index, change .12 to .15 refer to DCO 466	SLW	2-19-09
08	Updated index and Table of Contents, fixed font error in equations where – switched to <, added reference	SLW	7-21-09
09	Corrected weight spec from 1.25 Kg to 1.21 lbs	SLW	01-26-10
10	LP-80 firmware was rewritten into new firmware platform, manual had to be updated with new screen shots and the addition of many features- See PCR-00241.	SLW	4-9-2010
Date -- Time	Uploaded manual to repository. Available at http:// manual.decagon.com . Please ask archivist for previous versions or use Beanstalk application.	NJR	6/20/2013
11	METERized (but still in Latex), added info from DCO 02259. Part of Rebrand ECO-01756.	JCP	7-31-18
12	Rebranded into InDesign https://app.asana.com/0/inbox/291002358953689/1138700294225887/1164218837076741	CSC	2.28.2020
13	Multiple updates made per Update—LP-80 Manual (10242-13, 10888-03, 20442-01)	RK	4.7.2021
14	Updated SQ100X per DCO 14385	KB	5.2022

15	Updated table 3 per DCO 15521	KB	7.2022
16	Small corrections throughout theory section 3.4 DCO 18368 https://app.asana.com/0/308057532565579/1203767413348793/f And ISO removal for subtask 18063	EMR	6.2023

Production File Name: http://publications.metergroup.com/Manuals/10242_Accupar%20LP80_Print.pdf

Working File Path: [https://csicloud.sharepoint.com/Product Number Library/10200-10299/10242](https://csicloud.sharepoint.com/Product%20Number%20Library/10200-10299/10242)

Dimensions: 12.5" wide x 8" tall (folded, 8"H x 6.25"W)

Colors: CMYK/Full color 4/4

Printer Type: In-house printing or at approved vendor

Material: Tabloid (11x17) Color Copy Digital

Finish: spiral bound

<small>10242-10 7.28.2021</small>	
TABLE OF CONTENTS	
1. Introduction.....	1
2. Operation.....	2
2.1 Configuring	2
2.2 Taking Measurements.....	4
2.2.1 Measurement Tips	5
2.2.2 Manual Measurements	7
2.2.3 Log Mode Measurements	8
2.3 Saving and Annotating Readings	9
2.4 Viewing Data	10
2.5 Downloading Data.....	11
2.6 Erasing Data	12
3. System.....	14
3.1 Specifications.....	14
3.2 Components	15
3.2.1 Probe	16
3.2.2 External PAR Sensor	16
3.2.3 Keypad.....	17
3.2.4 Display.....	17
3.3 LP-80 Utility.....	22
3.4 Theory.....	24
3.4.1 Average and Intercepted PAR.....	24
3.4.2 Sampling for Fractional Interception	25
3.4.3 Using PAR to Determine Leaf Area Index	27
3.4.4 Extinction Coefficient and Canopy Structure.....	28