

Survey Management System



GEODIMETER 468DR INSTRUMENT SETTINGS

SURV-GEN-20030713

Revision: draft A

Document Owner	OLIVER GLOCKNER – CONTRACT MINE SURVEYOR		
Date Originated	13-July-03	Approval Date	
Deployment Date		Archive Date	
Next Revision Date		Printed	

UNCONTROLLED COPY WHEN PRINTED

Table of Contents

1	PURPOSE.....	3
2	SCOPE.....	3
3	DEFINITIONS	3
4	PROCEDURE	4
5	REFERENCES.....	9
6	DOCUMENT REVISION HISTORY.....	9
7	APPENDICES	9

UNCONTROLLED COPY WHEN PRINTED

1 PURPOSE

This procedure describes how to check, and change some of the instrument settings for a Geodimeter 468DR.

Without the knowledge of these settings, a surveyor may be caught out, and encounter problems with out some field work.

2 SCOPE

This document applies to general mine surveying, Surpac software, and the Geodimeter 468DR style of instruments.



3 DEFINITIONS

-	-
---	---

UNCONTROLLED COPY WHEN PRINTED

4 PROCEDURE

CAUTION
Check the following in the instrument:

PRISM CONSTANTS

Use MNU 61 to change prism constants. **Caution:** The offset that is displayed on startup is not the MNU 61 prism constant setting, and the Geodimeter will use on start up whatever was set at the last power off!

See page 2.2.8 of Geodimeter System 468Dr User Manual Ver. 1

<p>Prism constant to be used for Trimble Super Prism #021 with Tilttable Traversing Target #850 is 0.0mm.</p> <p>The prism constant is the same for a Trimble Small Tilttable Reflector #100.</p>	
<p>To RPU, Prism Constant = 0</p> <p>To RPU502, Prism Constant = 0 (<i>far right</i>)</p> <p>To Sokkia prisms ... ensure screwed into "0" offset side of holder, Prism Constant = 0, (<i>Shown on the left-hand side</i>)</p> <p>Caution: To Peanut prism, Prism Constant = -35mm</p>	
<p>To either Sokkia or Eclipse prisms screwed into the 360 degree holder, Prism Constant = 0</p>	

UNCONTROLLED COPY WHEN PRINTED

<p>Caution:</p> <p>Eclipse prisms in the Eclipse holder DO NOT have a 0 prism constant, as shown below on the right-hand side image.</p> <p>I suggest these holders are only to be used for "prism wall-monitoring", and not mixed with other holders used for traverses.</p>	
<p>Caution:</p> <p>Prism constant for Leica circular prism is -34.0mm</p>	

UNCONTROLLED COPY WHEN PRINTED

UDS SUITABLE FOR SURPAC

Use Program 40 – UDS Generation

Program 1	Name		STN SET (or whatever)
	Logon?		Yes
	Label	2	Type 1
		3	1
		62	1
		21	1
		ENT	7
		Link to	2

Program 2	Name		PICKUP
	Logon?		Yes
	Label	5	Type 2
		4	2
		6	2
		ENT	7
		Link to	3

Program 3	Name		...
	Logon?		Yes
	Label	5	Type 4
		4	3
		6	3
		5	8
		4	8
		6	8
		7	0
		8	0
		9	0
		ENT	5

Before starting work choose Program 3.

Enter any pt no. answer NO to Incr? NO to Decr?, YES to AutoInc?

Enter any Pcode answer NO to Dup? YES to AutoDup?

Enter any Target Ht " " " " "

Start from Program 1. This links into P2 and then P3.

When a distance is measured (use TRK mode) the display will show Pno, Pcod, SH, and all data can be recorded with a single keystroke (REG).

Pressing ENT will show the raw data. To change a value use F4 for Pcod; F5 for Pno; F6 for SH.

UNCONTROLLED COPY WHEN PRINTED

PROGRAM 39 - ROADLINE 3D

Start [PRG] [39]

[5] Slope Stake

[Job no =] type in [0] usually

Select the memory unit

[Stn=] type in the instrument station number

[Area =] select the area file in which the roadline data is stored.

Select the data storage device [2 lmem]

[SH=] Enter signal/staff height

[Ht.Ofs=] ... for boning height, usually none... press [ENT]

WAIT ... The program checks the chosen roadline, this can take a couple of minutes with a big file.

[SecInc=] **Caution:** This is a bug in the program, type in [0] then [ENT], just accepting the default 0.000 value may cause a program crash!

[Sect.=] Type in the sectional chainage you wish to setout

Convention: Looking along the centreline, with chainages increasing = looking "up" the road!

Radofs: +1.5 (Offset from the centreline, +ve value means current position is to right of centreline looking up the road)

RT.ofs: +3.7 (Distance along centreline to get to required sectional chainage, +ve value means go "up" the road to get to the correct chainage interval)

dELE: +3.2 (Height above/below section profile, +ve value means too high, go down/cut to required design)

[REG] to finish that section

[more ?] Press the Yes button to continue with the next section, which will be prompted.

UNCONTROLLED COPY WHEN PRINTED

AFTER - MARKET BATTERY

Alternative Power Supply :

A relatively cheap option, when compared to purchasing genuine units, is to use a re-chargeable sealed lead-acid battery; 12V 6.5Ah.

Caution: Connect the battery +ve lead to the #6 pin, and the -ve lead to the #4 pin of a DB9 female plug.

Several cheap 240V/12V chargers are available to charge these types of batteries.



OFFSETS FOR A SURPAC PICKUP

Tip: The +ve sign is not readily invoked, as the ASCII key is not accessible as in the older numeric only (400, 4000) keyboards.

For example; to get PCODE: 4O+2

To get PCODE:	4	O	+	2
At FUNC 4 press	4	a STD a	Lc a ? R ? d a Lc	2

UNCONTROLLED COPY WHEN PRINTED

5 REFERENCES

Surpac Help Notes	Surveying – geodat.htm
Geodimeter Manuals	Geodimeter System 468Dr User Manual Ver. 1 Publ. No. 571 701 171
Haefeli-Lysnar Survey Equipment	Product Catalogue

6 DOCUMENT REVISION HISTORY

Revision Events			
Rev.	Author	Changes	Date
Draft A	OG	Initial draft	13/07/03
Draft B			

7 APPENDICES

UNCONTROLLED COPY WHEN PRINTED