

GP SERIES

GP-12K/GP-20K/GP-22K/GP-30K
GP-40K/GP-60K/GP-100K/GP-102K
GP-30KS/GP-100KS

Precision Balance

INSTRUCTION MANUAL



WM:PD4000273

CONTENTS

Basic operation

1. INTRODUCTION	3
1-1 About This Manual.....	3
1-2 Features.....	3
1-3 Compliance.....	4
2. UNPACKING THE BALANCE	5
2-1 Unpacking.....	5
2-2 Installing the Balance.....	6
3. PRECAUTIONS	7
3-1 Before Use.....	7
3-2 During Use.....	7
3-3 After Use.....	8
3-4 Power Supply.....	8
3-5 Display Symbols and Key Operation.....	9
3-6 Smart Range Function.....	10
4. WEIGHING UNITS	11
4-1 Units.....	11
4-2 Changing the Units.....	14
5. WEIGHING	14
5-1 Basic Operation (Kilogram Mode).....	14
5-2 Counting Mode (PCS).....	15
5-3 Percent Mode (%).....	17
5-4 Accumulation Function.....	18

Adapting to the environment

6. RESPONSE ADJUSTMENT / SELF CHECK FUNCTION	20
6-1 Automatic Response Adjustment / Self Check Function.....	20
6-2 Manual Response Adjustment.....	21
7. CALIBRATION	22
7-1 Calibration Group.....	22
7-2 Automatic Self Calibration (Calibration due to changes in temperature).....	23
7-3 Calibration Using the Internal mass (One-Touch Calibration).....	23
7-4 Calibration Using an External Weight.....	24
7-5 Calibration Test Using an External Weight.....	26
7-6 Correcting the Internal Mass Value.....	27
8. FUNCTION SWITCH AND INITIALIZATION	29
8-1 Permit or Inhibit.....	29
8-2 Initializing the Balance.....	30
9. FUNCTION TABLE	31
9-1 Structure and Sequence of the Function Table.....	31
9-2 Display and Keys.....	31
9-3 Details of the Function Table.....	32
9-4 Description of the Class "Environment, Display".....	35
9-5 Description of the Item "Data output mode".....	37
9-6 Description of the Item "Data format".....	38
9-7 Description of the Data Format Added to the Weighing Data.....	40

9-8 Data Format Examples	41
9-9 Clock and Calendar Function	43
9-10 Comparator Function	45
9-11 Adding the Comparison Results.....	47
9-12 Main Display Comparison Function.....	47
10. ID NUMBER AND GLP REPORT.....	49
10-1 Setting the ID Number	49
10-2 GLP Report.....	50
11. DATA MEMORY	53
11-1 Notes on Using Data Memory.....	53
11-2 Memory for Weighing Data	54
11-3 Memory for Calibration and Calibration Test Data	57
11-4 Memory for Unit Mass in the Counting Mode.....	58
11-5 Memory for Comparator Settings	60
11-6 Memory for Tare Value	62
11-7 Data Memory: Quick Selection Mode	66
11-8 Data Memory: Confirmation and Storage Mode.....	67
12. PROGRAMMABLE-UNIT	68
13. DENSITY MEASUREMENT	69
RS-232C serial interface	
14. I/O UNIT SPECIFICATIONS (Standard).....	72
14-1 RS-232C//External Contact Input.....	72
15. CONNECTION TO Peripheral EQUIPMENT.....	74
15-1 Connection to the AD-8121 Printer	74
15-2 Connection to a Computer.....	74
15-3 Using Windows Communication Tools (WinCT)	74
15-4 Using the WinCT software, the balance can do the following:	75
16. COMMANDS.....	76
16-1 Command List.....	76
16-2 Acknowledge Code and Error Codes.....	77
16-3 Control Using CTS and RTS.....	77
16-4 Settings Related to RS-232C.....	77
Maintenance	
17. MAINTENANCE.....	78
18. TROUBLESHOOTING.....	78
18-1 Checking the Balance Performance and Environment.....	78
18-2 Error Codes.....	79
18-3 Asking For Repair	81
19. SPECIFICATIONS	82
20. EXTERNAL DIMENSIONS	83
21. OPTIONS	85
22. TERMS/INDEX.....	86

This is a “Table of Contents preview” for quality assurance

The full manual can be purchased from our store:

<https://the-checkout-tech.com/manuals/AnD/GP-12K GP-20K GP-22K GP-30K GP-40K>

And our free Online Keysheet maker:

<https://the-checkout-tech.com/Cash-Register-Keysheet-Creator/>

[HTTPS://THE-CHECKOUT-TECH.COM](https://THE-CHECKOUT-TECH.COM)