

# Specifications and Operation Manual for DS-980

Prepared : 16 January 2003  
1st Amendment : 14 August 2003

1. General Layout .....	4
2. Purpose .....	5
3. Features.....	5
4. Operating Conditions .....	5
5. Analog Specification .....	5
6. Capacity/Minimum Graduation/Tare range .....	5
7. Display and Indicators.....	6
7.1. Display Specifications.....	6
7.2. Indicators.....	6
8. Dimensions .....	6
9. Connectors on the Main Board.....	6
10. Main Components .....	6
11. Existing parts to be used.....	6
12. Key Functions.....	6
13. Block Diagram of Electrical Connection .....	7
14. Physical layout of Electrical Connection .....	8
15. Hardware Description.....	9
15.1. Microcomputer.....	9
15.2. Pin Assignment .....	9
16. Maintenance Mode .....	11
16.1. SPAN Adjustment.....	11
16.2. Escape from Maintenance mode .....	11
16.3. Specification Setting .....	11
16.3.1. Operational Spec Enter.....	11
16.3.2. Weight & Measure Spec Enter.....	12
16.4. Internal Count & A/D Count Display .....	12
16.5. Software ID code & Span Switch State check.....	12
16.6. Key function in Maintenance Mode.....	12
16.5. Spec List.....	13
16.5.1. Operational Spec List .....	13
16.5.2. Weight & Measure Spec List .....	14
17. Operations In Weighing Mode.....	16
17.1. ON/OFF .....	16
17.2. Weight Reset.....	16
17.3. Tare Subtraction.....	16
18. Error Massage List .....	16
19. RS-232C Interface .....	17
19.1. Specification .....	17
19.2. Pin Assignment .....	17
19.3. Control Code and Characters .....	17
19.4. Standard type.....	18
19.4.1. Data Format.....	18
19.4.2. Communication Method.....	19
19.4.2.1. Standard stream type(Continuous Output).....	20
19.4.2.2. Standard command type.....	20
19.5. QUQA TRADING type .....	21
19.6. IBM, HUGIN type .....	23
19.7. ICL type .....	24
19.7.1. ICL (OLD, OLD OMRON) type.....	25
19.7.2. ICL (PORTUGAL) type.....	26
19.7.3. ICL (ACTUAL, ACTUAL OMRON) type.....	27

19.8. CAS interface type .....	28
19.9. CAS (PORTUGAL) type .....	31
19.10. NIXDORF type .....	32
19.11. NCR type.....	34
19.12. MONS type .....	35
19.13. SHARP TK300, UP700 type .....	37
19.14. DATECS MP50/500 type .....	40
19.15. NCI4000 type.....	41

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/Digi/DS-980 revised operation manual.html](https://the-checkout-tech.com/manuals/Digi/DS-980%20revised%20operation%20manual.html)

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)