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## CHAPTER-VII

### THE OTHERS

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## A. FOR THE SERIAL INTERFACES

### THE PROTOCOLS FOR THE CAS STANDARD SERIAL INTERFACE

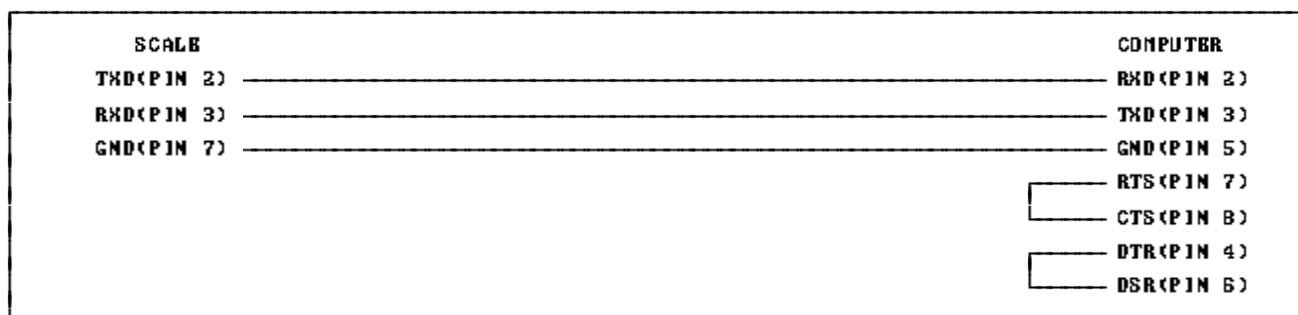
THIS IS HALF-DUPLEX COMMUNICATION RS-232C.

#### A. 1 THE COMMUNICATION AGREEMENTS

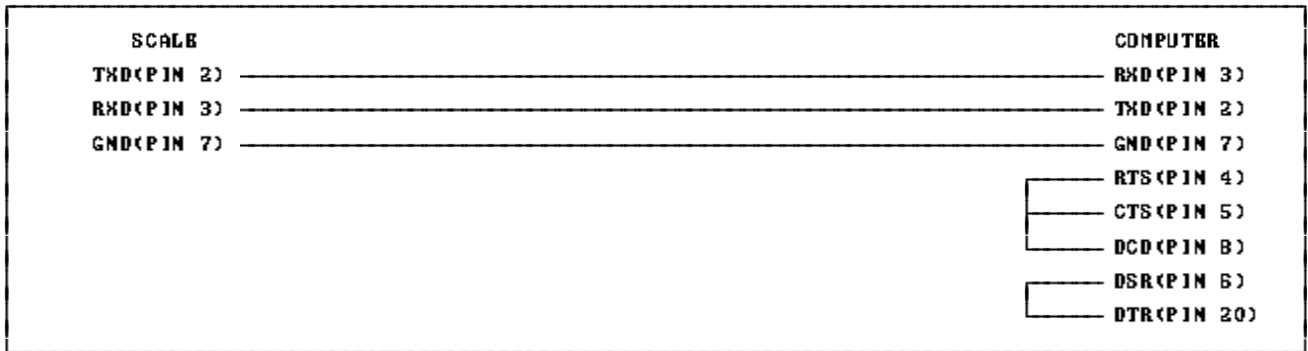
- |   |                    |
|---|--------------------|
| 1. BAUD RATE -> 9,600 BPS               |                    |
| 2. DATA BIT -> 8 BIT                    |                    |
| 3. STOP BIT -> 1 BIT                    |                    |
| 4. PARITY BIT -> NO                     |                    |
| 5. COMMUNICATION LEVEL -> RS-232C LEVEL |                    |
| 6. DATA FORMAT -> ASCII                 |                    |
| 7. THE COMMAND DEFINITIONS              |                    |
| 6-1. "ENQ" -> 05H                       | 6-7. "EDT" -> 04H  |
| 6-2. "ACK" -> 06H                       | 6-8. "DC1" -> 11H  |
| 6-3. "NAK" -> 15H                       | 6-9. "DC2" -> 12H  |
| 6-4. "SDH" -> 01H                       | 6-10. "DC3" -> 13H |
| 6-5. "STX" -> 02H                       | 6-11. "DC4" -> 14H |
| 6-6. "ETX" -> 03H                       |                    |

#### A. 2 THE WIRE CONNECTIONS

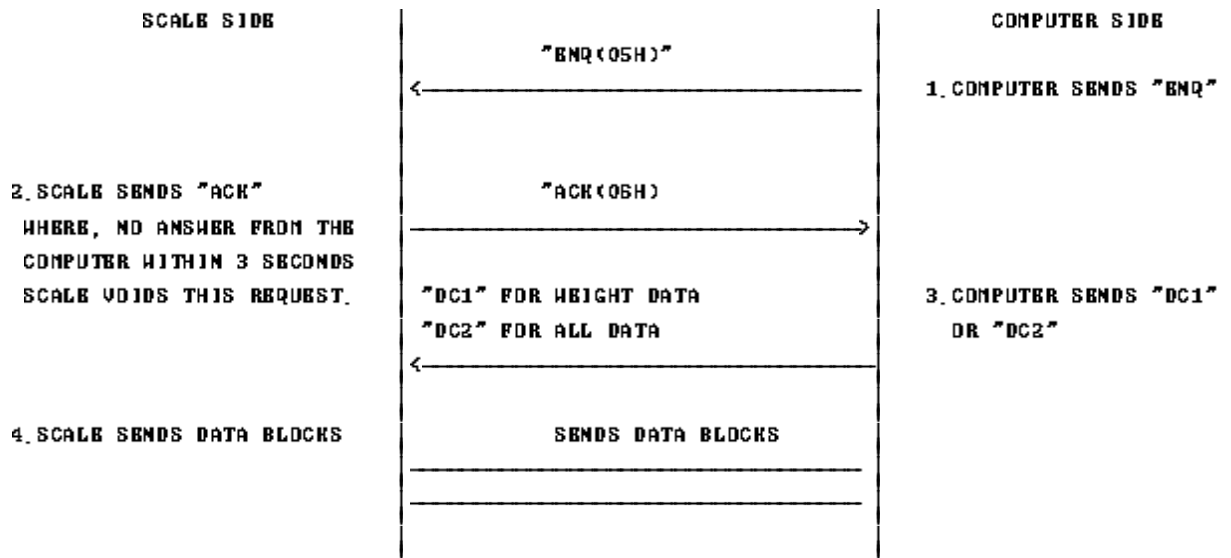
##### A.2.1 THE WIRE CONNECTIONS OF THE D-SUB 9 PIN CONNECTOR OF A COMPUTER SIDE



##### A.2.2 THE WIRE CONNECTIONS OF THE D-SUB 25 PIN CONNECTOR OF A COMPUTER SIDE

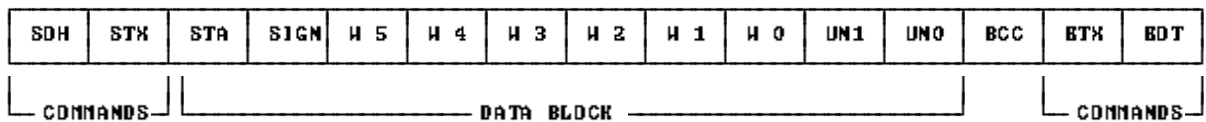


### A. 3 THE PROTOCOL



### A. 4. THE DATA TRAINS

#### 1. THE DATA TRAINS FOR THE "DC1"



#### REMARKS :

- . STA -> A WEIGHING STATUS OF THE SCALE  
SCALE IS STABLE -> "S", NOT STABLED -> "U"
- . SIGN ->SIGN OF THE HEIGHT DATA  
ZERO AND POSITIVE HEIGHT -> " ", NEGATIVE HEIGHT -> "-",  
OVER LOAD -> "F"
- . H5 THROUGH H0 -> HEIGHT DATA  
BUT ALL "F"s WHEN THE SCALE IS PUT ON OVER LOAD.
- . UN1 THROUGH UN0 -> UNIT OF HEIGHT(kg OR lb)
- . BCC -> BLDCK CHECK CHARACTER  
BCC IS CREATED BY EXCLUSIVE DRED OF A DATA BLOCK.

#### 2. THE DATA TRAINS FOR THE "DC2"

SDH	STX	P 7	P 6	P 5	P 4	P 3	P 2	P 1	P 0	BCC	ETX
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STX	STA	SIGN	H 5	H 4	H 3	H 2	H 1	H 0	UM1	UM0	BCC	ETX
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STX	P 7	P 6	P 5	P 4	P 3	P 2	P 1	P 0	BCC	ETX	EDT
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**REMARKS :**

- . STA -> A WEIGHING STATUS OF THE SCALE  
SCALE IS STABLE -> "S" , NOT STABLED -> "U"
- . SIGN ->SIGNS OF THE HEIGHT DATA  
ZERO AND POSITIVE HEIGHT -> " " , NEGATIVE HEIGHT -> "-" ,  
OVER LOAD -> "F"
- . P7 THROUGH P0 -> PRICE DATA  
IF THE OVER FLDW IS HAPPEN IN PRICE, ALL "F"s WILL FILL TO DATA BLOCK OF THE PRICE.
- . H5 THROUGH H0 -> HEIGHT DATA  
BUT ALL "F"s WHEN THE SCALE IS PUT ON OVER LOAD.
- . UM1 THROUGH UM0 -> UNIT OF HEIGHT(kg OR lb)
- . BCC -> BLOCK CHECK CHARACTER  
BCC IS CREATED BY EXCLUSIVE DREB OF EACH DATA BLOCKS.