OHAUS®

Scout™
RS232 Interface
INSTRUCTION MANUAL
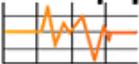
INTRODUCTION

This Interface Kit is for use with OHAUS Scout STX, SPX, SKX and SJX series products.

INTERFACE INSTALLATION

Install the Interface module on the mini DIN port (round connector) located at the rear side of the balance as shown. During this process, please make sure the balance is powered off.

Notes:

- Please make sure the small triangle mark (▲) on the round connector is at the bottom and then plug in.
- The appearance of your model may be different.

Mini DIN port
(Round connector)
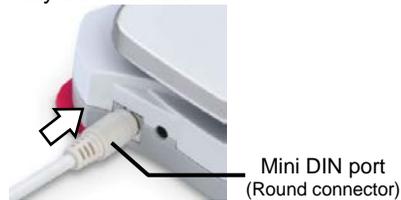
SETUP

A) The OHAUS Interface is preset to communicate using the following settings: **9600 baud, 8 bit, no parity, no handshake**. Determine the RS232 parameters required for the printer or computer that is to be connected. See computer or printer documentation if assistance is required. If the parameters do not match, it will be necessary to change either the balance settings, or the computer / printer settings.

B) Upon installation of the interface, the balance will recognize the RS232 Interface and add relevant items to the menu. Configure the balance to the desired RS232 and printing parameters; refer to the balance Instruction Manual for assistance in using the menus.

For SPX, SKX and SJX Balances:

Upon installation, the balance will show [r.5.2.3.2] during the power sequence.

PRINT		RS232	
Reset:	**no**, yes	Reset:	**no**, yes
Stable:	**off**, on	Baud Rate:	1200…**9600**…115200
A.Print:	**off**	Parity:	7 even, 7 odd, 7 none,
	On.Stable		**8 none**
	interval	Stop bit:	**1**, 2
	accept	Handshake:	**none**, XOn-XOff
	continuous	Alternate command:	Print (A…**P**…Z)
Content:	Result (-> off, **on**)		Tare (A…**T**…Z)
	Gross (-> **off**, on)		Zero (A…**Z**)
	Net (-> **off**, on)	End RS232:	Exit menu
	Tare (-> **off**, on)		
	Header (-> **off**, on)		
	Footer (-> **off**, on)		
	Mode (-> **off**, on)		
	Unit (-> off, **on**)		
	Info (-> **off**, on)		
Layout:	Format (->Single,**Multi**)		
	Feed (->**Line**, 4 Lines, Form)		
End Print:	Exit menu		

Note: Items with bold font are default settings.

SETUP DEFINITIONS

Menu Settings	Explanation
PRINT / A. Print – Off	Only sends data when PRINT is pressed.
PRINT / A.Print / On.Stable – Load, Load.Zero	Balance only transmits stable data. *Load*: Print stable value excluding zero *Load.Zero*: Print stable value including zero
PRINT / A.Print / interval - (xx) sec	Balance sends data every (xx) seconds.
PRINT / Auto Print – accept	Balance only sends stable accept data in Check mode.
PRINT / A.Print – Continuous	Balance repeatedly sends data as fast as possible.
PRINT / Content	On: print relevant content after weighing data Gross – on: G; Net – on: N; Tare – on: T; Info – on: balance will print application mode setting parameters
PRINT / Layout / Format - (Single, Multi)	*Single*: print all data in one line *Multi*: print all data in multiple lines
PRINT / Layout / Feed - (Line, 4 Lines, Form)	*Line*: feed one line after printing *4 Lines*: feed four lines after printing *Form*: feed one page after printing (move to the top of next page after printing)

For STX Balances:

Upon installation, the STX balance will show RS232 icon ( ) in the upper right corner.

Menu added	Function
Communication |--RS232 |--Baud Rate	Set the baud rate (bits per second).
|--Transmission	Set the data bits, stop bit, and parity.
|--Handshake	Set the flow control method.
|--Print Settings	For more info, please refer to the STX instruction manual.

CONNECTION

The RS232 Interface Kit cable terminates with a 9 pin Sub-D female connector.
Active pins: Pin 2 = TXD, Pin 3 = RXD, Pin 5 = Ground.
The Interface connector can connect directly to a computer, an OHAUS printer and
other printers.

RS232 OUTPUT

With the interface installed the balance will operate in several ways according to
the settings.

Print format can be switched by xFMT user command (see command table in
RS232 INPUT section).

New Scout Print Format (Default Format):

    Output String (Non Check Weighing Applications):

[weight]	11 characters (right justified)
[space]	1 character
[unit]	5 characters (right justified)
[space]	1 character
[stability indicator]	1 character; "?" when unstable, space when stable
[space]	1 character
[T/N/G/PT]	2 characters (right justified)
[Term]	2 characters

  Note: All of the fields have fixed length.

    Output example:

```
*****192.21_****g_*_**          A.Print: off; Stable: off
*******0.01_****g_?_**            Stable reading
                                  unstable reading

                                A.Print: off; Stable: on
*******95.0_****g_*_*N            Content / Result -> on
*****169.6_****g_*_*G             Content / Gross -> on
*******95.0_****g_*_*N            Content / Net -> on
*******74.6_****g_*_*T            Content / Tare -> on
```

Output String (Check Weighing Application):

[weight]	11 characters (right justified)
[space]	1 character
[unit]	5 characters (right justified)
[space]	1 character
[stability indicator]	1 character; "?" when unstable, space when stable
[space]	1 character
[T/N/G/PT]	2 characters (right justified)
[space]	1 character
[application status]	6 characters (right justified)
[Term]	2 characters

Example:

```
*****192.21_****g_*_**_Accept
*******0.01_****g_?_**__Under
```

A.Print: off; Stable: off
   Stable reading,
   Unstable reading

Scout Pro Print Format 1 (for the models 303/123/202/402/602/2001/6001/ 401FZH/601FZH/6000FZH):

Output String:

[weight]	12 characters (right justified)
[space]	1 character
[unit]	5 characters (left justified)
[space]	1 character
[stability indicator]	1 character; "?" when unstable, space when stable
[Legend]	1~10 characters

Output example:

```
********0.00_g****_*
*******12.73_g****_?
********0.85_oz***_WET*WT
```

Scout Pro Print Format 2 (for the models 401/601/6000):

Output String:
[weight]	11 or 12 characters (right justified)
[space]	1 character
[unit]	1~5 characters
[space]	1 character
[stability indicator]	1 character; "?" when unstable, space when stable
[space]	1 character
[Legend]	1~10 characters

Note: The unit field length varies with different units. The weight field could be 11 or 12, depending on if the weight string has a dot or not.

Output example:

```
*********100_g_*_
*********273_g_?_
*********8.5_oz***_WET*WT
```

Print Format 3 (for Certain POS Systems):

Output String:
[weight]	11 characters (right justified)
[space]	1 character
[unit]	5 characters (right justified)
[stability indicator]	1 character; "?" when unstable, space when stable
[Term]	2 characters

Note: All of the fields have fixed length.

Output example:

```
*******0.00_****g*
******12.73_****g?
```

RS232 INPUT

The following interface commands will be acknowledged by the Balance. They are case sensitive. The balance will return "ES" for invalid commands.

Command	Function
IP	Immediate Print of displayed weight (stable or unstable).
P	Print displayed weight (stable or unstable).
CP	Continuous Print.
SP	Print on Stability.
SLP	Auto Print stable non-zero displayed weight.
SLZP	Auto Print stable non-zero weight and stable zero reading.
xP	Interval Print x = Print Interval (1-3600 sec) 0P ends interval Print
0P	Turn off Auto Print
H	**H x "text"** Enter Header line , where x = line number 1 to 5, "text" = header text up to 24 alphanumeric characters
F	**F x "text"** Enter Footer line , where x = line number 1 to 2, "text" = footer text up to 24 alphanumeric characters
Z	Same as pressing Zero Key
T	Same as pressing Tare Key.
xT	Establish a preset Tare value in displayed unit. x = preset tare value. Sending 0T clears tare (if allowed).
PT	Prints Tare weight stored in memory.
PM	Print current application mode (weighing mode).
xM	Set current application mode to x. x depends on application 1M: WEIGH, 2M: COUNT,3M: PERCENT, 4M: CHECK, 5M: DYNAMIC, 6M: TOTAL, 7M:DENSITY, 8M: HOLD, 9M:MOLE
M	Scroll to the next enabled mode.
PU	Print Current weighing unit: g, kg, lb, oz, etc….
xU	Set balance to unit x: g, kg etc. 1U: g, 2U: kg,3U: ct, 4U: N, 5U: oz, 6U: ozt, 7U: dwt, 8U: lb, 9U:lb:oz, 10U: grn, 11U: thk, 12U: tsg, 13U:ttw , 14U: tola, 15U:c
U	Scroll to the next enabled unit.
ON	Brings out of Standby
OFF	Goes to Standby.
C	Begin Span Calibration
AC	Abort Calibration.
PSN	Print Serial Number.
PV	Print Version: print name, software revision and LFT ON (if LFT is set ON).
x#	Set Counting APW (x) in grams. (must have APW stored)
P#	Print Counting application APW.
x%	Set Percent application reference weight (x) in grams. (must have reference weight stored)
P%	Print Percent application reference weight.
xCO	Set Checkweighing Over Limit in grams x.
xCU	Set Checkweighing Under Limit in grams x.
PCO	Print Checkweighing Over Limit.
PCU	Print Checkweighing Under Limit.
xMM	Set Molar Mass in g/mol .
PMM	Print Molar Mass
xS	0 = print unstable data, 1 = print stable only
xFMT	**0** = New Scout print format (default) ; 1 = Scout Pro print format 1; 2 = Scout Pro print format 2; 3 = for certain POS system.
xRL	0 = disable response; 1 = enable response.

COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

DISPOSAL

In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment. If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.