



RICE LAKE SCT-4X Series High Speed Transmitter With Integrated Fieldbus And Webserver User Manual

[Home](#) » [RICE LAKE](#) » RICE LAKE SCT-4X Series High Speed Transmitter With Integrated Fieldbus And Webserver User Manual 

RICE LAKE SCT-4X Series High Speed Transmitter With Integrated Fieldbus And Webserver



Contents

- [1 Introduction](#)
- [2 Network Connection](#)
- [3 Network Parameters](#)
- [4 Web Page Login](#)
- [5 Main Screen](#)
- [6 Customer Support](#)
- [7 Documents / Resources](#)
- [7.1 References](#)

Introduction

Thank you for purchasing this product.

This manual contains webserver information for the following SCT-4SX digital weight transmitters:

- SCT-4X-ETHIP
- SCT-4X-MODTCP
- SCT-4X-PRONET

It is recommended that you carefully follow the instructions for programming the weight transmitter; performing

actions not indicated in this manual could compromise the functionality of the scale.

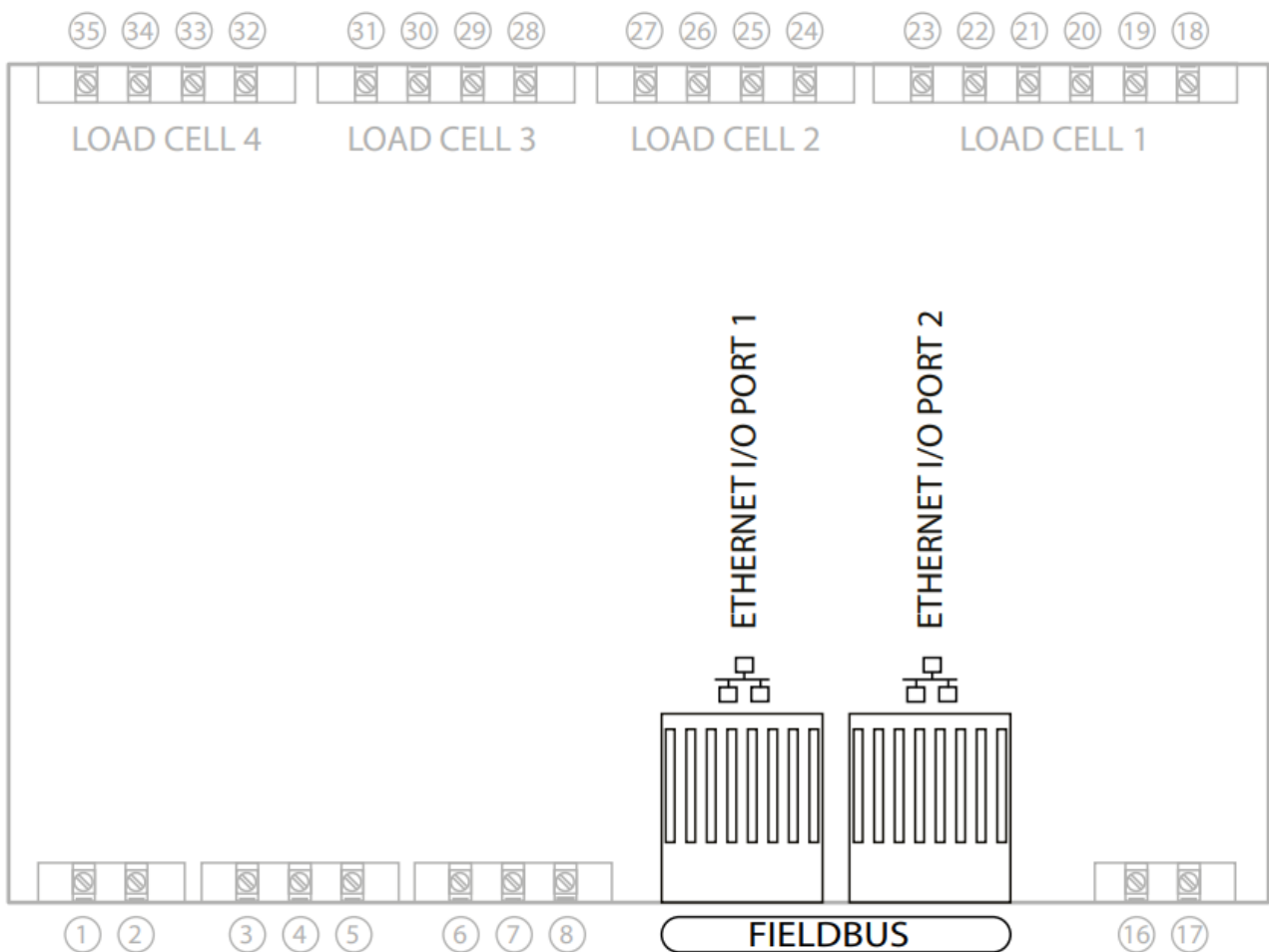


Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals Warranty information is available at www.ricelake.com/warranties

Report any product problems to the manufacturer or to the retailer where it was purchased. Always TURN OFF THE POWER SUPPLY prior to installation or repair action.

Network Connection

Connect the instrument to the network using either of the available Ethernet ports:



Network Parameters

Use the Fieldbus Settings procedure in the instrument's Quick Start Guide to configure the IP address, subnet mask and gateway of the instrument.

In most applications it is sufficient to set the IP address of the instrument to the same network ID as the PC. Ensure the configured device ID is not used by another device on the network.



For advanced configuration, contact your network administrator.

Web Page Login

Connect a device to the same network as SCT4X. Type the IP address of the instrument into a web browser. If the instrument has been configured correctly, the login window displays:

Ethernet/IP module

SN

Sign in

☒ Read Only

Warning: signing in with read only unchecked will prevent
Fieldbus master to send commands to indicator
until sign out

Enter the password "00000" and sign in.



Once logged in, it is possible to change the password (Change password). In case of lost password contact Rice Lake Weighing Systems for recovery



Only one PC is allowed to access the instrument's web page at a time, if you login from a second PC, the first one will be automatically disconnected.



Logging into the instrument with Read Only disabled interrupts the communication with the PLC. When Read Only is enabled, the following features are restricted: accessing load cells, Calibration, Operative mode and Indicator reboot.

Main Screen

Independent Channels Mode (Multi-Scale)

123456
Release 8.0

HomeOperative ModeNetwork configurationBackup/RestoreChange passwordIndicator rebootSign out

Fieldbus	Profinet	SN	22625	Fw release	1.19	Ind. SN	34306983
----------	----------	----	-------	------------	------	---------	----------

78

ID	GROSS	NET	TARE	UNIT	STATUS	
1	508	508	0	kg	~ >0< UL OL IN1 IN2 OUT1 OUT2	ZERO TARE
2	672	508	0	kg	~ >0< UL OL IN1 IN2 OUT1 OUT2	ZERO TARE
3	3200	3100	100	kg	~ >0< UL OL IN1 IN2 OUT1 OUT2	ZERO TARE
4	25.8	23.5	2.3	g	~ >0< UL OL IN1 IN2 OUT1 OUT2	ZERO TARE

9

Dependent / independent channels mode (single scale)

123456
Release 8.0

HomeOperative ModeNetwork configurationBackup/RestoreChange passwordIndicator rebootSign out

Fieldbus	Ethernet/IP	SN	22625	Fw release	1.121	Ind. SN	25145725
----------	-------------	----	-------	------------	-------	---------	----------

78

ID	GROSS	NET	TARE	UNIT	STATUS	
1	508	508	0	kg	~ >0< UL OL IN1 IN2 OUT1 OUT2	ZERO TARE

1012139

1115

PARAMETERS	
Unit	kg
Decimals	0
Capacity 1	10000
Capacity 2	0
Division 1	1
Division 2	

FILTER	
FILTER	F6
RATE	200
PARAM. 1	30
PARAM. 2	16
PARAM. 3	2

1213

CALIBRATION			
Cal. points	1	<input checked="" type="checkbox"/> By indicator	<input checked="" type="checkbox"/> Check stability
Weight		ADC	mV/V
Zero		0	0
Point 1	10000	2147484	1.78348
Point 2	0	0	0
Point 3	0	0	0

COMMANDS	
WRITE PARAMETERS	
ABORT CALIBRATION	
END CALIBRATION	
ZERO CALIBRATION	
THEOR. CALIB.	

Operating Mode

Read or configure operating modes. Settings include:

- Operative mode: Dependent or Independent
- Channels: Channel number (1, 2, 3, 4)
- Digital Cells: Type 1 -5 or Analog
- Excluded Channels: Excluded Channel number (1, 2, 3, 4)

Profinet module SN 22625

Operative mode Dependent ▼

Channels 1 ▼

Digital Cells Type 1 ▼

Excluded
channel None ▼

Read operative mode

Set operative mode

Sign in page

Network Configuration

Edit the network parameters and the displayed data format:

- IP address, Subnet mask, Gateway (enable “Auto config.” for DHCP).
- Byte order: Big endian / Little endian. This parameter configures device compatible with different processors. It reverses the byte order of input and the output data.
- Data format: Unsigned integer / Signed integer / Float.
- Name of station: up to 16 characters (only SCT-4X-PRONET)

Profinet module SN
22625

Password

Auto config

No

IP address

192.168.0.100

Subnet mask

255.255.255.0

Gateway

0.0.0.0

Byte order

Big Endian

Data format

Unsigned Integer

Name of station

100

Read configuration

Set configuration

Sign in page

(only SCT-4X-PRONET)



Changing the parameters will disconnect the transmitter. To reconnect, you must enter the new IP address in the web browser.

Backup/Restore

Select “Backup Configuration” to start receiving the instrument configuration in the web browser.

When reception is complete, the “setup.mot” file automatically downloads. This file is compatible with the Rice Lake Tools. Select “Restore Configuration” to choose a configuration file to load on the instrument.

WARNING: the configuration file must have “.mot” extension.

Ethernet/IP module SN
22625

Backup Configuration

Restore configuration

Sign in page

Change Password

To change an account's password:

- Enter your old password.
- Enter new password and then confirm.
- Select Change password the complete the procedure.

Profinet module SN

22625

Password

New Password

Confirm Password

Change password

Indicator Reboot

Reboots the indicator.

Sign Out

Signs out from the instrument’s web page.

Instrument Information

ID	Scale identification number (only for ind.Ch mode)	
GROSS	Gross weight	
NET	Net weight	
TARE	Tare	
UNIT	Unit of measure	
STATUS	Instrument status	
	~ >0< UL OL IN1 IN2 OUT1 OUT2	Unstable weight Gross weight equal to zero Underload Overload Input 1 active Input 2 active Output 1 active Output 2 active

Zero

Zeros the instrument.

WARNING: The zero execution takes place only if the necessary conditions are met (zero parameters).

Tare

Performs a tare on the instrument.
To clear an active tare, you must perform a new tare when the scale is empty.

A/D Conversion Points

In dep.Ch mode, the sum of the active channels is displayed.
In ind.Ch mode the value of the active scale is displayed.

Calibration Parameters


Sets the scale calibration parameters:

Unit	Unit of measure (g, kg, t, lb)
Decimals	Number of decimal places (0, 1, 2, 3)
Capacity 1	First range value (or full capacity for single range applications)
Capacity 2	Second range value (not used in single range applications)
Division 1	First range division (1, 2, 5, 10, 20, 50)
Division 2	Second range division (1, 2, 5, 10, 20, 50)

Calibration

NTE: When By indicator is enabled, calibration uses the indicator settings. When By indicator is disabled, it uses the settings on the web server.

By Indicator Calibration (By Indicator is Enabled)


1. Enable the By indicator checkbox.
2. In the Parameters menu, set Unit, Decimals, Capacity, and Division parameters.
3. In the Calibration menu, set the number of calibration points and then enter their weight values in the corresponding Weight text boxes.
4. Select  to send to parameters to the indicator (units, decimals, capacities, divisions, number of calibration points and sample weights).
5. Unload the scale and then select Zero.
6. Load the platform with sample weight 1 and select Point 1. The value of ADC points is automatically acquired in


the text box on the right. If you know the ADC point value, it can be entered manually.

- Repeat 5 and 6 for the remaining calibration points. The weight and ADC point values must increase with each calibration point:


- Select  to save the calibration.

Web Server Calibration (By Indicator is Disabled)

- Disable the By indicator checkbox.
- In the Parameters menu, set Unit, Decimals, Capacity, and Division parameters.
- In the Calibration menu, set the number of calibration points and then enter their weight values in the corresponding Weight text boxes.
- Unload the scale and then select Zero.
- Load the platform with sample weight 1 and select Point 1. The value of ADC points is automatically acquired in the text box on the right. If you know the ADC point value, it can be entered manually.
- Repeat 4 and 5 for the remaining calibration points. The weight and ADC point values must increase with each calibration point:
- Select  to save all parameters on the indicator.

 If the weight and/or ADC values are not increasing (Case 2), only point 1 will be considered. If “Check stability” is active, the calibration points are only acquired if the weight is stable.

- Case 1

CALIBRATION			
Cal. points	Weight	ADC	mV/V
1			
<input checked="" type="checkbox"/> By indicator			<input checked="" type="checkbox"/> Check stability
			
Zero		0	0
Point 1	2000	647484	0.22491
Point 2	4000	1292501	0.78523
Point 3	10000	30741680	1.89348

- Case 2

CALIBRATION

Cal. points

1

☒ By indicator
 ☒ Check stability

Weight

ADC

mV/V

Zero

0

0

Point 1

2000

647484

0.22491

Point 2

10000

30741680

1.89348

Point 3

4000

1292501

0.78523

Commands

WRITE PARAMETERS	Saves parameters to the indicator.
ABORT CALIBRATION	Cancels calibration without saving.
END CALIBRATION	After acquisition sequence ends calibration and saves values on indicator. NOTE Only used when the By indicator checkbox is enabled.
ZERO CALIBRATION	Pre-Tare Reset
THEOR. CALIBRATION	Theoretical calibration: By entering the weight and mV/V value of the cells the relative ADC points are calculated. .

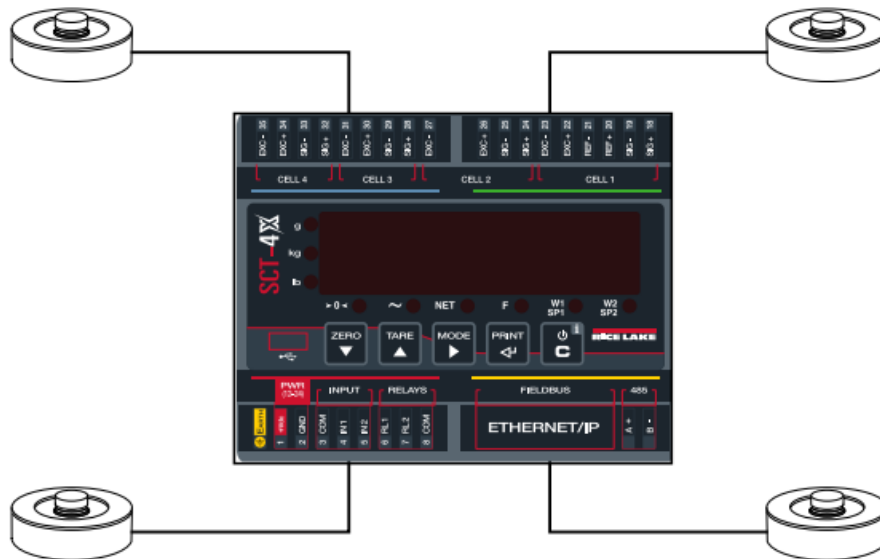
Theoretical Calibration

1. Enter the value 0 in the zero mV/V box.
2. Enter in the mV/V box related to point 1, the cell sensitivity value calculated as shown in the note.
3. Calculate ADC points by clicking

THEOR. CALIB

.

DEPENDENT CHANNELS



mV/V value:

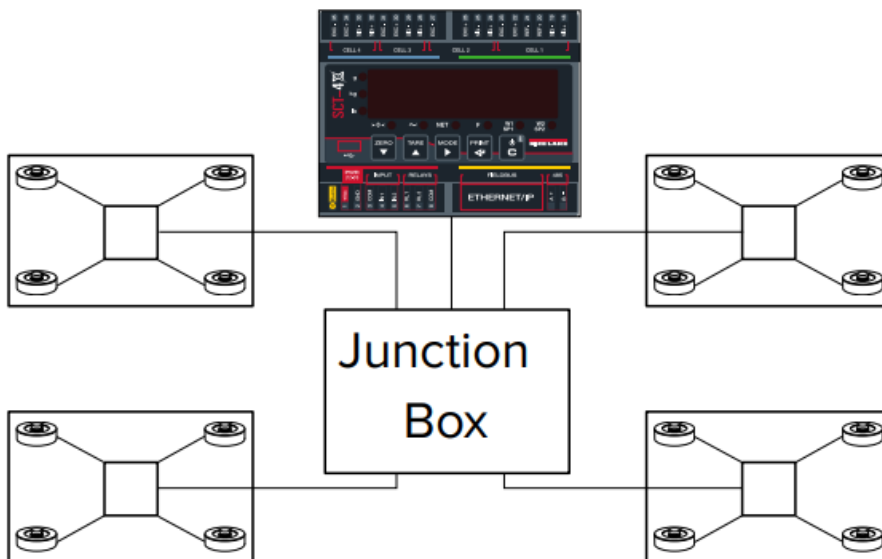
mV/V cell1 +

mV/V cell2 +

mV/V cell3 +

mV/V cell4 +

DEPENDENT CHANNELS INDEPENDENT CHANNELS



mV/V value:

$\frac{\text{mV/V cell1} + \text{mV/V cell2} + \dots + \text{mV/V cellN}}{N}$

N

Repeat the procedure for each scale

Filter

Filter	Configures filter (F1, F2, F3, F4, F5, F6, F7 or Custom). For more information, see instrument's operation manual.
Rate	Configures the number of analog to digital conversions (3-100) per second that is performed by the analog to digital converter.
Param. 1	Configures the length of the average window (quantity of ADC points). For example, a value of 8 indicates 8 ADC points will be used for the average window.
Param. 2	Removes ADC points from the average window in beginning or ending positions. For example, a value of 2 indicates the 2 outermost values will be removed from the list. In the list: 10, 20, 30 and 40; 10 and 40 are removed.
Param. 3	Removes the center most ADC points from average computations. For example, a value of 2 indicates the 2 center most values are removed from the list. In the list: 10, 20, 30 and 40; 20 and 30 are removed.

Parameter (Param.) values must meet the following criteria:

- All parameters values must be even numbers
- Param. 2 must be less than or equal to param. 1 and greater than zero
- Param. 3 must be in the range zero to param. 2 – 2



Configure the following parameters to disable filtering:

- Param. 1 = 1
- Param. 2 = 0
- Param. 3 = 0

Customer Support

© Rice Lake Weighing Systems. All rights reserved. Rice Lake Weighing Systems® is a registered trademark of Rice Lake Weighing Systems.

All other brand or product names within this publication are trademarks or registered trademarks of their respective companies.

All information contained within this publication is, to the best of our knowledge, complete and accurate at the time of publication. Rice Lake Weighing Systems reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.

The most current version of this publication, software, firmware and all other product updates can be found on our website: www.ricelake.com


© Rice Lake Weighing Systems Content subject to change without notice

230 W. Coleman St. • Rice Lake, WI 54868 • USA USA: 800-472-6703 • International: +1-715-234-9171

March 4, 2024 www.ricelake.com PN 221635 Rev B



Documents / Resources

	<p>RICE LAKE SCT-4X Series High Speed Transmitter With Integrated Fieldbus And Webserver [pdf] User Manual</p> <p>SCT-4X, SCT-4X Series High Speed Transmitter With Integrated Fieldbus And Webserver, SCT-4X Series, High Speed Transmitter With Integrated Fieldbus And Webserver, Transmitter With Integrated Fieldbus And Webserver, Integrated Fieldbus And Webserver, Fieldbus And Webserver, Webserver</p>
---	---

References

- [Rice Lake Weighing Systems](#)
- [Manuals | Rice Lake Weighing Systems](#)
- [Warranties](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.