ScaleLink
WIRELESS TRANSCEIVER

The first RADIO Communication Module designed for the weighing industry

SCALELINK –
AURORA
CONNECTION
GUIDE

SCALELINK - AURORA WIRELESS LINK

Step 1: Get Connected

A) Disconnect the indicator (or other device) from power. Connect the ScaleLink Wireless Transceiver to the device using the appropriate communication mode and terminal. See the wiring table below:

RS-232 (J3)		RS-422/485 (J4)		20mA Current Loop (J5)	
DEVICE	SCALELINK	DEVICE	SCALELINK	DEVICE	SCALELINK
TX ⟶ RX		TX+ ⟶ RX+		TX+ ⟶ RX+	
RX ⟵ TX		TX- ⟶ RX-		TX- ⟶ RX-	
COM ⟷ COM		RX+ ⟵ TX+			
		RX- ⟵ TX-			
		COM ⟷ COM			

B) Verify that the device is properly set-up to transmit data (Ex. For a typical Remote Display application, the indicator must output a CONTINUOUS and REPETITIVE data string).

Step 2: ScaleLink Configuration

ScaleLink Wireless Transceivers are configured at the factory to work right out of the box with devices using:

- **RS-232 Communications**
- **9600 Baud**
- **No Parity**
- **8 Data Bits**
- **1 Stop Bit**

A) If your device uses these settings, skip ahead to Step 3.

B) If your device does not use these settings, adjust the ScaleLink via the Communications dipswitch bank (SW1) inside the enclosure. See Page 4.

Step 3: Power Up

A) Wire power to the ScaleLink Wireless Transceiver using the optional AC adapter, or piggyback power from the communicating device. The ScaleLink requires a power input of 6 to 18 Volts DC.

POWER TERMINAL (J1)	AC ADAPTER	INDICATOR
+ 12 V	BLACK & WHITE WIRE	6 – 18 VDC
GND	BLACK WIRE	- , or COM

> NOTE: Check with your indicator's manufacturer regarding using "piggy-back" power for the ScaleLink Transceiver.

B) Apply power to the device and ScaleLink Wireless Transceiver.

Step 4: Check Your Link

A) Verify that the Aurora Remote Display and the ScaleLink Wireless Transceiver are set to the same radio channel.

B) Verify that the **Power/Transmit** LED on the ScaleLink Wireless Transceiver is **FLASHING**. This indicates data is being transmitted.

C) Verify that the **RADIO** LED on the Aurora Controller board is **FLASHING**. This indicates data is being received.

D) Finally, check that the correct data is being transmitted from the Indicator with ScaleLink to the Aurora remote display.

E) If the **Receive** LED (Green) **FLASHES**, the ScaleLink is receiving data from another wireless installation and a different radio channel must be selected. If the ScaleLink is only transmitting, this LED will not illuminate.

> NOTE: If the Aurora Display is found to be incorrect, erratic, or very slow, a different radio channel may need to be selected on both the ScaleLink and the Aurora.

SCALELINK CONFIGURATION

All communications settings for the ScaleLink are adjusted via the dipswitch banks (SW1 & SW2) inside the enclosure.

COMMUNICATIONS DIPSWITCH BANK (SW1)

Switches 1 & 2: Communication Mode

COMMUNICATION MODE	SWITCH 1	SWITCH 2
RS-232 (Default)	OFF	OFF
RS-422/485 *	ON	OFF
20 mA Current Loop	OFF	ON
Reserved for Future Use.	ON	ON

NOTE: When using the RS-422/485 protocol over long distances, a Termination Resistor may need to be activated. See SW2 Switch 8: RS-422/485 Termination Resistor.

Switch 3: Software Configuration

Sets the ScaleLink to its default communication settings (9600, N, 8, 1). Software Configuration is also used to access the full range of radio features when programming the radio for complex, custom applications. **Please contact the factory for more information.**

SOFTWARE CONFIGURATION	SWITCH 3
DISABLED	OFF
ENABLED (Default)	ON

NOTE: If Software Configuration is enabled, all other dipswitch settings are **over-ridden**. To change settings via dipswitches, ensure this switch is OFF.

Switches 4, 5, & 6: Parity

PARITY	SWITCH 4	SWITCH 5	SWITCH 6
NONE (Default)	OFF	OFF	OFF
EVEN	ON	OFF	OFF
ODD	OFF	ON	OFF
MARK	ON	ON	OFF
SPACE	OFF	OFF	ON

Switches 7, 8, & 9: Baud Rate

PARITY	SWITCH 7	SWITCH 8	SWITCH 9
1200	OFF	OFF	OFF
2400	ON	OFF	OFF
4800	OFF	ON	OFF
9600 (Default)	ON	ON	OFF
19200	OFF	OFF	ON
38400	ON	OFF	ON
57600	OFF	ON	ON

RADIO OPTIONS DIPSWITCH BANK (SW2)

Switches 1, 2, & 3: Radio Channel Select

The ScaleLink has 6 frequency channels (0 to 5). If there are multiple radio installations at a given site, each installation must have its own radio channel selected.

RADIO CHANNEL	SWITCH 1	SWITCH 2	SWITCH 3
0 (Default)	OFF	OFF	OFF
1	ON	OFF	OFF
2	OFF	ON	OFF
3	ON	ON	OFF
4	OFF	OFF	ON
5	ON	OFF	ON

Switch 4: Reserved for Future Use

Switch 5: Reserved for Future Use

Switch 6: Reserved for Future Use

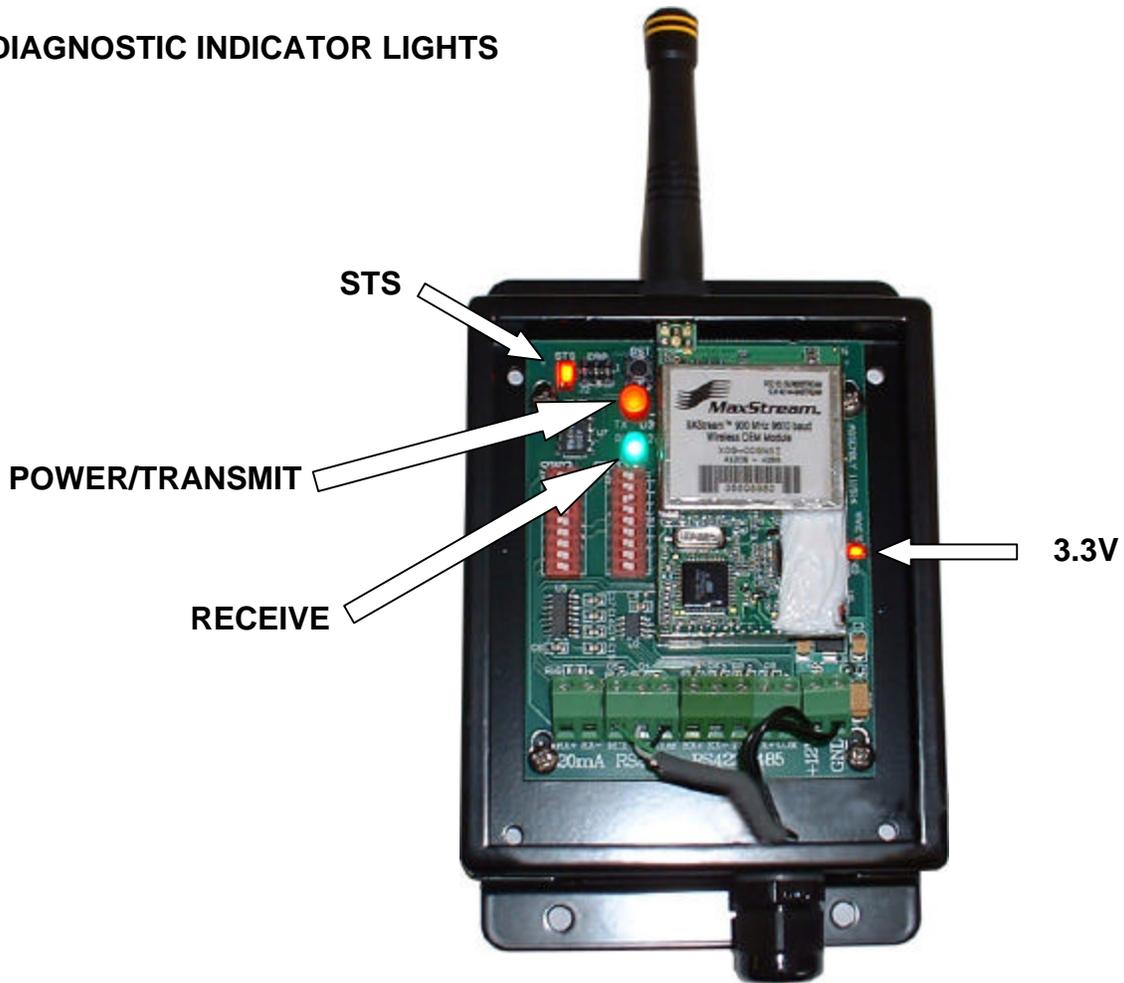**Switch 7: Reserved for Future Use**

Switch 8: RS-485 Termination Resistor

The ScaleLink has a built in termination resistor (when required). This switch must be set to enable the termination resistor on the Transceiver.

RS-422/485 TERMINATION RESISTOR	SWITCH 8
DISABLED (Default)	OFF
ENABLED	ON

Switch 9: Reserved for Future Use

DIAGNOSTIC INDICATOR LIGHTS

Power/Transmit Light (RED)

OFF: The ScaleLink is not installed or working properly.

STEADY ON: The ScaleLink is receiving power and working properly. The steady illumination also indicates nothing is being received for transmission from the device.

FLICKERING: Data is being received from the device and transmitted.

Receive Light (GREEN)

OFF: The ScaleLink is not receiving any data from another wireless installation.

FLASHING: Each time the ScaleLink receives data from another wireless installation, the light flashes on.

INTERNAL DIAGNOSTIC LIGHTS:

Input Power Light (3.3Vok)

Location: Right-hand side of the ScaleLink PCB.

This light is illuminated if the ScaleLink is connected to a proper power source. Power requirements for the ScaleLink are:

Status Light (STS)

Location: Upper left-hand corner of the ScaleLink PCB.

This light **BLINKS** steadily if the ScaleLink's processor is running properly.

FOR TECHNICAL SUPPORT REGARDING THIS PRODUCT, PLEASE CALL YOUR AUTHORIZED WESTERN DEALER: