

# **Advatek Systems Inc.**

**MODEL RS641L-TL**  
**4" LED DISPLAY WITH TRAFFIC LIGHT**

**SERIAL INPUT:**  
**(RS232, RS485/RS422, 20ma Current Loop)**

**INSTALLATION & OPERATION**  
**INSTRUCTION MANUAL**

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# **INTRODUCTION**

**This manual contains information for the installation and operation of Model RS641L-TL Led type Digit Remote Display.**

**The Remote display comes in 4" standard digit size including a 4" circular Bi-colour traffic light. This display accept ASCII characters with either manually selectable baud rates with a host of selectable Digital Weight Indicators or Auto Learn Mode that transmit RS232, RS485, RS422 or 20ma Current Loop data.**

**Application of these units is quite suitable from Warehouse Shipping and Receiving to outdoor Truck Scales.**

**The Led Displays compose of individual led's that are oval in shape red or yellow in color. Having horizontal and vertical viewing angles of 70° and 30° respectively. The intensity of the digits is jumper selectable.**

**The model comes as standard with 6 Numeric digits with lower case words for lb/kg and upper case G/N for Gross /Net. This meets with the Weight & Measures standards.**

**The weatherproof steel enclosure has a 1/4" light bronze lens as the viewing area. The units can be easily wall mounted or harnessed on a pole with appropriate strapping.**

# **SPECIFICATIONS**

**Input Types:** RS232, RS485/RS422  
and Serial Current Loop

**Temperature:** - 40°C to 80°C

**Power supply:** Desktop Modular Type  
12Vdc 3.3A  
Approvals: UL CUL, TUV/GE,  
CE. EMI: FCC part 15 Class B

**Led specifications:** Oval-Red or yellow with  
approximately Luminous  
Intensity of 3500mcd  
Horizontal and Vertical viewing  
Angles 70° and 30°.

**Power consumption:** 10-15W Maximum

**Crystal frequency:** 11.05 MHz

# **TROUBLE SHOOTING GUIDE**

- |                              |  |
|------------------------------|--|
| <b>No power:</b>             | <b>Make sure the AC plug is inserted Into the power module securely. Measure the 12vdc is output by the module.</b>  |
| <b>No Display:</b>           | <b>Check you have Data on your Incoming interface cable.</b>   |
| <b>Display not updating:</b> | <b>Place display in TEST MODE. If working check interface.</b>   |
| <b>Interface problem:</b>    | <b>Confirm by using alternate port to The one you are using. Check the Jumper for RS232, 20MA, RS485 selection. Replace the interface IC's H11A1, MC 1489 or MAX 488.</b>                  |
| <b>Led problems:</b>         | <b>Single led not working. Replace. Segment not working. Check all the led's in the segment. If one board on the 6" display does not light up check interconnect wires between boards.</b> |

# **WARNING**

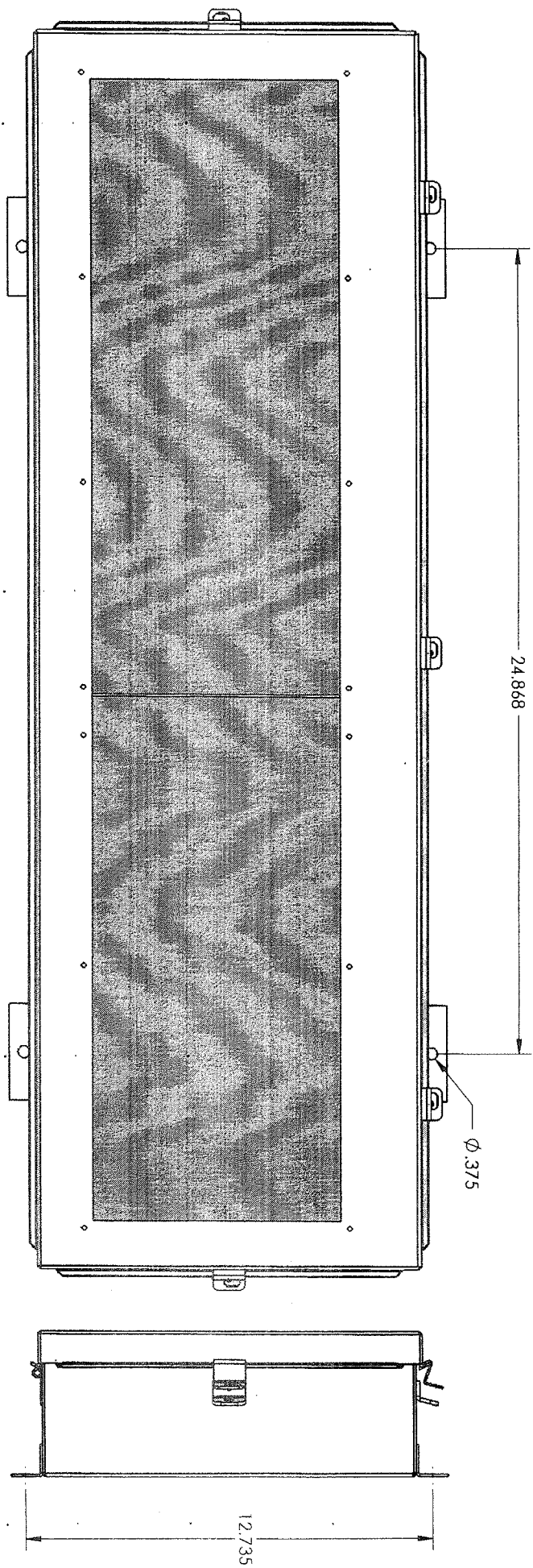
**If drilling into the box make sure iron filings do not get lodged on the display board. It is recommended that the assembly be removed before commencing any work.**

**Mount the display at an angle best suited for the application so that maximum visibility is obtained horizontally and vertically for the viewer.**

**Do not run the interface wire for the display alongside or near high frequency cables of CR Radio etc. Antennas should be mounted away from the device as far as possible to negate the presence of interference.**

**USERS OF CB RADIOS AND SUCH SHOULD REFRAIN FROM USING THEM NEAR THE DISPLAY.**

**USE OF SUCH ITEMS MAY RESULT IN THE MALFUNCTION OR PERMANENT DAMAGE TO THE INSTRUMENT.**



## MODE SELECTION SETTINGS

S1_8	S1_7	S1_6	S1_5	S1_4	MODE	DESCRIPTION
On	On	On	On	On	0	DF-1000 WESTERN <i>X SP = OK O = Over M = Motion</i>
On	On	On	On	Off	1	TOLEDO or FAIRBANKS (Gross Weight)
On	On	On	Off	On	2	UMC600 or IQ355
On	On	On	Off	Off	3	GSE550 or AD4323(Streaming Message)
On	On	Off	On	On	4	TOLEDO or FAIRBANKS (Tare Weight)
On	On	Off	On	Off	5	CARDINAL SB-400
On	On	Off	Off	On	6	CARDINAL SB-200
On	On	Off	Off	Off	7	TEST MODE
On	Off	On	On	On	8	GSE 465 (<stx>spspwwwwwsp<lb or kg>spspspsp<GR, NT or TA>cr)
					9	RESERVED
					10	RESERVED
					11	RESERVED
					13	RESERVED
					14	RESERVED
					15	RESERVED
					16	RESERVED
					17	RESERVED
					-	RESERVED
					-	RESERVED
On	Off	Off	Off	On	30	COMMAND MODE
Off	Off	Off	Off	Off	31	AUTO LEARN MODE

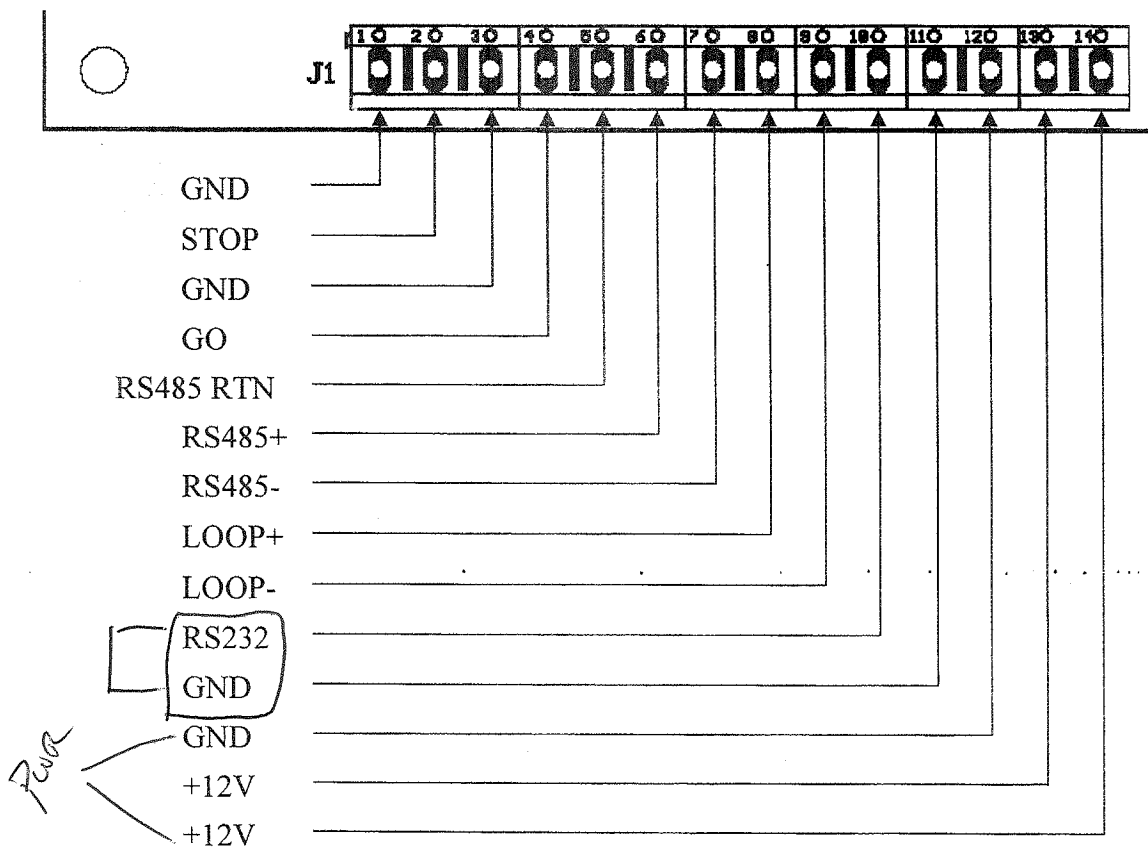
## BAUD RATE SWITCH SETTINGS

S1_3	S1_2	S1_1	DESCRIPTION
On	On	On	19200bps
On	On	Off	9600bps
On	Off	On	4800bps
On	Off	Off	3840bps
Off	On	On	2400bps
Off	On	Off	1200bps
Off	Off	On	RESERVED
Off	Off	Off	AUTO BAUD DETECT

## INTENSITY JP1 JUMPER SETTINGS

1	2	3	4	INTENSITY
IN				MAXIMUM
	IN			
		IN		
			IN	MINIMUM





## INTERFACE CONNECTOR J1

J1-1	GND
J1-2	STOP (RED LIGHT)
J1-3	GND
J1-4	GO (GREEN LIGHT)
J1-5	RS485 RTN
J1-6	RS485 +
J1-7	RS485 -
J1-8	CURRENT LOOP +
J1-9	CURRENT LOOP -
J1-10	RS232
J1-11	GND
J1-12	GND POWER IN
J1-13	+ 12V POWER IN
J1-14	+ 12V POWER IN

# **TRAFFIC LIGHT CONTROL**

**IT IS RECOMMENDED TO USE A TWISTED PAIR OF WIRES FOR THIS APPLICATION. IF HOWEVER YOU DO NOT ENCOUNTER ANY PROBLEMS OF INTERFERENCE YOU MAY USE WHATEVER IS AVAILABLE TO YOU.**

**THE TRAFFIC LIGHT CONTROL AND INTERFACE CAN BE IN THE SAME CABLE.**

**USE A TOGGLE SWITCH WITH OPERATOR:**

**ON – NONE – ON**  
**(GO) - (GND) - (STOP)**

# **WARRANTY**

The product supplied with this manual is warranted against Faulty workmanship and material for a period of 1-year commencing from the date of dispatch.

Our obligation assumed under this guarantee is limit to the replacement Or repair of parts after having been notified of alleged defect and after Having been satisfied that a defect pursuant to this warranty in fact exists.

The warranty is void where the unit has been tampered with, modified or if repairs have been attempted by anyone except, an authorized representative of the manufacturing company or it's appointed representative.

The guarantor is not responsible for consequential or special losses or damages, such as loss of use, inconvenience, commercial or Economic loss, defects caused by misuse, negligence, improper Operation or installation.

In addition the warranty shall have no force and effect and shall Not apply if there has been:

- a) Damage caused by lightning.
- b) Damage caused by electrical surges.
- c) Damage caused by water.
- d) Damage or loss to any product or part thereof in transit.
- e) Serial number of the product has been altered or defaced in any Manner whatsoever.

Alternatively, any damage caused by act of God.

Products for attention under guarantee must be returned to the manufacturer freight prepaid. When returning the product or parts thereof a full description of the fault and the mode of operation used when the product failed must be given accompanied by the model number and serial number.

The manufacturer has no other obligation or liability beyond replacement or repair of defective parts.