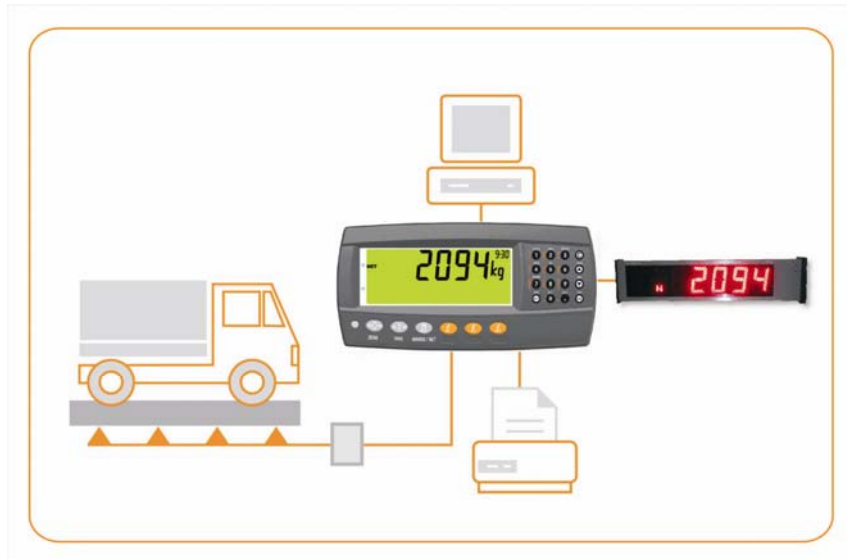


## Application Note: R42x-K401 Single Deck Weigh Bridge

### Application:



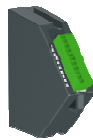
A single deck weigh bridge can be configured with either an R42x-K401 or K402. The K402 would be used in the case where truck id's were stored as it supports 250 products.

- The onboard RS232 serial port would be used to support the printer.
- The M4202 RS232/RS485 module would be used to support a computer and remote display.
  - The isolated RS232 would be used for a computer
  - The isolated RS485 transmit only port would be used for a remote display.
- The D740-6A super bright LED (or D640-6A E/M) is recommended as annunciators would be required on a trade approved installation.
- One or two summing boxes would be required depending on the number of load cells used.
- Up to two (2) from the six (6) standard print formats can be selected or custom print strings can be used.
- Along with standard auto transmitting formats, the two auto formats can be customised.

### Components:



R420-K401-A  
R42x General Purpose  
Indicator



M4202  
RS232/RS485 Module



0071  
Summing Box, 6 L/C  
Input. Expandable





D640-6A-C (shown)  
Or D740-6A-C  
Large Remote Display

\*Note1 Either R420s ABS or R423s flush stainless steel housing could be used.

\*Note 2 Large remote display can be ordered with either DC or AC supply requirements

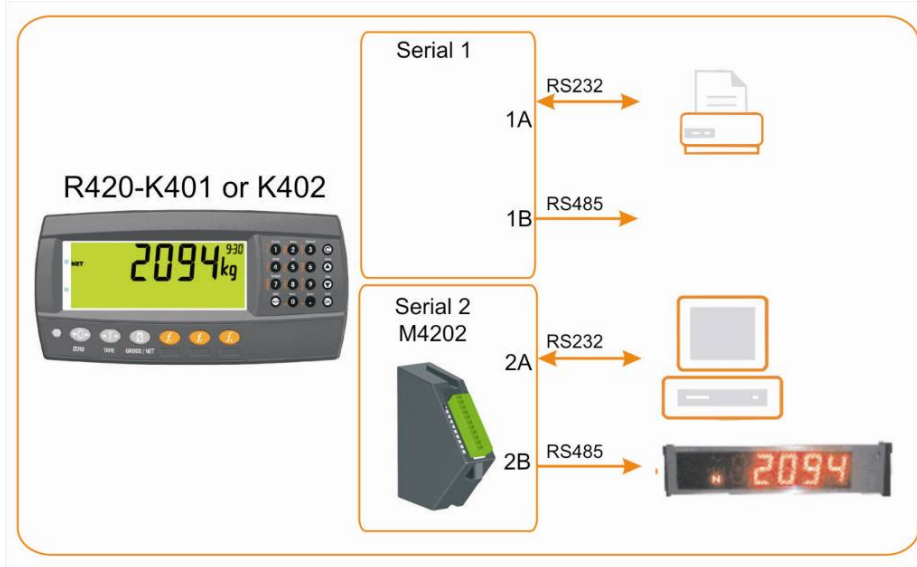
**Operation:**

<b>1. Set up</b> Enter preset tare if required	<b>2. Truck Drives On</b>	
	<b>K401 Display</b> 	<b>If DUAL display setting is used</b> 
		Where both the gross and net weights are to be displayed the VIEW setting would be DUAL

**Error Condition**  
The remote display will show a blanking screen (-----) using dashes if there is an error on the indicator

<b>3. Print Docket or Record</b> Press F1 Print Key	<b>Record Print - FMT.B</b>	
The print out can a simple preset one or customised to include specific information and formatting.	<pre> Joe's Gravel 01/01/2003 9:30 ID: 001234 T: 3000 kg G: 5094 kg N: 2094 kg Thank You!                     </pre>	

**Configuration:**



**R420-K401 (or K402) Set up**

(To enter the setup mode, hold down the **Power** and **F3** key for a few seconds.)

FUNC:NUM	1 or as required
FUNC:SF1	TYPE to PRINT KEY to F1 or as required
H.WARE:SER1.HW	BAUD 9600 PARITY to NONE DATA to 8 STOP to 1 DTR to ON (connect to paper out detect on printer)

## App Note

H.WARE:SER2.HW	BAUD 9600 PARITY to NONE DATA to 8 STOP to 1 DTR to OFF TERM to ON
PRINT:PRINT1:SERIAL	<b>Connection to Printer</b> (other print settings to be set as required) SER1A
SER.NET:TYPE	PROTOCOL.B
SER.NET:SERIAL	<b>Connection to Computer</b> SER2A
SER.AUT: NUM	1
SER.AUT:AUTO.1	<b>Auto output to remote display</b> TYPE to AUTO.LO SERIAL to SER2B FORMAT to FMT.C or as required

### Remote Display Dipswitch Settings

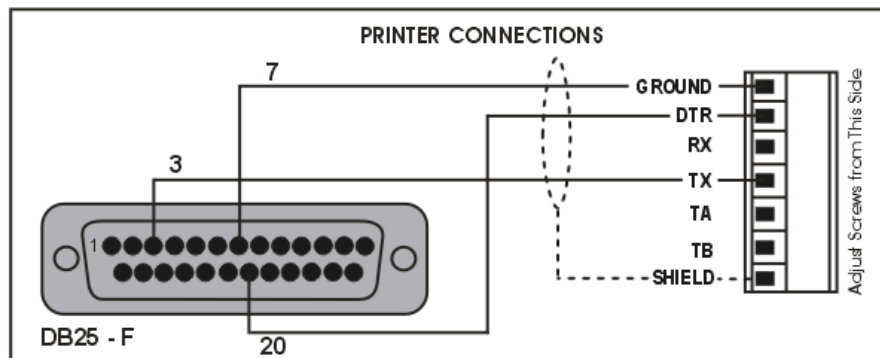
	Address	Address	Address	Protocol Group	Protocol Group	Lock Comms	Display Font	Decimal Point Treatment
<b>DIPSWITCH</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
<i>Explanation</i>	<i>BROADCAST</i>			<i>PROTOCOL GROUP 0</i>			*	**

\* On a D640 block or curved font can be chosen

\*\* On a D640 (E/M) a full digit will be used to for the decimal point and on a D740 the decimal point will be displayed if one is being sent.

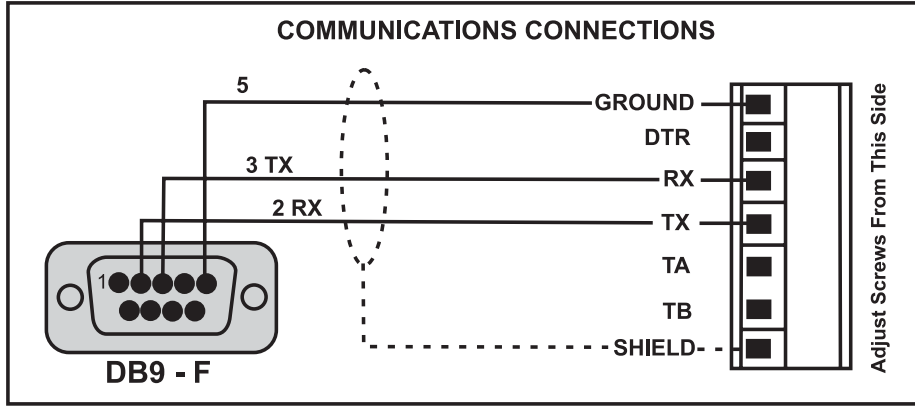
## Wiring

**RS232 Serial - Printer Connections (TX, DTR and GND) – Serial1A on the R420 in this application**



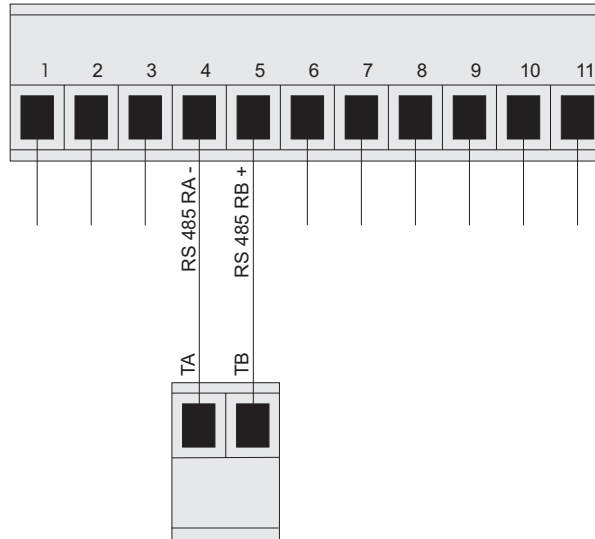
RS232 – Instrument to Printer (DB25)

RS232 Serial - Direct PC Link (RX, TX, GND) – Serial2A on the R420 in this application



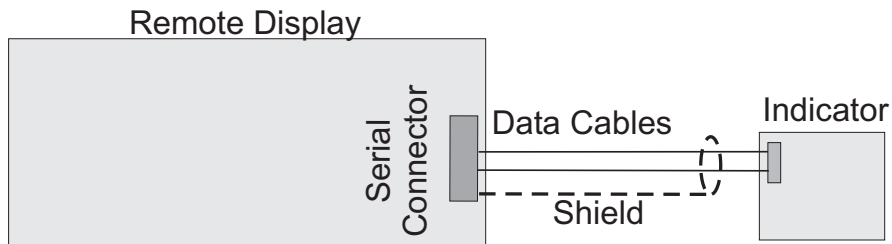
RS232 - Instrument to PC using COM Port (DB9)

RS485 Connection to Remote Display – Serial2B on the R420 in this application



\*\* Note for D740 super bright LEDs - to dim the LED display short pins 10 and 11 for internal applications as required, control with the external switch if required.

Earthing on Remote Display – Shield Pin 1 on Remote Display



For more information refer to the Reference Manual for these products