

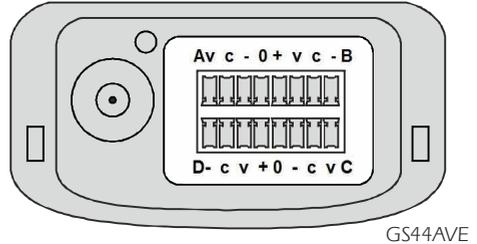
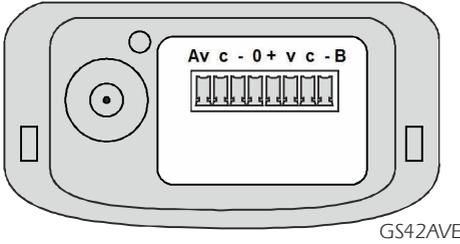
Eltek TU1026 - User Instructions for GS42AVE/GS44AVE

(Applicable to transmitters with serial numbers above 14889*)

The **GS42AVE/GS44AVE** is intended for use with any sensor where an averaged rather than instantaneous value at the time of transmission is required. The averaging technique includes values that can change during a transmission interval.

At the point of transmission the averaged value of the last 30 values, sampled every 10 seconds per channel, is sent.

GS42AVE/GS44AVE connections



V is a voltage input.

C is a current input (with V to C for current range)
- is the -ve voltage

Ranges available:

| | |
|------------|---------|
| 0 - 100 mV | 0-20 mA |
| 0 - 1 VDC | 4-20 mA |
| 0 - 10 VDC | |

Each input is a differential input.
Inputs are not isolated.

Connector 1 (GS42AVE and GS44AVE)

0 is external 9VDC -ve (e.g MP9U)

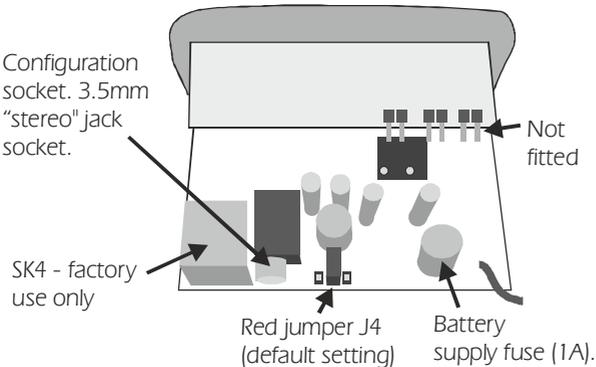
+ is external 9VDC +ve

Connector 2 (GS44AVE only)

(**0** is No connection, **+** is No connection)

Connector 2 is not available on the GS42AVE.

GS42AVE/GS44AVE interior components



External power supply connected



Note: When renewing batteries and especially if transmitter is no longer operating ensure you allow one minute with no batteries connected before installing new batteries. This is to ensure transmitter performs a power-on reset.

*For serial numbers prior to this, the 5V and 12V are swapped and the external supply link is not provided.

Setting and scaling GS42AVE/GS44AVE with sensors that provide a voltage or current output

Refer to Quick start guide to initially set up the RX250AL.

Note: GS42AVE/GS44AVE transmits the rolling average value from the connected sensor..

Many sensors are supplied with a voltage or current output. Recorded values can be scaled to provide meaningful engineering units e.g l/minute. The scaling is stored within the transmitter.

Setting up the GS42AVE/GS44AVE

Connect the GS42AVE/GS44AVE to the PC using the LCTX3 lead (and RS232/USB convertor if required).

Open **Contact Wizard**, select **GenII Setup/Transmitter Setup > Next > Next**, select **Modify the Transmitter setup based on the current Squirrel set up (Normal) > Next**. Note the **block transferring** Window.

Click **Squirrel Channel to Transmitter Channel Assignments > Transmitter Setup > OK/Connect** (ensure correct COM serial port assigned and follow on screen instructions)

Observe you are now in a new window: **Squirrel Channel to Transmitter Channel**, with the upper pane about TX setup.

TX Channels A, B, or A, B, C or D can be set as follows;

In channel A, select **(EU Range)** > **Set channel > Edit Eu Range** from the drop down list

In the **EU Range Selector : Channel A**, select the appropriate hardware range, e.g. **Voltage (0.000 to 10.000V)** from the drop down list.

EU range setting procedure - worked example: (Do not use Helper!)

Let's assume that the connected sensor provides

0-10VDC for 0-20%CO₂

and the manufacturer's specification for the sensor states that it is accurate to a resolution of 1 decimal place.

The **Minimum** of the range is 0, since our %CO₂ range starts at 0.

The **Maximum** value we enter for the EU Range will be scaled down afterwards by factors of 10 using the **DP Value** in order to create the correct resolution for the range. It must always be a whole number.

Therefore, in order to create a range accurate to 1 decimal place, we need to enter a **Maximum** of 200 (20 plus 1 zero) and a **DP Position** of 1. This will then be scaled down to 0.0 to 20.0.

When the three values are entered, the **Sample** of the EU Range will show a range of 0.0 to 20.0 %CO₂ - the EU range we want.

Repeat as appropriate for other channels.

You can now close **Transmitter Connections** and follow the instructions to end the routine by clicking **Sending to Squirrel > OK** and close the Window.