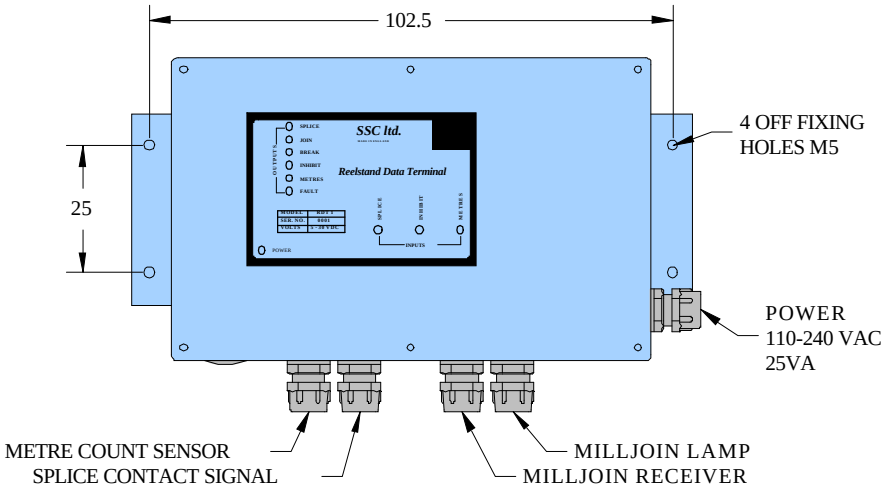
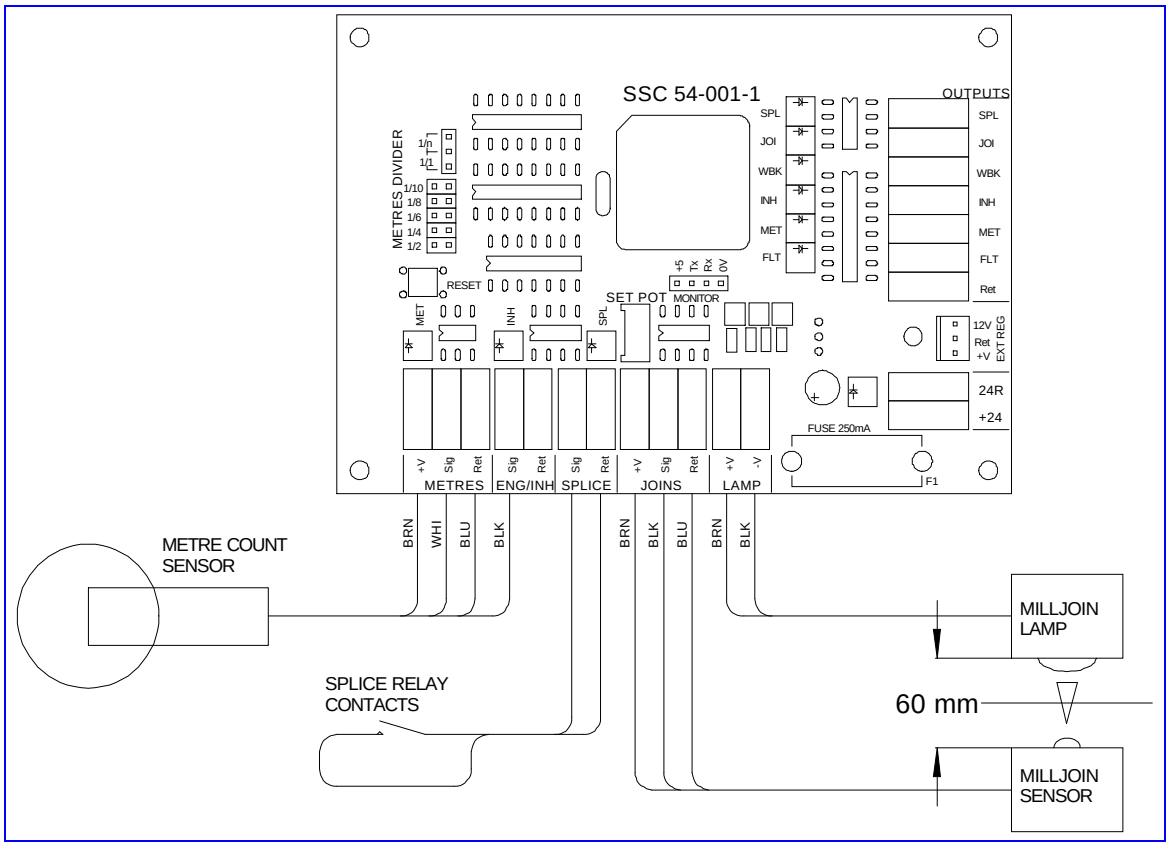
Installation Manual for the Reelstand Data Terminal Unit RDT 1

Installation:



Wiring:

If the unit is intended for mains power it will be pre-fitted with mains cable. The cable must be connected to a fused breaker. Live wire is brown and neutral wire blue.
Ensure that the earth wire (green/yellow) is connected to a good ground point.

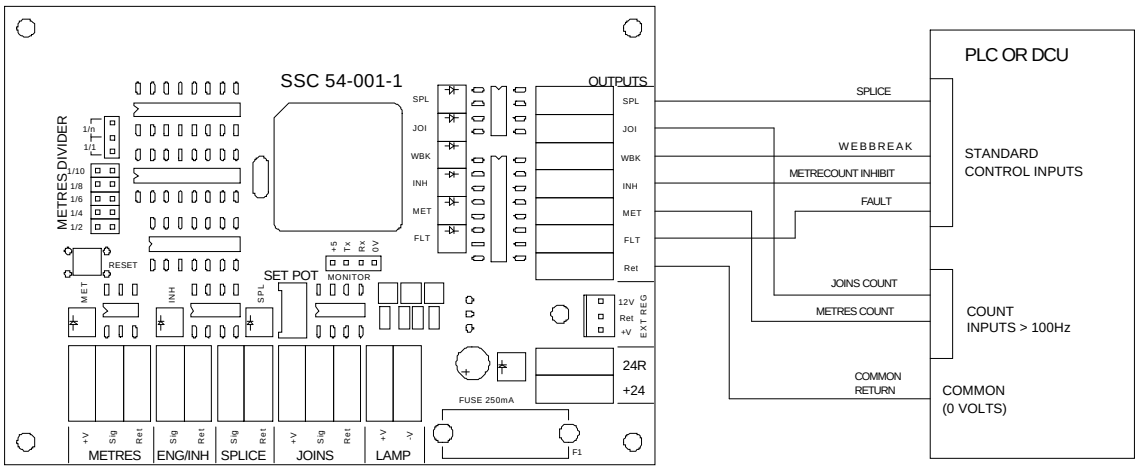


- Disconnect power. Check that the power is disconnected.
- Remove the screws fixing the lid of the MDU unit and lift away gently. Note that there are wires connecting from the box to the lid.
- With the sensors installed and the cables brought through the glands into the box, attach the relevant wires to the spring terminals as described above.
- If there were only two screws fixing the lid there will be a small packet containing four more screws in the box, remove these and keep them safe.
- Connect power to unit and check that the power ON green LED is lit.
- Set up the Milljoin sensor circuit as described below.
- Replace the lid of the box with all six screws.

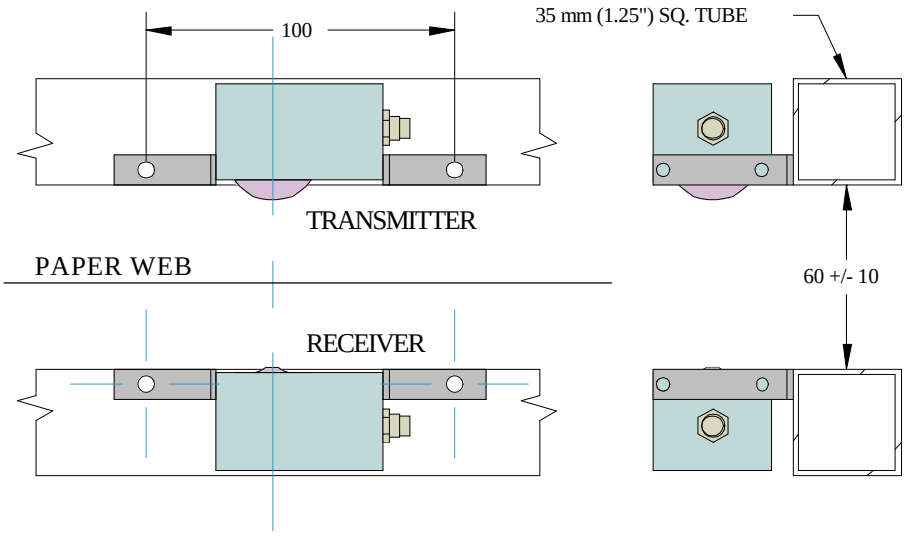
Output signal connection:

If the RDT is to be connected to another Data Collector Unit or Programmable Logic Controller then there are a number of outputs available:

- SPL: Splice Signal – signal time ON 6 seconds
- JOI: Milljoins count - signal time ON 6 seconds
- WBK: Web break - signal ON during no paper in milljoin sensor.
- INH: Inhibit – Metrecount sensor has been lifted off the paper.
- MET: Metrecount sensor signal – Output is limited to 100 Hz but input can be divided by hardware jumper setting to accommodate higher input speeds.
- FLT: Fault – indicates that the paper is outside the range, or there is too much dust built up on the lenses, or the unit has not been adjusted correctly after installation.



Mounting the Milljoin sensor:



To set up the sensor after installation:

- Remove paper from between lamp and receiver units.
- Rotate the Set Pot (10 turn) fully clockwise until the Web Break LED goes out and the Fault LED comes on.
- Rotate the Set Pot anti-clockwise until the Web Break LED lights and add another ½ turn.

The unit is now set for all paper densities.

Maintenance:

- Clean lenses once a week or more if necessary.

Technical Data:

- Power mains if fitted: 90-250 VAC 25VA
- All inputs: NPN 5mA at 24 VDC
- All outputs: NPN supply up to 30mA at 24VDC volt free
- Sensor supply (across V+ and Ret): 24VDC 100mA
- Input count: 5KHz with divide by 1, 2, 4, 8, 10 on-board jumper settings.
- Output count: 100 Hz
- Fuse: 250mA