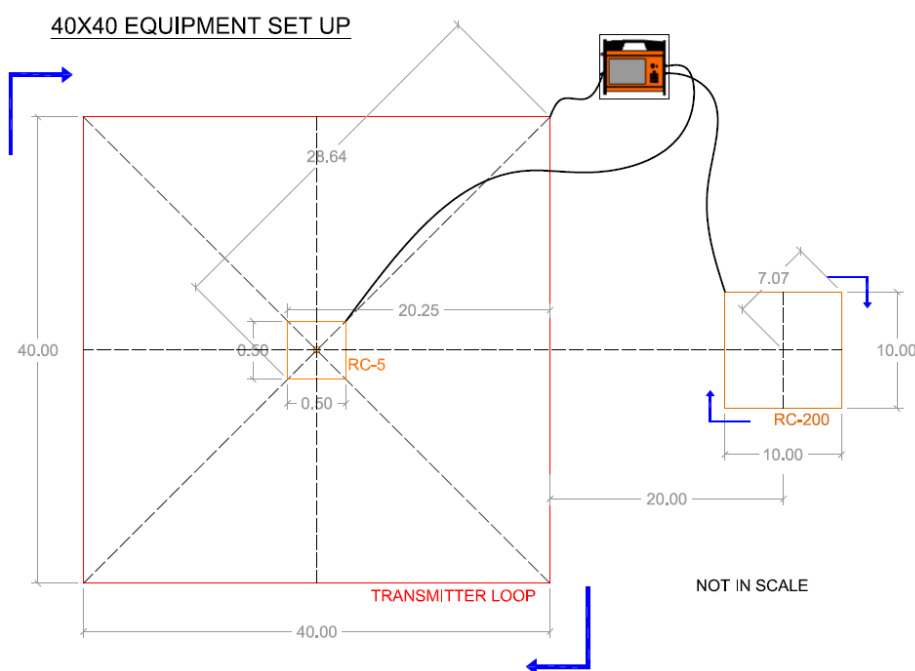


## Setting up WalkTEM instrument with 40 m x 40 m transmitter loop with center and offset receivers.

Setting up the instrument can be done by following the steps below:

1. Find a flat area with a recommended minimum distance of 100 - 200 meters to wires, cables and metal fences. The starting point is a corner of the transmitter loop where the instruments are placed.
2. The transmitter loop should be marked by tape for every 20 meters. Start at one corner and walk clockwise rolling out the loop and turn 90 degrees for every 40 meters.
3. Take the RC-5 receiver and go to one of the 20m markings and towards the middle of the transmitter loop. Either count your steps or have another person stand at the other 20m mark perpendicular to the direction as a guiding point. Place the RC-5 coil in the middle and roll back the cable. Make sure it crosses the transmitter loop by a 90-degree angle to minimize interference. The RC-5 does not have to be located with better accuracy than a couple of meters from the center.
4. Place the center of the receiver coil RC-200 at 20 m from the edge of the transmitter loop. Use a tape marked at 20m from the receiver coil. The offset between the center of RC-200 and the transmitter midpoint must be specified in the instrument setup. The location of the RC-200 has to be accurate within a meter.
5. When all loops are in place, the connection cables are unrolled and connected to the instrument. Connect the RC-5 to input A, and the RC-200 antenna to input B.
6. Connect the cables from both receiver coils to the instrument. The WalkTEM has to be 2 – 3 meter away from the corner of the loop. Decide beforehand which damping resistor to use. Either the 330  $\Omega$  damping resistor or the 200  $\Omega$  resistor. The 330  $\Omega$  is recommended as standard. Only use the 200  $\Omega$  resistor if the ground is very conductive. Always use the same damping resistor throughout the survey.
7. Connect the instrument to an external power source and start the instrument and run a test measurement, if all loops are connected in a clockwise fashion, a positive signal is registered and shown as red markings in the dB/dt-graph (blue markings indicate a negative signal).



## **Processing center and offset data in ViewTEM/SPIA**

1. Open the gdb file from the WalkTEM instrument in ViewTEM/SPIA.
2. Ch1 is the RC5 Low moment – central loop, and Ch4 is the Rc200 high moment – offset loop.
3. On Ch4, remove the data until 100 us. This data will often have sign change and not be used. Data up until 100 us is used from Ch1 -low moment.
4. Ch2 (RC5 high moment) and Ch3 (Rc200 low moment) should not be used for inversion and the two channels has to be disabled before inversion.