

Question: “How can I access the raw TD values to determine if my readings are correct?”

Answer: There is a rule called the validity rule. It states that the sum of the top and bottom readings should equal the sum of the side to side readings. In your case the top and bottom readings are taken at 12:00 and 6:00 respectively. The side readings are taken at 3:00 & 9:00. So 12:00 + 6:00 should equal 3:00 + 9:00. In the real world this sum is never exact. But a large disparity is an indication that something mechanical is wrong.

Here is how to use the system to get the raw detector values.

- To access the TD values set the heads in 9 o'clock position
- Enter dimensions. Use the real values if you are about to do an alignment. Or, simply enter a value of 10 for each dimension if you are simply checking for validity.
- Instead of pressing forward arrow to register the first measurement, press the + sign and the TD values will be set to zero.
- Now rotate to 12:00 and jot down both values.
- Rotate to 3:00 and jot down both values.
- Rotate to 6:00 and jot down both values.

You should have a table that looks something like this:

Position	TDS value	TDM value
9:00	0	0
12:00	20	-5
3:00	-15	7
6:00	-35	12

In my example the numbers add up perfectly:

S unit: $0 + -15 = -15$ and $20 + -35 = -15$

M unit: $0 + 7 = 7$ and $-5 + 12 = 7$

In the real world the number will almost never add up perfectly, but as the machines are aligned better and better the sum s will be closer.