



TRANSTRONIC AB

MANUAL

Inklinator Type CMD

	Page
1. General description	2
2. General data	3
3. Mounting	3
4. Start up the system	4
5. Setting the system	5
6. Operation	7
7. How to use Type CMD	7
8. Trouble shooting	8

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1 General description

Fig. 1

074103
Display unit



This Display unit is designed to show values from one Transducer. You use the type of Transducer that you need for your application. Connect it to the Display. Zero set. -Ready to use.

Length Transducer (Node 1)



022735



022466
With Proximity
Switches
(2 x 022310)



022457 (1")
022456 (1 1/4")
022455 (1 1/2")
022454 (2")

Angle Transducer



022552
(Node 8)
 $\pm 60^\circ$ (node 2)
Or
062345
360° (Node 11)



1 Axis Angle
Transducer
012425
(Node 8)
 $\pm 60^\circ$ Rotable 340°



Boom Joint
Transducer
022725
(Node 3)
 $\pm 180^\circ$

The system is easy to mount and operate on any type of drill rig.
The system contents of one Display unit and one Transducer, signal cable and a power supply cable.

2 General data

Power supply	10-30 VDC
Power consumption	0,2 A
Working temperature	-20 - +50° C
Environmental protection	IP67

3 Mounting

- Choose required transducer for your application, for the angle that you want to measure and mount it well protected.
For more mounting instruction contact Transtronic AB.



- Mount the Display unit so it is easy to see. - Connect the signal cable between the Display unit and the Transducer. Use air hose to protect the signal cable.

4 Start up the system

Connect the brown lead in the power supply cable to the carrier's main + VDC electrical system after the main circuit-breaker. Use a 1A fuse to protect the cable and the instrument from short circuits. Alternative, connect the power supply cable to the carriers own electrical system, where a suitable fused + DC-power is available. Connect the white lead in the power supply cable to carrier's - VDC (GND).

Before switching the power on.

1. Place the by-packed magnet towards the SE- mark on the upper part of the front.
2. Switch power on.
3. When the upper display shows SE X you have entered the Set-up mode. The system automatically enters the correct setup for the Transducer connected to the Display unit.

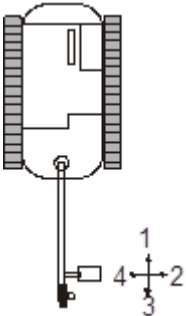


X= depending on Transducer

Setup	Transducer
SE 1	2 Axis Angle Transducer
SE 2	1 Axis Angle Transducer $\pm 60^\circ$, 1 Axis Angle Transducer $\pm 60^\circ$ Rotable 340°, 1 Axis Angle Transducer 360°
SE 3	Boom Joint Transducer,
SE40	Length Transducer
SE41	Length Transducer
SE42	Length Transducer

5 Setting the system

The Set-up mode has the following choices:

<p>Upper display:</p> <p>- SE 1</p>	<p>Setups (Transducer)</p> <p>2 Axis Angle Transducer</p>	<p>Lower display: Values</p> <p>1= Backwards 2= Left 3= Forward 4= Right</p>	
<p>-SE 2</p>	<p>1 Axis Angle Transducer $\pm 60^\circ$, 1 Axis Angle Transducer $\pm 60^\circ$ Rotable 340°, 1 Axis Angle Transducer 360°</p>	<p>1=Normal measurement direction 2=Reversed measurement direction</p>	
<p>-SE 3</p>	<p>Boom joint Transducer \pm</p>	<p>1=Normal measurement direction 2=Reversed measurement direction</p>	
<p>-SE40</p>	<p>Length Transducer</p>	<p>0=Normal measurement direction 1=Reversed measurement direction</p>	
<p>-SE41</p>	<p>Length Transducer</p>	<p>0= Metric measurement units 1= US measurement units</p>	
<p>-SE42</p>	<p>Length Transducer</p>	<p>0 = Custom (See below) 1 = 022735 cylinder feeder 1:2 2 = 022735 cylinder feeder 1:1 3 = 1" 4 = 1 1/4" 5 = 1 1/2" 6 = 1 3/4" 7 = 2" 8 = 1"Wire</p>	

Custom Setup for Length Transducer SE42:

If you in SE42 choose Custom (0), you will see on the upper display, “chp1” and on the lower display the first 4 digits of the 8-digit value.

Chp1 means the first of 8 digits. Now you can move from Chp1 to Chp8 with the SE point.

With the reset, you now can change digit from 0-9.

After Chp8 the value will be saved.

You can start from the beginning if you activate the setup with a magnet on the SE-mark again.

- Program the right mounting of the Transducer by holding and removing the magnet on the left side of the display.

- After programming, disconnect the power supply cable and wait for 5 seconds before connecting it again. The instrument has now started up the run-mode.

Note: Only angle and boom joint Transducers.

1. Turn the boom strait forward. Set the feeder vertical.
2. Zero-set the instrument by place the magnet towards the right part on the front until both displays gets 0.0.
3. Release the magnet.

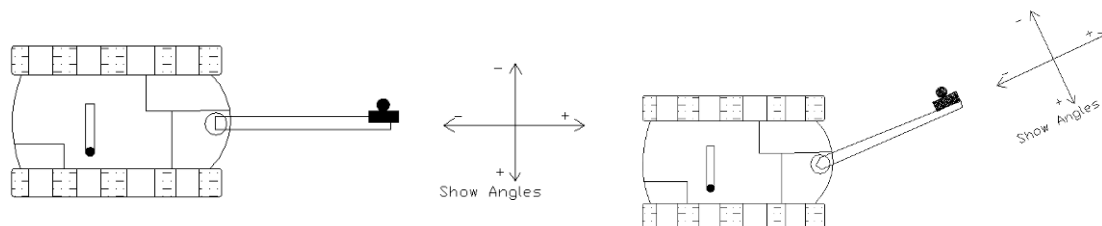


-The instrument is now ready for use.

6 Operation

The system is very easy operated. There are no switches or buttons to be operated during normal set-up and working.

On the gravity Transducers all angles are referred to gravity and are always calculated against the boom direction.



On the mechanic Transducers all angles is shown referred to the zero setting.

The length system has 2 inputs.

Drilling signal. When active (+24V In) the system starts counting length and counting length and showing rate of penetration until the signal disappears.

Reset signal. Zero set the length measurement. Can only be activated when drilling signal is off.

7 How to use: Type CMD

- 1: Set the crawler in position for the first hole.
- 2: Manually position the feeder to the drilling angles for the hole.
- 3: Drill the hole to desired depth.
- 4: Manoeuvre the drill rig to next hole.

8 Trouble-shooting

<p>Fault:</p> <p>The Display unit shows nothing. And the lights in the displays are OFF.</p> <p>The display show Error 2</p> <p>The display show Node Off</p> <p>Signal cables connection</p>	<p>Action:</p> <p>Check power supply between 0 VDC and 10-30 VDC in the connector at the power supply cable. Should be between 10 to 30VDC.</p> <div data-bbox="858 562 1230 685" data-label="Diagram"> </div> <p>Cable connector front.</p> <p>If no voltage, check the fuse and the electrical connection on the carrier.</p> <p>If the fuse is OK and the electrical connection on the carrier is OK. Change power supply cable.</p> <p>If power supply and power supply cable is OK, but instrument still doesn't work, change the instrument.</p> <p>The display can't talk to the Transducer. Replace cable first if still same problem change Transducer.</p> <p>The display can't talk to the Transducer. Replace cable first if still same problem change Transducer.</p> <div data-bbox="778 1447 1222 1666" data-label="Diagram"> </div>
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