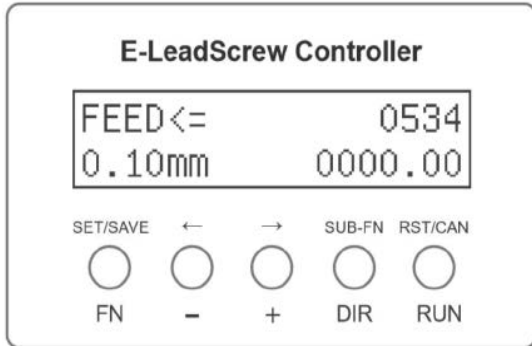


Button Function Description



Main function (button subscript) :

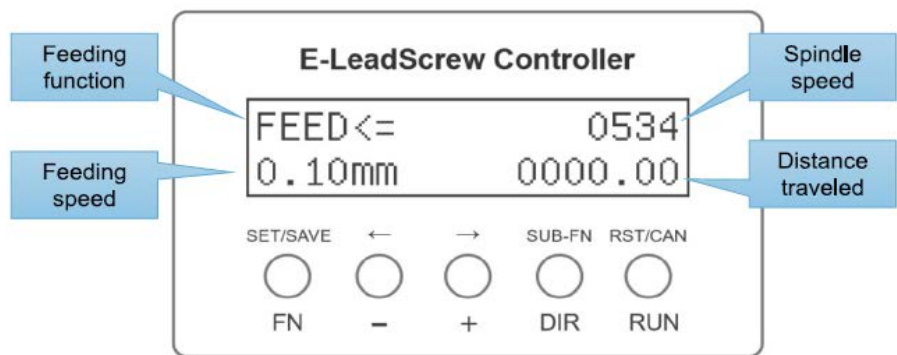
- ◆ 【FN】 : Short press to switch function ;
- ◆ 【-】 :Reduce
- ◆ 【+】 :Increase
- ◆ 【DIR】 :Direction key
- ◆ 【RUN】 :Rev. Stop button

Sub-function (button superscript):

- ◆ 【SET/SAVE】 :Hold down to set or save
- ◆ 【←】 : In the manual move function, move the turning tool to the left
- ◆ 【→】 : In the manual move function, move the turning tool to the right
- ◆ 【SUB-FN】 :In some functions, used to enter a sub-function
- ◆ 【RST/CAN】 :In some situations, used to reset or cancel
- ◆ 【<=】 : Arrow indicating the feed direction
- ◆ 【<=】 : The feed direction of the tool is close to the chuck
- ◆ 【=>】 :The feed direction of the tool is far away from the chuck

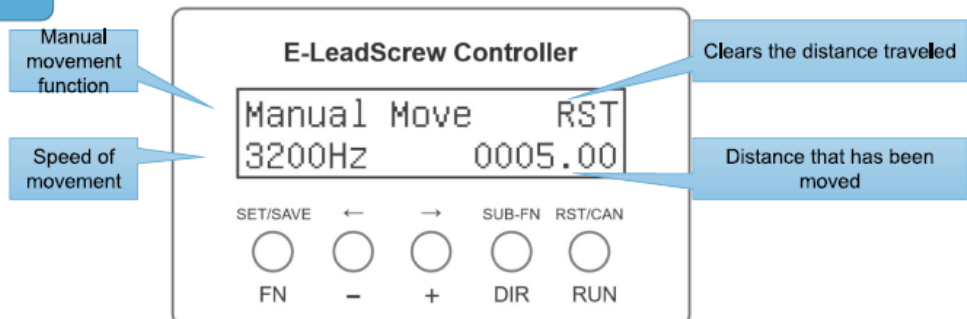
Lathe is chattering	Feed too high Slack in main bearing	
Center runs hot	Workpiece has expanded	Loosen tailstock center
Tool has a short edge life	Cutting speed too high Crossfeed too high Insufficient cooling	Reduce cutting speed Lower crossfeed (finishing allowance should not exceed 0.5mm) More coolant
Flank wear too high	Clearance angle too small Tool tip not adjusted to center high	Increase clearance angle Correct height adjustment of the tool
Cutting edge breaks off	Wedge angle too small (heat build-up) Grinding crack due to wrong cooling Excessive slack in the spindle bearing Arrangement(vibrations)	Increase wedge angle Cool uniformly Adjust the slack in the spindle bearing arrangement
Cut thread is wrong	Tool is clamped incorrectly or has been started grinding the wrong way Wrong pitch Wrong diameter	Adjust too to the center Grind angle correctly Adjust the right pitch Turn the workpiece to the correct diameter
Spindle does not activate	Emergency stop switch activated	Unlock emergency stop switch

Feeding function



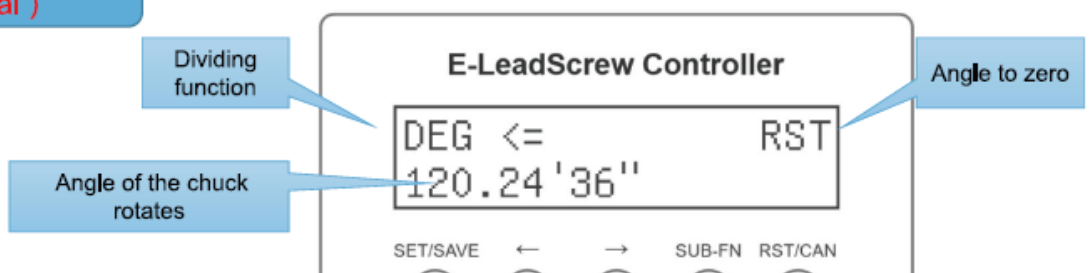
- ◆ **[-] [+]** : Adjust the cutting speed ;
- ◆ **[DIR]** : Click to switch the direction of turning tool ;
- ◆ **[RUN]** : Short press to start and stop moving knife
- ◆ Long press the [SUB-FN] key to switch the function to the cutter mode or the winding mode
- ◆ Long press the key [RST/CAN] to clear the moving distance

Manual movement function

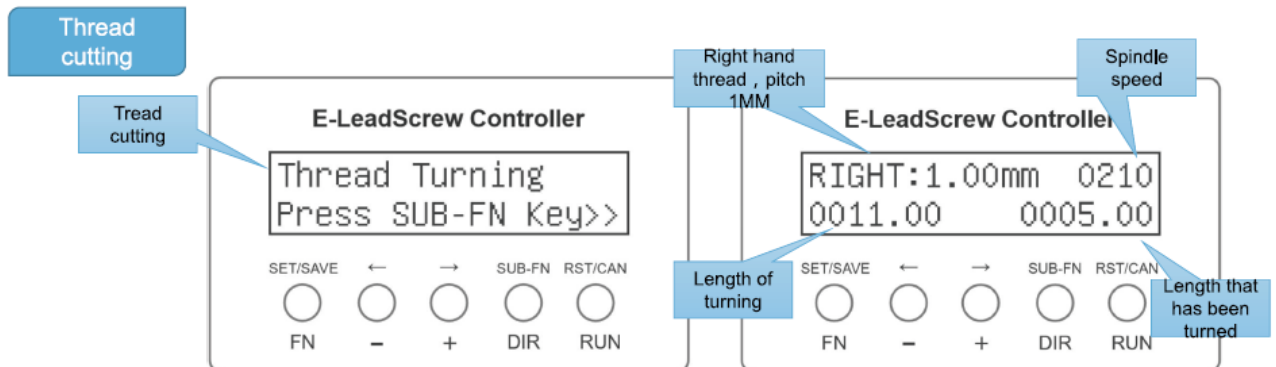


- ▲ **[-] [+]** : Move the turning tool to the left and right :

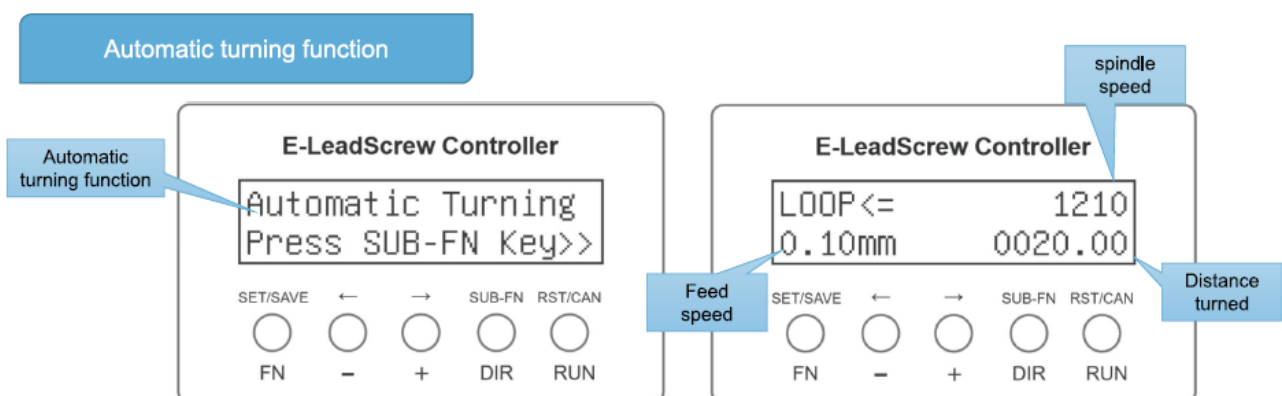
Dividing function (optional)



- ◆ Short Press the [DIR] key to switch the Angle direction
- ◆ Short Press the key [RST/CAN] to clear the Angle to zero



- ◆ Short Press the [SUB-FN] key to enter the parameter setting of the screw thread function :
- ◆ [Thread Standard] :Thread system, metric system, British system, arbitrary[Thread Size]: Thread size
- ◆ [Thread Length]: Length of thread
- ◆ [Thread Direction]:Thread direction, left screw, right screw
- ◆ [Start up Mode] : Start turning mode: manual start, automatic start, delay automatic start
- ◆ [Backing Mode]: The way of turning tool back to the starting point: manual button back, automatic back, delay automatic back
- ◆ [Delay Times (Sec)] : Delay time. This parameter is valid only when you select the delay mode ;
- ◆ After setting, long press the [FN] key to save the setting and start turning threads ;
- ◆ Start spindle rotation, short press [RUN] key, start turning ;
- ◆ When turning is finished, prompt [Back Cutter], please exit the tool, and then press [RUN] key, the tool will automatically return to the starting point ;
- ◆ When the Cutter returns to the starting point, prompt [Feed Cutter], enter the cutter, then press [RUN] to start the second cutter, and so on.



- ◆ Short Press the [SUB-FN] key to enter the parameter setting of the round-trip turning function
- ◆ [When Finished] : When the turning tool reaches the end point, whether to stop or return
- ◆ [Thread Length]:Length of thread
- ◆ After setting, long press the [FN] key to save the setting and start round-trip turning ;
- ◆ Adjust the tool moving speed consistent with the tool moving function
- ◆ Short Press the [FN] key to exit the round-trip turning function and return to the automatic tool walking function

System
Setting

Headstock and Driving Assembly

- ◆ Long press the [SET/SAVE] key to enter the system setting ;
 - ◆ [Encoder Pulses]: The pulse number of the encoder for each turn of the spindle ;
 - ◆ 【Step Motor Pulses】: The number of subdivision pulses of the step driver ;
 - ◆ 【Lead Screw】 : Screw pitch, the distance that the turning tool moves in each turn of the stepper motor
 - ◆ 【Limited Switch 01】 : Action after the trigger of limit switch 01: Turning tool stop or return
 - ◆ 【Limited Switch 02】 : Action after the trigger of limit switch 02: turning tool stop or return
 - ◆ 【Z-Moving Frequency】 : When moving function, how fast the tool moves;
 - ◆ 【Key Sound】 : Key sound switch
 - ◆ 【Feed ACCEL】 :Starting acceleration of turning tool with tool moving function ;
 - ◆ 【Limit FeedingSpeed】 : Safe range of tool going, after enabled, the tool going value will be limited between 0.01~0.4mm, to prevent users from setting the tool going speed too large by mistake;
 - ◆ 【Start Motor by Def】 : After the controller is started, whether the stepper motor starts by default;
 - ◆ 【FN:FEED】 : Enable/disable the automatic tool walking function;
 - ◆ 【FN:MOVE】 :Enable/disable the mobile function.
 - ◆ 【FN: Manual Moving】 : Enable/disable the manual movement function.
 - ◆ 【FN:Index Plate】 :Enable/disable the indexing function;
 - ◆ 【FN:Gear Shaping】 :Enable/disable the gear shaping function;
 - ◆ 【FN:Thread Turning】 : Enable/disable the screw thread function;
 - ◆ 【FN :Auto Turning】 :Enable/disable round trip turning function;
- ◆ SHORT Press the [RST/CAN] key to cancel the setting and exit the setting interface
- ◆ LONG Press the [SET/SAVE] key to save the setting and exit the setting interface