

SmartLift (22883) DIGITAL





NEW and IMPROVED with Auto-Lock™

Note: Push Crank Handle Down
While Cranking To Disengage Lock

Owner's ManualPlease read before using this equipment.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

WARNING: SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING AND OTHER CONSTRUCTION OR WOODWORKING ACTIVITIES contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints
- · crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

READ AND FOLLOW ALL INSTRUCTIONS

There are certain applications for which this tool was designed. Jointech strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Jointech and we have advised you.

Jointech, Inc. Technical Support

Suggested Router Bit Speeds		
Bit Diameter	Max. Speed	
1" (25mm)	24,000 RPM	
1-1/4" – 2" (30-50mm)	18,000 RPM	
2-1/4" – 2-1/2" (55mm-65mm)	16,000 RPM	
3" – 3-1/2" (75mm-90mm)	12,000 RPM	

WARNING

Read and understand the entire contents of this manual before attempting set-up or operation of this

- This tool is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper safe use of routers, do not use this tool until proper training and knowledge has been obtained.
- Keep guards in place. Safety guards, including insert rings, must be kept in place and in working order. Use the proper size insert for the size cutter being used.
- Remove adjusting keys and wrenches.
 Before turning on the router, check to see that any adjusting wrenches
- Reduce the risk of unintentional starting.
 Make sure switch is in the OFF position before plugging in the router.
- Do not force workpiece. Always us a cutter at the rate for which it was designed.
- Use the right cutter. Do not force a cutter or attachment to do a job for which it was not designed.
- Maintain tools with care. Keep tools and cutters sharp and clean for best and safest performance. Follow instructions for cleaning, maintenance and changing cutters.
- Always disconnect the router from the power source before changing cutters or servicing.
- Check for damaged parts. Check for alignment of moving parts, breakage of parts, mounting and any other condition that may affect the tools operation. A guard or any part that is damaged should be repaired or replaced.

- Turn power off. Never leave a tool unattended. Do not leave a tool until it comes to a complete stop.
- Keep work area clean. Cluttered areas and benches invite accidents.
- Do not use in a dangerous environment. Do not use power tools in damp or wet locations or expose them to rain. Keep work area well lighted.
- Keep children and visitors away. All visitors should be kept a safe distance from the work area.
- Make the workshop child proof. Use padlocks and master switches and remove starter keys.
- Wear proper apparel. Loose clothing, gloves, neckties, rings, bracelets and other jewelry may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Do not wear any type of glove.
- Always use safety glasses. Every day glasses only have impact-resistant lenses; they are not safety glasses.
- Do not overreach. Keep proper footing and balance at all times.
- Do not place hands near the cutter while the machine is operating.
- Do not perform any set-up work while machine is operating.
- Read and understand all warnings posted on your tools and in the operating manuals.
- This manual is intended to familiarize you with the technical aspects of this tool. It is not, nor was it intended to be, a training manual.
- Failure to comply with all these warnings may result in serious injury.

Thank you for purchasing your new SmartLift The shipping carton contains the following items:

- SmartLift Digital or SmartLift PRO
- Adjustment Handle 1
- 5/32" Hex Wrench (for leveling your SmartLift) 1
- 3/16" Hex Wrench (for installing the router motor into your SmartLift) Top plate inserts with ½", 2½" and 1³/₈" openings
- 3
- Insert Wrench 1
- Starter Pin for free hand routing (1/4-20 x 1" mach. screw & 13/16" Nylon Spacer) 1
- Warranty Registration Form

No additional tools should be required to install your router into the SmartLift



SETTING UP YOUR NEW SMARTLIFT

Please note that if you have purchased SmartLift Digital, the two AA Batteries used to power the electronics of its digital components are included and pre-installed for you at the factory. Under normal usage average battery life is expected to be 8-12 months.

SMARTLIFT PRO DOES NOT USE BATTERIES.

Replacing the Batteries in the SmartLift Digital

Once the factory installed AA Batteries have ceased to function, it will be necessary to replace them. To replace the batteries, use a small Phillips Head Screw Driver to remove the screw in the battery cover. Remove the battery compartment cover and install two new AA Batteries into the compartment as indicated. Replace the battery cover and re-install the small Phillips Head screw.

STEP 1: LEVELING THE TOP PLATE

STEP 1: Level the Plate

Place your SmartLift into the opening of your router table. Note that the SmartLift's Top Plate is lower than the rest of your table. It will be necessary to adjust the individual corner levelers of the SmartLift to raise each corner independently until the SmartLift is flush with the surface of your router table. The SmartLift's leveling system is designed to make it simple for you to adjust the levelers from under the table without the tedious and frustrating need to remove and reinstall the lift in the table each time a small turn of the adjustment screw is needed.

With your SmartLift in your table, take note as to where the top plate is below the surface of the tabletop. Using the included ⁵/₃₂" hex wrench, adjust the socket cap screws of the desired leveler in a clockwise direction. (Turning the screws Clockwise will raise the SmartLift in the table, counterclockwise will lower it.)

Do not adjust the screws too much at one time. It is better to adjust them slowly (approximately ¼ turn or less) and test after each adjustment. If you adjust the plate too high, simply turn the screws counterclockwise to lower it.

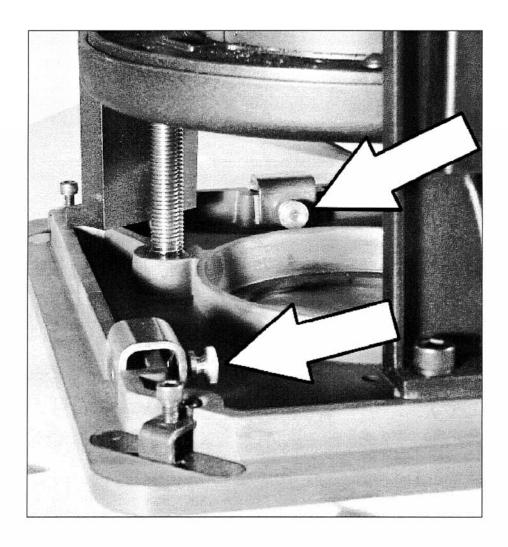
Check that the plate is flush with the surface of the table and make any final adjustments that may be necessary.

TIP: If you have a downdraft or vacuum cabinet for dust collection installed on the underside of your router table, remove it prior to attempting to level your SmartLift. Doing so will greatly ease the leveling process. NOTE: If you choose to not remove the downdraft or vacuum cabinet prior to the leveling process, or if it is not possible such as in the case of a dust collection enclosure built into a router table Cabinet, it may be easier to adjust the levelers by lifting the SmartLift in and out of your router table top making adjustments as you go.

STEP 2: ADJUSTING THE SNUGGERS

SmartLift has two *snuggers* to be used if the opening in your router table is slightly larger than the size of SmartLift's Top Plate. If you find that your SmartLift fits snuggly into your tabletop already, skip ahead to STEP 3. If however there is any side-to-side and/or front-to-back movement of SmartLift in your router table opening, you will need to adjust the snuggers to remove this excess movement.

Leave your SmartLift mounted in your router table. Adjust the small thumbscrews in each of the snuggers until SmartLift fits properly in the opening of your router table. Please be sure to not adjust it to the point that removal of your SmartLift from the table is difficult. This might cause damage to the SmartLift and/or your router table. Only apply enough adjustment to prevent the SmartLift from moving around.



STEP 3: INSTALLING YOUR ROUTER

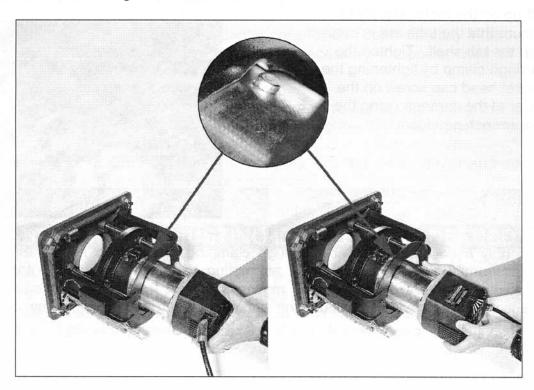
Installing your Porter-Cable 75182 router motor

NOTE: Always push crank handle down during cranking to disengage the auto lock feature.

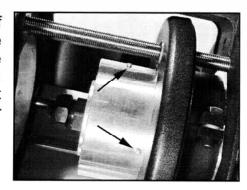
Your SmartLift's carriage assembly is designed around the 4.2" diameter motor of the Porter-Cable model 7518 router. Porter-Cable's model number for this motor-only assembly is 75182. If you happen to own the Porter-Cable 7518 with the Router Base Assembly installed, loosen the clamping nut on your router's fixed base and remove the motor from the handle assembly before proceeding. If you have the Porter-Cable 75182 motor only, you are ready to continue.

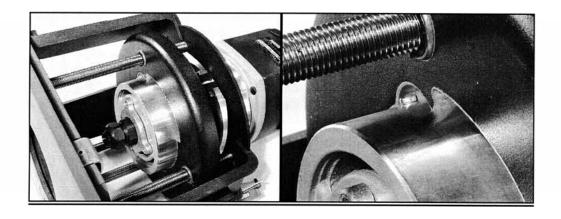
Using the adjustment handle supplied with your SmartLift, turn the handle clockwise to lower the carriage or counterclockwise to raise the carriage until the carriage is approximately halfway between the top plate and the bottom of the spider-like housing of the SmartLift. Place your SmartLift on its side on top of a bench, positioning it as shown below.

Locate the small tabs on the side of the 75182 router motor body. These small tabs alternate high and low as you go around the motor. With the lower tab aligned with the slot in the carriage that will allow it to go the deepest, slip the motor into the carriage as shown.

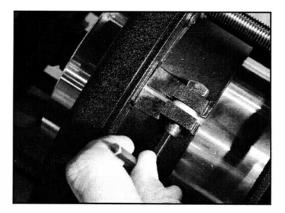


When the tab is aligned with the tab shelf portion of the slot it is to lock into, twist the motor in a slight clockwise direction to engage the tab onto its respective tab shelf. **CAUTION:** The motor will slide down if you let go of it. Keep a firm grip on the router motor throughout this process.





Lift up on the motor slightly to ensure that the tabs are in contact with the tab shelf. Tighten the carriage clamp by tightening the socket head cap screw on the collar of the carriage using the ³/₁₆" hex wrench provided.



It is only necessary to provide enough clamping pressure to keep the router motor from turning. Check this by attempting to twist the router motor in a clockwise direction. If there is still movement, twist the motor in a clockwise direction to its previous position and tighten the carriage clamp screw a little more.

Installing your router using the SL-A1 or SL-A2 Adapter Collar

The SL-A1 and SL-A2 adapter collars are used when you have a router motor assembly measuring 3¼" or 3½" in diameter.

The SL-A1 adapter collar is used with the following 3½" diameter router motors:

► Bosch 1617

▶ Bosch 1618

▶ Dewalt 610

► Dewalt 616

▶ Dewalt 618

► Porter-Cable 690 series

► Porter-Cable 890 series

The SL-A2 adapter collar is used with the following 3½" diameter router motors:

➤ Makita 1100

► Makita 1101

Using the adjustment handle supplied with your SmartLift, turn the handle clockwise to lower the carriage or counterclockwise to raise the carriage until the carriage is approximately halfway between the top plate and the bottom of the spider-like housing of your SmartLift. Turn your SmartLift upside down on top of the bench, positioning it in the opening in your router tabletop.

NOTE: Always push crank handle down during cranking to disengage the auto lock feature.

Insert the appropriate adapter collar into the carriage clamp of SmartLift with the slot roughly aligned with the carriage clamp screw.

Insert your router motor into the adapter collar and to approximately 1" above the top surface of carriage. Rotate router as necessary for power cord to clear opening on bottom.

Tighten the carriage clamp onto the collar and router by tightening the socket head cap screw on the collar of the carriage using the $^{3}/_{16}$ " hex wrench provided.

Apply enough clamping pressure to securely lock the router motor and adaptor collar into place. Test this fit before proceeding.

STEP 4: RE-ADJUSTING LEVELERS AS NEEDED

With your router motor now installed into your SmartLift, turn it right side up and place it into the opening of your router table. Please note the additional weight of the router motor might cause your SmartLift to sit lower into the opening of your tabletop. If this is the case, re-adjust the SmartLift's levelers accordingly.

Congratulations, your SmartLift is now set up and ready to be used.

INSTALLING THE ROUTER BIT

NOTE: NEVER PLACE YOUR HANDS ON OR NEAR THE ROUTER BIT WHILE THE ROUTER IS PLUGGED IN.

CAUTION!!! UNPLUG YOUR ROUTER BEFORE PROCEEDING!

NOTE: Always push crank handle down during cranking to disengage the auto lock feature.

CAUTION!!! DO NOT CONTINUE TO CRANK AFTER REACHING EITHER END OF ADJUSTMENT RANGE!

DOING SO MAY DAMAGE YOUR SMARTLIFT AND INVALIDATE YOUR WARANTY.

Place the adjustment handle into the hexagon access hole in the center of the calibrated ring in the top plate. To raise the router, turn the adjustment handle counterclockwise. (To lower the cutter, turn the adjustment handle clockwise.) Raise the router all the way up to the top until your router's collet is fully exposed. CAUTION: DO NOT USE A POWER DRIVER TO RAISE OR LOWER THE ROUTER. DOING SO MAY DAMAGE YOUR SMARTLIFT AND INVALIDATE YOUR WARANTY. Install your router bit according to instructions included with your router.

With your router bit properly installed, turn the adjustment handle in a clockwise direction until your router bit is completely below the surface of the top plate.

One of the key benefits of SmartLift Digital is using the digital readout to make every bit repeatable. To do this you must first reference the router bit to the top plate of the SmartLift. Here is a suggested method for doing that. First, use a piece of scrap wood large enough to cover the entire Insert Ring area. Place the board in your right hand and move it side-to-side slightly as you raise the router bit using the height adjustment handle. When you feel the router bit's cutter begin to "scratch" the bottom of the board, slowly lower the router bit (one thousandth of an inch at a time) until you no longer can feel the bit making contact with the board. At this time, stop turning and depress the "Zero" button below the digital display. This router bit is now flush with the SmartLift's top plate.

Next, proceed with making your normal rough height adjustments, remove the height adjustment handle, plug in your router and make any and all test cuts necessary to set that router bit to the proper height. Once you are satisfied that the height setting of that router bit is correct, make note of the digital readout. Whatever reading you see in the display is the appropriate one for that particular bit. (Note: No two router bits are 100% identical. Your readings will be different for every bit you ever use.) Now, record this information somewhere easily

retrievable. (One tip might be to use an indelible fine tip marker to write the height setting on the bottom of the router bit's shank). Use whatever you consider to be convenient.

Now, whenever you use that router bit the next time, simply "flush it up" to the SmartLift's top plate, press "Zero" on the display, and raise the bit to that height setting and the bit should be within a thousandth of an inch of its previous setting, thus eliminating the need for any additional test cuts. Experiment with this process and you will find SmartLift Digital to be an incredibly precise tool. One recommendation is to always "flush up" a bit using a cutting portion of the bit, not a bearing or any other part as these might give inconsistent results.

INSTALLING INSERT RINGS

CAUTION!!! UNPLUG YOUR ROUTER BEFORE PROCEEDING!

The three (3) yellow Insert Rings that come with your SmartLift as well as the five (5) optional inserts are designed to provide you with the appropriate sized opening through which the router bit protrudes. To increase the safety of your router operation, choose an insert that closely matches but exceeds the overall diameter of your router bit. (Example: When using a 1/4" diameter router bit, use the ½" diameter Insert Ring.)

Your SmartLift comes with three (3) insert rings: one with a $\frac{1}{2}$ " opening, one with a $\frac{2}{2}$ " opening and one with a $\frac{1}{8}$ " opening compatible with a Porter-Cable guide bushing set. **Note** that with no Insert Ring installed, the opening in SmartLift's top plate is 3-5/8", (designed for use with large bits such as panel raisers). There is an optional accessory set of five (5) Inserts Rings available (Jointech Part Number SL-5RS) with openings of $\frac{3}{4}$ ", 1", $\frac{1}{2}$ ", 2" as well as one blank Insert Ring (with a .050" center starter hole that can be milled to any size you choose).

Place the appropriate Insert Ring into the opening in SmartLift's top plate. Next insert the two (2) metal ends of the Insert Ring Wrench into the two (2) holes in the Insert Ring. Turn the insert <u>counterclockwise</u> to tighten, <u>clockwise</u> to loosen. **CAUTION: DO NOT OVERTIGHTEN.** (NOTE: If the insert becomes too tight to loosen with hand pressure, GENTLY tap the insert wrench clockwise with a block of wood or small mallet.)

Next, if your router is a variable speed motor, adjust the motor's speed to match the installed router bit diameter. Refer to the chart on page 2 of this manual or consult your router motor owner's manual for more on this subject.

USING YOUR SMARTLIFT DIGITAL

WARNING

Always turn the router off and disconnect it from the power source before making any height adjustments.

Note: Refer to back page of this manual for more information on the keypad functions.

The operation of the SmartLift Digital utilizes the digital readout to determine your router bit's precise height setting. The readout can be read in either thousandths of an inch or hundredths of a millimeter. The following are the recommended steps to get the most out of your new SmartLift Digital.

The operation of SmartLift Digital is identical to SmartLift Pro with the exception of the digital display. Instead of using the calibrated ring surrounding the adjustment handle access hole in the top plate of SmartLift, you will use the digital display as your reference to set the cutter height.

It is recommended that once you determine the exact working height of your cutter that you document the height someplace convenient as a reference when you need to use the same bit for the same thickness material. One of Jointech's instructors writes the height on the bottom of the bit's shank as a quick reference.

With the cutter installed, place the adjustment handle into the access hole in the center of the calibrated ring in the main plate and push **DOWN** to disengage lock.

To raise the cutter, turn the adjustment handle counterclockwise. To lower the cutter, turn the adjustment handle clockwise.

Bring the router bit flush to the top of the plate and "Zero" it out.

Rotate the adjustment handle counterclockwise to raise the cutter to its working height. Keep in mind that one complete revolution of the adjustment handle equals $^{1}/_{16}$ ". Make your desired height adjustment.

Remove the adjustment handle when your adjustment is complete.

NOTE: The display reading can be "locked" to prevent an inadvertent resetting of zero. Depress the ON/OFF to turn the unit ON. Hold the ON/OFF switch down and momentarily depress the mode switch (IN/MM). The word "LOCK" will appear in the upper left corner of the display. In this mode the ZERO cannot be reset. To unlock, repeat the procedure above. The word "LOCK" will disappear.

CARING FOR YOUR SMARTLIFT

Your new SmartLift Digital is a precision tool. While all efforts have been made to "harden" this product for normal usage, special care should always be taken.

Never strike the digital readout display. It is not "bulletproof". The exposed membrane switch is made of Lexan and is resistant to scratching and wear. Although there is a gap of 1/8" between the top surface and the LCD, it can and will fracture if some care is not exercised. This tool should be treated as you would a set of digital calipers.

Never expose this product to any solvents or chemicals containing petroleum distillates. Cleaning can be done using a moistened cloth, compressed air or a soft bristle brush.

Periodically apply a finishing paste wax, such as Minwax, to the top plate to protect and maintain a slick and lubricous surface.

Never attempt to disassemble this or any other product from Jointech. Your SmartLift was assembled at the factory using very precise methods, calibration fixtures and very tight tolerances.

If you experience any problems with this, or any other of Jointech's products, contact our Technical Support Department at 210-377-1288 immediately for assistance.

Caution

Always provide adequate ventilation for your router or overheating may occur causing damage to your router and/or LCD Display. Never operate your router in a closed compartment or down-draft cabinet without a dust collector attached and operating. There must be sufficient air flow around router to prevent overheating

USING YOUR SMARTLIFT PRO

WARNING

Always turn the router off and disconnect it from the power source before making any height adjustments.

The operation of SmartLift Pro is identical to the SmartLift Digital with the exception of the digital display. Instead of using the display to determine the height of your router bit or cutter, you will use the calibrated ring surrounding the adjustment handle access hole in the top plate of the SmartLift.

With the cutter installed, place the adjustment handle into the access hole in the center of the calibrated ring in the main plate and push DOWN to disengage lock.

To raise the cutter, turn the adjustment handle counterclockwise. To lower the cutter, turn the adjustment handle clockwise.

Bring the router bit flush to the top of the plate. Once the cutter is flush with the top of the plate or insert, rotate the calibrated ring to align the 'zero' reference mark to the etched line on the top plate. This will serve as a reference to set the final height of the cutter.

NOTE: Always push crank handle down during cranking to disengage the auto lock feature.

Rotate the adjustment handle counterclockwise to raise the cutter to its working height. Keep in mind that one complete revolution of the adjustment handle equals ¹/₁₆". Each line on the Index Dial equals .002". Make your desired height adjustment.

Remove the adjustment handle when your adjustment is complete.

Fraction	Decimal	Number of Revolutions
1/64"	0.016	1/4 revolution
1/32"	0.031	1/2 revolution
1/16"	0.062	1 revolution
1/8"	0.125	2 revolutions
1/4"	0.250	4 revolutions
1/2"	0.500	8 revolutions

CRANKING DIRECTION

Raise router bit: Counterclockwise

Lower router bit: Clockwise

Specifications

Stock NumberSL-D' SL-P1	1 (SmartLift Digital with Digital Display) 1 (SmartLift Pro without Digital Display)
Range of Travel	4.12" (104.65 mm)
Center Hole Diameter	3.625" (15.88 mm)
Electronics	Auto-Off Auto-On or via tactile pushbutton Power Supply: 2 AA Alkaline Batteries Battery Life: 8 – 12 months Operating temp. range: 32 deg. – 105 deg
Router Compatibility (without optional adapter collar)	Porter-Cable 7518 (PC75182 motor) Porter-Cable 7519 (PC75192 motor)
Router Compatibility (with optional SL-A1 adapter collar)	Porter-Cable 690 (PC6902 motor) Porter-Cable 691 (PC6912 motor) Porter-Cable 693 (PC6902 motor) Porter Cable 694VPK (PC6902 motor) Porter-Cable 891 (PC 8902 motor) Porter-Cable 892 (PC 8902 motor) Porter-Cable 893PK (PC8902 motor) Porter-Cable 894PK (PC8902 motor) Porter-Cable 895PK (PC8902 motor) Porter-Cable 895PK (PC8902 motor) Porter-Cable 9690LR (PC6902 motor) Dewalt 610 Dewalt 618 Bosch 1617 Bosch 1618
Router Compatibility (with optional SL-A2 adapter collar)	Makita 1100 Makita 1101
Overall Dimensions (without router motor)	
SL-D1 (SmartLift with digital display)	9.25" x 11.75" x 9.22" high (23.50 cm x 29.85 cm x 23.42 cm)
SL-P1 (SmartLift without digital display)	9.25" x 11.75" x 7.70" high (23.50 cm x 29.85 cm x 19.56 cm)
Plate Dimensions	9.25" x 11.75" x 7/8" thick with a 3/8" lip (23.50 cm x 29.85 cm x 2.22 cm)
Net Weight (approx., without router motor)	15.5 lbs. (7.05 kg)
Shipping Weight (approx., without router motor)	.17 lbs. (7.73 kg)

The specifications in this manual are given as general information and are not binding. Jointech, Inc. reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings and accessory equipment deemed necessary for any reason whatsoever.

SMARTLIFT DIGITAL KEYPAD FUNCTIONS

ON/OFF

When the ON/OFF switch is first depressed "P1.000" will momentarily appear indicating that there is power to the display.

The display will automatically turn off after 15 minutes to conserve battery life. However, there will still be a very small continuous drain on the battery sufficient to retain the last setting in memory and will be displayed again when ON/OFF is depressed. The display will automatically turn on again when an adjustment is made with the crank handle.

IN/MM

Depressing the IN/MM, or "mode" key, changes the reading between inches and metric.

The display reading can be "locked" to prevent an inadvertent resetting of zero. Depress the ON/OFF to turn the unit ON. Hold the ON/OFF switch down and momentarily depress the "mode" switch (IN/MM). The word "LOCK" will appear in the upper left corner of the display. In this mode the ZERO cannot be reset. To unlock, repeat the procedure above. The word "LOCK" will disappear.

ZERO

Press Zero to reset the reading to zero. This is normally done when the top edge of router bit is set flush to top surface and before adjustment to final depth of cut. Zero can also be referenced from any other part of a cutter as well.

Limited Warranty

The mechanical portion of this product is warranted by Jointech, Inc. against manufacturing defects in material and workmanship under normal use for two (2) years from date of purchase from Jointech and authorized Jointech dealers. The electronic portion of this product is warranted by Jointech, Inc. against manufacturing defects in material and workmanship under normal use for one (1) year from date of purchase from Jointech and authorized Jointech dealers. EXCEPT AS PROVIDED HEREIN, Jointech MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, Jointech SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN IF Jointech HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, return the product, along with your dated sales receipt as proof of purchase date to Jointech. Jointech will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design. All replaced parts and products become the property of Jointech. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributed to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation of maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by Jointech or a Jointech-authorized repair facility; (c) consumables such as fuses, batteries or cutters; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Made in the U.S.A. by Jointech, Inc. 11811 Warfield Dr., San Antonio, TX 78216 (210) 377-1288 • FAX: (210) 377-1282 • Toll-free (800) 619-1288