

# SYSTEM OWNER'S MANUAL

hat does an INCRA tool do better than any other? Just ask that question to any of the thousands of satisfied INCRA router table or table saw fence owners and they'll all give the same answer, "It positions your work with perfect accuracy and repeatability." Over the years, many of these same customers have requested a means of adding these benefits to many of the other tools in their shops. Your new INCRA Track does just this by providing the same patented automatic positioning control used on the famous INCRA Jig in a versatile track system. Combined with the modular design of the INCRA Shop Stop, you'll be able to add INCRA precision to virtually every jig, fixture, miter gauge, and stationary tool in your shop.

## **SAFETY**

Important safety instructions for using the INCRA Track System:

- Before using the INCRA Track, read and follow all of the instructions and safety information in this manual.
- When using the INCRA Track in conjunction with any other tool, first read and follow all instructions and safety information in that tool's owner's manual.
- Use appropriate safety devices. Keep hands clear of the bit or blade. Always
  use a push stick, rubber soled push block, or other safety devices to keep
  your hands safely away from the cutting tool.
- Never let any part of the INCRA Track interfere with another tool's safety guards or other safety equipment.
- Never let the bit or blade come into contact with the aluminum body of the INCRA Track.
- Always turn off the power and make sure the bit or blade has come to a complete stop before changing the setting of any part of the INCRA Track or INCRA Shop Stop.
- Wear safety glasses, hearing protection, and follow all normal shop safety practices.

#### FOR USE WITH ...

- ♦ Miter Gauge
- ♦ Jigs & Fixtures
- ♦ Miter Saws
- ♦ Radial Arm Saws
- ♦ Compound Saws
- ◆ Drill Press Fence
- ♦ INCRA Jiq

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## **GENERAL MOUNTING INSTRUCTIONS**

Your INCRA Track is designed to provide a variety of mounting options to meet the requirements of your applications. Each mounting option offers certain benefits. When considering a mounting preference, check the benefits of each option. In some applications, you may find combinations of two or more mounting options are useful.

### **Option #1:** Slotted Hole Mount – (Fig. 1)

#### Benefits:

- Quick and easy mounting
- ◆ Good for fixed INCRA Track applications

Applications:	age
♦ Jigs & Fixtures	6
♦ Sliding Crosscut Boxes	6
◆ Drill Press Fence	7
♦ Miter and Compound Miter Saws	7

Note: When using the slotted hole mounting, always screw the INCRA Track to your application before adding the INCRA saw toothed racks.

# FIG. 1 Slotted hole mount #10 x 1" wood screw #10 flat washer Plywood or hardwood base

### Option #2: Rear T-slot Mount - (Fig. 2)

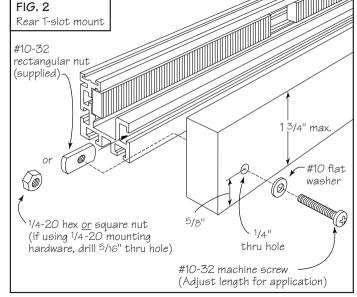
#### Benefits:

- Allows for sliding the INCRA Track relative to applications
- Good for applications where the ability to slide the fence toward or away from the cutter is important
- ◆ Enables guick removal of INCRA Track from application

Applications:	.Page
♦ Miter Gauge	. 5
♦ Jigs and Fixtures	. 6
♦ Radial Arm Saw	. 7
◆ Compound Miter Saw	. 7

**Note:** When using any T-slot mount, first install screws and washers through your application and loosely attach nuts. Then slide nuts into the T-slots on the INCRA Track.

**Note:** If your application requires a vertical attachment point for the INCRA Track that is taller than 13/4", just place a 1/2" thick spacer block no taller than 13/4" between the application and the rear of the INCRA Track.



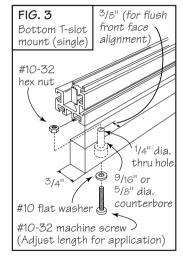
# **Option #3:** Bottom T-slot Mount – (Figs. 3 & 4)

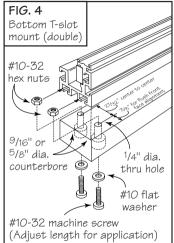
#### Benefits:

- ◆ Allows mounting to the 3/4" edge of a piece of plywood
- ◆ Good for applications requiring a taller fence
- ◆ Use for fixed or sliding track applications

Applications:	age
♦ Miter Gauge	5
♦ Jigs & Fixtures	6
◆ Drill Press Fence	7

**Note:** When using any T-slot mount, first install screws and washers through your application and loosely attach nuts. Then slide nuts into T-slots on the INCRA Track.





## ATTACHING THE SAWTOOTHED RACKS

In your INCRA Track package you'll find a number of black sawtoothed racks. Once attached to your INCRA Track, these racks are what give the INCRA Shop Stop the ability to clamp to your track so accurately. You see the teeth on the Shop Stop and the INCRA Track will

Insert the #8-32 x 3/8" machine screws through the INCRA racks as shown and loosely install the hex nuts. Slide the hex nuts into the T-slot on your INCRA Track.

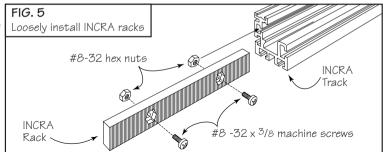
Note: Some track sections may include both 4" and 6" racks. Use all racks supplied in any order. (Fig. 5)

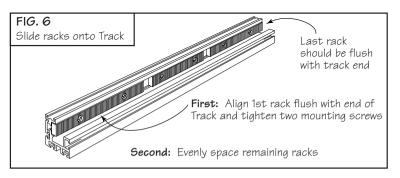
Note: If you will be using the slotted hole mounting as described in Fig. 1, always screw the INCRA Track to your application before adding the INCRA sawtoothed racks.

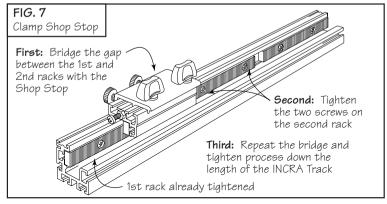
After sliding all of the supplied racks onto your INCRA Track, align the rack at one end flush with the end of the track and tighten the screws for this rack only. Evenly space the remaining racks along the length of your track. This is not a critical alignment, just eyeball the spacing. (Fig. 6)

Now clamp your Shop Stop to the INCRA Track so that it bridges the gap between the already tightened first rack and the loose second rack. Tighten the screws on the second rack. Continue this bridge and tighten process down the length of your INCRA Track. (Fig. 7)

only mesh every 1/32". This is why the INCRA tools will so easily duplicate any setting that is a multiple of 1/32". You might think that with all this accuracy, attaching the racks to your INCRA Track would be a demanding job. Quite the contrary – it is really easy.

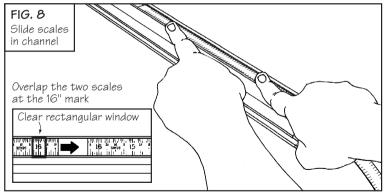






# **POSITIONING THE SCALES**

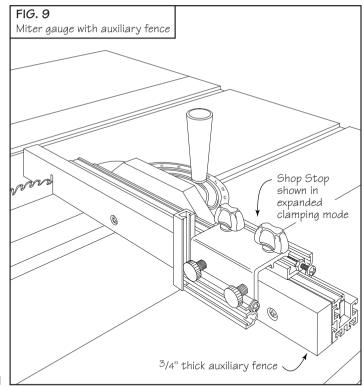
All INCRA Track scales come in 16" lengths (0-16", 16-32", 32-48", etc.) To position the 0-16" scale, zero your Shop Stop to the cutter as described in the Shop Stop owner's manual, then slide the 0-16" scale to read 0" directly under the end of the gold stop cap on the Shop Stop. For longer INCRA Track sections you'll now need to slide the 16-32" scale into the track, overlapping the two scales at the 16" mark. You'll notice on the 16-32" scale a rectangular shaped window at the 16" mark. This window makes it easy to perfectly align the two scales. Adding the 32-48" scale is done in the same way using the rectangular shaped window at the 32" mark.



## **AUXILIARY FENCES**

#### Zero clearance

Adding a wooden auxiliary fence to the front face of your INCRA Track offers several benefits. Often the most important benefit is the ability to add zero clearance backing for all of your crosscutting and mitering operations. A zero clearance auxiliary fence for a miter gauge (Fig.9) backs up your stock to provide tearout control during a cut as well as carrying small cut off pieces safely past the blade. In the expanded clamping mode, your INCRA Shop Stop will still clamp to your INCRA Track with auxiliary fences up to 3/4" thick attached. Zero clearance auxiliary fences are useful at any station where you want backing support right up to the blade. Candidates for zero clearance auxiliary fences include the miter gauge, miter and compound miter saws and radial arm saws.



## Extending stop range or fence height

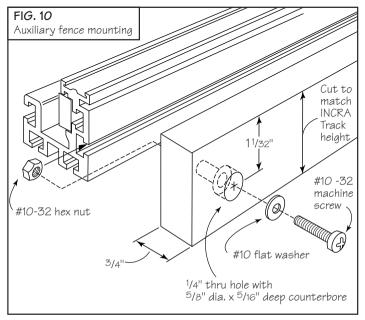
Another reason to add an auxiliary fence to your INCRA Track is to extend the stopping range or fence height when used in conjunction with your INCRA Shop Stop. Say you have an 18" INCRA Track mounted to your miter gauge and you need to crosscut several boards to 30" lengths. By adding a ¾4" plywood or hardwood auxiliary fence that extends the necessary distance from the saw blade and then using your Shop Stop in the standard clamping mode you can clamp the stop directly to the auxiliary fence. Using the Shop Stop in this way allows use of taller auxiliary fences as well.

## Attaching an auxiliary fence

For auxiliary fence applications where incremental use of the Shop Stop is required, the wooden auxiliary fence should be flush with the top of the fence track. The unmodified height of the INCRA Track is 19/16" but if you've raised the height for your application, adjust the height of your auxiliary fence to match. (Fig. 10)

### **INCRA Track extension**

INCRA Track sections are available in 18", 36", and 52" lengths and should accommodate most of your jig and fixture needs. For stopping range beyond the standard lengths, sections of the INCRA Track can be attached to your applications end to end. Just attach the track section closest to the cutter first, then use a reliable straightedge to align the second track before securing it to your application. Attach the sawtoothed racks as though the joined tracks were one continuous INCRA Track section, beginning at one end and working your way to the other end.



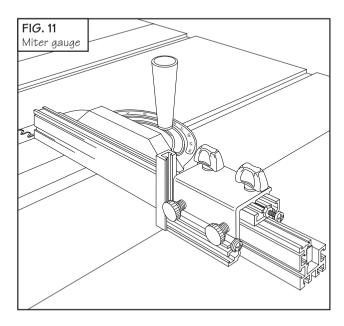
## **APPLICATIONS**

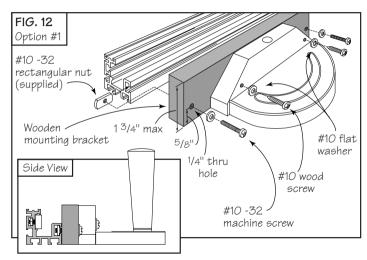
Following are just a few examples of the many applications you'll discover for your new INCRA Track. The illustrations represent food for thought and contain few actual dimensions since your INCRA Track applications will require dimensions that depend on your particular tools.

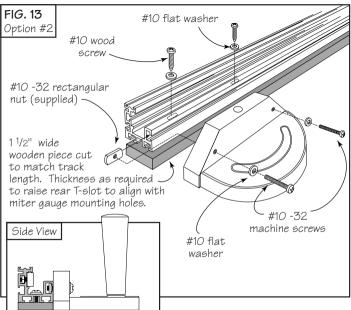
When designing your own applications just remember the INCRA Track and Shop Stop are the perfect solution to any cutting or drilling operation that requires the duplication of multiple stop positions.

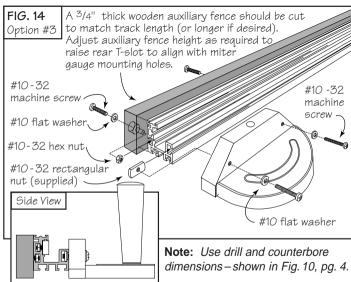
## Miter gauge

Of course, any miter gauge will allow you to crosscut a board to length, but for most miter gauges accurately cutting to length means endless trial and error cutting that usually leads to mediocre results. Adding an INCRA Track and Shop Stop to your miter gauge will put an end to trial and error forever. You'll find your crosscuts not only accurate, but repeatable as well. For most miter gauges the easiest mounting will be as shown in Figs. 12 or 13. Note that the wooden mounting bracket shown in Fig. 12 must be 13/4" or less in height. Fig. 14 shows another mounting option where the rear T-slot on the INCRA Track is raised to align with the holes in your miter gauge by mounting an auxiliary fence to the front face.



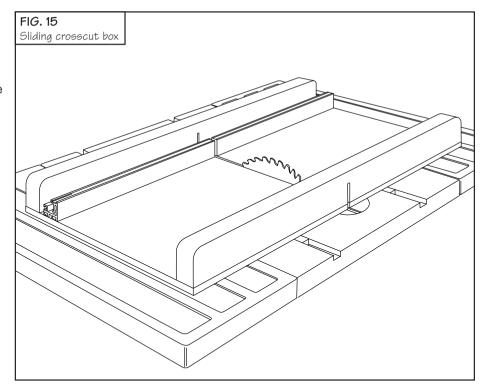




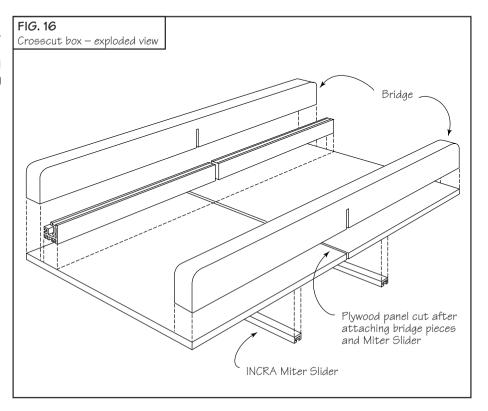


# **JIGS & FIXTURES**

There are many special use iigs and fixtures in the shop that provide the ability to accurately set and then duplicate cutting positions. Unfortunately, most iigs built for specific applications are limited to the size of that specific project. Any change to the dimensions of the project often means making another jig since the stop positions must be changed. Adding the INCRA Track and Shop Stop to your next iig or fixture design provides perfectly repeatable stop positions at every 1/32". So no matter what changes vou make in vour project dimensions. your INCRA Track-equipped jig will always be able to handle the job without expensive and timeconsuming rebuilding.



Illustrated in Fig. 15 is one of the most common jigs used in the shop the sliding crosscut box for the table saw. A plywood base is first attached to a pair of miter bars that track along the table saw's miter slots. (The adjustable INCRA Miter Sliders, available in 18" and 24" lengths are perfect for this). Glue and/or screw a front and rear bridge to the plywood base. With your blade raised about 1", engage the miter bars with your table saw miter slots and make a cut through the jig. Turn off the saw and screw the INCRA Track to the plywood base at whatever angle to the blade is required for your jig. Do not place the track directly against the rear bridge since it is probably not square to the blade and its vertical height will interfere with the Shop Stop. Place a piece of INCRA Track on both sides of the kerf for stopping range and support both left and right of the blade. (Fig. 16)

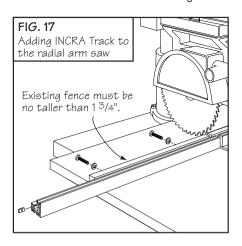


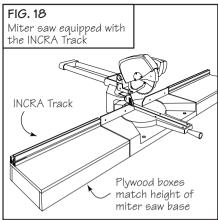
# MITER, COMPOUND MITER AND RADIAL ARM SAWS

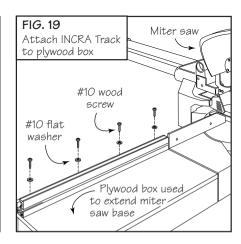
Every miter, compound miter, and radial arm saw made today provides a fence to help hold your stock during mitering, crosscutting or dadoing. But with few exceptions, none offers a stop to ensure the location of your cut. You'll find that adding an INCRA Track section on both sides of your blade will give you perfect control of your cut locations. To set up the track at your radial arm saw, simply drill holes through your existing wooden fence to align with the T-slot in the rear of the INCRA Track and screw in place. (Fig. 17) For extra long crosscut applications you can mount multiple track sections end to end. For miter and compound miter stations, place the saw on a flat table or bench, then construct plywood boxes for both sides of the saw. The boxes should match in height the distance from the

top to the top of your saw's base. (Fig. 18) Attach the plywood boxes to your table top, then screw INCRA Track to both boxes with the front of the INCRA Track in line with the existing fence on your miter saw. (Fig. 19) If you want to extend the fence track closer to the blade for short cutoffs and don't mind reducing some of your crosscut capacity, overlap the INCRA Track onto the miter saw's base before screwing in place.

**NOTE:** If you are extending the INCRA Track toward the blade over your miter saw's base and your miter saw's standard fence is taller than 13/4", you must place a 1/2" spacer block between the rear of the INCRA Track and the front of your saw's standard fence.

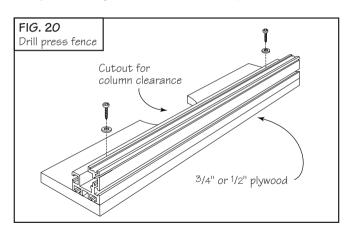


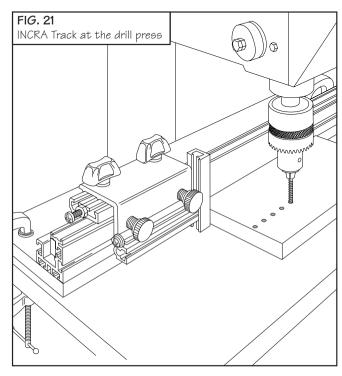




## **DRILL PRESS**

You'll find many uses for your INCRA Track and Shop Stop at the drill press. Any project that requires a series of precisely located holes can easily be produced, then duplicated again and again with the aid of the INCRA Track. Locating a drill position in your project has never been easier. Simply mount your INCRA Track to a flat, straight piece of 1/2" or 3/4" plywood as shown in Fig. 20 below, then clamp to your drill press table. You can band saw a cutout in the plywood piece if you want to give clearance for the drill press column.





# PARTS AND OPTIONAL ACCESSORIES

Part #	Part Description	Price
SHOPSTOP	INCRA Shop Stop	\$ 32.95
TRACK18 TRACK36 TRACK52	18" Track Section 36" Track Section 52" Track Section  Add one or more individual INCRA Track sections for placing the Shop Stop on both sides of the cutter, or extending the stopping range. Track sections include incremental racks, sliding scales, and complete mounting hardware.	\$ 27.95 \$ 42.95 \$ 52.95
TRACKSYS18 TRACKSYS36 TRACKSYS52	18" Track plus Shop Stop 36" Track plus Shop Stop 52" Track plus Shop Stop  Buy the complete INCRA Track System and save. Includes specified length of INCRA Track section, INCRA Shop Stop, incremental racks, sliding scales, and complete mounting hardware.	\$ 52.95 \$ 72.95 \$ 82.95
IMS1 IMS2	18" Miter Slider  24" Miter Slider  This aluminum runner adjusts for perfect sliding action in ANY standard 3/4" x 3/8" miter gauge slot.  Won't warp, shrink, or swell like wooden runners. Includes plans for a wide variety of shop-made jigs and fixtures. (one per package)	\$ 14.95 \$ 19.95

## PRODUCT INFORMATION

For a product information update on the complete INCRA line of tools, please see your nearest dealer. If you are unable to locate a store nearby, or if you have trouble finding a particular product, we will honor your order directly.

For a product information brochure, call, write or fax to:

Taylor Design Group, Inc. P.O. Box 810262, Dallas, TX 75381

Tel: (972) 418-4811 Fax: (972) 243-4277

Web Site: www.incra.com

# **WARRANTY**

Taylor Design Group, Inc. warrants this product for one year from date of purchase. We will repair any defects due to faulty material or workmanship, or at our option, replace the product free of charge. Please return the failing component only, postage prepaid, along with a description of the problem to the address below. This warranty does not apply to parts which have been subjected to improper use, alteration, or abuse.

#### LIFETIME WARRANTY ON POSITIONING RACKS

If an INCRA positioning rack in this tool becomes damaged for ANY reason, Taylor Design Group will replace it free of charge for as long as you own your tool. Return the damaged rack, transportation prepaid, and allow 1 to 2 weeks for delivery.

#### NOTE:

Replacements cannot be sent unless damaged racks have been received by Taylor Design Group.

#### Made in America by:

Taylor Design Group, Inc. P.O. Box 810262 Dallas, Texas 75381 Web Site: www.incra.com

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