Accessories



The windicator makes reading the wind a cinch. The 3-piece aluminum rod is connected to a rip-stop flag. A nylon bag keeps it all under wraps until your next outing. The level of quality and function is incredible.



Let the fabric dividers protect your boomerangs from the hazards of travel and outside elements. The strap easily adjusts so you can carry the case over your shoulder or like a briefcase. You certainly won't mistake this carry case for your office briefcase!!

Ask your dealer about our T-shirts. The front sports the Colorado Boomerangs logo. All shirts are high quality 100% cotton. Inquire about colors and sizes.

For a dealer in your area call 1.800.35 RANGS



Instruction Booklet

BOOMERANGS ARE A SPORTS ARTICLE, NOT A TOY. USE EXTREME CAUTION. DO NOT LEAVE CHILDREN UNSUPERVISED.





ColoradoBoomerangs.com 4095 Oceanside Blvd. Suite E Oceanside, CA tel [760] 295.6456 fax [760] 722.3561 orders 800.35 RANGS orders [888] 734.1166 web site: www.ColoradoBoomerangs.com email: sales@boomerangs.com

SAFETY INSTRUCTIONS

* Adult supervision must be present to insure proper safety for children using boomerangs.

BOOMERANGS ARE A SPORTS ARTICLE, NOT A TOY. EXTREME CAUTION SHOULD BE USED WHEN THROWING OR CATCHING BOOMERANGS. REMEMBER - YOU ARE THE TARGET! * Never throw a boomerang at or near someone. Always throw in a large open space of at least the size of a footbal field (100 yards by 100 yards is advised - much more space is needed for some competition MTA (maximum time aloft) or LD (long distance) boomerangs).

* Make sure that your throwing space is clear of all people, cars, trees, buildings, animals or other objects which could be damaged if hit by a boomerang.

* Protective safety glass eyewear should be worn at all times when throwing and/or catching boomerangs. BOOMERANG THROWERS AND SPECTATORS ARE IN EXTREME DANGER IF IN THE PATH OF A THROWN BOOMERANG. CHILDREN SHOULD NOT BE LEFT UNSUPERVISED.

* Only one boomerang should be thrown at a time. Use care at all times when throwing boomerangs.

* Never throw your boomerang laid out flat like a frisbee. Boomerangs should always be thrown in a nearly verticle position to avoid dangerous diving and swooping flights.

* If you are just learning to throw boomerangs do not throw too hard at first. For most boomerans a half powered throw is usually enough to get the boomerang to return. As you get more experience you can add more power to your throw to get longer range flights.

1

SAFETY INSTRUCTIONS

* Never throw a competition level MTA (Maximum Time Aloft) or Long Distance boomerang unless you are an experienced thrower. Ranges of up to 200 yards or more are possible and flight times longer than 3 minutes. Different throwing techniques are used with competition boomerangs than are included with this manual.

* Special expertise and care must be used to throw competition boomerangs in general as they are often faster and more difficult to catch than a recreational boomerang. Competion level boomerangs often have different instructions for their specific use, for example Fast Catch, Trick Catch and Long Distance boomerangs. Long Distance boomerangs can go up to 200 yard or more. See instructions for your specific boomerang if you have a competition model.

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Care & Maintenance

Treat your boomerangs with great care. Large grassy fields are the best place to throw. When you're not using your boomerangs keep them in a carry case or hang them up. Never lay anything on top of them, or leave them in direct sunlight.

Repair Tips

To repair nicks or dings, use either plastic wood or cyanoacrylate (found at hobby shops). When using CA, try mixing in a little baking soda for a filler. This mixture will be extremely hard and durable. Try a test before using this on your rang.

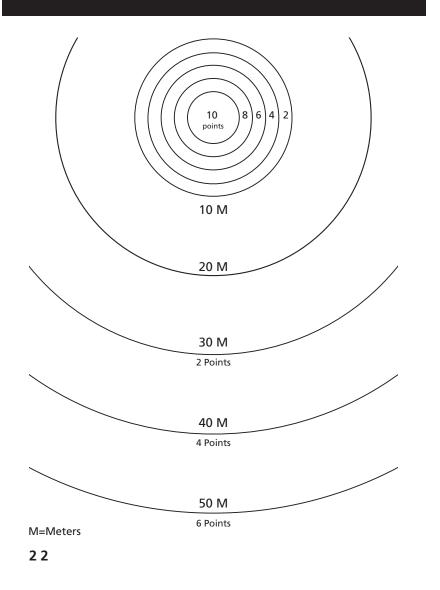
Breakage

If your boomerang breaks, use 5-minute epoxy or CA to put it back together. Remember to make sure the boomerang is flat when you glue it. Be sure to recheck for flatness after gluing. See Warp Check Section, page 16-17.

Refinishing

Don't be afraid to refinish your favorite boomerang. Do be careful not to put too much additional weight on your boomerang (paint weight). Too much weight and the boomerang will not fly properly. If you come up with a cool-looking paint scheme, let us know. We are always looking for cool new looks!!

Tournament Field



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SAFETY FIRST

IMPORTANT: Read this instruction booklet carefully! Boomerangs are a sports article and not a toy. Failure to follow the safety guidelines in this booklet could lead to serious harm to yourself or others. Use good judgement when throwing and only throw if you have plenty of room. You, the thrower, are responsible for your conduct and its ramification. HAVE A BLAST, but be careful, especially when others are nearby. And remember, wear safety glass eye protection.



New To Boomerangs?

If you are new to the sport of boomerangs we hope you find it to be a blast!! Similar to a good golf swing, boomerangs require patience and practice to develop the required skill. Some boomerangs are easier to throw than others. For quick positive results, start with the easier-to-throw models, such as the Yanaki, Seagull, Phoenix, Everest and Triblader.

Sport and Recreation with Boomerangs

Today there are more than 12 countries with national boomerang teams, including the US. People are finding boomerangs to be not only a competitive sport, but also a great addition to mountain biking and backpacking, camping trips, kite flying, and just about any other outdoor activity.

Colorado Boomerangs

Colorado Boomerangs has been cranking out the highest quality boomerangs in the world since 1985. All our boomerangs come ready to rip some air right out of the box!

Lefty Rangs and Instructions

Instructions are written for right-handed throwers. Lefties will need to interpret them for left-handed throwing. For example, while righties throw Counterclockwise, lefties throw clockwise. Lefties must use "left-handed" boomerangs. All lefty boomerangs will have "Left-Handed" written on the back by the model name. Not all models are available left-handed.

Games People Play

Fast Catch Endurance

How many Fast Catch throws you can pack into 5 minutes... throw your arm off!!

Records: World 76 USA 76

Doubling

Throwing two boomerangs. Use one boomerang with a longer flight and longer hover, and one with a shorter flight and shorter hover. Hold both boomerangs in one hand and throw...yes, both at the same time. The one with the most catches wins!!

Consecutive Catch

Just like it sounds. Go for some trick catches ... don't drop!!

Glorp

Just like pig or horse from basketball. Each thrower has to duplicate the previous catch (unless it's a drop). Miss a catch, get a letter...GLORP and you're gone!! Last one throwing wins.

Colorado Boomerangs for Competition

Aussie Round: Alpine, Delicate Arch, or Eagle. Doubling: Tri-blader with Everest or Adirondack (Tri-blader on top). Juggling: 2 Typhoons or 2 Rainers. Endurance: Fast Catch. Fast Catch: Fast Catch. Consecutive Catch: Typhoon or Condor Comp. Accuracy: Condor Comp. or Yanaki.

For additional information check out: www.boomerangs.com, www.boomerangs.org and www.boomerangs.tv.

Games People Play

Accuracy

The boomerang is thrown from the bull's-eye and allowed to land untouched. Points are awarded for accuracy to the bull's-eye. Ten points inside the bull's-eye, 9 points if it is on the line and accordingly on down to 1 point if it lands on the 10 meter line. Five throws... add up the points.

Records: World 50 USA 49

Fast Catch

One boomerang. Fastest to complete 5 throws and 5 catches wins.

Records: World 14.60 seconds USA 14.60 seconds

Juggling

Two boomerangs. You must keep one boomerang in the air at all times. Throw and catch till you drop.

Australian Round

Many people consider this to be the quintessential event. Thrown from the bull's-eye, points are awarded for flight distance, accuracy of the return, and catching the boomerang. Five throws are made by each competitor. Maximum possible points with five catches, five throws over 50 meters, and five catches in the bull'seye is 100. Four points for each catch. Six points for 50+ meters. Ten points for accuracy. Distance points are only earned if accuracy and/or catching points are earned.

Record: World 95 USA 95

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Ready To Throw

Below are a few precautions.

Preparation: Fully read and understand the directions. Practice your stance and arm movements prior to your first throw.

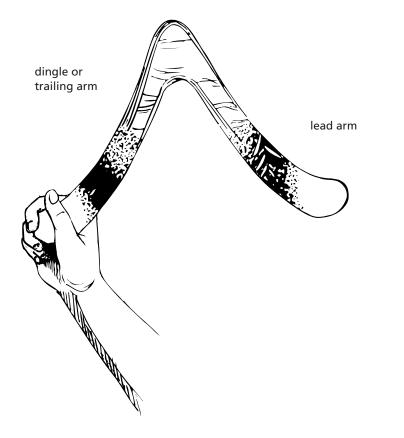
Eyewear: Always wear eye protection when throwing. Just as basketball and racquetball players need protective eyewear, so do boomerang throwers.

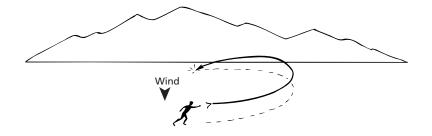
Space: Allow at least 70 yards in every direction and more space than that is needed for long distance MTA and other competition boomerangs. Be aware of people, even if they appear out of your throwing area. Never throw at or towards any person. Empty athletic fields are usually ideal places to let your rangs rip some quality air!!

Wind: This is a wind game, and wind conditions have an enormous effect on the flight of a boomerang. An awareness of wind direction with each throw is essential if one expects to enjoy the sport of boomerangs. Check out our windicator; never has reading the wind been so easy!! (See back cover.)

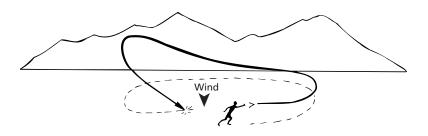
The Boomerang

Warps & Flex Tuning





When your boomerang consistently sinks on the outbound part of the flight, check warp, bend the tips up.



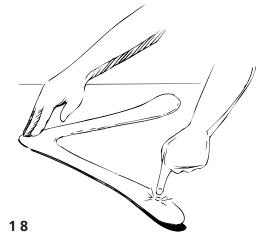
When your boomerang climbs too high, too fast, check the warp. Try bending the tip down so the boomerang is flat. See page 18 for warp-checking techniques.

Additional information on page 18.

The arm on the left (with hand) is the dingle arm. The arm on the right is the lead arm. Left-handed boomerangs would be opposite.

Warp Check

To check for warp while out throwing, hold from the lead arm (righties). Sight straight down the edge of the rang. If the rang is warped, you will see the profile (or partial profiles) of the far arm. Check both arms of the boomerang. Slight warp can have significant effects on the flight. Bend the boomerang accordingly to correct the warp. Slight tips-up warp is okay (if painted side is top).



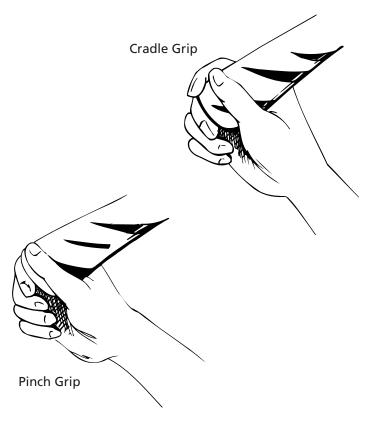
Lay the boomerang on a perfectly flat surface, painted side up. Slight clicking just at the tips is what you



want. Be sure to check both arms.

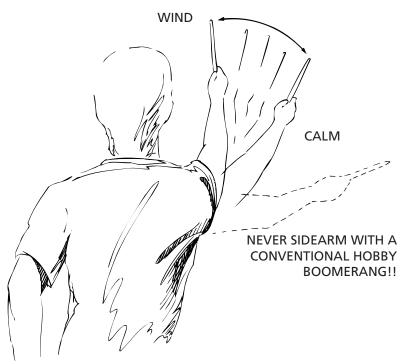
#1

The Grip



The bottom of the boomerang (unpainted side) should be against your palm. The top (painted side) against your thumb. Remember, spin is more critical than a hard or forceful throw. Your grip should allow the boomerang to begin to spin (rotate) as it leaves your hand. Use what works best for you, and remember, spin is king!!

#2 Layout Zone

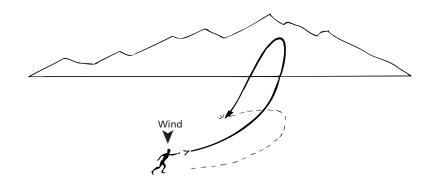


Throw no more than 45 degrees from vertical. Too laid over (sidearm) and the boomerang will climb too high and slide back towards the ground!! Proper layover will create a lower, more controlled flight. <u>Not enough layover, see page 17</u>. Each model requires a different degree of layover. A good rule of thumb is as the wind increases, come up closer to vertical.

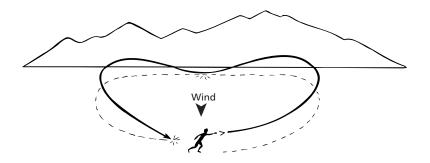
These guidelines apply to conventional "hobby" boomerangs. There are specially designed competition boomerangs for "Long Distance", "MTA" and "Trick Catch" event throwing which involve different instructions. Please make sure to consult your throwing guide for those specific boomerangs before using. You can obtain more information and guidance about competition boomerang throwing by visiting www.boomerangs.tv, www.boomerangs.org or www.boomerangs.com.

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Effects of Layover



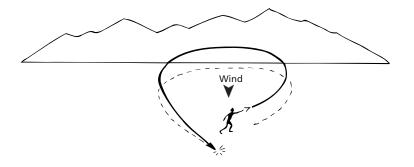
This is what happens when you use too much layover. (Too close to a sidearm throw.)

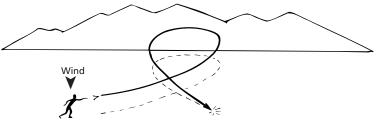


This is what happens when you do not use enough layover. The layover was too vertical.

What Wind Can Do ...



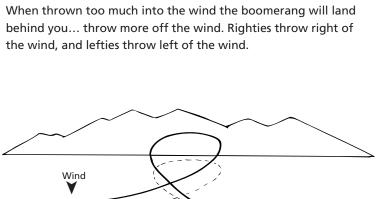




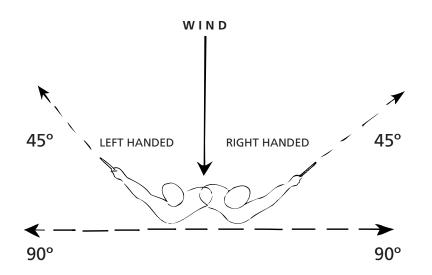
When thrown too far off the wind the boomerang will land in front of you... throw more into the wind. Remember, righties throw right of the wind, and lefties throw left of the wind.

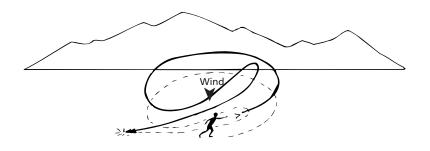
16

Release the boomerang at a slight upward angle (in relation to the horizon). A good rule of thumb is to aim at distant treetops. Keep it off the ground, but don't put it in the clouds!! Too low of a release angle creates a high-climbing end of the flight. A touch more release height will create a level, more consistent flight.



Throwing Hard & Soft





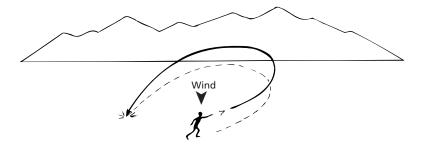
When thrown too hard, the flight will look like this.

#1. Determine wind direction and velocity,#2 Depending on the model, throw 40-60 degrees off the wind.

If the boomerang lands in front of you, throw more into the wind. If it lands behind you, throw more off the wind. You must know wind speed and direction prior to each throw. Right handed: throw right of the wind. Left handed: throw left of the wind. As you become more proficient, you will be able to handle more and more wind.

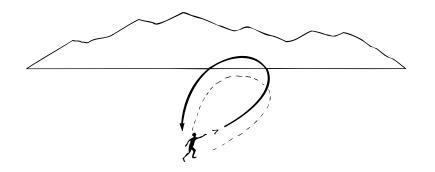
See page 16 for more information.

10

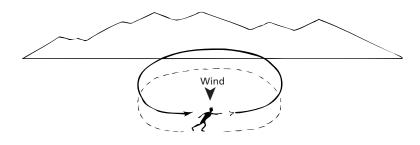


When thrown too soft, the boomerang will not make it all the way back to you.

It Will Come Back...



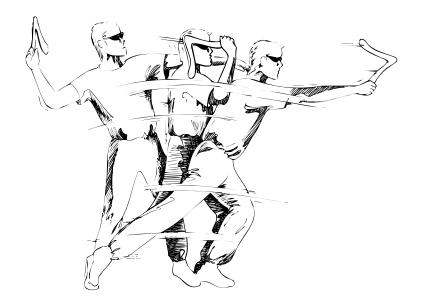
In a calm, use a little more layover. The flight will be more elliptical with less wind.



In a wind, throw with less power and less layover. The flight will be more round with wind.

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#5 Throwing Motion

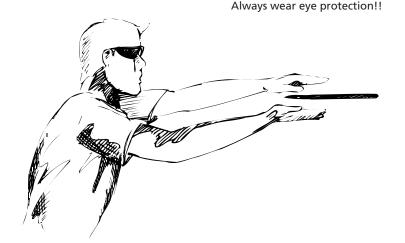


SPIN IS KEY!

The throwing motion is similar to throwing a football. Let the boomerang fly out of your hand. <u>Do not try to initiate the turn of</u> the boomerang with your throw; it will turn itself. Pick a point in the distance that is the correct angle off the wind and throw. Remember, spin is king!! More spin, and snap... less muscle!!



The Catch



Use good judgment when deciding when you should attempt a catch. You should not attempt to catch a boomerang until you are familiar with its flight path. Also, if the boomerang is coming in fast towards you, do not attempt a catch! Only go for the catch when the boomerang is hovering in softly towards you. Before long you will be catching like a pro.

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Throwing Tips...

Aspen (4MM Seagull)

Light to medium wind. No proper top or bottom. Bend the wings up for a high flight with a long hover, then turn it over for a lower, round flight.

Seagull

Light to medium wind. The long hover gives plenty of opportunities for catches.

Yanaki / Phoenix Calm to medium wind. Throw 45° off the wind. Medium toss.

Tri-blader

Calm to medium wind. Light toss. Keep the layover close to vertical.

Everest (v)

Light to medium wind. A hard throw creates a longer hover. Likes a light toss in a calm. In a wind throw it more off the wind.

Kilimanjaro (Hook)

Light to heavy wind. Throw from lead arm. Lay it over (45° max) in a calm. Down warp on the dingle arm and the Hook will not fly. Make sure you check for warp.

Alpine

Medium to heavy wind. Throw the Alpine easy or hard. Not enough wind will have it landing in front. Check warp... tips up!

Delicate Arch

Light to heavy wind. Lay it over (45° max) in a calm. Loves a light toss with lots of spin in light wind. Check for warp... tips up!!

Condor Comp.

Light to heavy wind. Likes the wind and a hard throw.

Matterhorn

Light to heavy wind. Throw hard for S-shaped flight.

Eagle

Light to heavy wind. Loves wind and a hard throw... needs layover. If it's not getting all the way around, check warp... tips up!!

Mirage

Calm to medium wind. Not a hard throw. <u>Only throw from</u> lead arm (long arm).

Rainier

Light to medium wind. Hard vertical or light laid-over release.

Adirondack

Light to medium wind. Easy throw gets cool, low flight. Keep tips up... check warp!!

Typhoon

Calm to light wind. Use a high release angle (pg. 7) Medium throw with lots of spin.