Transition
BICYCLE COMPANY

Over the years, the bike industry has gone through a number of “standards” – axle sizes, bottom brackets, ISCG tabs and the list goes on. The various headset standards are one of the most convoluted categories of components so here we’re going to take a closer look at some of the sizes and styles you’re most likely to encounter. We’re going to skip the more obscure stuff (1”, 1-1/4”) and focus on what you’re likely to find in today’s market.

Sizes:

1-1/8th (1.125):

This was the industry standard for a long time until onepointfive took over for much of the gravity market around 2002. They are light, simple, and a great selection of headsets is made in this size from every desirable headset manufacturer.

1.5” (onepointfive):

This standard was introduced several years ago as single crown forks grew in travel and the gravity market sought additional stiffness for these long travel machines. Frames equipped with a 1.5 head tube grew quickly in popularity. Not only did they accommodate the new 1.5 forks, they also allowed riders with 1-1/8th” forks to run internal or external headset cups to adjust the geometry and stack of the frame.

Tapered 1.125/1.5:

This is the newest style of headset to enter the market. It uses a head tube that tapers from 1.5 at the crown to 1-1/8th at the top. This allows us to achieve the stiffness of a 1.5 fork without all the extra weight. Tapered head tubes also allow for a better weld interface around the top, down, and head tubes of your frame. They are also the most convoluted because there are several different style cup combinations that could be used by a given manufacturer. Tapered steerers may use any combination of standard, zero stack, or integrated bearings. Rear more about those styles below:

Cup Styles:

Traditional:
1.125 Cup OD size: 34mm
1.5 Cup OD size: 49mm

These feature a classic press-in headset cup. 1.125 uses a 34mm OD cup and 1.5 uses a 49 OD Cup. In the 1.125 size, the bearings are always external and sit outside of the frame adding between 10 and 15mm of stack height to the top and bottom of the head tube. The 1.5 version comes in external and internal (flush mount) versions. If you run a 1.5 steerer fork, the bearings will always sit external to the frame in a traditional setup adding 10-15mm in stack to the top and bottom. If you run a 1.125 fork, the bearings may be external or internal, the latter only adding a millimeter or two in stack height.

Semi-integrated (Zero Stack):
1.125 Cup OD size: 44mm
1.5 Cup OD size: 56mm

These headsets use a press-in cup like the traditional headsets, but their diameters have been expanded to allow the bearings to sit inside of the head tube and keep the stack height lower. They come in both 1.5 and 1.125 versions, but they only work with frames designed for zero-stack configurations. In either the 1.5 or 1.125 versions, the top and bottom cups add a millimeter or two to the stack height. The outer diameter of a 1.125 zero-stack cup is 44mm and the outer diameter of a 1.5 zero-stack cup is 56mm.

Integrated:
Cup is built into frame

Integrated standard is a headset interface where the frame has a cup built into the head tube and the bearings drops directly into the frame. We use this standard in our TOP and TransAm frames for its added simplicity, clean aesthetics and low stack height. With no cup to press in, maintenance is easy and the headsets are very affordable. We also used this standard on the top of many of our tapered head tube models manufactured before 2011.

Transition's Use:

There really is no best or worse in terms of headset styles and sizes. Just like every feature on your bike, there are pro's and cons to each. It is up to the designer to determine which makes the most sense for the overall vision of each bike.

Over the years Transition has used virtually every size and style of headsets in various models. Below is a small table summarizing the 2010 & 2011 lineup and the headsets that each model requires. For 2011 all of our frames that use a tapered steerer have changed from an integrated 1.125 top assembly to a zero-stack. This is because there are more headset options available with a zero-stack than integrated and to accommodate some of the newer, geometry-altering headsets on the market that will not work with an integrated top assembly.

2010	1.125 Integrated	1.125 Semi Integrated	1.5
TR450	Upper		Lower
Blindside	Upper		Lower
Bottlerocket			Upper & Lower
Syren			Upper & Lower
Covert	Upper		Lower
Double	Upper		Lower
Bank	Upper		Lower
TransAm	Upper & Lower		
TOP	Upper & Lower		
2011	1.125 Integrated	1.125 Semi Integrated	1.5
TR450		Upper	Lower
TR250		Upper	Lower
Blindside		Upper	Lower
Bottlerocket		Upper	Lower
Covert		Upper	Lower
Bandit		Upper	Lower
Double		Upper	Lower
Bank	Upper		Lower
TransAm	Upper & Lower		
TOP	Upper & Lower		