

## Attaching Control Contractor Speakers to Speaker Stands, Lighting Bars & Trusses

Control Contractor speakers can be attached to speaker stands, lighting bars and trusses by using a standard cheeseboro-type clamp with the proper size inside diameter for the stand. By removing the Invisiball base, the threaded Invisiball shaft can be attached to the cheeseboro. Some cheeseboros can be counterbored to accept the proper nut. For others, you can use flathead screw inserted from the inside of the clamp and a barrel adapter to the Invisiball shaft\*. If the diameter of the clamp is too large for the stand/pole, adding a resilient shim material such as rubber usually works well. \* *InvisiBall Shaft Threading: Control 23 is 6 mm (1 mm pitch). Control 25, 28 & 29AV are 7/16" fine-thread (20 TPI). Control 30 is 16 mm.*

You can either attach the speaker to the clamp assembly first, and then put the whole thing on the speaker stand, or you can attach the clamp to the stand first and then put the speaker on. The instructions assume you're putting the speaker onto the clamp assy first. Once the clamp/Invisiball assembly is complete, use the following directions to attach it to the stand.



STEP 1 – Attach speaker to the Invisiball that's on the clamp assembly



STEP 2 – With the wingnut loosened, place the clamp on the speaker stand. Flip the bolt into place (as shown).



STEP 3 – Tighten the wingnut. It's OK to make it pretty tight.



STEP 4 – Make sure that the nut on the Invisiball shaft is very tight to the cheeseboro clamp (just to make sure the speaker doesn't accidentally rotate).

*Note: If the speaker is going to be located overhead, add a secondary safety cable through the D-ring (C23, 25, 28 or 29) or secondary attachment point (C30 via 6 mm forged eyebolt) on the back of the speaker with the other end attached to a separate attachment point on the bar or truss, using safe rigging practice.*



STEP 5 -- Adjust the aiming angle of the speaker using the Invisiball mechanism via a hex wrench from the front of the speaker and raise the stand.

That's all there is to it!