

Installation Guide

TCK-SERIES INSTALLATION GUIDE

Tilt Cable Kits

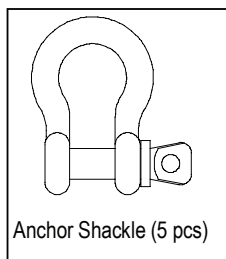
The Steerables™ Tilt Cable kit serves as a suspension and pull back device for flyable loudspeakers and can be used in a wide range of rigging applications. It provides an easy and infinitely adjusting tilt feature for loudspeakers and other objects weighing up to 220 lbs. (134 kg). The Steerables™ Tilt Cable Kit comes in standard fixed cable lengths of 8.25", 10", 14", 18" and 22". Custom length tilt cable kits are also available.

The Steerables™ Tilt Cable Kit contains all the necessary hardware to hang one loudspeaker in a two point or 3 point configuration. One kit includes a pair of structural fixed length cables, an adjustable pull back cable, shackles, clutch lock and pulley. A four point configuration requires an extra pair of fixed cables.

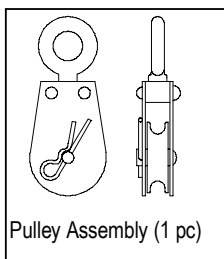
Warning:

Mounting and rigging loudspeakers requires experienced professionals. *Improperly installed loudspeakers can result in property damage, personal injury, death and/or liability to the installing contractor.* Due to the wide variety of building structures, materials and methods, this instruction guide assumes that the installing contractor will exercise proper judgment in selecting the proper rigging area, suspension points and equipment.

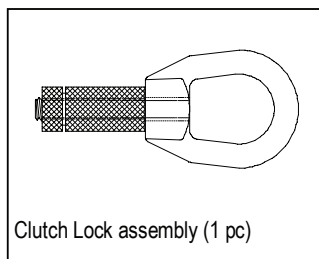
Be sure that all of the following items are included in this kit before proceeding:



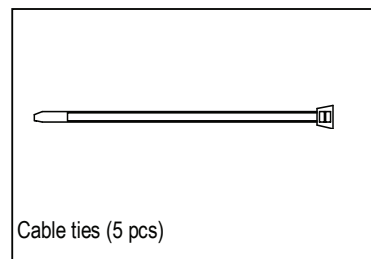
Anchor Shackle (5 pcs)



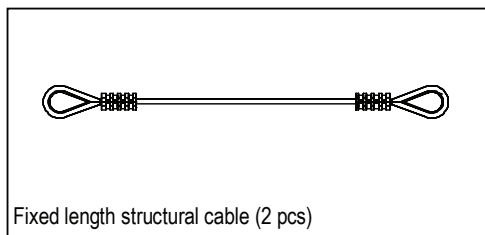
Pulley Assembly (1 pc)



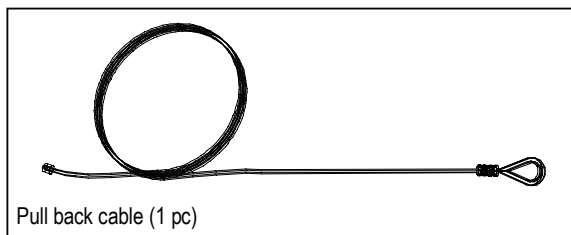
Clutch Lock assembly (1 pc)



Cable ties (5 pcs)



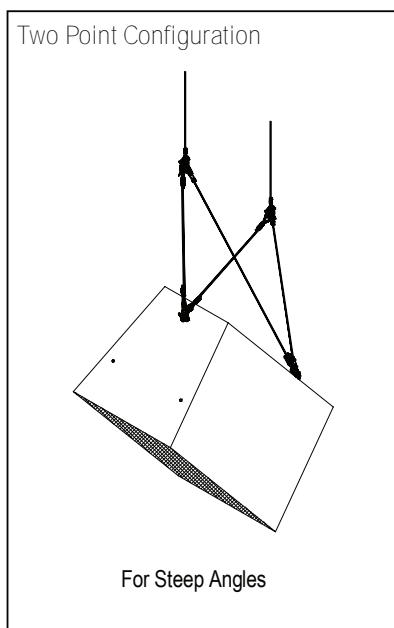
Fixed length structural cable (2 pcs)



Pull back cable (1 pc)

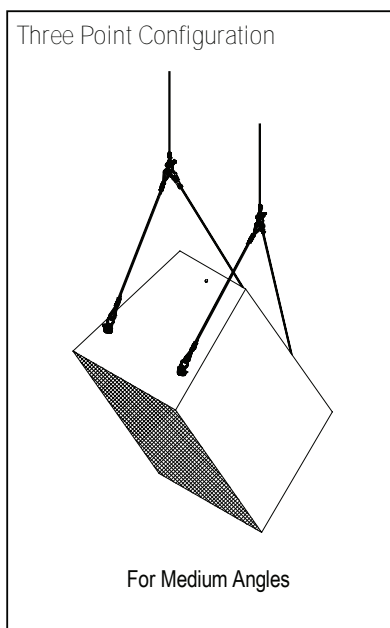
Before Starting:

Select the type of application from the illustrations below then go to the corresponding page that describes that application. The application will depend on the mounting points available on the speaker.



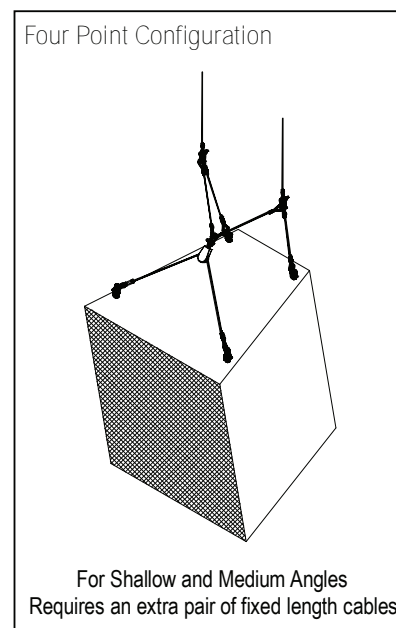
Two Point Configuration

For Steep Angles



Three Point Configuration

For Medium Angles



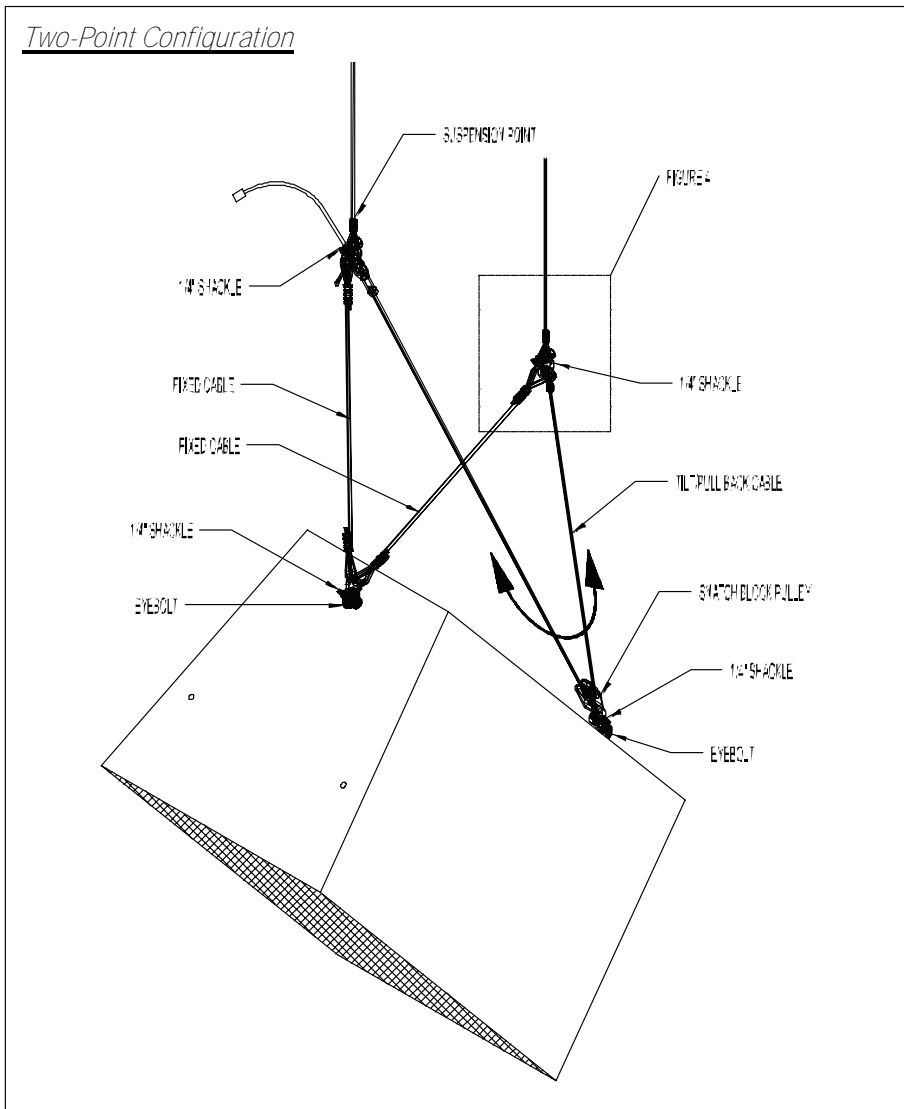
Four Point Configuration

For Shallow and Medium Angles
Requires an extra pair of fixed length cables

ALWAYS INSTALL SAFETY CABLES

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Two-Point Configuration



Step 1. Attach Fixed Cables

Attach one end of each fixed cable to the top anchor point of the speaker (such as eyebolt, track fitting, etc) using a supplied shackle (Figure 1).

Step 2. Assemble Pull-Back Cable to Fixed Cable

Capture the eye of the clutch lock (at the end of the pull back cable) and one of the fixed cables with one of the selected suspension points using a supplied shackle. (Figure 5) Repeat with the other fixed cable, suspension point and the other end of the pull back cable (Figure 4).

Step 3. Attach Pulley to the Pull-Back Cable

Using the pulley's shackle, capture the eyebolt or fitting at the speaker's pull back point (Figure 2).

Step 4. Adjust / Increase Slack of the tilt cable

Loosen the knurled end of the clutch lock. Compress the knurled end inward while pulling the cable towards the pulley until the desired length is achieved (Figure 6).

If there is no rigging point available at the back of the speaker, use a rigging point from the bottom of the speaker to connect a back chain extension (Figure 3).

Step 5. Adjust Speaker's Tilt Angle

To increase the tilt angle of the speaker, compress the knurled end of the clutch lock then pull the pull back cable away from the pulley until the desired angle is achieved. To decrease the tilt angle of the speaker, support the weight of the speaker while compressing the knurled end of the clutch lock then slowly lower the speaker until the desired tilt angle is achieved. Release the knurled end to lock in place then tighten (Figure 6). Coil the extra cable or trim cable and place a stop swage on the end.

Step 6. Secure Shackles and Clutch Lock

To prevent the screw pin of the shackles from loosening over time, secure them with a supplied tie wrap as shown in figure 8. Tape the knurled end of the clutch lock to avoid long term loosening.

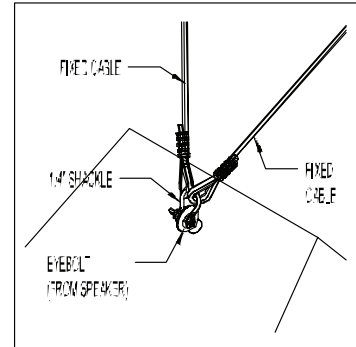


Figure 1: Fixed cable assembly

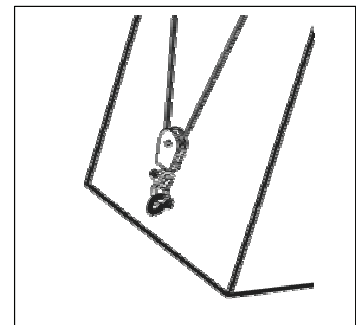


Figure 2: Pull back-direct

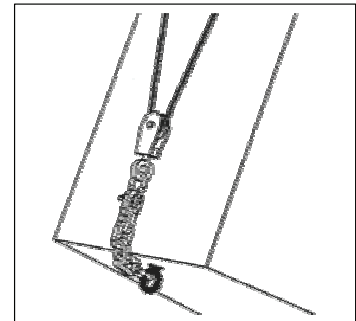


Figure 3: Pull-back relocated
(Requires back chain extension)

Three-Point Configuration

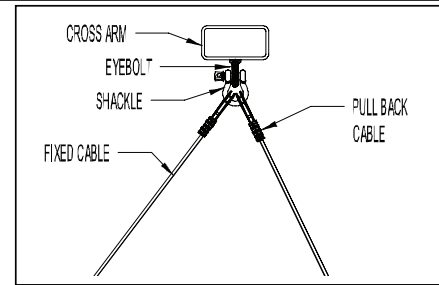
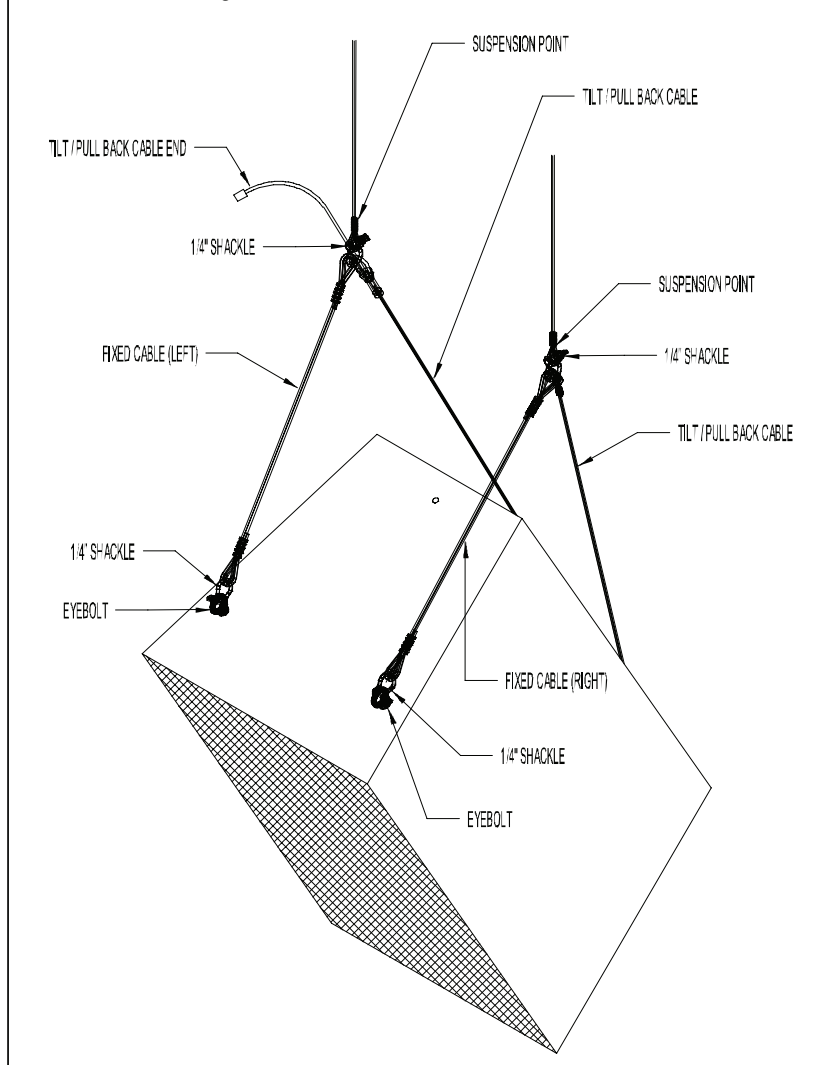


Figure 4: With Cross Arm suspension point

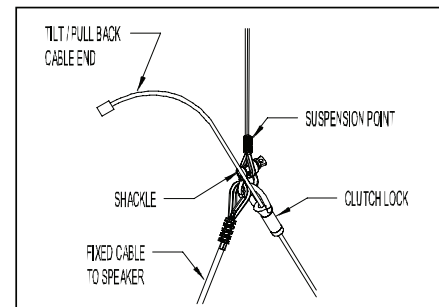


Figure 5: Clutch lock and fixed cable assembly

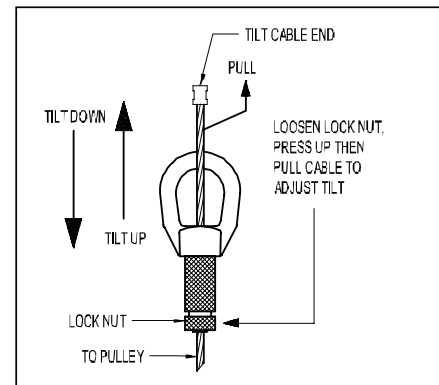


Figure 6: Clutch lock tilting mechanism

Step 1. Attach Fixed Cables

Attach one end of each fixed cable to the top anchor points of the speaker (such as eyebolt, track fitting, etc) using supplied shackles as shown in the above drawing.

Step 2. Assemble Pull-Back Cable to Fixed Cable

Capture the eye of the clutch lock (at the end of the pull back cable) and one of the fixed cables with one of the selected suspension points using a supplied shackle. (Figure 5) Repeat with the other fixed cable, suspension point and the other end of the pull back cable (Figure 4).

Step 3. Attach Pulley to the Pull-Back Cable

Using the pulley's shackle, capture the eyebolt or fitting at the speaker's pull back point (Figure 2).

Step 4. Adjust / Increase Slack of the Pull-Back Cable

Loosen the knurled end of the clutch lock. Compress the knurled end inward while pulling the cable towards the pulley until the desired length is achieved (Figure 6).

If there is no rigging point available at the back of the speaker, use a rigging point from the bottom of the speaker to connect a back chain extension (figure 3).

Step 5. Adjust Speaker's Tilt Angle

To increase the tilt angle of the speaker, compress the knurled end of the clutch lock then pull the pull back cable away from the pulley until desired angle is achieved. To decrease the tilt angle of the speaker, support the weight of the speaker while compressing the knurled end of the clutch lock then slowly lower the speaker until the desired tilt angle is achieved. Release the knurled end to lock in place then tighten (Figure 6). Coil the extra cable or trim and place a stop swage on the end.

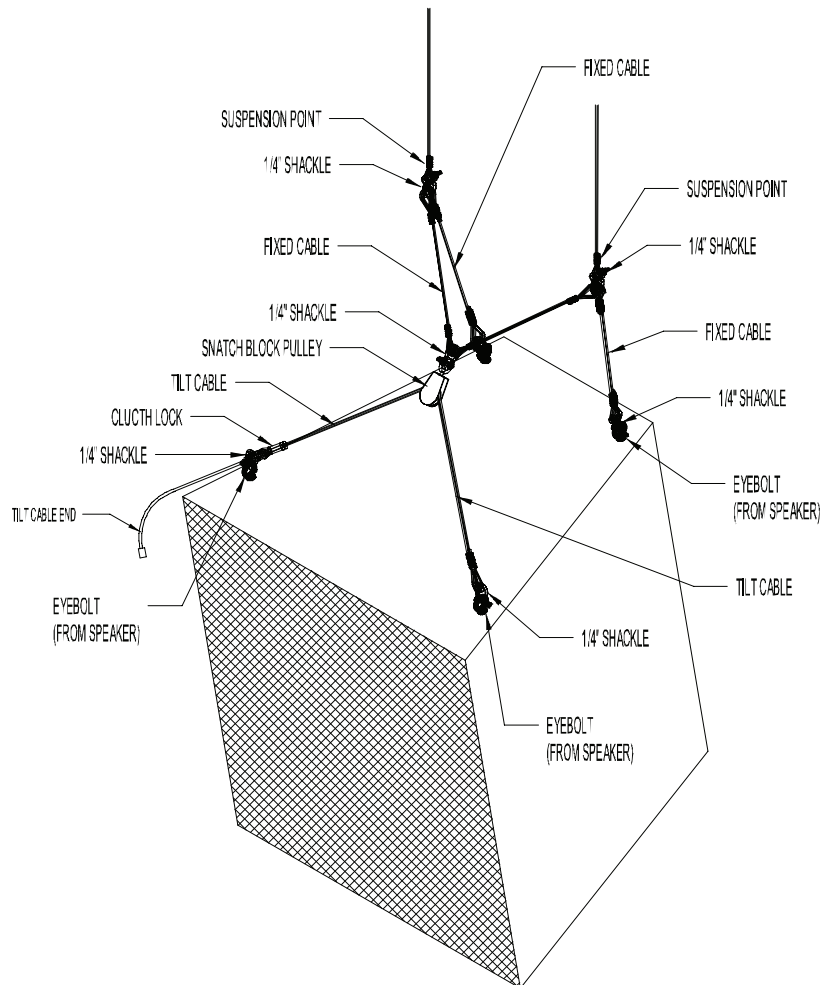
Step 6. Secure Shackles and Clutch Lock

To prevent the screw pin of the shackles from loosening over time, secure them with a supplied tie wrap as shown in figure 8. Tape the knurled end of the clutch lock to avoid long term loosening.

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Four-Point Configuration



Step 1. Attach Tilt / Pull-Back Cable

Connect the pullback cable to the top front anchor points of the speaker (such as eyebolts or track fittings, etc) as shown in the above drawing. Using the pulley's shackle, secure one end of both fixed cables to the pulley (Figure 7).

Step 2. Attach Rear Fixed Cables

Attach each end of the second set of fixed cables to the back anchor points of the speaker with the supplied shackles as shown in the above drawing.

Step 3. Attach Fixed Cable to Main Suspension Point

Connect the front left and the rear left fixed cables to the left suspension point (of your chosen rigging or mounting equipment) using the supplied shackle (Figure 4). Repeat step for the right front and right rear fixed cables.

Step 4. Adjust Speaker's Tilt Angle

To decrease the tilt angle of the speaker, compress the knurled end of the clutch lock then pull the pull back cable away from the pulley until the desired angle is achieved. (Figure 9) To increase the tilt angle of the speaker, support the weight of the speaker then compress the knurled end of the clutch lock and slowly lower the speaker until the desired angle is achieved. Release the knurled end to lock in place then tighten (Figure 9). Coil the extra cable or trim and place a stop swage on the end.

Step 5. Secure Shackles and Clutch Lock

To prevent the screw pin of the shackles from loosening over time, secure them using a tie wrap as shown in figure 8. Tape the knurled end of the clutch lock to avoid long term loosening.

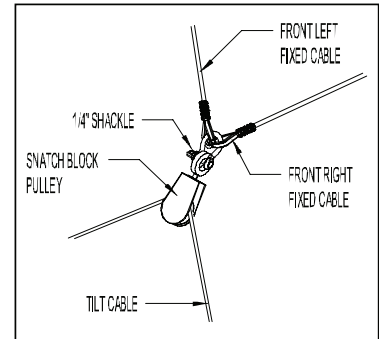


Figure 7: Pulley and Fixed Cable assembly

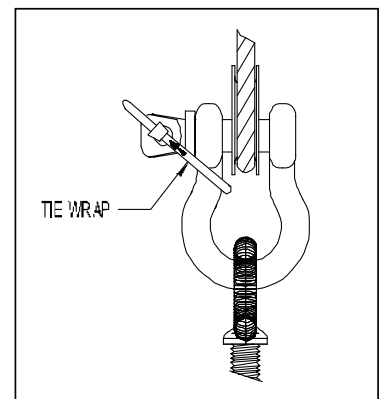


Figure 8: Securing the shackles

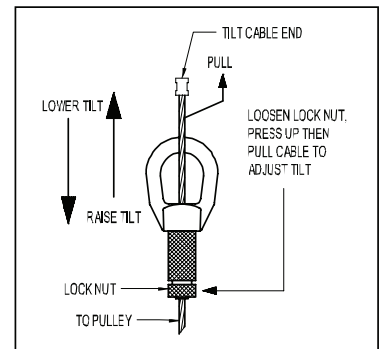


Figure 9: Clutch Lock tilting mechanism