

BVITS CH-REG Cornhole App and Target Instructions

BVITS Cornhole Targets

The dxdt BVITS CH-REG target tag for cornhole is elongated at an approximate 3:1 ratio to account for the acute angle from which a cornhole player observes the cornhole box. Any BVITS tag elongated in such a way can serve as a target. The printed size will impact the effective range of the system. The effective width of the CH-REG target is 6" and this size target should be sufficiently large to enable cornhole play at regulation distances. The CH-REG target tag can be downloaded in pdf form or purchased in sticker form, from: <https://dxdtengineering.com/BVI-Target-System/>. Other products available from that web page include:

- Poster size for archery*
- Heavy paper for air gun*
- Waterproof laminated, wearable placards for squirt gun

*phone mounts for bow or air gun must be purchased separately

BVITS users are welcome to print out April Tags from the Directions Mode collection and modify them as necessary for these and other game and sport purposes.

Cornhole Game Mode Directions:

Configuring the BVITS app for archery:

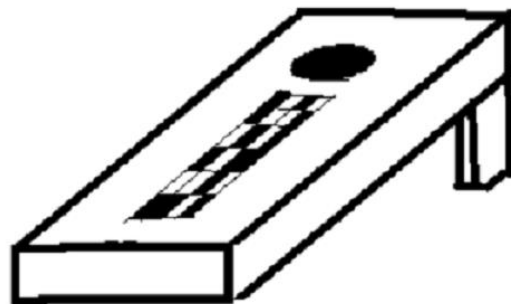
The app includes the following features that can be useful:

- Cornhole competitions take place at specified distances between the player and the cornhole chute. For this reason, we recommend the following BVITS App settings:
 - "Announce range to target": off (This is highly recommended as range to target determinations are seldom accurate using CH-REG elongated tags.)
 - Tag size (if range announcements are to be used, enter 6" for dxdt CH-REG targets.
 - "Manual Zoom": on
- "Match a specific tag": off

- “Vibrate when centered”: The system can be made to vibrate upon detection of a centered target. Set to your preference.
- “Message Speed”: Start at “Normal” and adjust to your preference later. It is likely that at longer target ranges the rate of messages should be decreased.
- “Centering Tolerance”: Set slider to middle of its range. It is likely that at longer target ranges the centering tolerance slider should be set further to the right because at long distances centering adjustments become too minute to be useful. If when you are at competition distance, the most minute change in phone angle causes a message, this is a sign that the centering tolerance should be set further to the right- for a larger tolerance.

Affixing the CH-REG Target Tag to the Cornhole Box

The CH-REG target tag stickers should be affixed to each cornhole box directly under the chute and such that the sticker is centered and parallel with the sides of the box. The top of the sticker should be within 1 inch of the bottom of the chute. Refer to the figure below:



CH-REG Sticker affixed to Cornhole Box

Acquiring the target initially:

Note that acquisition of the CH-REG target tag will be sensitive to the angle relative to the ground from which the target is viewed. This means that a player's height will factor into where the phone should be aimed in order to acquire the target. At regulation distances (24' between the front of each box), an individual about 6' tall would tend to hold the phone at mouth height. Shorter individuals would hold the phone a little higher, perhaps at nose or eye height. Individuals taller than 6' would hold the phone some distance below their chin.

Play at distances shorter than regulation will require that the phone be held lower relative to the body. The shorter the distance, the lower the phone should be held. The BVITS app is pretty forgiving in terms of acquisition angle of CH-REG target tags, however.

Prior to the competition or practice session the player should acquire the target with the app at a close in range and then back themselves to the toss line, increasing the manual zoom as necessary from the slider at the top of the App display so as to maintain a good and stable acquisition of the target by the app. The objective of this step should be to arrive at app settings that will allow a sufficiently precise target picture without excessive or unnecessary messaging- which can be distracting and disruptive to the flow of sporting activities.

Acquiring the target during competition:

While at the toss line and facing the target, place the app in Game mode and aim the phone downrange. Sweep the phone slowly right to left within a small angle until the BVITS app acquires the target. Sweep up and down by a small angle if necessary. Increase the sweep angle as necessary to acquire the target. The BVITS app affords the user a virtual target “box”. The edges of the box are defined by where, left, right and up and down, the app loses target acquisition and issues a message to that effect. In this way, it is possible for the shooter to estimate when their phone is aimed at the center of the box. Tosses should be directed at the center of the virtual box.

Locating tossed beanbags:

Small-scale Bluetooth enabled lost item locators- that fit on key rings- can be considered as a stitched-in addition to each beanbag to facilitate recovery using the phone. A lower tech option is to spray the beanbags generously with a room deodorant or aromatic cleanser like Lysol to make the bags detectable by smell. The cornhole player should also listen carefully for the impact of the beanbag. Small bells or rattles could be stitched into the beanbags to make them easier to hear on impact.

Please enjoy your BVITS system and use it safely.