Kyminasi 3D-Printed Kit Installation Instructions

FAILURE TO FOLLOW THESE INSTRUCTIONS WILL VOID ALL GUARANTIES OR WARRANTIES.

Note: Visit www.HarvestHarmonics.com/Installation to see all the installation videos.

INSTALLATION GUIDELINES

- Your Crop Booster kit comprises a series of Kyminasi Discs (KD's) installed right next to each other in a straight line, held together on a 3D-printed plastic strip. According to your field specs, you may have received either a 3-disc system (first photo below, it's 5 inch long) or a larger system with up to 12 KD's (second photo below, it's 12 inch long). The instructions apply to all sizes.

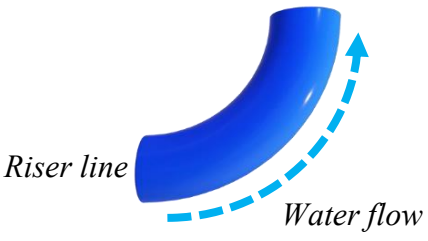


Photo: Disc Holder for 3 KD's The arrow shows the direction of water flow



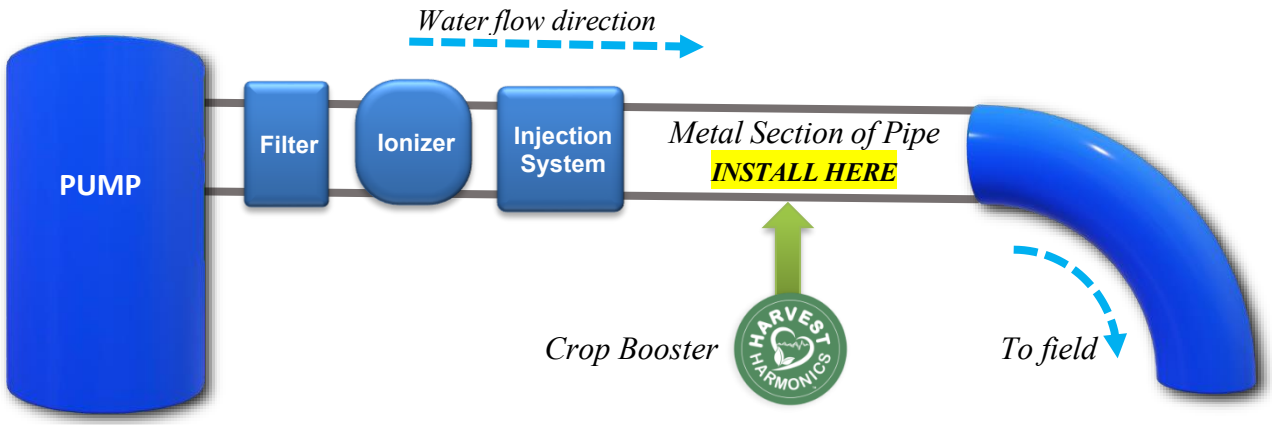
Photo: Disc Holder for up to 12 KD's

- Install the Crop Booster on the **bottom** of a **horizontal** pipe or manifold.
- If no horizontal pipe is available for installation, install on a **vertical** pipe, on the riser line (a pipe in which water flows upwards, see picture):



- Make sure to place the exposed metal of the KD's against the metal pipe. ***Installation must be metal to metal.*** Additionally, adjacent KD's must be touching each other.

- Install the Crop Booster after any ionizers, injection systems, filters, etc. This may not always be possible. Ideally the Crop Booster should be the last attachment in the water line before it goes to the plants.

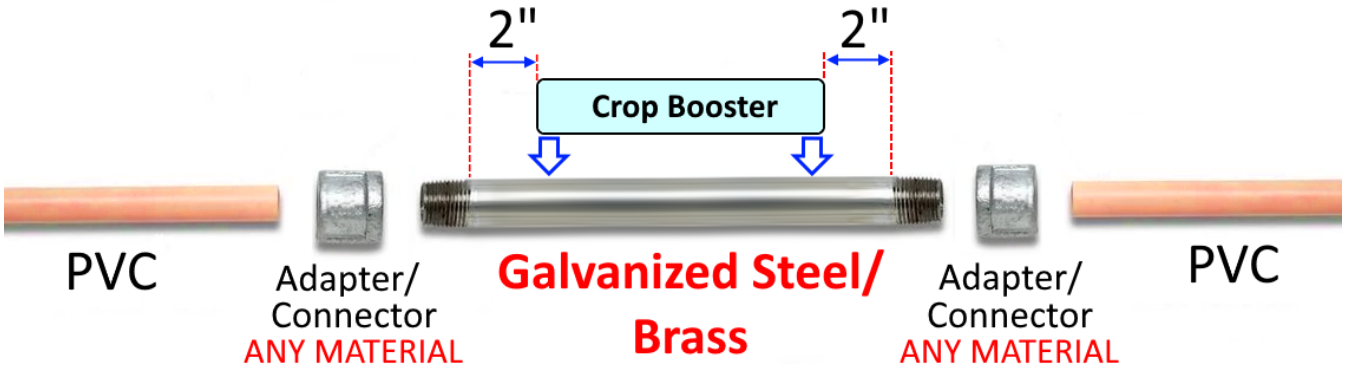


- **IMPORTANT:** Make sure the maximum water flow rate of the pump (or any other water source) does not exceed the '*Water Flow Rate'* specified for your *Crop Booster.*

PREPARE THE INSTALLATION AREA

WHAT TO DO IF THERE IS NO METAL PIPE SECTION TO INSTALL ON

In some cases, the irrigation system has no metal section that's long enough for installing the Crop Booster. The solution is to install a metal pipe in line with the irrigation line. Refer to the diagram below and follow the guidelines below:



1. MATERIAL OF METAL PIPE: ***Galvanized steel, or brass.*** The rest of the irrigation pipe can be made of PVC or any other material – even an open canal.
2. DIAMETER OF METAL PIPE: The diameter can be any size from ½ inch and up. The edges can be threaded or unthreaded (glued). The diameter can be the same as the irrigation pipe, or different, if it fits your maximum water flow.

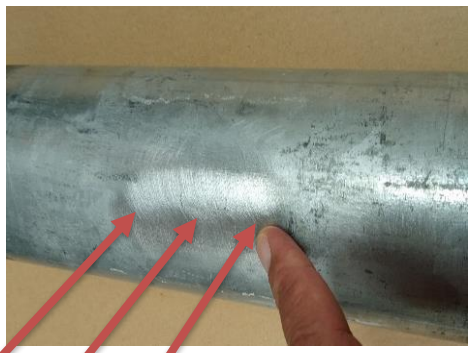
3. LENGTH OF METAL PIPE: Examine your Crop Booster kit to determine the length of the metal pipe to add. You need at least 2 extra inches on each side for the duct tape and labels (for long-term protection from rain and dirt). For example, if your disc holder strip is 12 inches long, then you need a length of 16 inches ***to install on.*** Add the extra length for the adapters, whether threaded or unthreaded. For example, if the pipe is unthreaded and needs 1.5 inches on each side for glueing adaptors, then your overall length needs to be 16+1.5+1.5 = 19 inches total. *It can be longer.*

   For example, if your disc holder strip is 5 inches long (holds up to 3 KD's), then you need a length of 7 inches ***to install on.*** Therefore, your overall length needs to be 7+1.5+1.5 = 10 inches total. *It can be longer.*

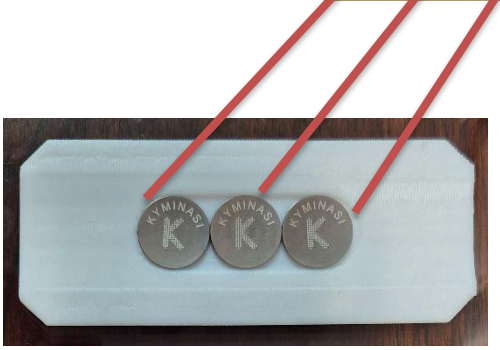
INSTALLATION PROCEDURE

1. The Crop Booster KD's must be attached to metal. The signals will not transfer through a pipe that is not metal. Find a section of metal pipe with enough unobstructed space to install the KD's.

2. Ensure that the surface of the metal pipe at the installation site is completely clean before installing. Remove any rust, paint, plastic covering, weatherproofing, debris, etc. We highly recommend using a grinding tool as needed to ensure a clean surface prior to installation.
   (a) This only needs to be done where the KD's contact the pipe.
   (b) ***The area does NOT need to be flattened!*** Grind it only to a clean surface.
   (c) Remember, this clean area is prepared at the **bottom** of a horizontal pipe.







3. Attach the Disc Holder to the cleaned area, with the KD's facing and contacting the pipe. Make sure the arrow is pointing at the direction of water flow.

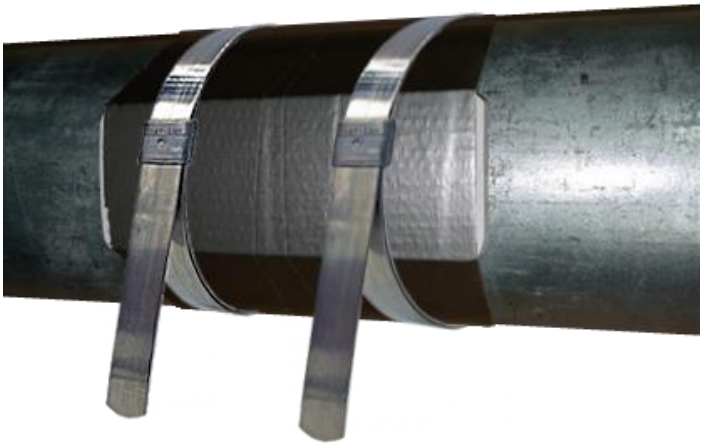
Kyminasi® Crop Booster™

4. Secure it in place by wrapping duct tape around it as shown in the picture on the right. Make at least three passes around the pipe.



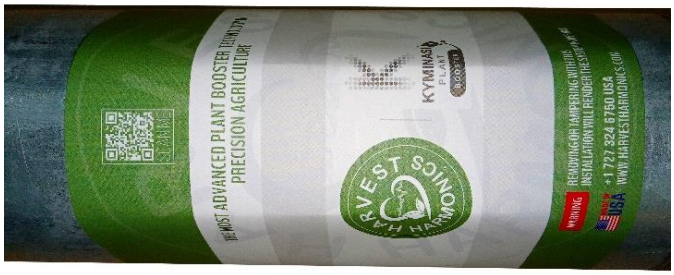
5. Secure the Disc Holder using the metal clamps provided in your Crop Booster kit (two clamps for the 5-inch Disc Holder, and three clamps for the 12-inch Disc Holder). For instruction on using the Strap Binding Tool, refer to the guide provided with the tool.





6. For extra protection from rain, rust, and dirt, wrap another layer of duct tape and cover the edges, too.

7. Wrap the installation area with the Harvest Harmonics labels:



8. Your installation is ready to use. ***The first flow of water through the pipe will activate the KD's.***

9. To verify the installation, perform a Water Sample Test – see separate instructions.