Bin Buddy

Users Manual

Please read the owners manual before mounting or trying the Bin Buddy!

Mounting Instructions

To mount the spout, drill two 3/32 holes half way around, from the front center of the steel spout on the auger (front implies the intake end of the auger). From the inside of the steel spout tack weld two 3/8" lock nuts (supplied). Place the spout over the steel auger spout and insert the shoulder bolts with the flat washer on the outside of the spout. Tighten until the bolts bottom out, this will allow the spout to pivot. Make sure that the tab of the spout is hanging towards the intake end of the auger.

To mount the sensor, use the two holes drilled into the tab at the bottom of the spout. First insert the pan head screw from the outside of the spout, install one clamp and then the other. Insert the ¼" nuts into the inside clamp and begin to thread the pan head screws. Once the clamps are fastened to the spout and slightly tightened up, insert the sensor between the clamps and finish tightening the clamps. DO NOT OVERTIGHTEN THE PAN HEAD SCREWS!!

To install the receiver Unit, make sure that the top pin on the 7 pin round connector is the ground (-) and the bottom is (+). Simply insert the sensor into the 7 pin round connector, located on the tractor.

To insert or remove batteries, simply unscrew the antenna and push slightly down on the antenna connection while pulling on the other end of the sensor. Insert the batteries ensuring the polarity of the batteries. Reinsert the board into the tube and attach the antenna. DO NOT OVERTIGHTEN THE ANTENNA, AS IT WILL DAMAGE THE CONNECTION!!

How to use your Bin Buddy

To use your Bin Buddy, simply place into your bin, making sure not to set the auger on the sensor. Insert the auger to the desired depth, or until the reflective tape is just visible in the bin lid. Fill the bin and for the first couple of bins you will want to watch and make sure that the spout is at the right height so as not to run the bin over or plug the auger. When you hear the horn, simply close the gate on the truck, lift the auger slightly and idle down the tractor until the auger is empty and ready to move. When inserting the auger in the bin, make sure the spout is touching the edge of the bin lid opening towards the tractor.

Storage

Remove the batteries when not using the sensor for long periods of time. We recommend removing the sensor once you are done with it for the season.

There are no user serviceable parts inside other than the batteries. Please do not tamper with anything inside the tube!

Operation

"This device has been designed to operate with an antenna having a maximum gain of 2.7 dBd.
Antennas having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms."

"To reduce potential radio interference to other users, the antenna type and its gain should be chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication."

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
FCC
IC Canada

WARNING: The use of external RF amplifiers with low power devices is strictly prohibited.

Battery Info:

Use and industrial grade alkaline “AA” battery.
Replace with fresh alkaline “AA” batteries at the start of every season.
Remove the “AA” batteries from the TX Unit when not in use.

WARNING: Verify battery polarity when installing batteries.
Do not use “AA” batteries with conductive outer casings.
Installation of conductive battery casings may explode or leak and cause personal injury.

Receiver Specifications:

Operates on 6-14 VDC
Siren active 160mA Current at 12 V
Siren idle 5mA Current at 12 V

Mating connector to Pollack 11-700 Plug
Pin 1 is Power GND
Pin 4 is +10-14 VDC
Reverse power protection and surge protection to 20VDC

Receiver type SAW Based Superheterodyne
Max. RF input 0dBm
Sensitivity @BER 10-5, -95dBm typical
Operating temperature range –25 to +70 degrees C
Initial settling time typical 7mSec, max 10mSec.

Siren: Piezo Siren 102dB
Tone rated at 2,000-4,500 Hz

Transmitter Specifications:

Requires 3 industrial grade alkaline “AA” batteries.
Industrial Grade Alkaline Battery rated @ 2A/Hr
Transmitter Idle current 10uAmps typical
Transmitter Active current 5mAmps typical

Absolute Frequency 314.8MHz, 315.0MHz, 315.2MHz
RF Power Output –12 to -14dBm
Data Rate 2.2KHz
Operating Temperature Range –25 to +70 Degrees C

Warranty:

Limited Warranty on parts and labor for one full year. Full year unless the failure is due to misuse or abuse.

Disclaimer:

Viagrow Fertilizers cannot be held liable for any damage to any equipment or product that is used in conjunction with the bin buddy.