Bale Drop Sensor (BDS)

The BDS is installed at the rear of the top baler door to detect when the trailing end of a hay bale has dropped onto the tailgate (or more often now the weigh scales).

For the Gazeeka, this sensor serves a number of purposes. First, it detects when a bale gap is passing between the antennae and prevents a wrong moisture reading and potentially marking the bale. Secondly, it also indicates the end of a bale being measured for moisture, so the maximum (peak) moisture can be determined bale by bale

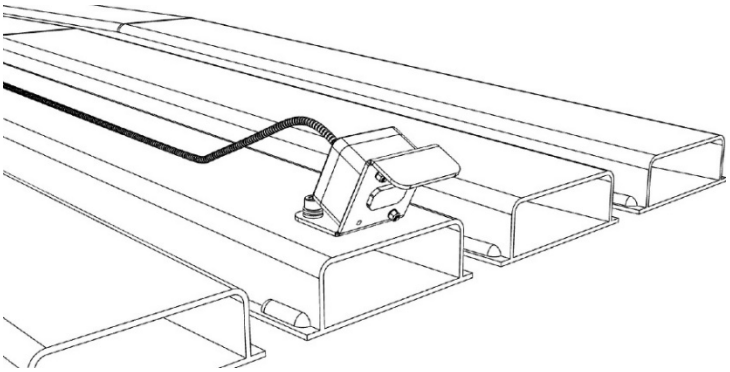
The average moisture remains time based to give operators a better understanding of the moving moisture value when going into or coming off the dew.

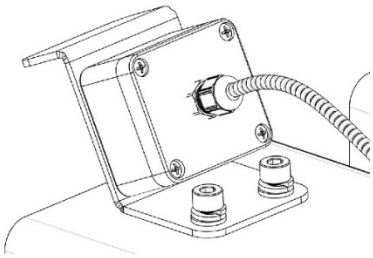
Compatibility

The BDS (LiDAR) sensor will only operate as designed when installed with a D1445 controller electronics module (Gazeeka serial number 3566 on) and V22p00 on software code in the controller.
(Note. In some cases, the BDS can be used in older Gazeeka units with some success. However, it will only simulate the end of tailgate optical sensor to detect bale gaps. Consult your machinery dealer or the factory).

Installation

Drill two holes 10.5mm (for M10 bolts) on the middle section of the baler top door. Use the actual bracket of the lidar sensor as your template, and put the pair of holes 70mm (+/- 5mm) in from the back edge of the door. Secure the sensor in place with the fasteners provided as shown below.





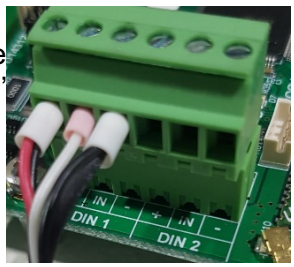
Route the sensor cable to the bottom of the active antenna (the one with all the electronics in it).

Secure with cable ties and ensure you have allowed for the baler door movement when securing.

Remove the bolt in the base of the antenna and secure the sensor loom into the antenna using the M12 cable gland supplied with the sensor loom.

Wire the sensor lead into the terminal strip at the top of the controller module as follows:

Wire into DIN1 (Digital Input 1), red and black pair **(+)**, white wire to **(IN),** and the black pair wire to **(–)**.



To test the BDS, do as follows:

Place your hand in front of the BDS about 300mm (one foot) away and hold it there for 10 seconds, then take your hand away. As you take your hand away the “DIN 1” red LED on the controller module should light up for a few seconds.

Next, tell the Gazeeka system you are using the BDS (LiDAR).

870s (non ISObus)

1. In Analyse Mode press F1 to go into Setup Mode.
2. Press MENU to get to Set Parameters.
3. Press ITEM to get to LiDAR,
4. Press the UP or DOW N keys to make this YES.
5. Press MENU until you get to “Press F1 for Analyse”. Press F1.

870i (ISObus)

1. In Analyse Mode press the settings cog.
2. Select “Set Parameters”.
3. Change “Lidar On” to “Yes”.
4. Press the exit symbol to return to Analyse Mode.