AndrOvin

Weighing in combination with electronic scales

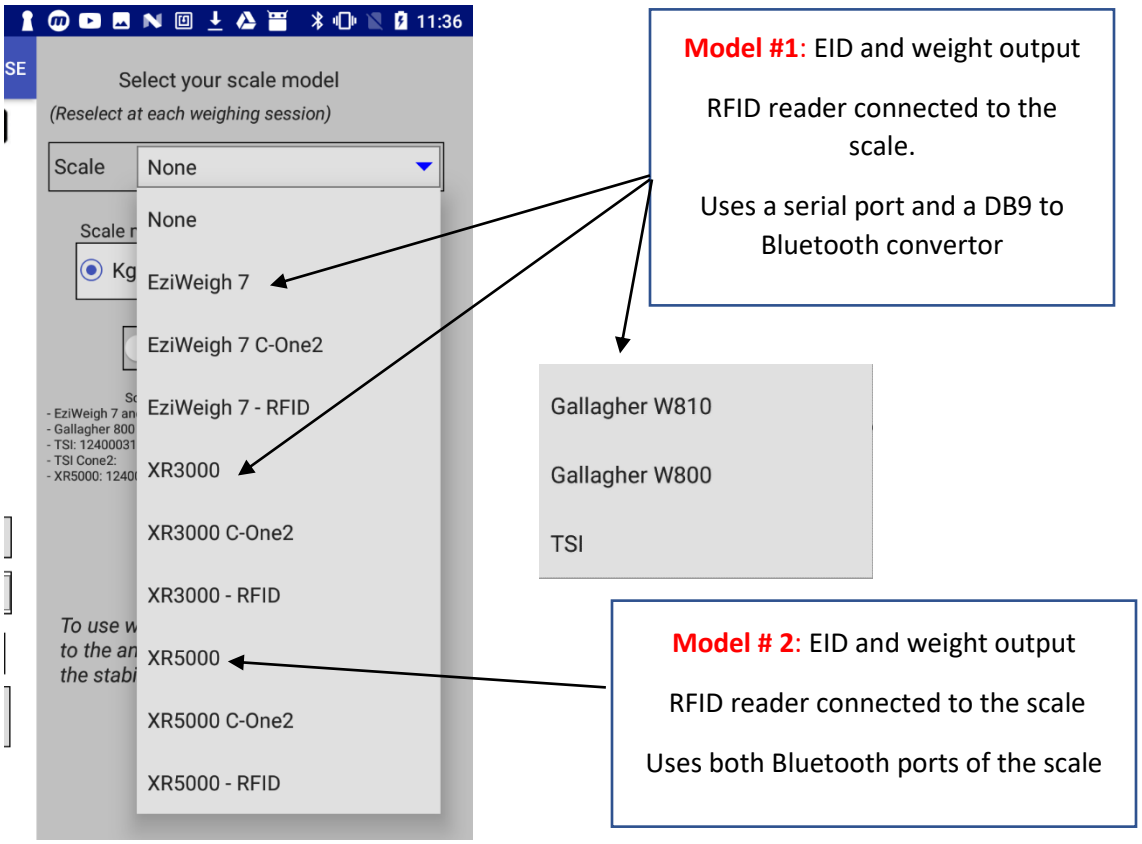
When using AndrOvin, it is possible to weigh animals with electronic scales and import data directly in your mobile device.

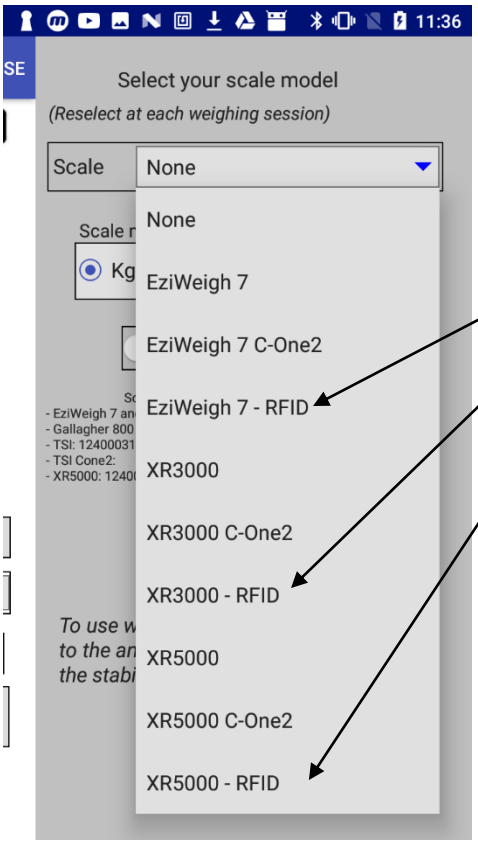
However, as each scale model has its own unique characteristics (some have one Bluetooth port, some have two etc.…), various connection methods can be used. Note that a Bluetooth port can only be used to connect a single device. Then, if one connects an RFID reader on the Bluetooth port of a scale, this port can no longer be used for other purposes. In most cases scales also have a « serial » (Connections via a 9 pin – DB9- connector) port that can be converted to a Bluetooth port. (see the corresponding section at the end of this document)

The following explains the various configurations when used with AndrOvin, according to the selection made on the AndrOvin scale menu.

AndrOvin scale model selection menu

When you access the scale menu selection, you are presented with the following drop-down list:

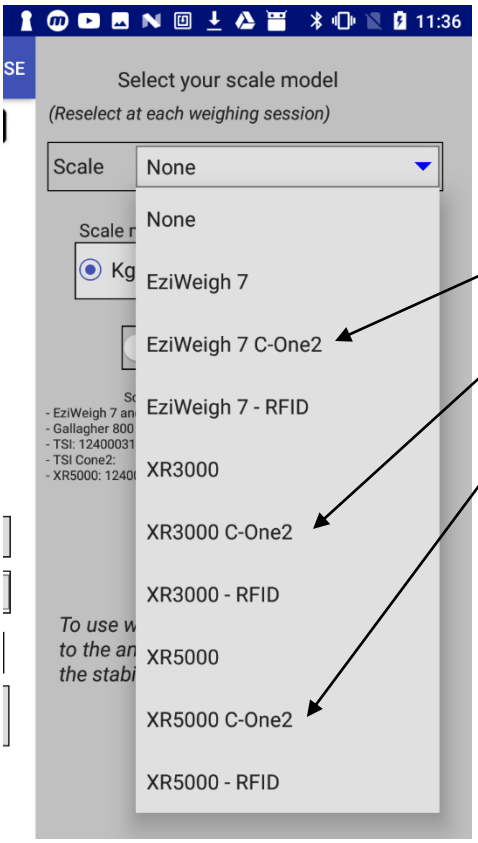




Model # 3: Output weight only from the scale

RFID reader connected via Bluetooth to the mobile

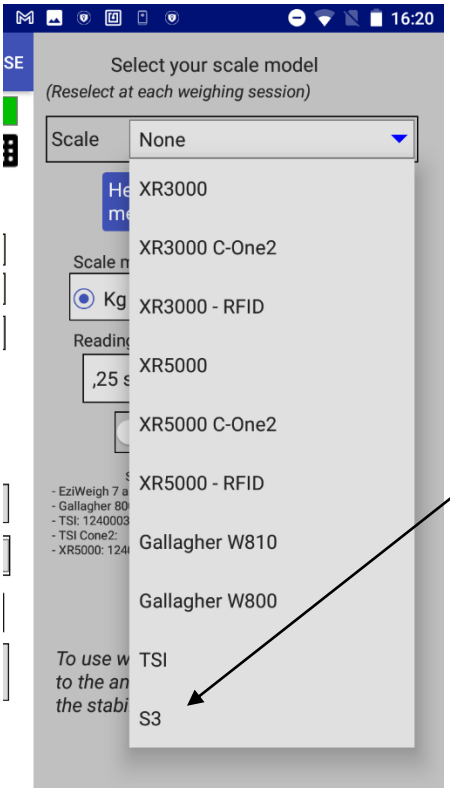
Scale Bluetooth port connected to the mobile



Model # 4: Output weight only from the scale

Uses the integrated RFID reader of the C-One2

Bluetooth port of the scale connected to the C-One2



Model # 5 :Weight only from the scale

With the C-ONE2 integrated reader

Or

External bluetooth reader

The scale Bluetooth port is connected to the mobile

Serial Magic Gears software must be used to read the S3 weight output

Summary of configurations

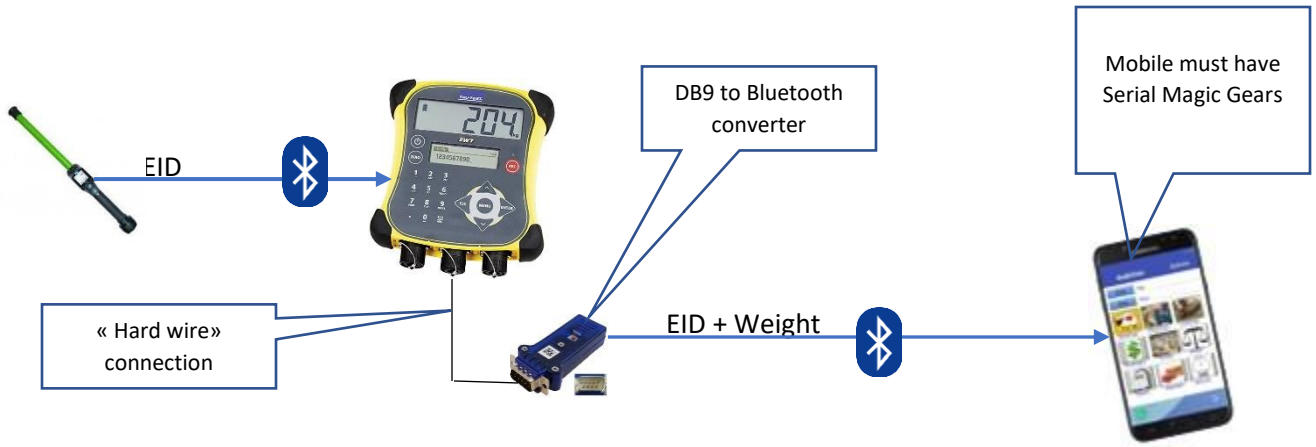
Scale type 7 model	Menu Selection	RFID Reader	Connection of the mobile to the scale	Data output from Scale
EziWeigh 7i	EziWeigh 7	Connected to scale via Bluetooth	On the scale DB9 port via a Bluetooth converter	EID & weight
	EziWeigh 7 – RFID	Bluetooth connected to the mobile	Via the Bluetooth port of the scale	Weight only
	EziWeigh 7 C-One2	Not required	Via the Bluetooth port of the scale	Weight only
XR3000	XR3000	Connected to scale via Bluetooth	On the scale DB9 port via a Bluetooth converter	EID & weight
	XR3000 – RFID	Bluetooth connected to the mobile	Via the Bluetooth port of the scale	Weight only
	XR3000 C-One2	Not required	Via the second Bluetooth port of the scale	Weight only
XR5000	XR5000	Connected to scale via Bluetooth	Via the second bluetooth port of the scale	EID & weight
	XR5000 C-One2	Not required	Via the Bluetooth port of the scale	Weight only
Gallagher W810	Gallagher W810	Connected to scale via Bluetooth	On the scale DB9 port via a Bluetooth converter	EID & weight
Gallagher W800	Gallagher W800	Connected to scale via Bluetooth	On the scale DB9 port via a Bluetooth converter	EID & weight
TSI	TSI	Connected to scale via Bluetooth	On the scale DB9 port via a Bluetooth converter	EID & weight
Tru-Test S3	S3	Option 1: Connected to scale via Bluetooth Option 2: use C-ONE2 integrated reader	Via the Bluetooth port of the scale	Weight only

Note: For all configurations, the weight output value is always 1 decimal only

Model # 1: Applicable to the following menu selections: **EziWeigh 7, XR3000, Gallagher W800 and W810 as well as TSI**

The objective is to read both the tag and the weight from the scale

In this model, the configuration is as follows:



In this model,

- The RFID reader is connected to the Bluetooth port of the scale.
- The scale must be configured to output both the EID and the weight once the weight is stable
- The DB9 serial to Bluetooth converter is connected to the DB9 physical port of the scale (see video on EweManage.com)
- The Bluetooth side of the converter is connected to the mobile
- The mobile receives both the EID and the stabilized weight from the scale and record it appropriately in AndrOvin.

Notes:

1. A null modem connector is always required to connect the converter to the port
2. For the TruTest EziWeigh 7i, a special adaptor cable must be ordered to get the DB9 connection: manufacturer product code: 818324
3. The Bluetooth converter is available from Serial IO in USA or from your EweManage administrator

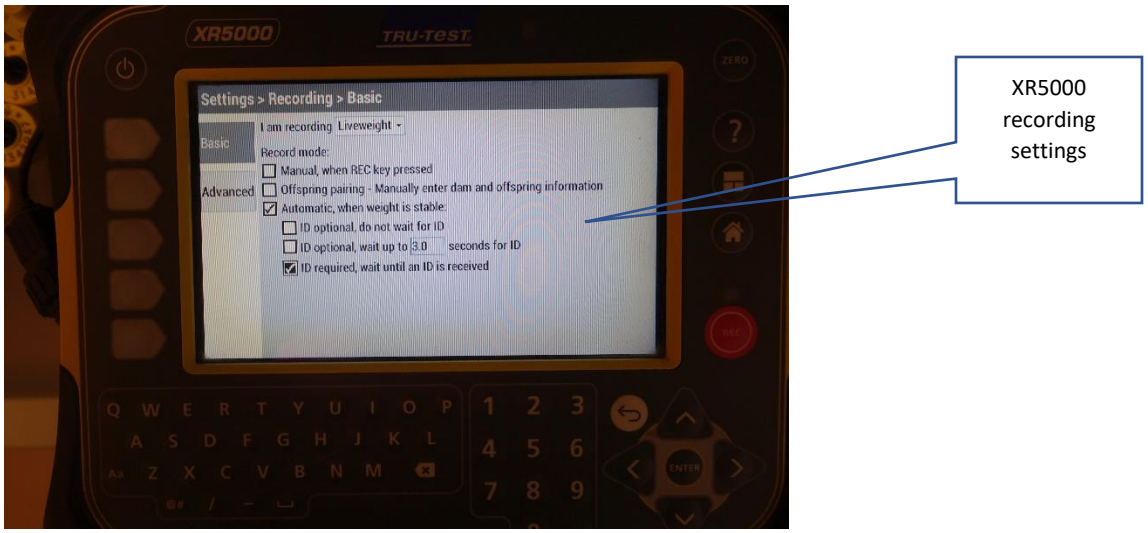
Model # 2: applicable to the **XR5000** menu selection

The objective is to read both the tag and the weight from the scale

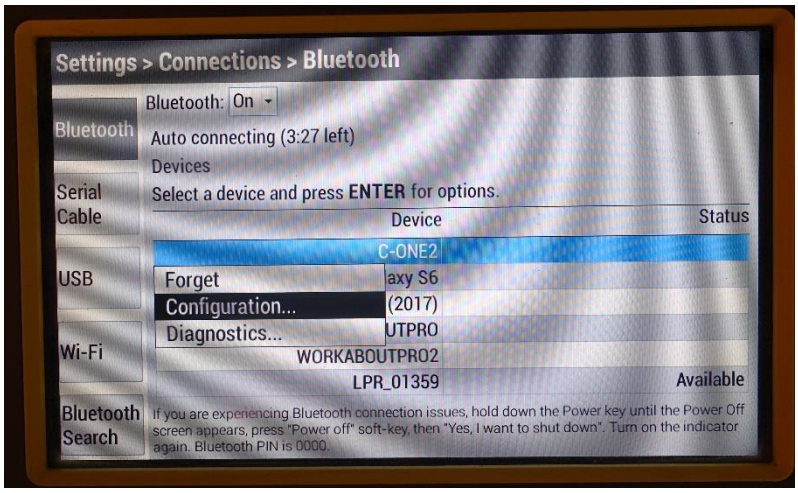
In this model, the configuration is as follows:

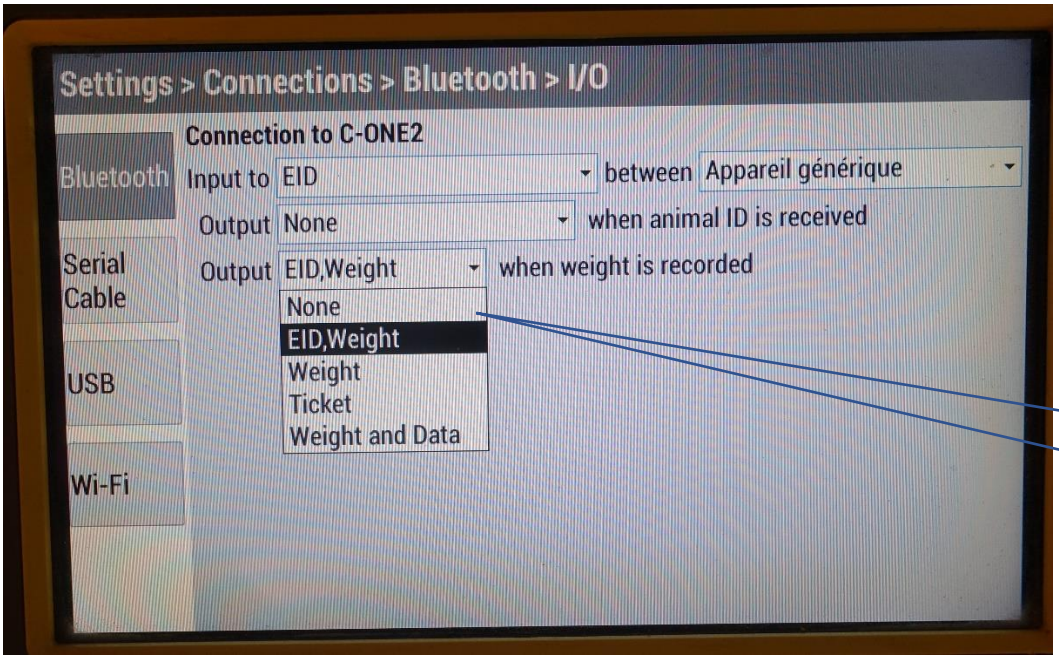
In this model,

- The RFID tag reader is connected to one of the Bluetooth ports of the scale (The XR5000 has 2 Bluetooth ports)
- Scale must be configured as follows:
    - Recording settings :
        - Automatic, when weight is stable
        - ID required (see image below)
    - Must send <u>EID and weight when weight is stable</u>
- The mobile is connected to the second Bluetooth port of the XR5000
- The Bluetooth mobile port must be configured to send both EID and weight (see below)
- The mobile receives both info upon stabilized weight recorded. (*NOTE: a certain delay may appear in the process since the mobile checks 4 times per second if the weight is stable and records it only when the condition is met*).
- No convertor nor SMG is required



Configuration menu for the mobile Bluetooth port (mobile is C-One2 in the example)



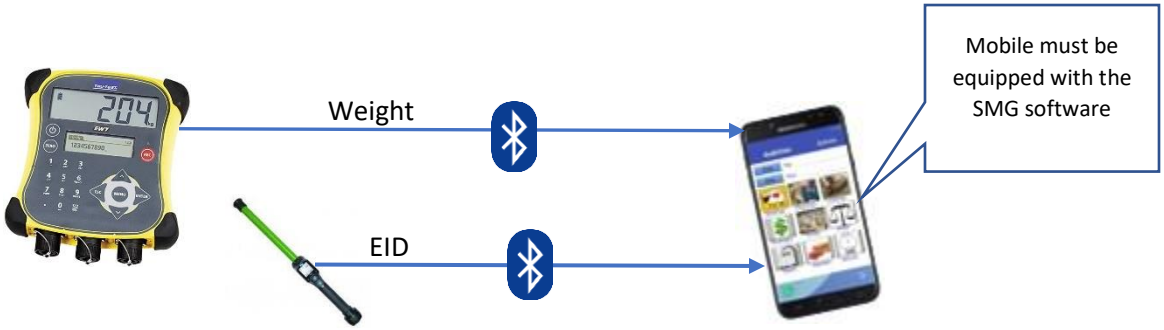


Configuration of the Bluetooth mobile port on the scale

Model # 3: applicable to menu items **EziWeigh 7 – RFID, XR3000 – RFID and XR5000 - RFID:**

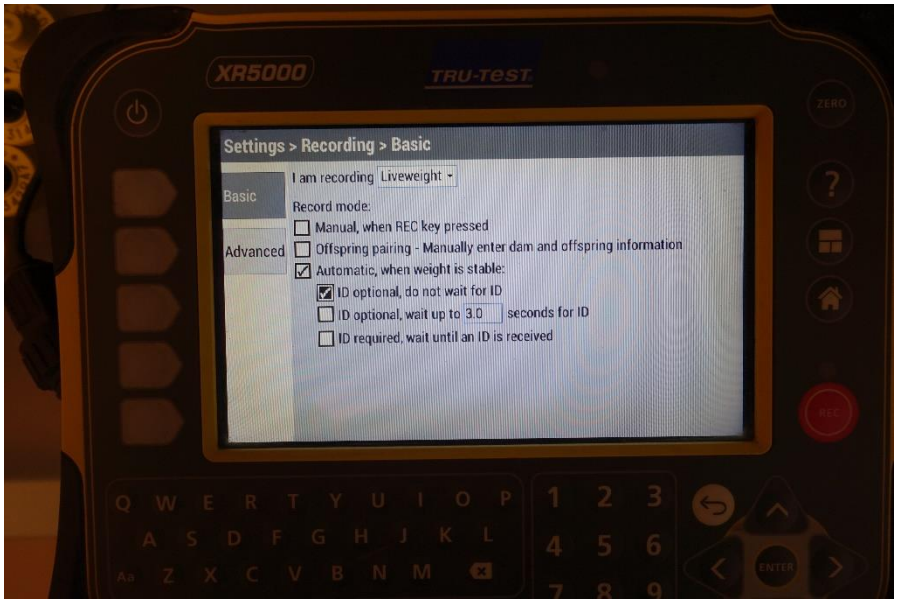
The objective is to only read the weight from the scale. The RFID tag reader is Bluetooth connected to the mobile

In this model, the configuration is as follows:

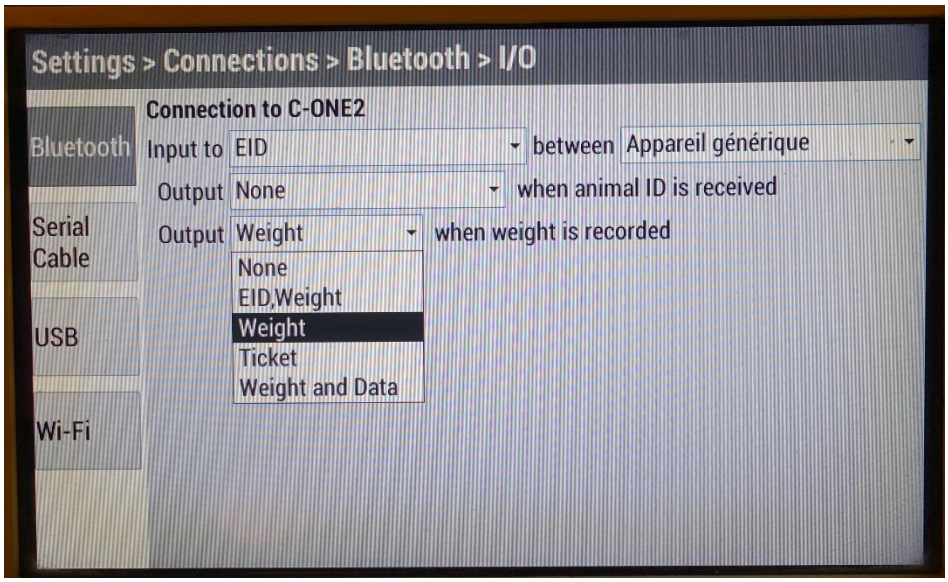


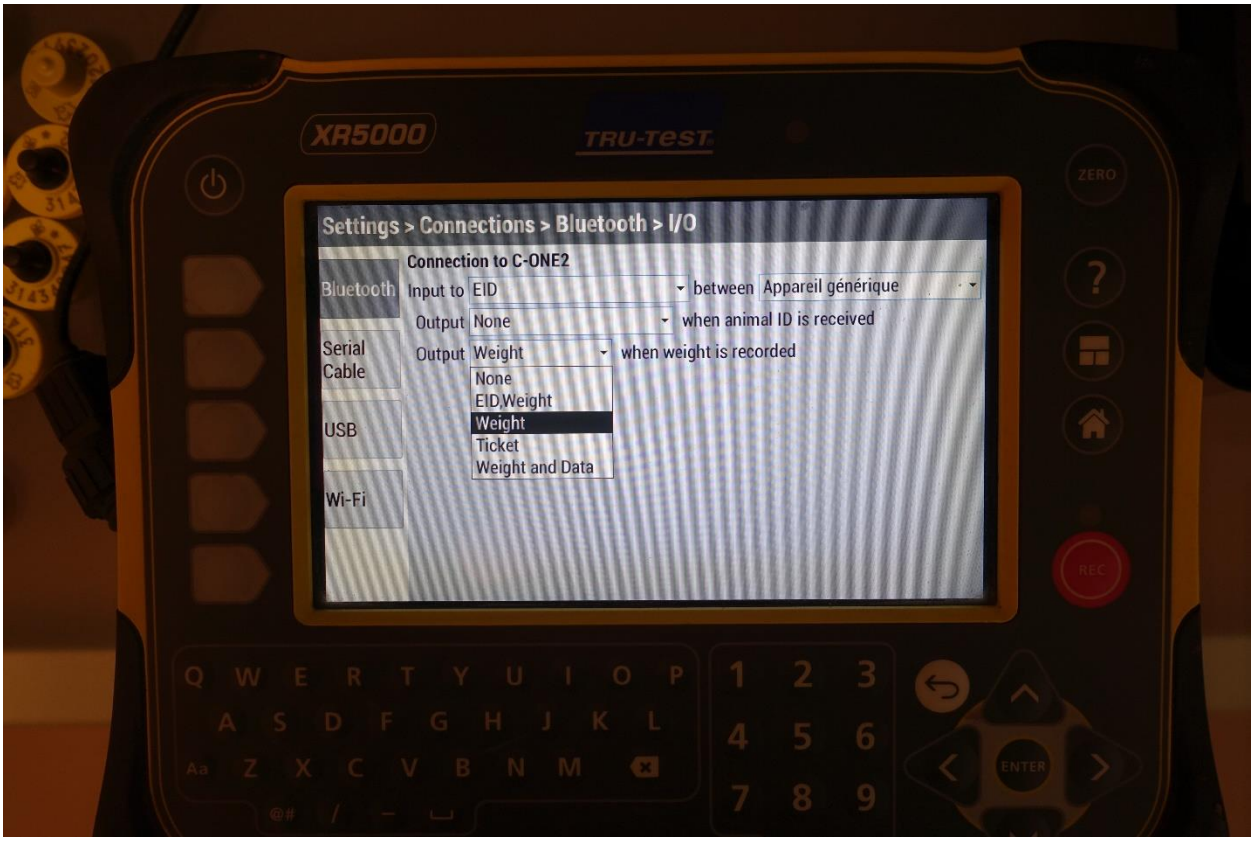
In this model,

- The scale Bluetooth port is connected to the mobile
- The RFID reader is also Bluetooth connected to the mobile
- The mobile must be equipped with the Serial Magic Gears software to allow reading the tag
- The scale must be configured as follows:
    - Recording settings :
        - Automatic, when weight is stable
        - ID optional (see image below)
    - Must send <u>weight only when weight is stable</u>
- The mobile Bluetooth port must be configured from the scale to send only the weight (see pictures below)
- When a tag is read in AndrOvin, AndrOvin sends a weight request message to the scale. The mobile receives the weight value via the Bluetooth port of the scale.



Setting configuration of the mobile Bluetooth port (In the example, the mobile is a C-One2)

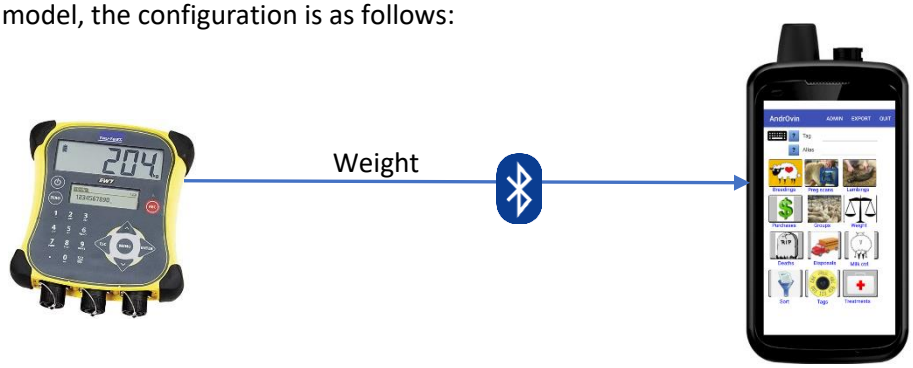




Model # 4: Applicable to EziWeigh 7 **C-One2**, XR3000 **C-One2**, XR5000 **C-One2**,

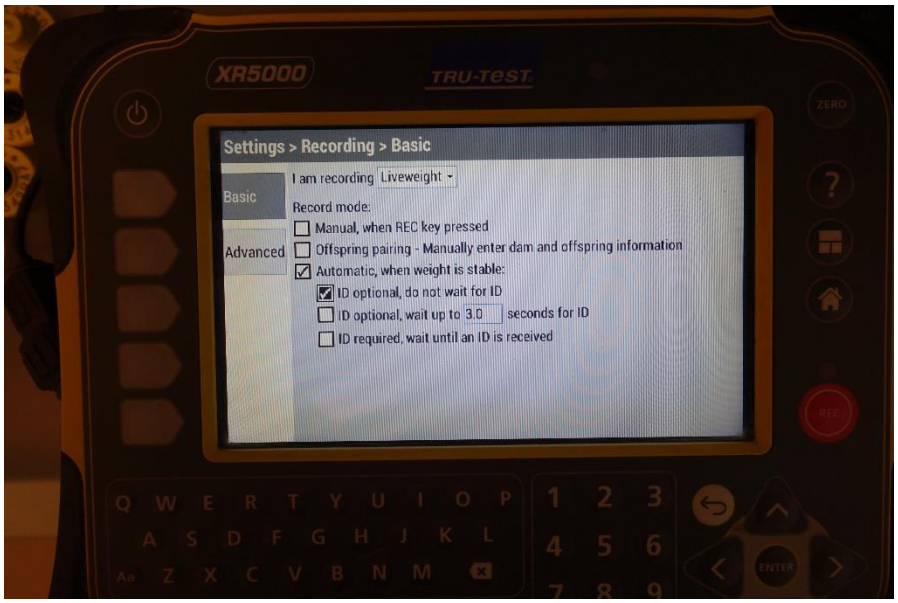
The objective is to read only the weight from the scale. The RFID tag value is read by the reader integrated on the C-One2

In this model, the configuration is as follows:

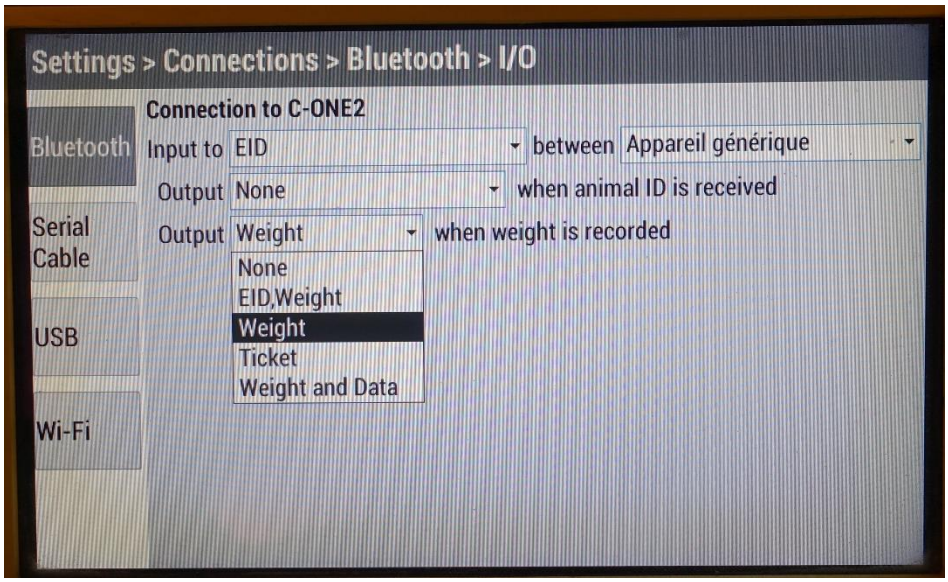


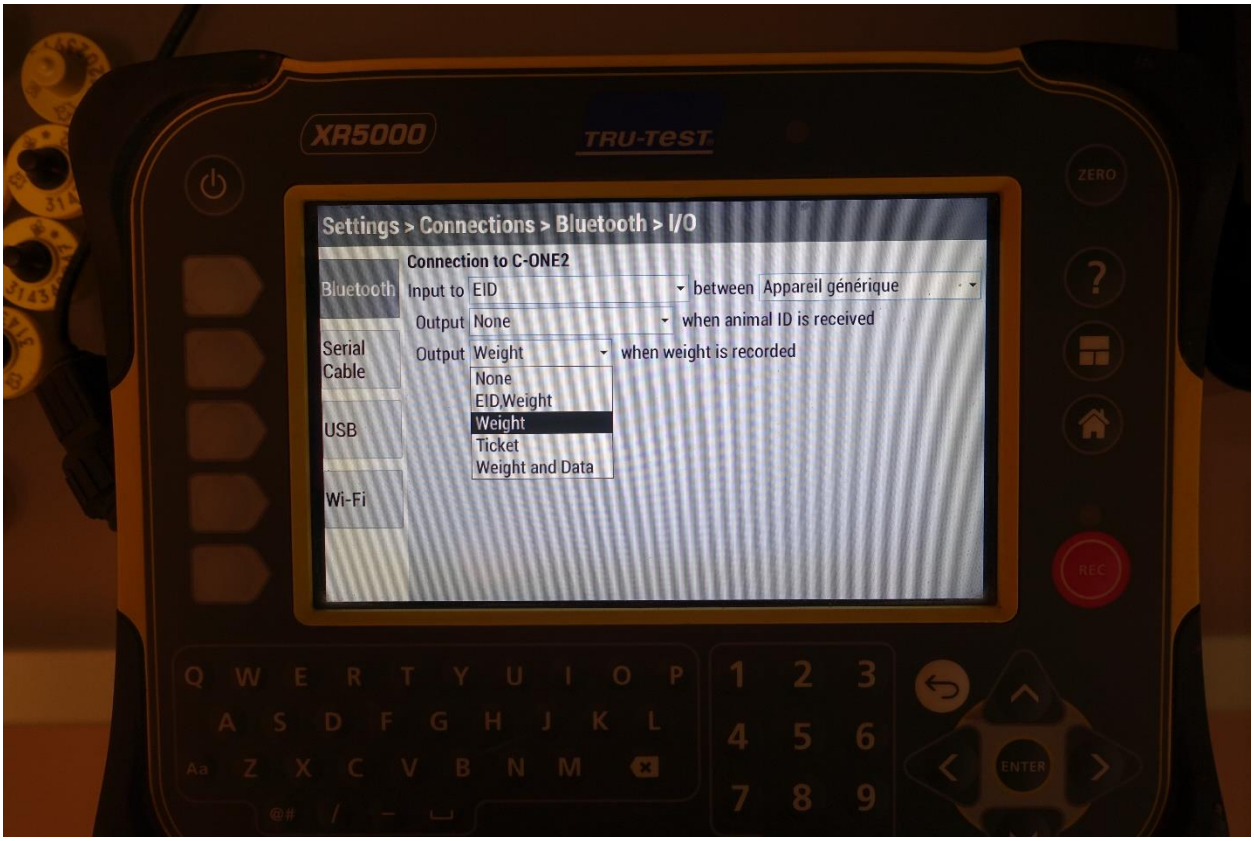
In this model,

- The scale Bluetooth port is connected to the mobile (no converter required; no SMG software required)
- The scale must be configured as follows:
    - Recording settings :
        - Automatic, when weight is stable
        - ID optional (see image below)
    - Must send <u>weight only when weight is stable</u>
- The mobile Bluetooth port must be configured from the scale to transmit only the weight (see pictures below)
- When a tag is read by the C-One2, AndrOvin sends a weight request message to the scale. The mobile receives the weight value via the Bluetooth port of the scale.



Setting configuration of the mobile Bluetooth port (In the example, the mobile is a C-One2)

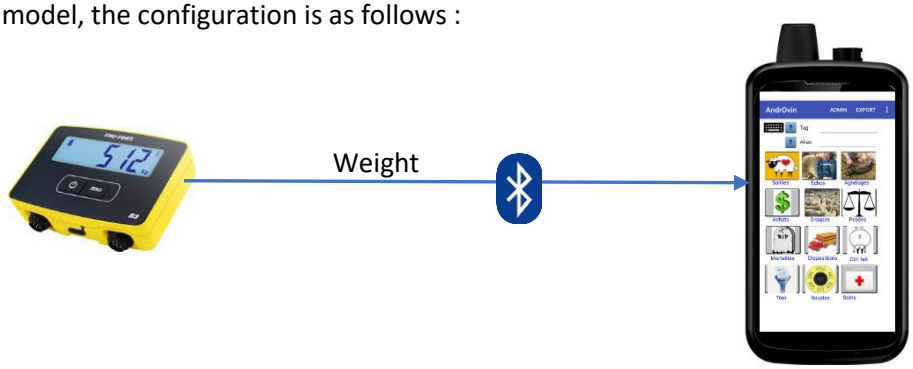




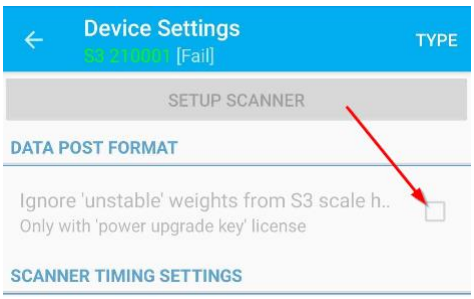
Model # 5 : Weight from the S3 scale, either on C-ONE2 or any Android mobile

The objective is to read weight only from the scale head. The RFID tag is read either by the C-ONE2 integrated reader or via an external reader Bluetooth connected to your mobile.

In this model, the configuration is as follows :



You must use the Serial Magic Gears software (SMG) from Serial IO to read the output from the S3 scale. In order to do so, you must purchase the « S3 power upgrade » de SMG and select the "Ignore unstable weights" box:



When you select the S3 scale, you do not have to click the « Bluetooth connexion » in the scales selection screen. The connexion is made via the standard parameters of your mobile, as for any normal bluetooth device and via the SMG software.

If you are using a mobile other than the C-ONE2, the same SMG software will be required to connect at the same time your RFID reader and the S3 scale to AndrOvin.

Note on the S3 scale head :

This device does not act as other scale heads … It is equipped with a « low energy » bluetooth port (BLE) and may require that you « unpair » (or forget) the device and repair it again at each Bluetooth session.

Moreover : the S3 always send stabilized weights at each and every change, including when it reached « 0 » upon an animal leaving the scale. Consequently, eventhough AndrOvin is programmed to handle this behaviour, <u>you must wait until the scale has reached the zero reset value prior to scanning the next animal</u> to be weighed.

DB9 serial to bluetooth convertor

For those scales not equipped with a bluetooth output port but have a serial DB9 port, a DB9 serial to bluetooth converter is required. This is the case of equipments described in scenario 1 of this document.

This module can be purchased directly from Serial IO, called « Blue Snap DB9 to RS232 adapter »

You must verify the connector type required for your scale : typically, scales are equipped with a male connector (9 pins) and you must then purchase the converter with a female connexion. In case of error, you must use a « null modem » adaptor. Make sure you buy the model with integrated battery and proper cable to recharge.

An additional document is available in the information section of ewemanage.com describing how to bluetooth connect your scale using the DB9 converter.

Connection a bluetooth scale to AndrOvin :

Note : applicable for all scales to the exception of the Tru-Test S3

To bluetooth connect a scale with AndrOvin :

1) Pair your scale with your mobile as for any other standard Bluetooth equipment. Then, launch AndrOvin, access the Weigh page and flip the page to the left in order to obtain the sacles selection menu.
2) Select your scale in the menu as per conditions mentioned in this document
3) Click on “Bluetooth connexion” button on the same page
4) On the next screen, click on “List BT devices” and wait for your scale to appear in the list of available devices
5) Select your equipment and wait for a confirmation of the connection
6) When connected, return to the weight screen and position the cursor in the tag reading green field. You may start your weighing session.