Interfacing YieldPoint Instruments with an Ackcio Digital Node

July 2021

YieldPoint's Instruments

The majority of YieldPoint instruments communicate using RS485. These can be easily adapted to connect and be read by an Ackcio Digital Node.
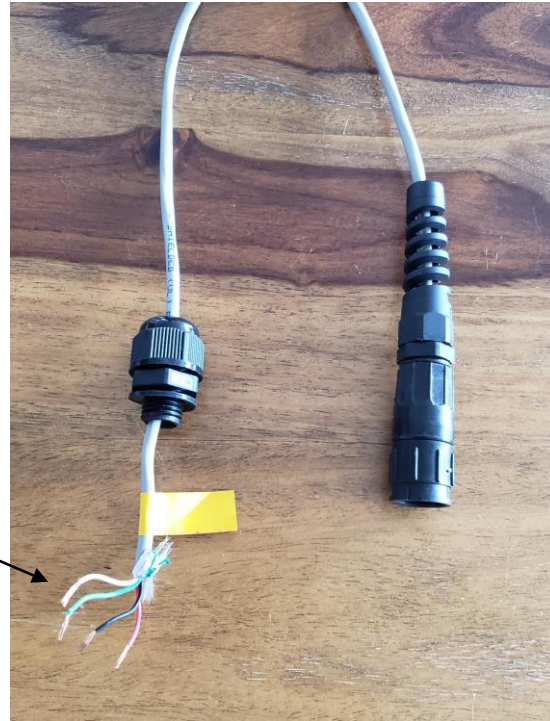

Power: *6-18VDC*
Red: +6-18VDC
Black: GND
White: Tx
Green: Rx

RS485: 9600, 8, N,1

Ackcio Digital Node

In this document we will outline the process based on an Ackcio Digital Node using the RS485 inputs.
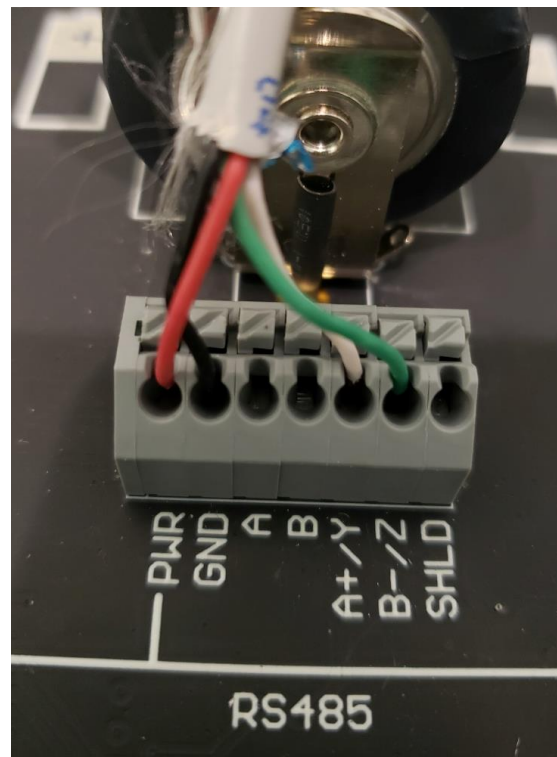
Physical Connection

The first thing we should look at, is how the cable is physically connected to the Ackcio Digital Node. It is wired directly into the RS485 connector inside the Node.

Note: Make sure to run it through the grommet to the outside of the box first.

Red: PWR
Black: GND
Green: B-/Z
White: A+/Y

Software Setup

At this point the YieldPoint equipment is ready to go, and it's all about setting up the Node to know what type of device it is talking to.

- Install the App
- Connect to the Gateway's Wi-Fi
- Plug into the Node
- Configure the Node
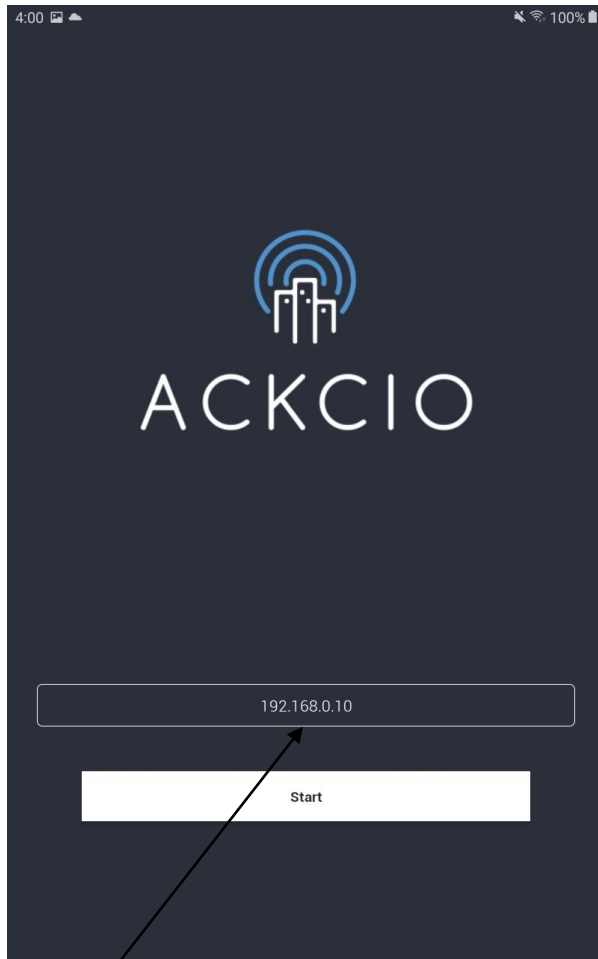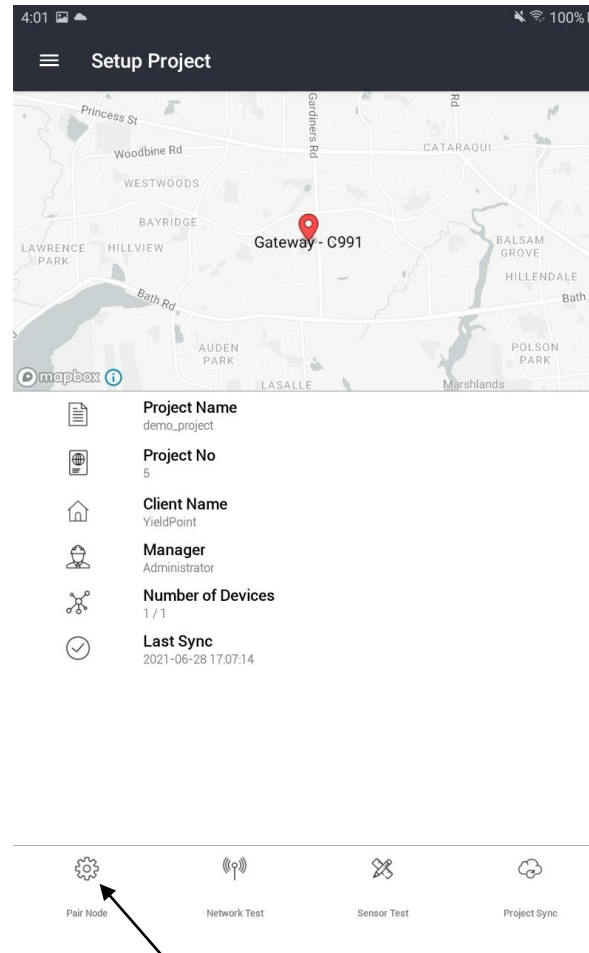- Link it to the Gateway

Setting Up

Figure 1

Figure 2

You'll need the Ackcio Nimbus app installed on your tablet.

First, enter the IP address of the Gateway and then tap the START button (Fig. 1) . Once on the main page of the app, plug the USB cable into your node and into your tablet. Press RESET on the node and tap PAIR NODE on the app (Fig. 2).
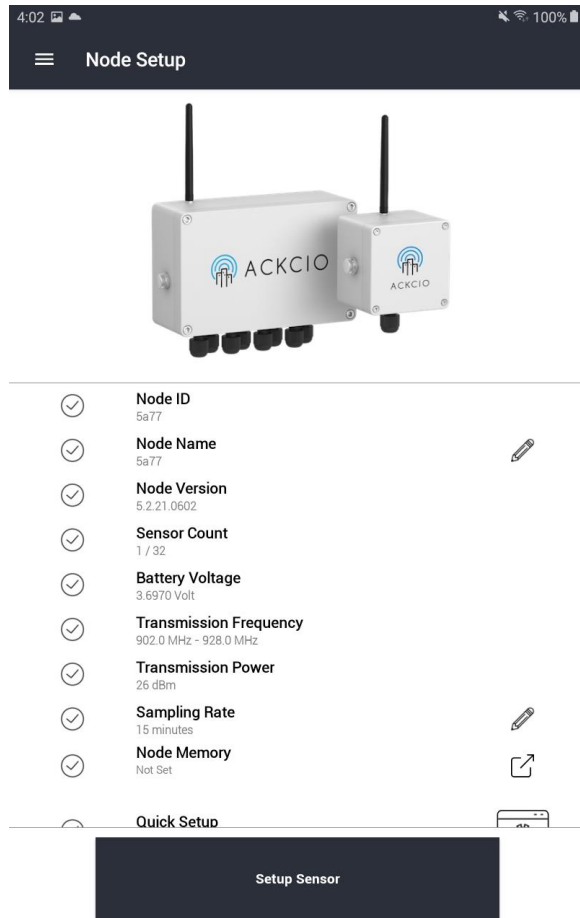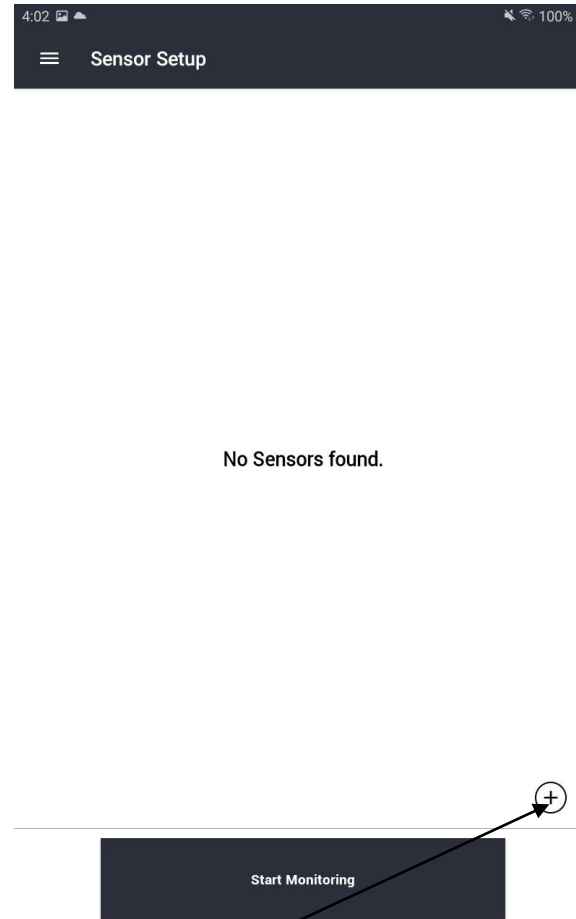
Setting Up

Figure 3

Figure 4

Tap SETUP SENSOR (Fig. 3). There are any sensors already there, tap the TRASH icon to delete them, then tap the + symbol to begin adding new devices. (Fig. 4)
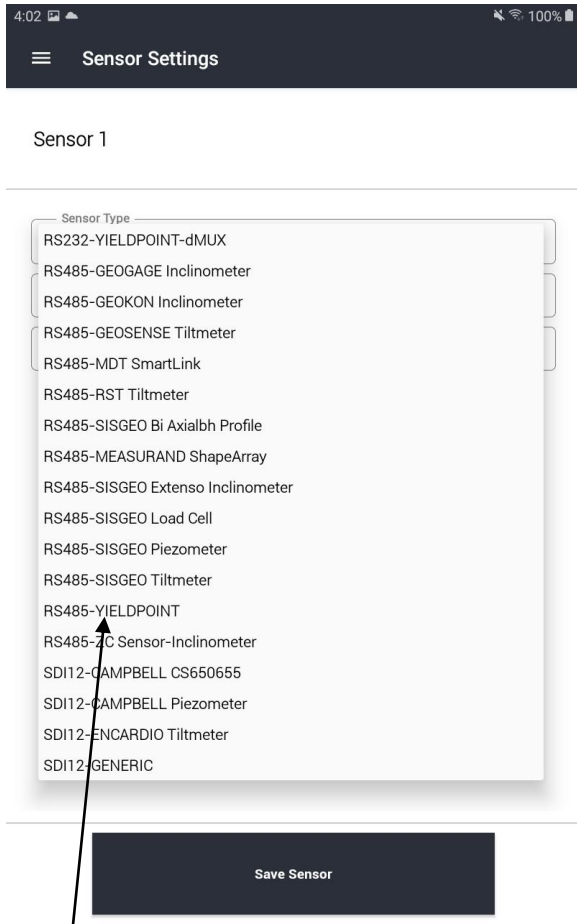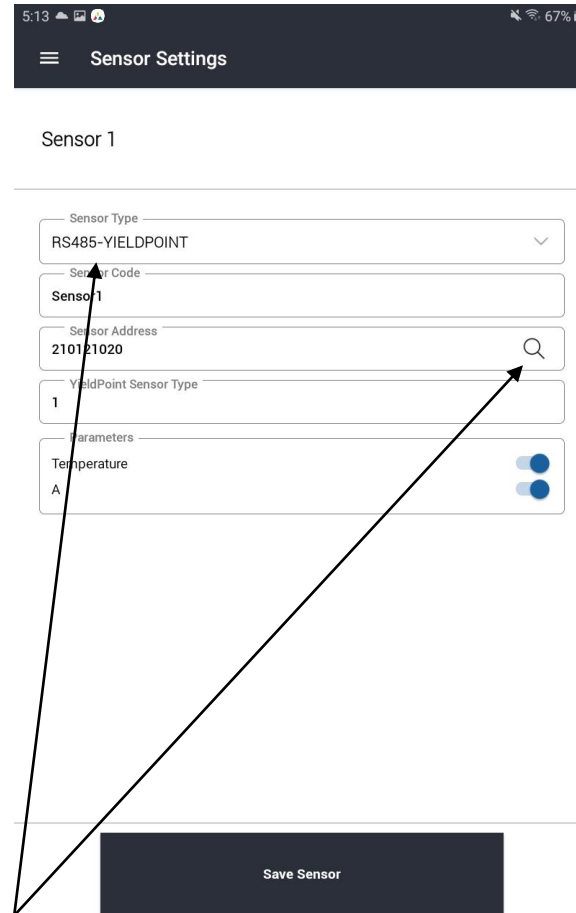
Adding your Devices

Figure 5

Figure 6

In the SENSOR TYPE dropdown, select RS485-YIELDPOINT (Fig. 5)

Give it a base name in the code field, and click on the Magnifying Glass (Fig. 6)

Once it has found your device (It will show up in the SENSOR ADDRESS field) tap SAVE SENSOR.
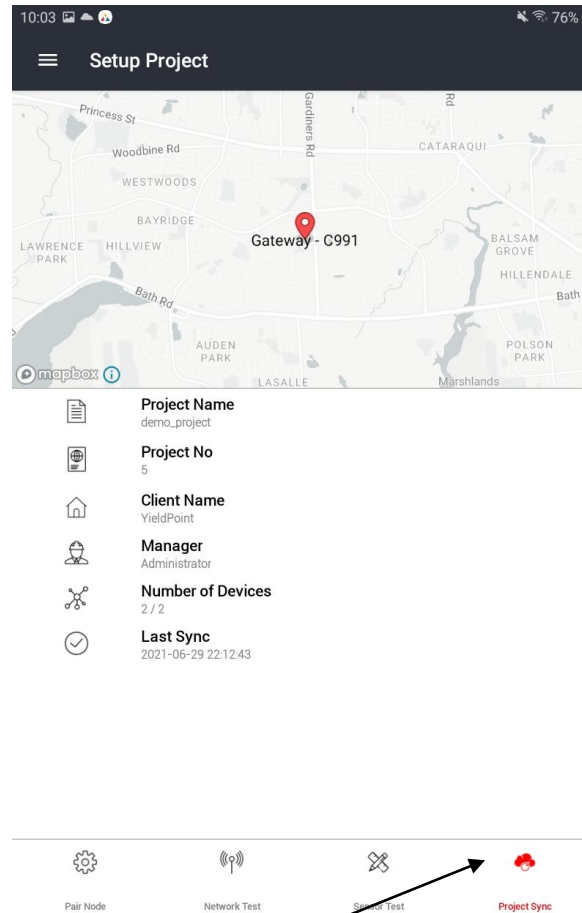
Adding your Devices

Figure 7

Figure 8

It will take you back to the SENSOR SETUP page but there will be a device there now. The app will get an initial reading from the instrument. Tap START MONITORING. (Fig. 7) Finally tap PROJECT SYNC to update the Gateway. (Fig. 8)