PRECISION 3
POWERMETER

USER MANUAL

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INTRODUCTION

1.1 Your PRECISION 3 Powermeter

1.2 Installation

Install your 4iiii Powermeter and crankset following the crankset manufacturer's instructions.

The steps to install the crankset vary between models. Follow the manufacturer's instructions, or consult your local bike mechanic for assistance.

Installation instructions for your new Shimano crank are included with the Ride Ready option.

1.3 Get ready to ride (Quick Start)

1. ***Wake up** PRECISION 3 by rotating the crank 3-4 times.*
2. ***Pair** your power meter with a compatible display unit using ANT+ or Bluetooth Smart.*
3. ***Perform a zero offset** (calibration).*
   - *(a) Unclip and dismount. Hold the bike upright and stationary, and position the crank arms at 12 and 6 o'clock, with the non-drive side crank arm down.*
   - *(b) Select "Zero" or "Calibrate" on your display unit.*

2.1 Compatible display units

To view and record power and cadence data from your power meter, pair it with a compatible head unit or smart watch. Compatible devices pair with your power meter using one of the following protocols:

- *Bluetooth Smart (BLE)*
- *ANT+*

Consult the head unit or watch manufacturer for compatibility and pairing instructions.

2.2 Pair with a display unit over ANT+

Pairing steps vary between display units. Consult your display unit's user manual for specific instructions.

The following are generic instructions for ANT+ enabled display units:

1. *Turn on your display unit.*
2. *Spin the crank 3-4 times to wake up your power meter*
3. *Navigate to the "sensors" menu on your display unit.*
4. *Add a new sensor.*
5. *Select your power meter's ANT+ ID from the list of available devices and connect. Your power meter's ANT+ ID is etched on the end of the power meter pod.*

Once paired, most display units will remember your power meter and automatically connect when both devices are on.

Power Meter Metrics

Additional power metrics can be added to your display unit's workout screen. Consult the display unit's user manual for instructions. Fields that are available on many display units include:

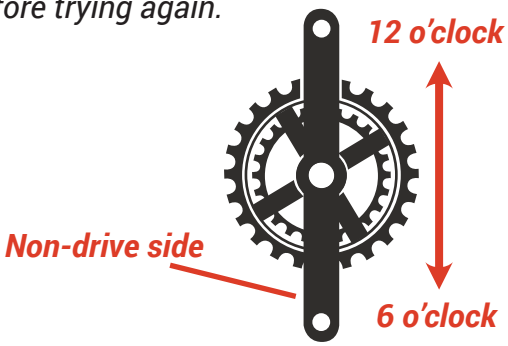
- *Power (1 sec. 3 sec. 10 sec.)*
- *Normalized Power*
- *Intensity Factor*
- *TSS (training stress scores)*
- *Power Balance (dual power meters only)*
- *Cadence*

PERFORMING A ZERO OFFSET

Zero offset (calibrate) your power meter using your display unit before riding. For optimal performance, allow the power meter to adjust to the ambient riding temperature before performing a zero offset. This normally takes just a few minutes.

1. *Unclip and dismount from your bike for the zero offset.*
2. *Spin the crank arms 3-4 times to wake your power meter.*
3. *Connect your power meter with your display unit.*
4. *Place your crank arms at 12 and 6 o'clock, with the non-drive side crank arm down. Hold the bike stable and upright.*
5. *Use your display unit to calibrate your power meter.*
   A. *Navigate to the Zeroing or Calibration menu.*
   B. *Press "Zero" or "Calibrate".*

Tip: if you receive an error message, re-check that the bike is stable and upright and the cranks are in the correct position before trying again.



Results

Single-sided mode:
A two digit response will appear on your display unit.

Dual-sided mode:
A four digit number will appear on your display unit. The first two digits are the zero offset result for the non-drive side, and the last two digits are the results for the drive side.

Zero Offset Sequence

TWO DIGIT RESPONSE	RESULT	DESCRIPTION	WHAT TO DO
10	Success		Go ride!
20	Error	Crank movement detected	Keep your bike steady
40	Error	Firmware mismatch	Connect to the *4iiii* app to update your firmware
50	Error	Firmware error	Connect to the *4iiii* app to update your firmware
99	Error	One side not found (dual power meter)	• Spin crank arms four times to wake up power meter • Confirm power meters are linked in *4iiii* app • Replace battery
0	Error	Power meter not found	• Spin crank arms four times to wake up power meter • Replace battery

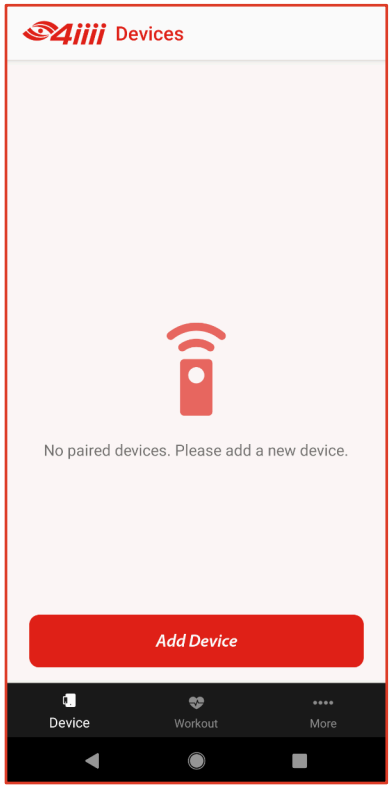
Download the 4iiii app for iOS or Android to configure your power meter as a dual-sided power meter, update firmware and access advanced features.

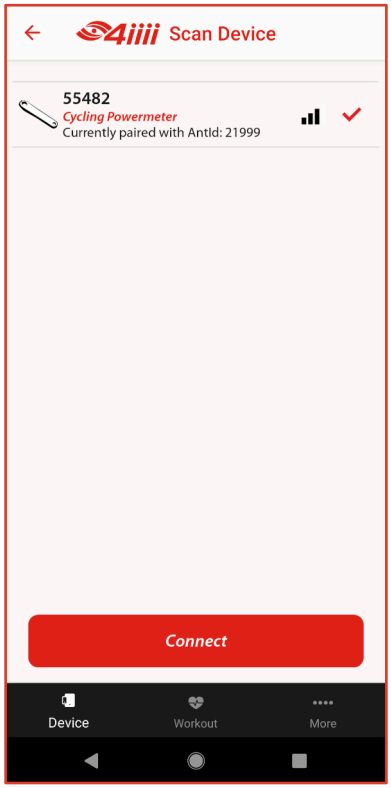
Search for "4iiii" on the Apple App Store or Google Play Store.

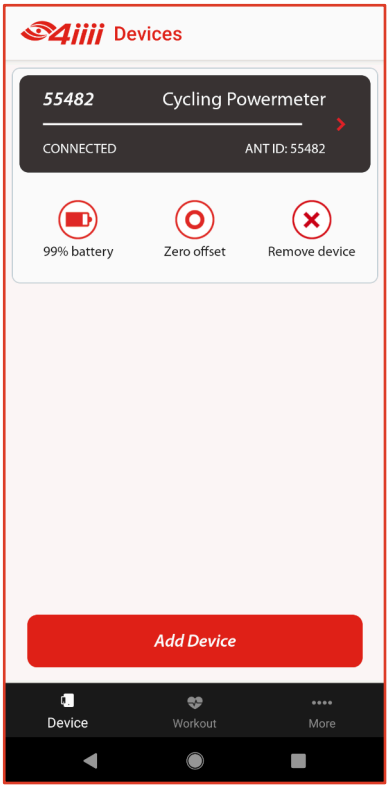
*Find the complete **4iiii App User Guide** at 4iiii.com/docs*

4.1 Pair with the 4iiii app

1. *Open the 4iiii app and log in. If this is your first time using the app, you will need to create an account. Once you have logged in the app will take you directly to the **Devices** tab.*
2. *Spin the crank 3-4 times to wake up your power meter.*
3. *Select **Add a Device.***
4. *Select your power meter from the list of available devices. A check mark indicates the device is selected.*
   Tip: You can identify your power meter using the ANT+™ ID number etched onto the end of the power meter pod.
5. *Press **Connect.***

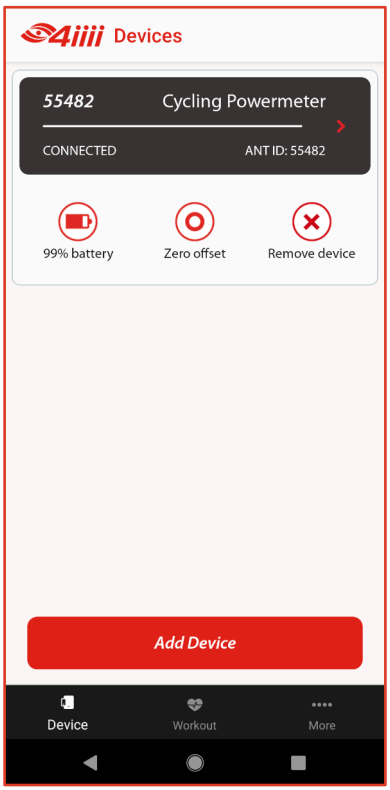






4.2 Zero offset using the 4iiii app

1. *Unclip and dismount from your bike for the zero offset.*
2. *Spin the crank arms 3-4 times to wake your power meter.*
3. *Pair PRECISION 3 Powermeter with the 4iiii app.*
4. *Place your crank arms in the 12 and 6 o'clock positions, with the non-drive side crank arm downwards. Make sure the bike is stable and upright.*
5. *From the **Devices** tab, select the **Zero Offset** icon below your power meter's name.*



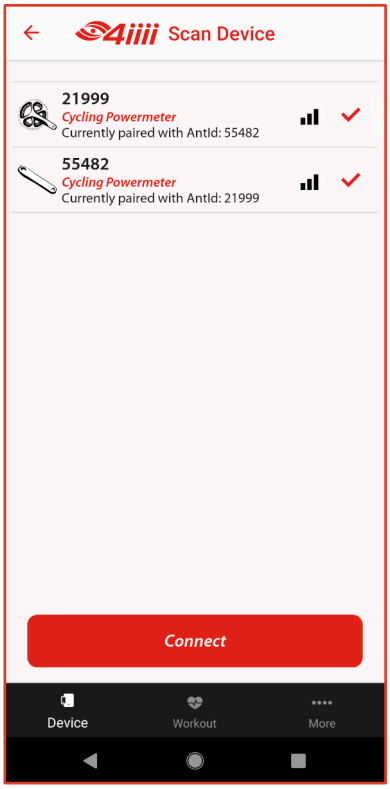
4.3 Link PRECISION 3 with a right-side power meter

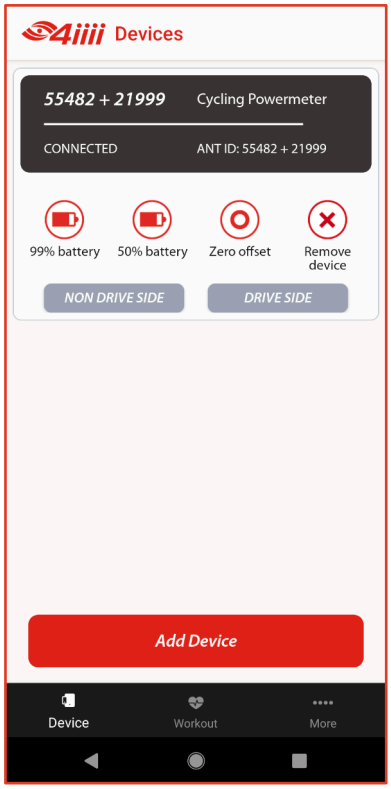
The Left Side PRECISION 3 Powermeter can be used as a single-sided power meter, or linked with a right-side 4iiii PRECISION or 4iiii Podiiiium Powermeter for dual-sided power. PRECISION 3 ships configured as a single-sided power meter.

If the right side power meter you are linking with has previously been linked with another left side power meter, make sure to unlink it first.

Link as a dual power meter

1. *Open the 4iiii app and log in.*
2. *Select Add Device.*
3. *Select both the left and right power meters from the available devices. A check mark indicates the device is selected.*
4. *Select Pair on iOS or Connect on Android.*





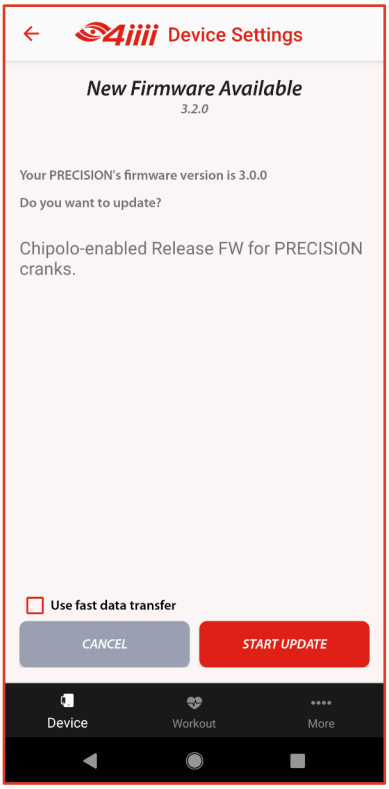
Unlink a dual power meter

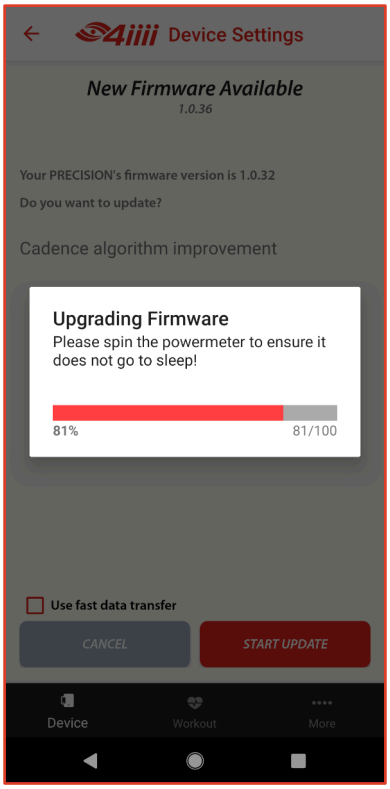
1. *Connect to your dual power meter, and navigate to the Devices page.*
2. *iOS: Press the Unpair Device icon. Wait for a prompt indicating unpairing was successful Android: Select Remove Device. A dialog box will pop up. Select Unpair and Remove.*

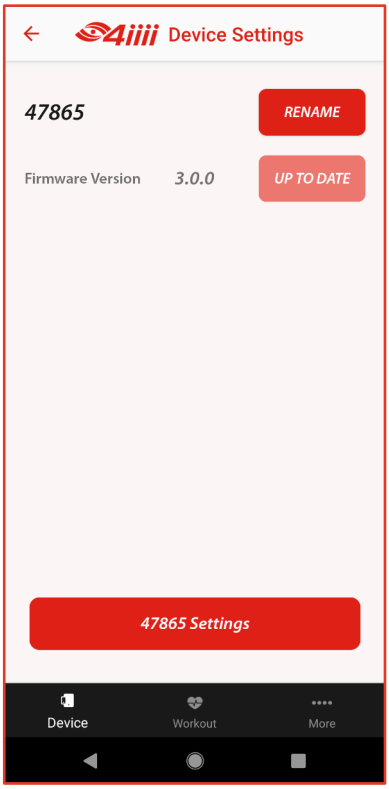
4.4 Update firmware

If a new firmware update is available, you will be prompted when you connect to PRECISION 3 Powermeter in the 4iiii app. We recommend updating your firmware if prompted.

1. *Connect with PRECISION 3 Powermeter in the 4iiii app.*
2. *Select PRECISION 3 Powermeter from the **Devices** tab to view **Device Settings**.*
3. *Select **Update Firmware** (iOS) or **UPDATE** (Android). Do not close the app during a firmware update.*







4.5 Advanced features

The 4iiii app can be used to customize the following features:

1. *Rename your power meter.*
2. *Set scale factor compensation values, to compensate for left and right leg imbalances, or match your power output to a third-party power meter or smart trainer.*
3. *Enable third-party compatibility mode on Bluetooth (for dual power meters only). This allows you to connect to display units that do not support separate power data for the left and right leg for a dual power meter.*

*Go to 4iiii.com/docs and open the **4iiii App User Guide** for iOS or Android for instructions.*

MAINTENANCE

5.1 Cleaning and storage

- *Store your power meter in temperatures no colder than -40°C (-40° F) and no warmer than 60°C (140° F).*
- *Use only water and mild soap to clean your crank. Do not expose the power meter to degreasers, or abrasive or corrosive cleaning agents. Do not pressure wash your power meter.*
- *Keep water or liquids away from the power meter when the cap is off for maintenance.*

5.2 Battery life and battery replacements

Your power meter comes with a CR2032 coin cell battery, which allows for 800 hours of riding. Replacement CR2032 batteries can be purchased wherever batteries are sold.

1. *Twist the cap counterclockwise to remove it. Do not pry the cap.*
2. *Remove the old battery from the cap by holding the cap by its edges and tapping it against a hard surface.*
3. *Place the new battery into the cap with the '+' symbol facing the battery cap.*
4. *Replace the cap and twist it clockwise to secure it.*

***Tip:** Check the condition of the o-ring on the battery cap when replacing your battery. To ensure a watertight seal, keep the o-ring lubricated with silicone grease and replace any o-rings that appear worn or damaged. Find the PRECISION Maintenance Tutorial video at 4iiii.com/docs. Replacement battery covers and o-rings are available from our online store.*

SPECIFICATIONS

PARAMETER	SPECIFICATION
Accuracy (Power Error)	+/- 1.0 %
Battery Type	CR2032 Coin Cell
Battery Life	800 hours
Operating Temperature Range	0 to 50°C
Storage Temperature Range	-40 to 60°C
Weather Sealing Rating	IPx7
Cadence Output	30-170 RPM
Power Output, Maximum	0-4000 watts
Communication	ANT+ & Bluetooth® Smart
ANT+ Range	15 meters
ANT+ Frequency	4 Hz
ANT+ Features	Cadence, Power, Zero-Offset, Torque Effectiveness, Pedal Smoothness, Left/Right Balance, Low Battery Notification
Bluetooth® Range	15 meters
Bluetooth® Frequency	2.400-2.4835 GHz
Bluetooth® Features	Cadence, Power, Zero-Offset
Weight	9g

TROUBLESHOOTING

For additional troubleshooting assistance, please go to 4iiii.com/support

7.1 What do the power meter lights mean?

When you wake up the power meter, the light should turn red, green, and blue in sequence, then pause, then flash red 1 to 5 times to indicate the battery level.

Start-up Light Sequence

LIGHT SEQUENCE	MEANING
Red, Green, Blue	Start-up sequence
5 red blinks	≤ 100% battery
4 red blinks	≤ 80% battery
3 red blinks	≤ 60% battery
2 red blinks	≤ 40% battery
1 red blinks	≤ 20% battery

Zero Offset Sequence

LIGHT SEQUENCE	MEANING	SOLUTION
1 blue blink	Zero offset successful	
2 blue blinks	Error Code: Unstable gauge	Keep the bike and crank steady.
3 blue blinks	Error Code: Low battery	Check the battery level in the *4iiii* app. Replace the battery.
4 blue blinks	Error Code: Mismatched firmware	Connect to the *4iiii* app to update your firmware.
5 blue blinks	Error Code: Invalid Calibration	Connect with the *4iiii* app.

7.2 Troubleshoot Bluetooth and ANT+ connections

1. *Make sure your power meter is awake by spinning the crank several times.*
2. *Check the battery level using the startup light sequence or 4iiii app.*
3. *Remove the power meter from the sensor list, and re-pair it.*
4. *For Bluetooth: Ensure that the power meter is not connected to any other device or app via Bluetooth. Sensors can only be paired to one device at a time.*

WARRANTY

By purchasing this product you acknowledge and agree to the terms of this limited warranty.

4iiii Innovations Inc. ("4iiii") warrants this product to be free from defects in material and workmanship, under normal use, for a period of three (3) years from the date of original purchase (the invoice date) to the original purchaser for Power meters.

Defects that have resulted from improper or unreasonable use or maintenance, accident, excess moisture, insects, improper or inadequate packing for shipment, lightning, power surges, or unauthorized tampering, alteration or modification are not covered under the limited warranty. 4iiii will, at its sole discretion, repair or replace the defective product with a comparable product, at no charge to the customer for parts or labor, with the customer to be responsible for all shipping and handling costs [and with return shipping and handling costs to be paid for by 4iiii after the product has been repaired or replaced]. Replacement products may be new, refurbished or reconditioned and are warranted for the unexpired period of the original purchase, or 30 days from the date of shipment, whichever is greater. Any products replaced by 4iiii shall be the property of 4iiii.

WHERE PERMITTED, THE PROVISIONS OF THIS LIMITED WARRANTY ARE TO SUPERSEDE AND REPLACE ANY OTHER WRITTEN WARRANTY, WHETHER EXPRESSED OR IMPLIED, WRITTEN OR ORAL, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL 4iiii BE LIABLE FOR ANY DIRECT OR INDIRECT DAMAGES OR OTHER RELIEF ARISING FROM ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. To obtain warranty service, open a request at 4iiii.com/support for shipping instructions and an RMA tracking number. Return your product, freight prepaid, along with the original sales receipt as a required proof of purchase for warranty repairs, with the RMA tracking number written on the outside of the package to 4iiii.

WARNING: This limited warranty becomes null and void if the product is repaired by anyone other than an authorized person of 4iiii.

REGULATORY COMPLIANCE

FCC ID: *ZZNPM300*
Model: *PML300*
FCC Statement:
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.
The device has been evaluated to meet general RF exposure requirements. The device can be used in portable exposure conditions without restriction.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution: If any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Warning
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ISED Certification Number: *9896A-PM300*
Model: *PML300*
ISED Statement:
This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). 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. CAN ICES-3(B)/NMB-3(B)

Le présent appareil est conforme avec ISED Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. CAN ICES-3(B)/NMB-3(B)

The device has been evaluated to meet general RF exposure requirements. The device can be used in portable exposure conditions without restriction.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux radiofréquences. L'appareil peut être utilisé en condition d'exposition portable sans restriction

RF Exposure Information
This equipment complies with ISED RSS-102 radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme avec ISED RSS-102 des limites d'exposition aux rayonnements définies pour un environnement non contrôlé. Cet émetteur ne doit pas être colocalisé ou fonctionner en association avec une autre antenne ou émetteur.

CONTACT

For technical support please contact your 4iiii authorized dealer.

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141 2 Ave E
Cochrane, AB T4C 2B9
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Or visit

www.4iiii.com/support