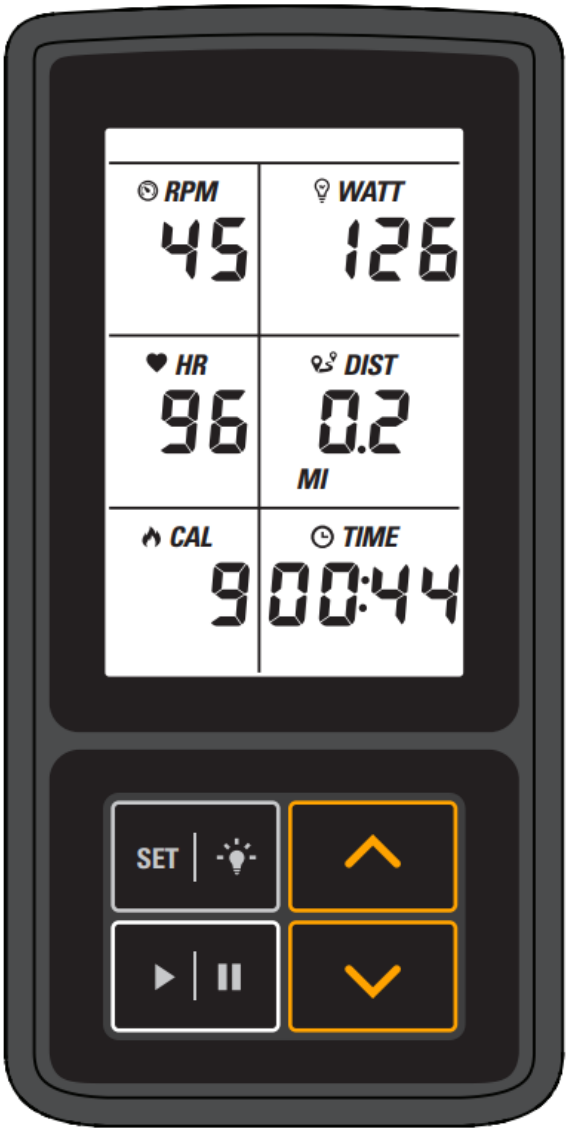
JOHNSON

Group Training Console

FC213



Service Manual

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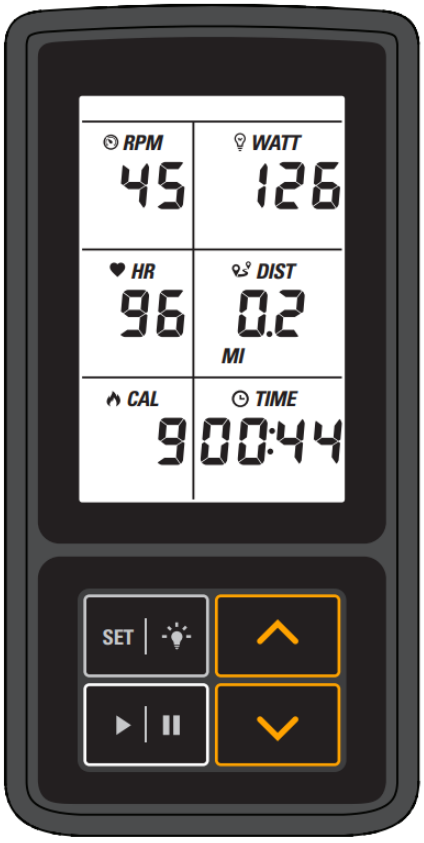
V1.1
Johnson Health Tech - Factory CS & TCMT

Table Of Contents

Features

Group Training Console



- ANT+ interoperable 2.4Ghz wireless technology
- Polar® 5 KHz technology
- Low power consumption for long battery life
- 6-panel data display; Cadence, Watts*, Heart Rate, Distance, Calories, Time
- Advanced energy expenditure algorithm for personalized Kcals (Calories)
- The console operates from 3x AAA batteries, the cadence sensor from a single CR2032 lithium coin cell battery
- LED backlight

Display

- Cadence RPM; Current, Average and Max
- Watts*; Current, Average and Max
- Heart Rate; Current, Average and Max
- Distance; Kilometers, Miles
- Calories
- Time
- Console low battery indicator

Using the Console

- Press the play/pause key to start or pause your workout
- Press the up or down keys to cycle between Current, Average and Max
- Press the lightbulb key to turn on backlight for 5 seconds
- Press and hold play/pause key to reset workout data

* TBC models only

Cadence Sensor

This is the cadence sensor that matches with the GTC Console. The battery in the cadence sensor is type CR2032.

Compatible Frames

The GTC console is compatible with multiple different frame types. The desired frame type can be selected within the frame type setting inside of the console engineering menu.

Frames currently compatible with the GTC:
TBCC/TBCC-02/CXC/IC600/AB600/IC700

Pairing Screen

First Time Set Up and Pairing the Cadence Sensor

3.

1) Access the engineering menu by pressing up and down on the console until the screen lights up after waking the console from a sleep cycle or a power reset. (See Accessing the Engineering Menu (Page 5) for detailed instructions.)

2) Press Set to access the pairing screen.

4.

3) Press play to start searching for the cadence sensor. Pedal (bikes) or move pivot arms (TBCC) to generate RPMs so that the cadence sensor will be visible to the console.

4) After the sensor has been found it will display in the bottom right corner.

5.

5) You may now press the Set button and set your unit to either Metric or Imperial measurement.

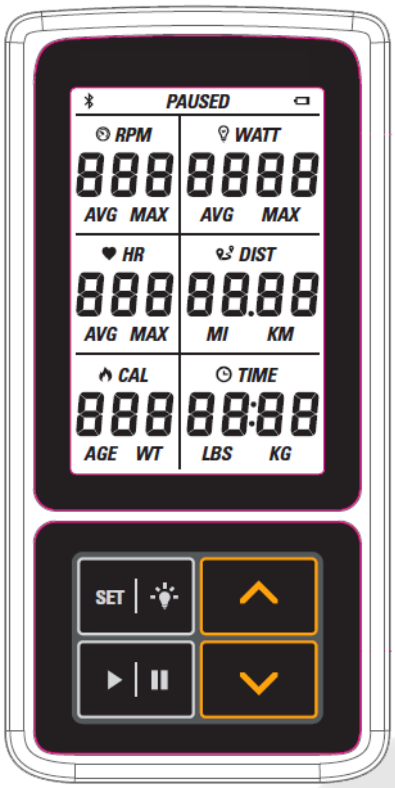
6.

6) Press Set again to enter the machine type setting, the console in this image is set to tbC.

7.

7) Press Set again to view the software version or perform an update, V1.08 is shown in the diagram to the left. (V1.26 is the most up to date version of software as of 7/29/2025)

8) Console setup is now complete.



Using the Console

The display screen of the console is divided into six different sections: **RPM**, **Watts**, **HR**, **Distance**, **Calories**, and **Time**.

RPM, **Watts**, and **HR** offer **AVG** and **MAX** settings, which allow you to check the average and maximum values of the corresponding metrics during your current workout. You can cycle between the standard, average, and maximum by pressing the up key.

*Watts is only available when paired with the TBC frame.

Accessing the Engineering Menu

To access the engineering menu, please follow these steps:

1. While all LEDs are lit (see image 1),Hold the up and down buttons simultaneously ( ).

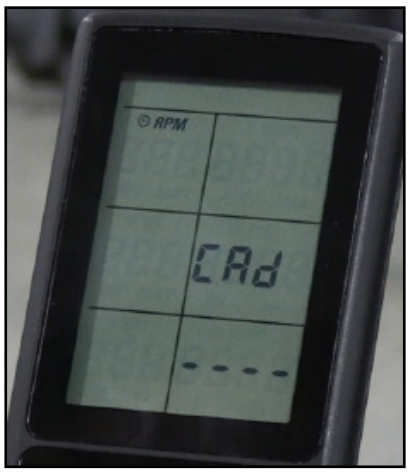
Note: *All LEDs will be lit directly after waking the console from sleep mode or after power cycling the unit by removing and reinserting a battery.*

2. E1 will appear in the top right box with CAd in the box underneath it indicating you've entered the engineering screen.

3. Press the Set button( )to filter through the available engineering options (Page 6).

Engineering Menu Screens

1.



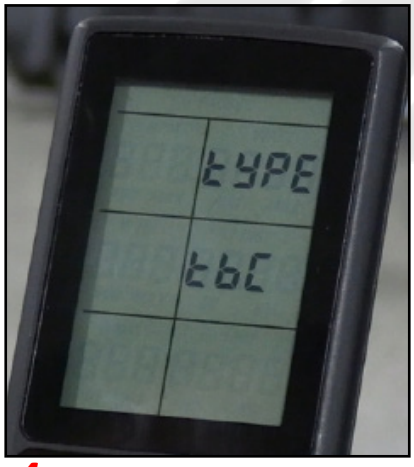
Note: Press Set to cycle through the functions.

1) The first screen will display RPM in the top left corner and CAd in the middle right box. Below it will display "----" when not paired with the cadence sensor, if paired with a cadence sensor it will display a string of numbers. This screen is for pairing the cadence sensor to the console. Instructions on pairing the cadence sensor to the console (Page 4) can be found in this service guide.

2.

2) The second engineering screen will show MI/LBS or KM/KGS, this screen can be used to switch between the metric and imperial system.

3.



3) The third engineering screen will display "type" in the top right corner and below that will be the machine type. This should be set to your specific frame type. You can filter through the options using the up and down arrows.

4.

4) The fourth engineering screen is for performing Over-The-Air (OTA) updates, this screen also displays the software version in the right middle box (V1.08 shown in diagram). Instructions on performing OTA updates (Page 7) can be found in this service guide.

Pairing Chest Transmitter to Console

Note: 5kHz (Polar) HR connection does not require pairing it will be automatically connected

The GTC console is compatible with both 5kHz and ANT+ heart rate monitoring functionalities. To establish a connection between the console and an ANT+ heart rate monitor, please follow the prescribed procedure outlined below:

1. Initiate HR pairing mode by holding down the Set button.

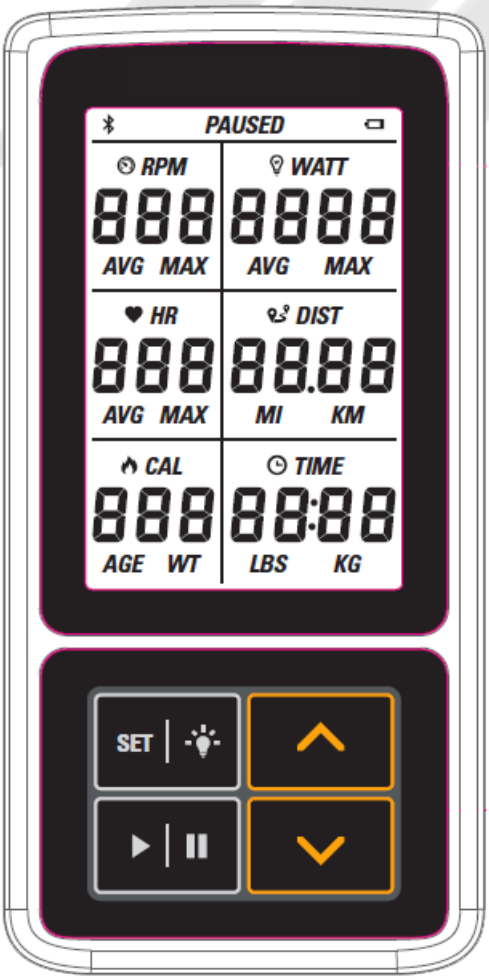
2. Commence the search for the ANT+ heart rate monitor by pressing the Start button.

3. Once the device is detected, the console will display its unique device ID.

4. You can press the up and down keys to filter through the available ANT+ signals if there are more than one present.

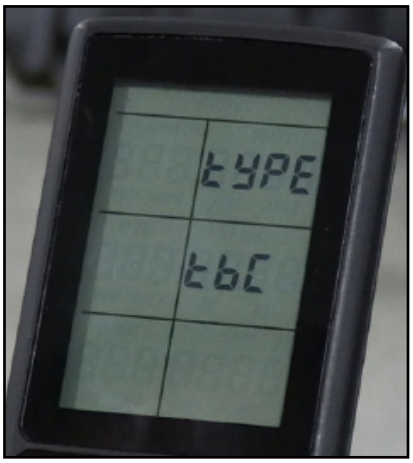
5. Establish the link between the ANT+ heart rate monitor and the console by pressing the Set button.

Paired ANT+ heart rate monitors will supersede polar HR monitors.



Updating the Console (OTA)

1. Enter the engineering menu.
2. Navigate to the OTA screen by continuing to press the Set button.
3. On the OTA screen press the up arrow to turn OTA on.
4. Turn on the nRF Connect program on your phone.
5. Find and connect to your console.
6. Navigate to DFU and then select your software .zip file. The .zip folder will have a name similar to GTC CONSOLE OTA S1.26.zip. You do not need to unzip this folder, but the folder it is contained within may need to be unzipped.
7. Upload the .zip file and it will update the software, the console will restart after updating.



No Watts

Watts is only a supported function for the Total Body Cycle, no other frame types will display watts.

No watts being displayed on the console can indicate that the machine type setting is incorrect.

1) Navigate to the engineering menu and change the machine to tbC to fix this issue (Page 6).

Console Doesn't Turn On

1) Check console batteries aren't dead and are in the correct orientation.
2) Replace the console.

No RPM

1) Check cadence sensor batteries.
2) Check that the cadence sensor is paired.
3) Replace cadence sensor (page 8).
4) Replace the console.

Cadence Sensor Will Not Pair

1) Check cadence sensor batteries.
2) Replace cadence sensor.
3) Replace console.

Heart Rate Will Not Pair

Note: 5kHz (Polar) HR connection does not require pairing, will be automatically connected, and will supersede ANT+ pairing.

1) If you are pairing an ANT+ HR sensor, make sure that a 5kHz sensor hasn't already been paired.
2) Make sure you are selecting the correct ANT+ device when pairing.
3) Make sure your ANT+ device is functioning properly.
4) Try testing another ANT+ device to determine if it is a console issue.
5) Replace the console.

Screen Appears Scratched

A film is attached to the console screen to protect it during production and distribution. The film should be removed before use.

1) Peel the protective film off of the console screen.

Note: One corner of the film will have a tag so that it will be easier to find and remove.

Setup and Pairing	*https://vimeo.com/943642192/18b8f9bb53*
Sensor Battery Replacement	*https://vimeo.com/943643221/c8bd899e24*

Version/Date	Change	Name
V1.00 - 10/25/2024	Original Release	Maxwell Anderson
V1.1 - 07/29/2025	Updated the software update process steps, updated method for accessing engineering menu. The previous methods were based on V1.08 which was not the production version of software. V1.26 is the first software released for production models.	Maxwell Anderson