

RECOIL NOW RN-1 INSTRUCTION MANUAL



This product information guide contains explanatory, instructional, safety, handling, disposal-recycling, and regulatory information as well as the one-year limited warranty for RN-1.

Read all safety information below and operating instructions before using RN-1 to avoid injury.

For updated operating instructions and the latest Product Information Guide, including any updates to the safety and regulatory information, please go to: www.recoilnow.com/support



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INTRODUCTION

Practice with Purpose - Excel with Ease

RN-1 is a portable training device for practising high-velocity low-amplitude (HVLA) thrust technique. It is designed for chiropractic and osteopathic students who want focused, repeatable practice at their home or dorm, without needing a specialised table, a training partner, or complex instrumentation.

RN-1 is **a training aid only**. It does *not* simulate human tissue, measure clinical effectiveness or patient care, replace institutional instruction or tutor supervision.

WHAT RN-1 TRAINS

RN-1 focuses on the core elements of an HVLA thrust;

- **Setup stability** - establishing and holding a stable pre-thrust pressure
- **Force control** - matching intended pressure levels
- **Speed** - how quickly peak force is reached
- **Thrust action** - recoil and non-recoil motor patterns

Feedback is delivered using simple, easy to read LED indicators rather than complex numerical data. This allows you to stay focused on feel, timing, and consistency instead of chasing metrics.

HOW YOU USE RN-1

RN-1 has two distinct ways it is used:

Practice

You perform thrusts, receive immediate feedback, think about how you're going to adapt, and repeat. Most of your time with RN-1 is spent here.

Score & Settings

You can briefly check your score or adjust goal settings such as recoil type, force range, and speed range.

The device uses 'modes' to describe these functions:

- **STATUS MODE** - shows battery level and current settings
- **THRUST MODE** - shows the current goal and helps you establish a stable setup
- **REVIEW MODE** - shows feedback after each thrust
- **SCORE MODE** - show cumulative progress according to [learning phases](#)
- **SETTINGS MODE** - allows you to change training parameters

Navigation is performed entirely through the contact point using either a tap, a hold, or a release.

WHAT TO EXPECT

Early practice may feel inconsistent or demanding. That is intentional. The RN-1 is designed to expose habits that are difficult to perceive by eye and to help you build a reliable internal reference for setup, force, speed and recoil over time.

The following sections walk you through your first practice loop, explain how feedback is presented, and show how to adjust your settings as your technique develops.

START HERE

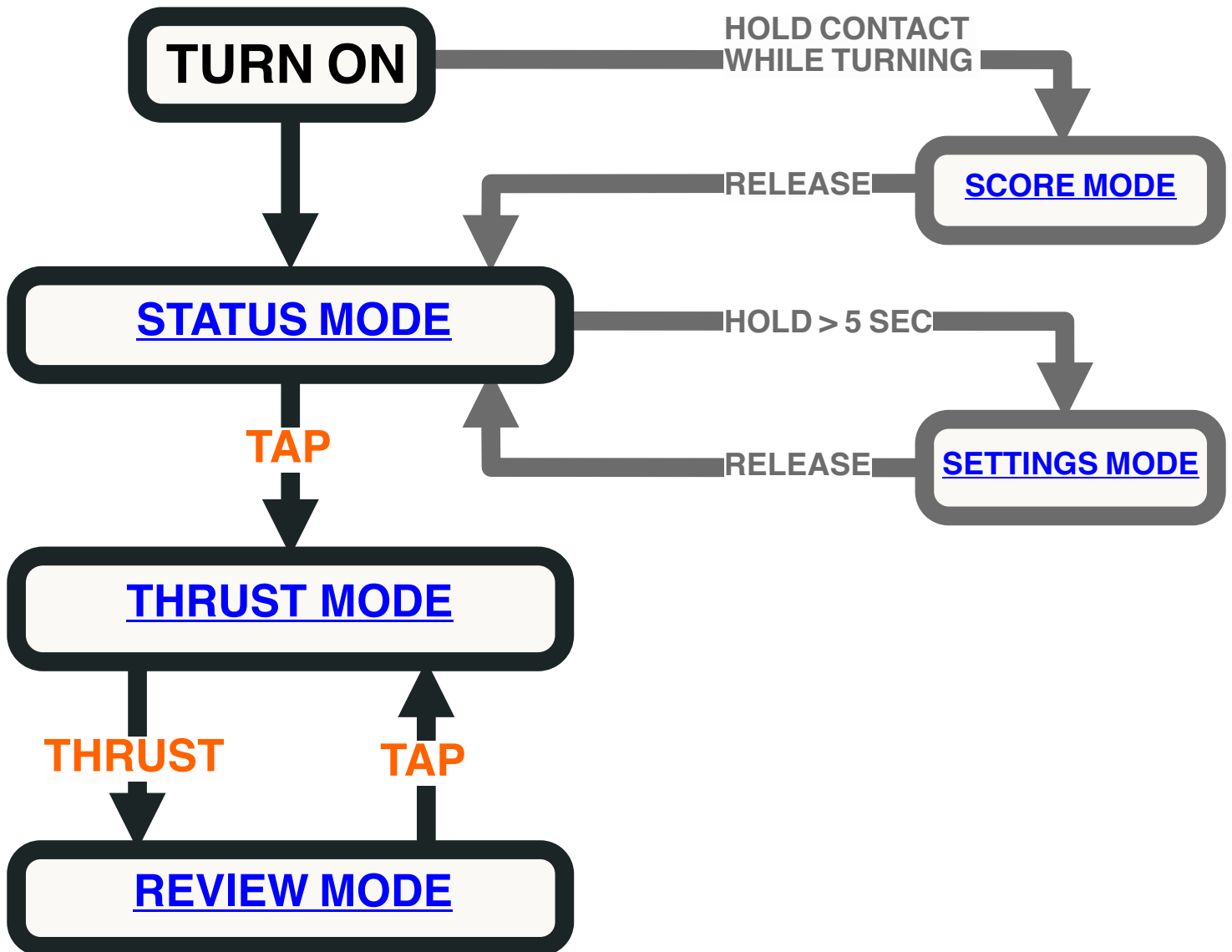
The RN-1 has two ways you'll use it:

PRACTICE- where most of your time is spent performing thrusts and getting immediate feedback. Once you turn it on and tap through to the thrust mode, it's a pattern of thrust-review, thrust-review, etc.

SCORE & SETTINGS- where you'll briefly check your score or adjust training goals.

PRACTICE

SCORE & SETTINGS



STATUS MODE

BATTERY POWER	RECOIL SETTING (SETUP)	FORCE RANGE SETTING (FORCE)	SPEED RANGE SETTING (SPEED)
● Good	● Recoil-Only	● Narrow Range	● High Speed
● Low	● Mixed Recoil	● Medium Range	● Medium Speed
	● Non-Recoil Only	● Wide Range	● Low Speed

When unit voltage drops beyond the ● level the unit will flash ●●●● twice and the unit will turn off. Turn the unit off at the switch and replace the batteries with fresh batteries of the same type; don't mix new and old batteries, don't mix brands.

Use the table above to understand what the three settings lights are indicating. There is more information about these settings, and how to change them, in [SETTINGS MODE](#).

THRUST MODE

On entering this mode, you will see the device has given you a goal, indicated by the Level light. ● Light, ● Medium, ● Firm. If it is also flashing, then a recoil thrust is expected, otherwise a non-recoil thrust is expected.

You will also see the Setup light is red. This means not enough pressure has been placed on the contact point for Setup to occur. As you put pressure on the contact point, the Setup light will turn orange to indicate the the pressure is within an acceptable range. It will turn red if the pressure goes out of range.

If the pressure is constant and within the acceptable pressure range, the Setup light turns green. It is important to keep that pressure constant in order to make a controlled thrust.

When the light is green, you can perform the thrust. If you thrust, but it is not detected (see below) then simply remove any pressure and start the setup again.

On thrust detection, the display will blank momentarily while your setup, pressure, speed and recoil are evaluated. If the thrust is considered to be within an acceptable range it will show the [REVIEW MODE](#).

If the thrust is too light, all lights will flash ●●●● twice, and the [THRUST MODE](#) will return with the SAME goal to retry.

If the thrust is too heavy for the current Force Range, the display will flash ●●●● twice, and if the force is beyond the device *design limitations* then it will flash ●●●● eight times. The contact point has limits – **repeated HARD thrusts will weaken and/or soften it at a faster rate than it is designed for.**



REVIEW MODE

Approach reading this mode in a systematic way from left to right.

LEVEL	SETUP	FORCE	SPEED
● Light Goal	● Stable	● Light force	● High speed
● Medium Goal	● Overlock	● Medium force	● Medium speed
● Firm Goal	● Runup	● Firm force	● Low speed
	● Not Stable	⚠ Flashing - Recoil Thrust	⚠ Flashing - Slow Recoil Release

SCORE MODE

In order to quickly review your score, perform the following steps:

Before turning the unit on, put a light pressure on the contact point and turn the unit on while holding the pressure. *Keep pressure* on to continue checking your score. When finished, release pressure to go to STATUS MODE.

READING THE SCORE

There are 3 colour zones that correlate to the 3 Learning phases, and within each zone there are 3 levels;

The colour zones are ● **Foundational**, ● **Competence** and ● **Excellence**

In addition, each zone has three levels. **1** (setup light), **2** (force light) and **3** (speed light) These will light as you progress through each mode.

LEARNING PHASES

The RN-1 uses three learning phases to support long-term skill development. These phases adjust how strictly performance is evaluated as your consistency and control improve.

Foundational (red indicators) is about awareness. Scoring is deliberately forgiving and focused on helping you recognise setup stability, basic force matching, and reasonable speed. Errors such as run-up, overlock, or excessive force are noted, but tolerance is higher at this stage. The goal is to establish a reliable internal reference for what 'correct' feels like before precision becomes important.

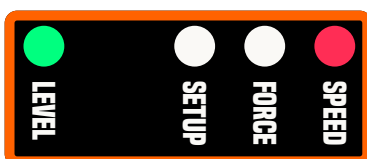
Competence (orange indicators) Matching the intended force and recoil intent is assumed rather than rewarded. Speed becomes more influential, and greater emphasis is placed on maintaining clean setup and appropriate force. This phase shifts from simply attempting the task to performing it with consistency and control.

Excellence (green indicators) focuses on refinement. At this level, RN-1 assumes your fundamentals are established and evaluates performance with higher expectations. Errors in setup, recoil intent, force or speed will make the score go down more than the previous phases, and progress depends on consistently producing high speed, well-controlled thrusts. This phase is designed to challenge subtle habits, loss of focus moments, and to support continued technical development.

As you move through the phases, scoring may feel more demanding. This is intentional. It reflects growing capability and shifts the emphasis from learning *what to do* toward doing it reliably, with precision, every time.

Advanced Users; Feel free to create your own goals and ignore the scoring system. See Tips & Tricks section for goal ideas.

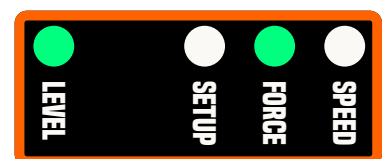
Foundation 3



Practice 1



Growth 2



Examples

SETTINGS MODE

RN-1 can be adapted to your preferences in technique style; some techniques are extremely rapid and light and others are firmer and relatively slower. Some techniques are exclusively recoil and others non-recoil. In User Options, you can change; the [Recoil Type](#), [Force Range](#), and [Speed Range](#). Note; some experimentation may be required to find your ideal settings.

ENTERING USER OPTIONS

1. Start with the device turned off.
2. Turn it on.
3. While in the STATUS MODE, **press and keep holding** the contact point for > 5 seconds.
4. You are now in *User Options*. The lights will cycle like a carousel while you **keep holding pressure** on the contact point.
5. Each light represents a setting - see the table to right.
6. When you are ready to make a selection simply **release your pressure** to lock it in.
7. If you miss your setting, don't worry, the selections will continue looping until you take your pressure off.

USER OPTION	LIGHT
5 SECONDS WITH NO LIGHTS	
1. RECOIL ONLY	
2. MIXED RECOIL	
3. NON-RECOIL ONLY	
4. NARROW RANGE	
5. MEDIUM RANGE	
6. WIDE RANGE	
7. HIGH SPEED	
8. MEDIUM SPEED	
9. LOW SPEED	

TIP: To exit without selecting anything - Wait until *no lights* are lit (after last option; the Low Speed Option) and release the pressure, **or** turn the unit off at any time while still holding pressure on the contact point. Also don't worry if you select something accidentally, everything is able to be reset.

SETTINGS RECOMMENDATIONS

RECOIL SETTING (SETUP LIGHT)

RN-1 supports both recoil and non-recoil techniques.

- Recoil Only Mode – Focus on recoil thrusts. Good for rapid thrust and release training.
- Mixed Mode – Switch freely between recoil and non-recoil. Good for general skills practice.
- Non-Recoil Mode – Focus on thrusts without recoil. Good for refining set and hold.

FORCE RANGE SETTING (FORCE LIGHT)

Force Range sets the size of the pressure window the device uses. Narrow compresses the range, Wide expands it, and the Light/Medium/Firm zones scale to match.

- Narrow Range – Good for very light-force practice.
- Medium Range – Good for general practice.
- Wide Range – Good for foundational learning as the force zones are at their widest.

SPEED RANGE SETTING (SPEED LIGHT)

Each mode defines a range of High, Medium and Low speed zones.

- High Range – Challenging for extremely high speed thrust practice.
- Medium Range – Good for general practice.
- Low Range – Slower speed expectation - good place to start.

QUICK START

1. START



Place RN-1 on a solid, flat surface about the height you normally train from. A regular table or desk is ideal but not a springy table, certainly not a therapeutic table or bed. When you switch it on, you'll see the battery level (● = Good to go) and your settings. Make a quick tap on the contact point to move on to the next step.

Example: This shows the STATUS MODE on starting the unit for the first time with fresh batteries.

2. CHECK GOAL



The Level light is your target force level: ● Light, ● Medium, or ● Firm. If it is flashing then a recoil thrust expected. No flashing means a non-recoil thrust is expected.

The Setup light is Red because Setup has not been achieved yet.

Example: The THRUST MODE. In this case, the expected force level is ● Medium.

3. FIND SETUP



To find your setup, also called lock-up or pre-tension, use a double-pisiform contact. Slowly press on the contact point until the Setup light goes from ● to ● to ●. Miss it? Back off completely and start again. Take it slowly and get used to the pressure range by experimenting with varying pressures.

Example: When you find the setup pressure and are steady, the light will turn ●.

4. THRUST!



When the Setup light is Green, go ahead and perform a thrust. If a thrust is detected, the Setup(1), Force(2), and Speed(3) lights will tell you how you went (REVIEW MODE). Once you have checked your result briefly press on the contact point and the display will reset to the THRUST MODE and a new random goal will be presented.

Example: The REVIEW MODE. In this example, the setup is stable, the force level is correct (same as the goal) and the speed is in the high range.

TIPS, TRICKS & FAQ

These pointers will help refine your skills and make training with the RN-1 more effective.

Use a sturdy table – Place the device on a solid, flat surface for accurate readings and safety.

Maintain good posture – It's one thing to have great technique, but having excellent posture while adjusting is important for your own health.

Battery choice – Alkaline batteries are recommended, but rechargeables work too (with slightly dimmer lights and less battery life).

Practice duration – Aim for a maximum of 30 minutes of focused practice daily. Sometimes it is more effective to break it up into micro-sessions (3-5 minutes) to work on single elements.

Set small goals – It might be beneficial to attempt to work on perfecting the Setup, before working on consistent Thrust Force, and finally getting the Speed right.

Give it time – It may take a few practice sessions to adapt to the force levels of the RN-1. If you change Force Range, it will require time to learn as well. But that's the point, learning to control your hands and keeping the challenge going.

Warm up first – Hand, wrist, and shoulder warm-up exercises helps to prevent strain.

Stay present – Distracted practice lowers results. Commit to a few fully focused thrusts. Don't focus on not getting things wrong, focus on getting things right.

Mix Recoil Settings – Switch between Recoil, Non-Recoil, and Mixed to train adaptability.

Advanced Students

Create your own goals. Try these examples below:

- Decide on a force level goal and try to make three thrusts in a row using that force level.
- Try to make three thrusts in a row where the force starts at the lowest level and ends at the firmest.
- Try to make three thrusts in a row where the force starts at the highest level and ends at the lowest.
- Try to purposely achieve a high speed thrust followed by a low speed thrust - repeat as many times as you can keep the pattern going.
- Purposely recreate the Setup errors of Run-Up and Over-Lock.

Find more online – Go to www.recoilnow.com/support

TERMINOLOGY

On/Off Switch - flick it to the right to turn on

Indicator Lights - use these to read each mode

Contact Point - Use this to navigate between modes and to perform thrusts



This is a list of terms that are relevant to RN-1 and/or which may be misunderstood without clarification;

Recoil - The act of removing your force as soon as you have achieved peak force.

Non-recoil - The act of maintaining a constant force once peak force has been achieved.

Force - The pressure used to effect a thrust.

Speed - Speed refers to the time it takes to reach peak force from the start of a thrust. It does not measure hand velocity or movement speed. Instead, it reflects how quickly peak force is achieved once a thrust is detected.

Setup - The stable position from which a high-velocity low-amplitude thrust takes place.

Run-up/Pulling - Stable setup has been achieved, but instead of holding the setup pressure steady, you reduce, or pull, your pressure and then thrust, essentially punching the contact point. It is a very common fault and can be difficult to spot by eye.

Overlock/Pushing - An overlock will be detected in the case where a stable setup is reached but then you lean forward, increasing the setup pressure, just before performing the thrust. This amounts to pushing, causing excessive peak force and often a slower thrust speed.

Force Range - The Force Range sets the overall span of force RN-1 listens for. Within that range, force is divided into coloured zones, red (firmest), green (lightest) and orange, the middle zone. These zones are proportional to the selected range and blend smoothly into one another, so changes in technique are reflected gradually rather than as abrupt cut-offs.

Speed Range - The Speed Range defines the overall time span used to interpret how quickly force is applied. Within this range, speed is shown using coloured zones. Red indicates slower thrusts, green indicates faster, and orange marks the transition between them. The zones are also blended, or overlapped slightly, to support learning rather than enforce hard boundaries.

Slow Recoil Release - This error occurs if the thrust was recoil and the pressure was lifted off too slowly. A recoil thrust force needs to be just as quickly removed as it is applied. You may find focusing on improving the 'lift-off' speed also improves your over speed.

TROUBLESHOOTING

These are some issues you might run into with RN-1.

For the latest updates and troubleshooting, visit: www.recoilnow.com/support

If our troubleshooting guide here and on the website don't help please contact us at www.recoilnow.com/contact

Force reading lower than expected

- What you might notice: You perform a thrust that feels strong, but the RN-1 records it as a lower force level than expected.
- Why this happens: The RN-1 measures force in a single, straight-down direction through the contact point. If part of your thrust is directed off-axis (angled forward, backward, or sideways), that portion of the force is not captured by the device.
- What to try: Focus on directing your thrust straight through the contact point. A more vertical, aligned force will be measured more accurately and often with less effort.
- Tip: Allowing the RN-1 to sit freely on a smooth surface can also help. If the device shifts or slips during a thrust, it often indicates that some of the force is being directed off-axis.

Unit won't turn on

- Check that your batteries are fresh.
- Try a different set of batteries.
- Make sure the batteries are the correct way around.

Lights look dim

- Batteries might be running low.
- Or, you might be in a bright environment that makes the lights look dim.
- Try replacing the batteries or moving to a less bright spot.
- Rechargeables often don't put out the same voltage as alkaline or lithium batteries and so lights appear dimmer.

RN-1 doesn't register a thrust

- Usually caused by a thrust that's too light, or is a double movement.

All four lights flash RED twice, then the unit turns itself off

- Battery power is too low for reliable readings.
- Replace with fresh batteries.

SAFETY & HANDLING

Failure to follow these instructions could result in injury, damage to RN-1, or property damage.

HANDLING

RN-1 contains sensitive components. Do not drop, crush, bend, puncture, shred, incinerate, microwave, or paint the device.

Do not insert foreign objects into the device.

Keep on a stable surface during use.

The contact point/spring mechanism is subject to a natural run-in period and will very slightly soften, however repeated practice exceeding the recommended pressures may cause more noticeable deterioration.

TEMPERATURE & ENVIRONMENT

Operate between 5°–35° C (41°–95° F)

Do not leave the device exposed for long periods in sunlight (or UV light) or in cars or other places with extreme heat or cold.

Keep away from rain, sinks, food, and liquids. If it becomes wet, turn off, remove the batteries, and allow to dry completely before use (this may take 3-4 days). Do not use external heat sources (e.g. hair dryer, microwave).

CLEANING

Power off and remove batteries before cleaning.

Wipe with a soft, slightly damp, lint-free cloth.

Do not allow moisture into openings.

Avoid cleaners such as sprays, solvents, alcohol, ammonia, or abrasives.

BATTERIES

RN-1 uses 2 × AA alkaline or rechargeable batteries.

Insert correctly (+/–) according to marking in the battery compartment.

Do not mix old and new batteries, or different types, or brands.

Remove batteries if storing the unit long-term.

REPAIRS

Do not attempt to repair or modify the device yourself. RN-1 contains no user-serviceable parts.

If the device is damaged (e.g. punctured, submerged, dropped heavily), stop using it and contact us through www.recoilnow.com/contact

TRAINING USE

RN-1 is a training tool only. It has no clinical or therapeutic function.

Use it to practice HVLA technique in a safe, controlled setting for periods up to 30 minutes per day.

Take breaks during repetitive training. If you experience pain or discomfort in your hands, arms, shoulders, or neck, stop and seek professional advice.

DISPOSAL & RECYCLING

Dispose of responsibly, following local regulations.

Batteries must be recycled or disposed of safely—check your council's guidelines.

At end of life, check the website, or your local authorities, or contact us at www.recoilnow.com/contact for recycling options.