

thera 5 3-in-1 Physiotherapy Device



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Instructions

Please read this manual thoroughly before using this device for the first time.

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INTRODUCTION

This device can be used for pain relief, muscle stimulation and massage. It provides two independent, controllable output channels. A pair of electrodes which can be connected to each output channel and the current's parameters and intensity level can be adjusted according to your needs.

1. What is pain?

Pain warns our body of injury to prevent additional damage. This sensation is important because without it, vital parts of our bodies might be injured without our knowledge. However, long-lasting, persistent (chronic) pain, once diagnosed serves no apparent purpose and reduces quality of life.

2. How does TENS work?

TENS (Transcutaneous Electrical Nerve Stimulation) refers to the transmission of small electrical pulses through the skin to the underlying peripheral nerves. The theory of TENS suggests two different modes of operation:

In **conventional (high frequency)** TENS, continuous mild electrical activity may block the pain signal traveling to the brain. If the pain signal does not get through to the brain, the pain is not "felt". In **low frequency** TENS, short bursts of electrical activity may stimulate the release of endorphins, the body's own pain-control substance. Ask your physician or therapist for more details. No matter what pain theory is used, TENS has been proven useful in pain management for many patients in helping to make their lives better.

3. What is EMS and how does it work?

In normal muscular activity, the central and peripheral nervous systems transmit electrical signals to the muscles, making them contract. EMS (Electrical muscle stimulation) uses an external source (the stimulator, via wires and electrodes) to achieve the same effect, creating involuntary muscle contractions. This can help improve and maintain muscle tone without actual physical activity and therefore prevent atrophy.

SAFETY INFORMATION

- 1. This device is recommended for: Symptomatic relief of chronic intractable pain, acute post traumatic pain or acute post surgical pain Improving local blood circulation Relief from muscle spasms Immediate post-surgical stimulation of muscles to prevent venous thrombosis Prevention or retardation of disuse atrophy Maintaining or increasing range of motion
- 2. Do not use in the following situations: Undiagnosed pain syndromes (until etiology is established). Cancerous lesions that are present in the treatment area. Swollen, infected, inflamed areas or skin eruptions (e.g. phlebitis, thrombophlebitis, varicose veins, etc.). Demand type implanted pacemaker or defibrillator.
 Epilepsy Serious arterial circulatory problems in the lower limbs Abdominal or inguinal hernia Safety has not been established for use during pregnancy.

WARNING

For external use only. The long-term effects of frequent electrical stimulation are unknown. This device should be used only under the continued supervision of a licensed medical practitioner. Do not apply stimulation over the thyroid or carotid sinus regions, as this could disrupt breathing, cardiac frequency or blood pressure. Do not use while connected to high-frequency surgical equipment or near shortwave or microwave therapy equipment. Never use in environments with high humidity (ex.: bathroom). Never place the electrodes anywhere on the front of the thorax or transthoracically as it can increase the risk of ventricular fibrillation, cause cardiac arrhythmia and lead to cardiac arrest. Never use near the eyes, the genitals, the heart or on areas which lack normal sensation. This stimulator should never be used by patients who are noncompliant or are emotionally, cognitively or mentally impaired. Keep the stimulator out of reach of children.

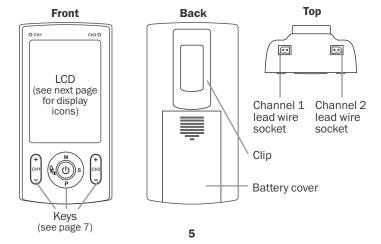
4. Precautions

- Do not adjust controls while operating machinery or vehicles.
- Turn the stimulator off before applying or removing electrodes.
- Only use with ProActive[™] lead wires and electrodes.
- Long-term stimulation at the same electrode site may cause skin irritation. Use only as prescribed by a physician.
- Never use in rooms where aerosols (sprays) are used or pure oxygen is being administered. Do not use it near highly flammable substances, gases or explosives.
- Apply the electrodes to clean, dry, and unbroken skin only.
- Keep electrodes separate during treatment. Electrodes coming in contact with each other could result in improper stimulation or skin burns.

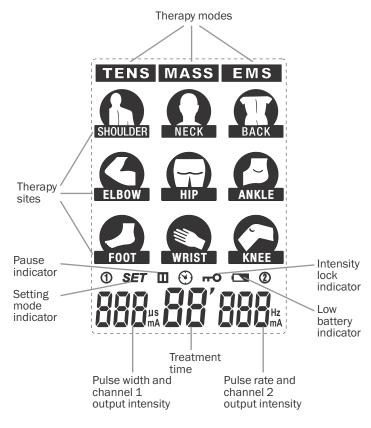
5. Possible adverse reactions

Skin irritation or electrode burn under the electrodes. Allergic skin reaction to electrode gel may also occur.

DEVICE OVERVIEW

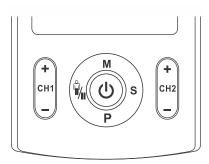


Display icons



INSTRUCTIONS FOR USE

Keys





- Turns the device on or off
- In treatment mode, press to stop treatment
- Use this key to exit memory or setting mode



- In user select mode, press to select a user (U1 or U2)
- In memory mode, press to check data or confirm its deletion
- In treatment mode, use to pause or resume
- M In standby, press to select a therapy mode
- P In standby, press P to select a therapy program
 - Press and hold P to enter setting mode



- Press to confirm user selection
- In standby, press to select a treatment site or press and hold for 3 seconds to enter memory mode
- In memory mode, press and hold for 3 seconds to clear memory data.



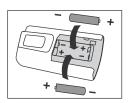
- Increases / decreases the output intensity of channel 1
- In setting mode, press Ch1to select the next parameter



- Increases / decreases the output intensity of channel 2
- In setting mode, press Ch2+ and Ch2- to ajust user program parameters

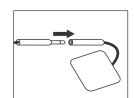
1. Insert batteries

Press and pull down on the battery cover to open. Insert 4xAAA batteries (included), matching the positive and negative ends of the battery to the markings, then close.



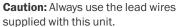
2. Connect electrodes to lead wires

Insert the lead wire connector into the electrodes connector, ensuring that no bare metal remains exposed.



3. Connect lead wires to the device

This device has 2 output channels, which can be used simultaneously (with 2 electrode pairs) or individually (1 channel with 1 electrode pair). After making sure that the device is turned off, insert the wire plugs into the sockets at the top of the unit.





4. Place electrodes on skin

Ensure that the skin surface where the electrodes will be placed is clean and dry. Apply electrodes to the exact site indicated by your physician. The electrodes should be placed firmly and evenly on the skin to ensure good contact.

See p.21 for our electrode placement guide, which also includes recommendations for stimulation positions.

Caution:

- Always wash and dry the treatment area before applying the electrodes.
- Do not turn the device on when the electrodes are not applied to the treatment area. Never adjust, reposition or remove the electrodes while the device is still on.
- Always use this device with 4cm x 4cm self-adhesive square electrodes, or larger.

5. Turn the device on

Carefully read the contraindications and safety information in this manual before using for the first time.

Press 0. The device will first go into user select mode (see figure I). Select U1 or U2 by pressing $\mathring{\psi}_{\textbf{I}}$ and press S to continue.



Figure I

6. Select the therapy mode and site

Press **M** to select "TENS", "MASSAGE" or "EMS". The selected mode will flash (see figure II).

Press **S** to select the therapy site (body part).

The therapy site will flash once selected (see figure II).



7. Select the therapy program

Press **P** to select the therapy program for the treatment site selected. Figure II

The LCD will display program numbers (see figure II).

See p.12 for details on preset and user-defined programs.

8. Adjust the intensity to start the treatment

Press **CH1+** or **CH2+** to increase the output intensity of the corresponding channel, which will begin treatment. Use **CH1-** and **CH2-** to decrease the intensity. The LCD will display the current output intensity (see figure III) and remaining treatment time.



Figure III

IMPORTANT

- The intensity of stimulation may be adjusted as required to a maximum of 90 (1 level/step).
- Always turn the unit off before removing the electrodes.
- The safety lock feature automatically activates after 20 seconds of button inactivity. You cannot increase the output intensity while the indicator ro is displayed. Press CH1- or CH2- button to unlock the device.
- The device stops automatically once treatment time reaches "0".
- Press ⁽⁾ to stop treatment at any time and put the device in standby. Press the ⁽⁾/_{||} to simply pause treatment and press again to resume. If the device is locked, press **CH1** or **CH2**-first to unlock the device.
- If an open circuit is detected on either channel and the amplitude level is 10mA or greater, the amplitude will be reset to 0mA.

9. Consulting the memory

The device will record the treatment parameters (e.g. recording number, program, body part, the average intensity and treatment time) after you finished your treatment. The maximum number of records is 30, after which the oldest record will be deleted. To check the memory data, press and hold **S** 3 seconds to enter into memory mode. Press $\sqrt[n]{n}$ to read the memory parameter, and press **CH1** button to read the next record when the LCD display memory number.

Notes:

10. Turn the device off

Press and hold \circlearrowleft to turn the device off. When not in treatment, it shuts off automatically 3 minutes after the last button operation.

11. Low battery indicator

When the indicator flashes, replace the batteries as soon as possible. However, the stimulator will continue to operate for several hours.

TO CREATE A CUSTOMIZED PROGRAM

Turn on the device, select TENS or EMS and press $\bf P$ to select a user program. Once in U1, press and hold $\bf P$ to enter setting mode. In this mode, you can set the pulse width from 50 to 350 μ s, the pulse rate from 1 to 150 Hz and treatment time from 5 to 90 min.

1. Select the parameter

First press **CH1**- to switch between the parameters to set (pulse rate, pulse width and treatment time).

2. Set each parameter

Then, press **CH2+** and **CH2-** to adjust. Press 0 to confirm and go into standby, the use **CH1+** and **CH2+** to adjust the amplitude of each channel.

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NOTE: to change the parameters, press and hold **P** again.

PRESET PROGRAMS IN TENS MODE

Note: Treatment length for all options below is 30 minutes.

Pulse rate (Hz) LDER 2 2 2	Pulse							
LDER 2° 80 2	(srl)	Waveform	Pulse rate (Hz)	Pulse width (µs)	Waveform	Pulse rate (Hz)	Pulse width (µs)	Waveform
2 080	100 ~ 200	Simple modulated pulse	50	200	Synchronous	2~ 125	100 ~ 200	Simple modulated pulse
/ 08	180	Continuous	80	70 ~ 180	Pulse width modulated	80	180	Continuous
	180	Hans	80	70 ~ 180	Hans	100	330 / 200	Amplitude modulated
ELBOW 2 18	180	Continuous	80	70 ~ 180	Pulse width modulated	2~ 125	100 ~ 200	Simple modulated pulse
HIP $100 \frac{33}{2}$	330/	Amplitude modulated	125	330/200	Amplitude modulated	80	330/200	Amplitude modulated
ANKLE $\begin{bmatrix} 2 \\ 60 \end{bmatrix}$ 20	100 ~ 200	Simple modulated pulse	2~ 8	300	Pulse rate modulated	2~ 40	100 ~ 200	Simple modulated pulse
F00T 80 70	70 ~ 180	Pulse width modulated	80	70/	Hans	2~ 100	100 ~ 200	Simple modulated pulse
WRIST 50 20	200	Synchronous	65	200	Synchronous	2~ 80	100 ~ 200	Simple modulated pulse
KNEE 50 38	350	Asynchronous	2	180	Continuous	80	200	Alternate ramped burst

PRESET PROGRAMS IN EMS MODE

Note: Treatment length for all options below is 30 minutes.

Program			P1		P2	5		U1 (Default)	fault)
Therapy	Pulse rate (Hz)	Pulse width (µs)	Waveform	Pulse rate (Hz)	Pulse width (µs)	Waveform	Pulse rate (Hz)	Pulse width (µs)	Waveform
SHOULDER	80	150	Synchronous	20	200	Synchronous	40	200	Synchronous
NECK	1	20	Continuous	2 ~ 60	100 ~ 200	Simple modulated pulse	2~8	300	Pulse rate modulated
BACK	20	350	Synchronous	65	350	Synchronous	80	150	Synchronous
ELBOW	20	150	Synchronous	20	200	Synchronous	20	350	Asynchronous
HIP	65	350	Synchronous	40	200	Synchronous	20	350	Synchronous
ANKLE	20	200	Synchronous	65	200	Synchronous	20	200	Synchronous
F00T	20	200	Synchronous	20	200	Synchronous	65	200	Synchronous
WRIST	20	200	Asynchronous	50 / 8	200	Asynchronous	20	350	Synchronous
KNEE	20	350	Synchronous	50	350	Synchronous	40	350	Synchronous

MASSAGE PROGRAMS (PRESET ONLY)

Note: Treatment length for all options below is 30 minutes.

Program	Phase	Pulse rate (Hz)	Pulse width (µs)	Work time (s)	Rest time (s)
P1	1	8	100	4	/
	1	25	30~220	3.5	1.0
	2	25	30~220	2.5	6.0
	3	33	30~220	1.9	6.0
	4	43	30~220	1.3	0.8
	2	53	200	6.0	0.7
	9	69	200	0.7	9.0
P2	7	79	200	0.5	0.5
	8	69	200	2.0	9.0
	6	23	200	2.0	9.0
	10	43	30~220	1.3	0.8
	11	33	30~220	1.9	6.0
	12	25	30~220	2.5	6.0
	13	25	30~220	3.5	1
	1	83	50~220	4	1
	2	100	50~220	3.8	0.8
Р3	3	111	50~220	3.1	0.72
	4	118	50~220	5.6	9.0
	2	132	50~220	2.3	9.0

Therapy site	Program
Shoulder	P1, P2, P3, P4
Neck	P2, P3, P4
Back	P1, P2, P3
Elbow	P2, P3
Hip	P1, P2, P3, P4
Ankle	P3, P4
Foot	P3, P4
Wrist	P2, P3
Knee	P1, P2

MASSAGE PROGRAMS (PRESET ONLY) - CONTINUED

Note: Treatment length for all options below is 30 minutes.

Program	Phase	Pulse rate (Hz)	Pulsewidth (µs)	Work time (s)	Rest time (s)
	9	118	50~220	2.6	9.0
Р3	7	111	50~220	2.8	0.7
	∞	100	50~220	3.3	0.8
	1	147	30~220~150	12.0	1.0
	2	169	30~220~150	10.3	6:0
	က	196	30~220~150	8.5	9.0
	4	237	30~220~150	6.8	9.0
	2	285	30~220~150	5.1	0.4
P4	9	290	30~220~150	5.7	0.5
	7	238	30~220~150	6.3	0.5
	_∞	197	30~220~150	8	9.0
	6	191	30~220~150	8.5	0.7
	10	168	30~220~150	9.1	8.0
	11	150	30~220~150	10.8	6.0
					I

CLEANING AND MAINTENANCE

1. Stimulator

Remove the batteries before cleaning. Wipe the stimulator with a soft, slightly moistened cloth. If a more thorough cleaning is needed, you can also moisten the cloth with mild soapy water.

Do not use any chemical cleaners or abrasive agents to clean this device.

2. Electrodes

- Use the device only with the leads and electrodes provided with this device or sold under the ProActive brand, following the placements and settings prescribed by your practitioner.
- It is recommended to use at minimum 4cm x 4cm self-adhesive, square electrodes.
- Inspect your electrodes before every use and replace as needed.
 Reusing electrodes too many times may cause slight skin irritation, low adhesion or ineffective stimulation.
- Between uses, store the electrodes in the resealed bag in a cool dry place. It may be helpful, between applications, to moisten their adhesive surface with a few drops of water (be careful not to over-saturate) and then let them air-dry to help them last longer.



Reusable, self-adhesive electrodes

3. Cleaning the electrode cords

Clean the electrode cords by wiping them with damp cloth. Coating them lightly with talcum powder will reduce tangles and help them last longer.

4. Maintenance

- Do not attempt any repairs to the device or any of its accessories. Contact us at 1-800-363-2381 for repair information.
- The manufacturer will not be held responsible for the results of maintenance or repairs by unauthorized persons.
- Check the device before each use for signs of wear and/or damage. Replace worn items (electrodes, lead wires) as required.

TROUBLESHOOTING

If your device does not seem to be operating correctly, refer to the chart below to determine what may be wrong. Should none of these measures correct the problem, the device should be serviced.

Problem	Possible cause	Solution
Displays fail	Battery contact failure	1) Install new batteries
to light up		Ensure batteries are inserted correctly, respecting the polarities, and that battery contacts are in place and in good condition
Weak or no stimulation	Electrodes are dried out or dirty	Replace and re-connect the electrodes
	Electrodes are improperly positioned	Reposition and re-connect the electrodes
Displays fail to light up	Old / worn / damaged lead wires	Replace the lead wires
	Intensity is too high	Decrease intensity
uncomfortable	Electrodes are too close together	Reposition the electrodes
	Damaged or worn electrodes or lead wires	Replace the lead wires
	Electrode active area is too small	Replace electrodes with ones that are 16 cm ² (4 cm x 4 cm or 1.5" x 1.5") or larger
to light up Weak or no stimulation Stimulation is uncomfortable	Refer to the program section on p.12 for more details	Please check the manual before use
	Program option in use	Some programs will seem intermittent. This is expected. Refer to the program section on page 12 for more details.
	Lead wires	Verify connection is secure and firmly in place
		Turn down the intensity. Rotate lead wires in socket 90°. If the problem persists, replace lead wire.
		3) If replacing the lead wire does not solve this problem, contact us at: 1-800-363-2381

Problem	Possible cause	Solution
Stimulation is ineffective	Improper electrode placement	Reposition electrode
	Unknown	Contact your doctor
The skin becomes red and / or	Repetitive use of the electrodes on the same site	Reposition the electrodes. If at any time you feel pain or discomfort, stop use immediately
you feel a stabbing pain	The electrodes aren't applied on the skin properly	Ensure the electrodes are attached securely to the skin
	The electrodes are dirty	Clean the electrode pads with a damp, lint-free cloth or replace with new electrodes. Clean the electrode cord according to the description in the user manual
	The surface of the electrode is scratched	Replace with a new electrode
Output current stops during	The electrode pads come off the skin	Turn off the device and attach the electrode firmly to the skin
therapy	A cable is disconnected	Turn off the device and connect the cable
	Batteries are low	Replace with new batteries

STORAGE

- Remove the batteries if the device is not in use for long periods of time.
- Store the device in a dry place and protect it against heat, sunshine and moisture.
- · Never place any heavy objects on the device.

DISPOSAL

Used fully discharged batteries must be disposed of in a specially labeled collection container, at toxic waste collection points or through an electrical retailer.

Please dispose of the device in accordance with the directive 2002/96/EC WEEE (Waste Electrical and Electronic Equipment). Contact your local distributor for information regarding disposal of the unit and accessories.

LIMITED WARRANTY

AMG Medical Inc. warrants the stimulator to be free from defects in material and workmanship for a period of one (1) year, to be proven by means of the sales receipt or invoice. This warranty is valid for the original purchaser only. Any alterations, abuse, misuse or accidental damage voids this warranty. Repairs under warranty do not extend the warranty period. For service under warranty, call us at:

1-800-363-2381, between 8 AM and 5 PM EST.

- The following is excluded under the warranty:
 - A) All damage which has arisen due to improper treatment, e.g. nonobservance of the user instructions.
 - B) All damage which is due to repairs or tampering by the customer or unauthorized third parities.
 - C) Damage which has arisen during transport from the manufacturer to the consumer or during transport to the service centre.
 - D) Accessories which are subject to normal wear and tear.
- Liability for direct or indirect consequential losses caused by the unit are excluded even if the damage to the unit is accepted as a warranty claim.

TECHNICAL INFORMATION

- Material: ABS Channel: Two channel
- Power supply: 4x AAA batteries
- Waveform: Biphase square-wave pulse
- Pulse duration: 30-350µs. Pulse frequency: 1-290Hz
- Treatment time: 5 to 90min
- Intensity: Adjustable from 0 to 90mA (at 1000 ohm)
- Operating conditions: 5°C to 40°C with a relative humidity of 30% - 85%, Atmospheric pressure from 700 hpa to 1060 hpa
- Storage conditions: $10\,^\circ$ C to $50\,^\circ$ C with a relative humidity of $10\%\sim90\%$, atmospheric pressure from 700 hpa to 1060 hpa
- Dimensions: 117 x 60 x 25 mm (without belt clip)
- Weight: 110 g (without batteries), 140 g (with batteries)

ELECTRODE DI ACEMENT CHINE

	ELECTRO	DDE PLACEMENT GUIDE
Muscle group	Placement of electrodes	Body positionning and voluntary start of the contraction phase
Plantar arch muscles	P	Sit with your feet resting on the floor
		Vigorously contract the muscles of your plantar arch, trying to dig your toes into the floor
Peroneal muscles		Sit with your feet resting on the floor
		Contract your muscles by exercising a strong pressure on the floor with your big toe, while also trying to raise the other toes from the floor





Sit with your feet placed under a piece of furniture, to prevent your ankles from bending

Contract your tibialis anterior muscles while vigorously trying to raise the tip of your foot against an object that resists and prevents this movement

Calf muscles



Sit with your back and feet firmly placed against supports. This position is easy to adopt by sitting, for exemple, in a doorframe

Vigorously contract your calf muscles while strongly trying to push the tip of your foot against an object that resists and prevents this movement

Hamstrings



Lie flat on your stomach with your ankles held down in a convenient way

Vigorously contract the muscles on the back of your thighs (hamstrings) while trying to bend vour knees

ELECTRODE PLACEMENT GUIDE

Muscle group

Placement of electrodes

Body positionning and voluntary start of the contraction phase

Adductors



Sit and place a rigid (but comfortable) object between vour knees

Strongly contract your adductors, while vigorously trying to bring your knees together

Quadriceps



Sit. The voluntary movement phase can be done in two ways:

- statically immobilize your knees
- dynamically to emphasise the treatment with movement, using an object to create a resistance

Strongly contract your quadriceps while trying to extend your legs

Buttocks



Lie down on your stomach or stand up. Important note: this treatment requires very good muscular qualities and is not compatible with certain morphologies. If you experience repeated failures with this technique, we recommend that the buttocks be treated in classic mode.

Vigorously contract your muscles to try to close your buttocks while trying to bring your thighs behind your back

Abdominals





Lie down on your back, which can be slightly raised. The voluntary movement phase can be done in two ways:

- statically, to simply start the muscular contraction phase
- dynamically, to associate the treatment with sit-ups. In this case, always work with your knees bent so as to not accentuate the lumbar region arch (lordosis)

Strongly contract your abdominal muscles, while vigorously trying to raise your head and shoulders from their support

ELECTRODE PLACEMENT GUIDE

Muscle group

Placement of electrodes Body positionning and voluntary start of the contraction phase

Lower back



Sit. Important note: it is necessary to have strong muscles to use this method. In case of repeated failure, we recommend use of "classic" mode or use of the recommended placement for combined stimulation of the low back muscles and erector spinalis. In this case, always take care to position the electrodes at the level of the dorsal region muscles, as shown in the picture.

Vigorously contract your lower back muscles, while trying to sit as tall as possible

Erector spinae



Sit

Vigorously contract your back muscles while trying to sit as tall as possible

Cervical muscles



Sit

Vigorously contract your back muscles while trying to sit as tall as possible

Trapezius



Sit

Strongly contract your trapezius muscles while trying to shrug your shoulders vigorously

ELECTRODE PLACEMENT GUIDE

Muscle group Placement of electrodes Body positionning and voluntary start of the contraction phase

Deltoids



Sit with your elbows placed inside armrests to create a resistance to their movement away from the body

Vigorously contract your deltoids, while strongly trying to move your elbows away from your body

Latissimus dorsi



Sit with your elbows placed outside of a chair's armrests, to create a resistance to their movement towards the body

Vigorously contract your latissimus dorsi, while strongly trying to move your elbows towards your body

Pectorals



Sit with the palms of your hands in contact with each other. WARNING: This electrode positioning increases risks of cardiac fibrillation

Vigorously contract your pectoral muscles while strongly trying to press the palms of your hands against each other

Triceps



Sit with your forearms and hands resting on armrests

Vigorously contract your triceps, while strongly trying to dig the palms of your hands into the armrests

Biceps



Sit with your forearms resting on armrests and the palms of your hands facing up. Use a fixing system to avoid any movement or flexion of your elbows during stimulation

Vigorously contract your biceps, while trying strongly to move the palms of your hands towards your shoulders

ELECTRODE PLACEMENT GUIDE

Muscle	
group	

Placement of electrodes

Body positionning and voluntary start of the contraction phase

Hand extensors



Sit on a chair, with your forearm and the palm of your hand resting on an armrest and your hands solidly attached to the armrest

Vigorously contract your hand extensors while trying to raise your hand

Hand flexors



Sit on a chair, with your forearms resting on armrests and a crush-proof object in your hand so that your fingers are slightly bent

Vigorously contract your hand flexors while firmly trying to grip the object that is in your hand