



The wand

NIAD

Non-Invasive Acupuncture Device

User Manual

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The System in Case

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The System in Use

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INTRODUCTION

The NIAD (Noninvasive Acupuncture Device) is an electronic measurement and stimulation system that empowers practitioners of varying medical backgrounds to diagnose and treat patients under the guiding principles of acupuncture meridian therapy. The NIAD is designed for simple implementation, and practitioners can learn to use its core functionality in a few hours – or in much less time for users who have existing acupuncture knowledge.

The instructions for the NIAD are written for practitioners with medical training and certifications, and Jade Biomed requires all users to read all instructions. The instructions are available both in the NIAD system software and in the packaged printed material, arranged in the following categories:

- Introduction
- Acupuncture basics
- Electronic meridian therapy
- NIAD hardware
- NIAD software
- NIAD Evaluation
- NIAD stimulation
- Point location

The instructions are always available in the software as reference during operation of the NIAD system.

Jade Biomed welcomes all users to the NIAD system and trust it will help all patients enjoy years of optimum health!

THEORY OF USE

Acupuncture Basics

Acupuncture treats the body as twelve primary systems of function, most of which are associated with physical organs. Disease is viewed as imbalance between the systems of function, and diagnosing imbalances between these systems is a subjective and complex task of assessing the ears, the tongue, or multiple pulses. Such techniques may require years to master.

Treatment of disease is approached by managing the body's energy, or 'chi', by stimulating locations on the skin, known as acupuncture points, with needles, electric current, or possible other means. The stimulation of the proper points helps return the body's chi into balance, helping to resolve a range of conditions as broad as that addressed by pharmaceuticals.

Acupuncture, however, works with the body's ability to heal, creating positive side effects such as increased energy while minimizing the unwanted side effects that come with altering the body with chemicals. It is an excellent but underused protocol since many practitioners do not have the training, experience, or licensure to apply it. Fortunately, advances in technology are making acupuncture's benefits available to almost every practitioner through protocols such as electronic meridian therapy.

Electronic Meridian Therapy

Acupuncture points form lines called meridians that have special electronic qualities. In the early 1950s, the Japanese doctor Yoshio Nakatani developed Ryodoraku, a protocol that uses electric current to evaluate the systems of function. Electric current, measured in microamperes represents the 'conductivity' within a meridian, which in turn represents its chi state.

Based upon a scale that Dr. Nakatani developed and that has been proven over decades, the conductivities of each meridian are compared to determine the balance or imbalance between them. Ryodoraku then calls for electric current to be applied to the proper acupuncture points to manage chi and help rebalance any imbalances discovered during evaluation.

Although the NIAD can support many chi management or electronic meridian therapies, it is an optimal system to support Ryodoraku. It achieves evaluation by applying a regulated voltage to twenty-four points that measure the conductivity of the body's twelve main meridians (12 left, 12 right), and it provides stimulation of meridian points in several ways.

The NIAD can stimulate meridians with low energy (deficient), it can sedate meridians with high energy (excessive), and it can stimulate meridians per Chinese 5-elements theory, which provides, among other guidance, a model that governs the direction of chi flow. After a NIAD Evaluation, the NIAD software will recommend a stimulation process.

NIAD HARDWARE

The NIAD hardware instructions include several subsections.

Main unit operation

The most important factors in operating the main unit are pressure and moisture control at the patient's skin. Other important factors are proper operation of the send button and electronic controls. This section describes how to optimize these factors, beginning with a proper grip.

The main unit is designed to be gripped one of two ways. The first way is with the thumb in line with the handle where the thumb is used to control the send button. The second way is with the index finger in line with the handle where the index finger is used to control the send button. Both grip techniques are pictured.



Thumb Grip



Index Grip

Search Probe - Pressure control

The most important aspect of pressure control is to apply the same pressure to each point during evaluation. The correct pressure is achieved when approximately 3 ounces of force is applied.

To estimate 3 ounces of force, hold the main unit (batteries inserted) with your index finger so that it tips slightly forward and so that the search probe tip lightly touches a horizontal surface. This is shown in the picture below. The weight of the main unit in this position will place approximately 3 ounces of force on a patient's skin.



Search Probe



3 ounces force

Search Probe - Moisture control

Moisture on the skin must be held constant at each point in Evaluation. Cleanse each point with sterile solution prior to each session, and wipe up any excess solution. To assure perfect moisture, tap the search probe against a moist alcohol prep pad prior to evaluating or stimulating each acupuncture point. If a prep pad is unavailable, a container of tap water may be used.

Send button control

The send button transmits data from the main unit to the computer. It does not control any other functions, although pressing it may cause the numbers on the liquid crystal display to shift slightly during transmission.

To send data, the send button must be held for approximately one quarter of a second. This minimum time is to prevent accidental bumping and sending erroneous data. If the button is held longer, it will still transmit only one reading. Holding the button longer will not damage the NIAD, but it will shorten battery life.

Each pressing of the button sends one four-digit reading between 000.0 and 199.9 to the computer. The value 1--.- represents a value greater than 199.9 microamperes (for safety, the NIAD will never put out more than 300 microamperes).

For data to be received, the receiver unit must be plugged in to your computer before opening the software. The receiver is attached via the USB cable per the pictures below.



Send Button



USB Port



Receiver

Electronic control

The electronic control of the main unit is governed by internal circuitry as prescribed by the Ryodoraku protocol. In diagnosis mode, the main unit maintains a constant 12 volts. In stimulation mode, it maintains a constant 24 volts. These voltages are regulated automatically, but they require a minimum charge in the main unit's three AA batteries to do so.

The main unit is designed to operate hundreds of hours - deep into the lifespan of alkaline AA batteries or deep into the discharge cycle of rechargeable AA batteries. As the end of life or the end of discharge is approached, the liquid crystal display will show a low battery warning (LO BATT).

When a low battery warning appears, it is recommended to change the batteries. However, the NIAD is designed to operate for one full session (up to 15 minutes) after a low battery warning so that no session has to be disrupted for changing batteries. If a low battery warning appears during a session, the session may be completed (within 15 minutes) before the batteries are changed.

The low battery indication may disappear and reappear as batteries approach their end of life or discharge cycle. This is normal due to voltage fluctuations and battery heat. The batteries should be changed or recharged immediately when a low battery indication appears unless you are in the midst of a session and no replacement batteries are available. Then the session should be completed within 15 minutes and then the batteries should be replaced.

NIAD SOFTWARE

Please see the help section of NIAD software application.

NIAD EVALUATION

Please review the point location section of these instructions prior to administering a NIAD session.

Evaluation is performed with the main unit energized in Evaluation mode by sliding the left switch upward. The right switch is de-activated in Evaluation mode. Upon energizing the main unit in Evaluation mode, a green light next to the left switch will illuminate, and the numbers of the liquid crystal display will show 0.0. The liquid crystal display may show other values or symbols while the circuitry energizes.



Evaluation Mode

Hold the main unit with numbers facing you. You may rotate the search probe if needed to facilitate your view. Make sure that you can reach and depress the 'send' button with your thumb or index finger. Verify that the receiver is installed and that the software is ready to receive data. The patient holds the grip cylinder in the right hand when the search probe measures points on the left side. Shift the cylinder to the left hand when measuring the right side.

The software sets the order in which you measure the 24 evaluation points. Beginning with the left hand, lung meridian's 9th point (Lu9L), a total of 6 measurements are taken on the left hand. Then 6 readings each are taken on the left foot, right hand and right foot. The order of readings cannot be changed in this version of software.

Place the flat end of the search probe on the point being measured. Hold it on the point for approximately 2.5 seconds, press the 'send' button, and then lift the probe from the patient. Note that the readings will climb rapidly at first and then taper to a slow climb after 2 seconds. Do not hold the probe on the patient for longer than 5 seconds because you will begin to stimulate the meridian (this is why readings continue to slowly climb). After the reading is stored in the computer, move to the next point. You may manually change the number in the computer if needed.

Ensure that the patient is at resting heart rate and calm prior to a session or readings will be skewed. Avoid abnormal skin temperatures due to physical exertion, bathing, or exposure. If the patient is calm with cleansed skin at room temperature and readings are still off-scale high (1---), shift the system into a lower voltage reading mode and re-begin evaluation. For early units, this requires shifting the left switch to 'stim' and the right switch to 'min'. Although this setting appears unintuitive, it will perform an evaluation at 5 volts.

Ensure that the patient is at resting heart rate and calm prior to a session or readings will be skewed. Avoid abnormal skin temperatures due to physical exertion, bathing, or exposure. If the patient is calm with cleansed skin at room temperature and readings are still off-scale high (1---), shift the system into a lower voltage reading mode and re-begin evaluation. For early units, this requires shifting the left switch to 'treat' and the right switch to 'min'. Although this setting appears unintuitive, it will perform an evaluation at 5 volts.

NIAD STIMULATION

After performing an evaluation, you will have a graphical interpretation of the 12 meridians, left and right, displayed on your computer screen. Note that the readings are normalized to a 0-160 microampere value per the Ryodoraku protocol, which is why readings of equal value on different meridians will be graphed at different values on the normalized chart.

You are encouraged to view the chart with the patient and to use its information as you see fit within your practice. If you desire to use the main unit to electrically stimulate acupuncture points at the 24 volts prescribed by the ryodoraku protocol, shift the left switch into 'stim' mode and shift the right switch to 'norm'. If the patient notes that the electric tingle is uncomfortable, switch the right switch to 'half'. If discomfort remains, switch to 'min'. If discomfort then still remains, discontinue use of the system with that patient and contact Jade Biomed.

To support stimulation, the software calculates a list of points that follow Chinese 5-elements theory. The calculated list identifies points that promote balancing bilateral (left/right) imbalances, balancing the meridians of the fire element (heart with pericardium, small intestine with triple warmer), and then 5-elements after considering the bilateral and fire imbalances. The calculated list is a stimulation recommendation - not a requirement. You are encouraged to follow it, or you may use another philosophy of balance with which you are comfortable.



Stimulation Mode – Normal Setting

During stimulation, the system aids you by offering a countdown tool that is set to either 7 or 21 seconds as appropriate. With the main unit in stimulation mode, place the search probe on the point identified in the recommended stimulation list. Stimulation begins when the probe makes contact with the skin, and the liquid crystal display will indicate how much current is being used to stimulate the point – usually value just above 200 microamperes, indicated by the number 1--.-.

When the probe contacts the skin and the current begins flowing, press the 'send' button to begin the counter. Watch the counter and remove the probe from the skin when the counter reaches '0'. Then repeat at the next point in the list until all points are stimulated.

Note that the list may identify a meridian or even a point more than once, such as a point that balances a meridian bilaterally which may also be called upon in 5-elements theory.

POINT LOCATION

Before administering a NIAD session, each user must become familiar with the location of the points to be used in both evaluation and stimulation.

Please refer to the training section of the NIAD software application for descriptions and pictures of the point locations.

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE

INSTRUCTION TO THE USER

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.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

FCC ID: VMV-NIAD-4000

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.

FCC - DECLARATION OF CONFORMITY

TRADE NAME: Jade Biomed – Non-Invasive Acupuncture Device

MODEL NUMBER: NIAD4000

COMPLIANCE TEST REPORT NUMBER: B70821D1

COMPLIANCE TEST REPORT DATE: August 22, 2007

RESPONSIBLE PARTY: Jade Biotechnologies Incorporated (Jade Biomed)

ADDRESS:

21 Carlton Ln
Dearborn, MI 48120

TELEPHONE: 313 330 0523

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 the unit does cause harmful interference to radio or television reception, please refer to your user's manual for instructions on correcting the problem.

I the undersigned, hereby declare that the equipment specified above conforms to the above requirements.

Place: Dearborn, Michigan (Wayne County)

Signature:



Date: September 2, 2007

Full Name: John R. Hindinger

Position: President and CEO, Jade Biotechnologies, Incorporated