NeuroMuscular Transmission Module, E-NMT

Service Manual

Host software version 3
Module hardware version 01

NeuroMuscular Transmission Module,
E-NMT
English
3rd edition
2098086-011

Due to continuing product innovation, specifications in this manual are subject to change without notice.

For technical documentation purposes, the abbreviation GE is used for the legal entity names, GE Medical Systems *Information Technologies*, Inc. and GE Healthcare Finland Oy.

Contents

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About this manual

Intended use of this manual

This manual contains instructions for the planned and corrective maintenance of the acquisition module. This manual must be used together with the monitor's service manual for important safety and installation information.

Use the manual as a guide for maintenance procedures and repairs considered field repairable. Where necessary the manual identifies additional sources of relevant information and technical assistance.

See the monitor's service manual for an overview of the patient monitoring system, information needed for system installation and for planned and corrective maintenance of the monitor.

See the monitor's supplemental information manual for the technical specifications, default settings and compatibility information, including electromagnetic compatibility.

See the monitor's user manual for the instructions necessary to operate the device safely in accordance with its function and intended use.

Intended audience of this manual

This manual is intended for service representatives and technical personnel who maintain, troubleshoot, or repair this device.

Manual conventions

This manual uses the following styles to emphasize text or indicate an action. Also note the terminology conventions.

Item	Description
bold	Indicates hardware keys and connectors.
bold italic	Indicates menu options, software keys and messages.
italic	Indicates terms for emphasis.
>	Indicates menu options to select consecutively.
select	The word select means choosing and confirming.
supplemental information	In this manual, the phrase supplemental information refers to information that appears in the Supplemental Information Manual or supplements provided.
NOTE	Note statements provide application tips or other useful information.

Illustrations and names

This manual uses illustrations as examples only. Illustrations in this manual may not necessarily reflect all system settings, features, configurations, or displayed data.

Names of persons, institutions, and places and related information are fictitious; any similarity to actual persons, entities, or places is purely coincidental.

Related documents

- CARESCAPE monitor's service manual
- CARESCAPE monitor's user manual
- CARESCAPE monitor's supplemental information manual
- Cleaning and Disinfecting Supplement
- Supplies and Accessories Supplement

Product availability

NOTE Due to continual product innovation, design and specifications for these products are subject to change without notice.

Some of the products mentioned in this manual may not be available in all countries. Please consult your local representative for the availability.

Trademarks

GE, GE Monogram, and CARESCAPE are trademarks of General Electric Company.

Third party trademarks

All third party product and company names are the property of their respective owners.

Manufacturer responsibility

GE is responsible for the effects on safety, reliability, and performance of the equipment only if:

- Assembly operations, extensions, readjustments, modifications, servicing, or repairs are carried out by authorized service personnel.
- The electrical installation of the relevant room complies with the requirements of the appropriate regulations.
- The equipment is used in accordance with the instructions for use.
- The equipment is installed, maintained and serviced in accordance with the instructions provided in the related service manuals.

WARNING SAFETY HAZARD. To avoid risks to personnel and patient, or damage to the equipment, only perform maintenance procedures described in this manual. Unauthorized modifications can lead to safety hazards.

2

Module introduction

NMT module introduction

This document provides information for the maintenance and service of the NeuroMuscular Transmission Module, E-NMT-01.

The NMT module provides peripheral nerve stimulation and response measurement, which supports electromyography (EMG) and kinemyography (KMG).

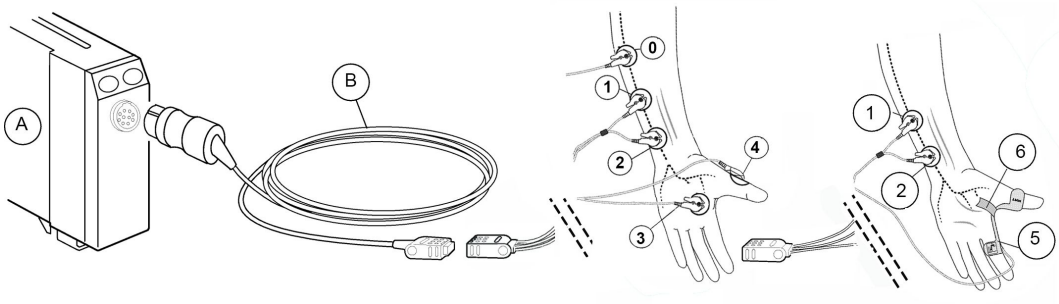
The module can also be used as a nerve locator for regional nerve blocking with a regional block cable. However, response measurement is not available with regional nerve blocking.

CAUTION ELECTRIC SHOCK. Always stop the NMT measurement before handling the stimulating electrodes or connectors.

Module compatibility

For detailed information regarding module, monitor, and accessory compatibility, see the supplemental information provided.

NMT equipment to patient connection



A = Module with NMT measurement capability

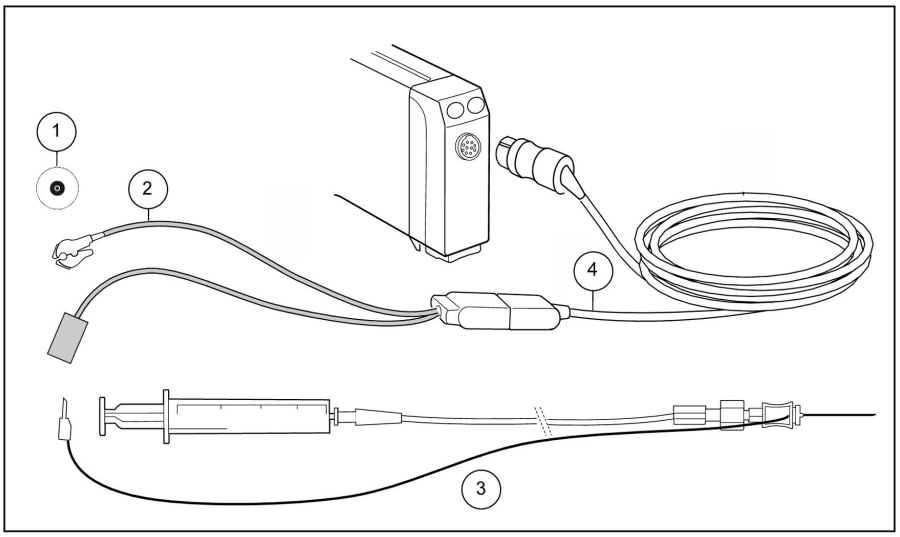
B = NMT sensor cable

- 0 = Electrode, black (ground)
- 1 = Electrode, white (stimulating)
- 2 = Electrode, brown (stimulating)
- 3 = Electrode, green (measuring)
- 4 = Electrode, red (measuring)

- 5 = MechanoSensor (measuring)
- 6 = Tape

Local nerve and plexus localization

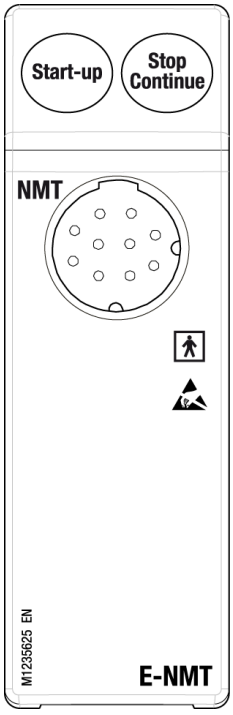
Single stimulation pulses may be helpful for determining the correct needle tip position from a local nerve in plexus procedures. The NMT module delivers single stimulation pulses at a selected rate until it is manually stopped. Muscle contractions from the stimulated innervating motoric nerve(s) may be observed. Note that you need specific accessories for this measurement.

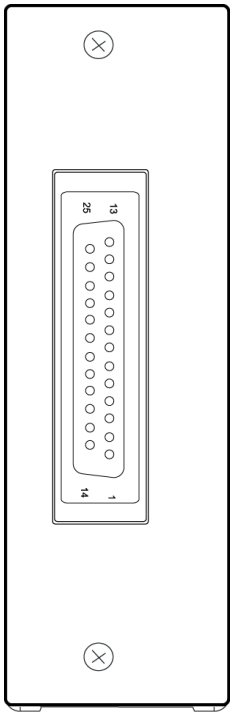


1. Electrode
2. Regional block adapter
3. Sterile needle and syringe set
4. Sensor cable

Controls and connectors

Front panel NeuroMuscular Transmission Module, E-NMT, and the back of the module:





Connector	Description
NMT	NMT connector
D25 connector	Module bus connector

NMT module keys

There are two keys on the module:

Start-up	With host software version 3.1 or earlier: • Starts the search for supramaximal current and reference level. • Proceeds with the selected measurement cycle.
	With a later host software version: • Depending on the ***Start-up Settings*** selection: ▪ ***AUTO***: Starts the search for supramaximal current and reference level. ▪ ***Recall Patient***: Retrieves the supramaximal current and reference from the module. ▪ ***Relaxed Patient***: Uses the current set in ***Current mA*** and does not use a reference. • Proceeds with the selected measurement cycle.

Stop Continue	With host software version 3.1 or earlier: • Interrupts monitoring. • Restarts monitoring of the same patient. If the module has been disconnected, but you wish to continue the previous NMT monitoring, select ***Recall reference***.
	With a later host software version: • Stops monitoring without resetting the current or reference. • Continues monitoring of the same patient with unchanged current and reference.

Measurement principle

Nerve stimulation

There are three stimulus modes in the NeuroMuscular Transmission Module: train of four (TOF), double burst 3,3 (DBS) and single twitch (ST).

In the train of four stimulus mode, four stimulation pulses are generated at 0.5 second intervals. The response is measured after each stimulus and the ratio of the fourth and first response of the TOF sequence is calculated (TOF%).

NOTE If the first response does not exceed a certain signal level, TOF% is not calculated due to poor accuracy.

Double burst (3,3) stimulation includes two bursts with a 750 ms interval. Both bursts consist of three pulses separated by 20 ms intervals. The responses are measured after each burst, and the ratio of the second and first response is calculated (DBS%).

In single twitch stimulation, one stimulation pulse is generated. The response is measured after the stimulus. In order to prevent decurarization of the stimulated area, the measurement is automatically stopped after 5 minutes stimulation if 1 second cycle time is used.

Tetanic/PTC

Tetanic/PTC (post tetanic count) can measure deeper relaxation than TOF. The tetanic stimulation is produced when ***Start PTC*** is selected on the ***Setup*** tab. ***Start PTC*** is disabled until the Count reaches 0. With host software version 3.1 or earlier, the selection is called ***Start Tetanic/PTC***.

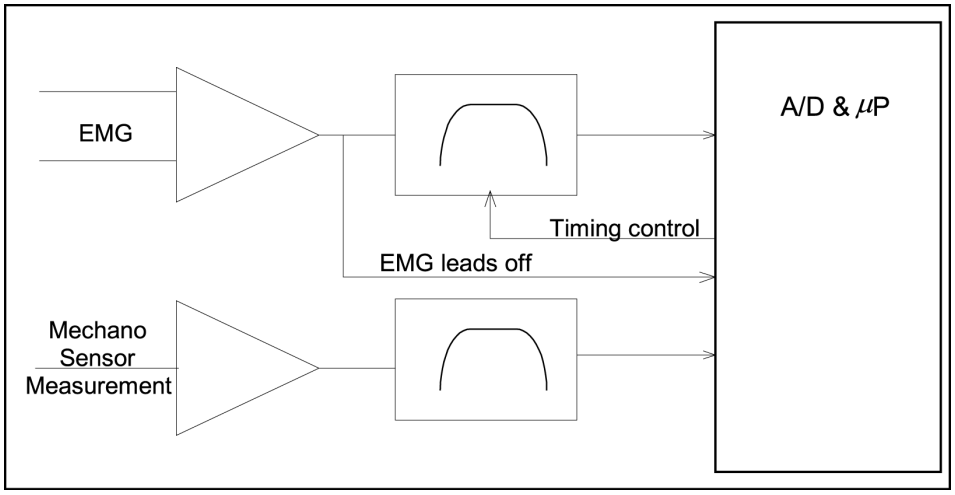
The length of the stimulation is 5 seconds. The stimulation generates pulses with a frequency of 50 Hz and with a selected pulse width and current. After the tetanic stimulation there is a 3 second delay, and single twitch stimulation is produced to detect the post tetanic count (PTC). PTC describes the number of responses detected after tetanic stimulation. If there is no response, the measurement will be stopped. If the responses do not fade away, a maximum of 10 responses are counted and the text **>10** is displayed. With host software version 3.1 or earlier, a maximum of 20 responses are counted and the text **>20** is displayed.

After tetanic stimulation, NMT measurements are stopped for one minute. Then the monitor automatically continues with the previously selected TOF, DBS, or ST measurement cycle.

Response measurement

Before each stimulation, the sequence offset, noise, and threshold for the response detection are measured. Offset is a baseline of the noise measurement. Noise is calculated by the same algorithm as the response signal itself. The response detection threshold is calculated based on the noise, and if the response is not greater than the threshold, it is interpreted as no response.

The following illustrates the principle of response measurement:



EMG measurement

The EMG response is measured as integrated muscle activity. The EMG measurement starts 3 ms after the stimulation and lasts 15 ms. The 3 ms delay helps to prevent the effect of stimulation artifact.

MechanoSensor measurement

MechanoSensor is attached between a thumb and an index finger. It measures the response as a movement of the thumb with a piezoelectric wafer.

Regional block

A regional block cable can be used as a nerve locator in local anesthesia. An adjustable stimulus current between 0 to 5.0 mA is given every 1, 2 or 3 seconds. The response measurement is ocular.

Main components

NMT board

The NMT board consists of the following functional sections:

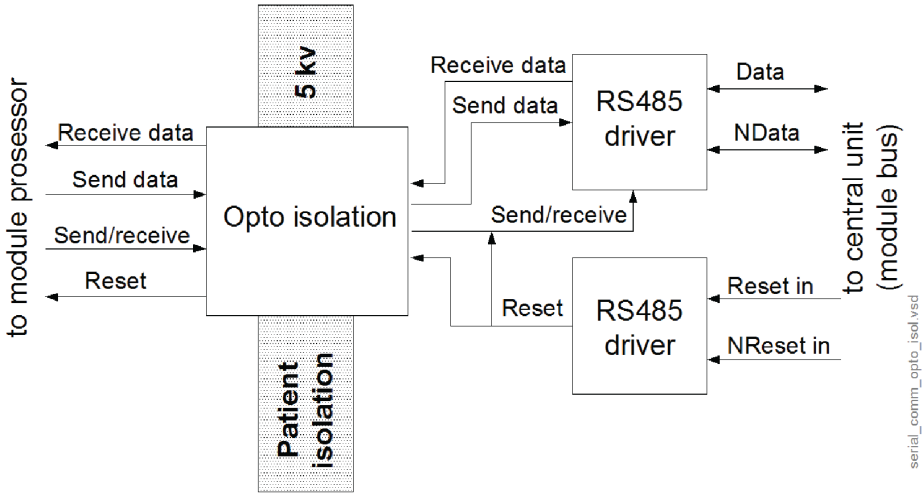
- constant current stimulator
- measuring electronics for the EMG signals
- microprocessor for the stimulation and measuring control, and for counting the measuring results

- serial communication

The serial bus speed is 500 kbps and the bus itself is half duplex, i.e. data can be transferred in both directions but only one way at a time.

Serial communication

The following illustrates serial communication and opto isolation:



Stimulator

The constant current stimulator generates pulses whose amplitude is independent of the load impedance in the specified load range. Load impedance range of the NMT measurement is 0.5 to 3 kOhm. The impedance over this range does not have an effect on the stimulus parameters.

The main components of the stimulator are a transformer, capacitor, and transistor. The transformer produces a high voltage which charges the capacitor and the transistor adjusts the pulse width and amplitude of the current.

3

Planned and corrective maintenance

About the maintenance check procedures

This chapter describes the planned and corrective maintenance check procedures for the product. To help ensure the equipment remains in proper operational and functional order and maintains its essential performance and basic safety, follow the corrective and planned maintenance recommendations. The tests that are related to the essential performance and basic safety are marked with the *.

The cleaning precautions, cleaning requirements, cleaning procedures, and recommended cleaning solutions are described in the monitor's user manual or supplemental information provided.

For details about cleaning, disinfecting and sterilizing the accessories, see the instructions for use in the accessory package.

Record the results of the planned and the corrective maintenance check procedures to the eCheckforms delivered in the electronic manual media.

WARNING SAFETY HAZARD. To avoid risks to personnel and patient, or damage to the equipment, only perform maintenance procedures described in this manual. Unauthorized modifications can lead to safety hazards.

Planned maintenance

WARNING PATIENT SAFETY. Planned maintenance must be carried out at the specified interval. Failure to implement the maintenance schedule may cause equipment failure and possible health hazards.

Perform the planned maintenance procedure completely every 2 years after installation. Perform the procedure in the following order:

1. Visual inspection
2. Electrical safety tests *
3. Functional check

Corrective maintenance

Perform the following check procedure after any corrective maintenance, before taking the product back into clinical use:

Performed service activity	Required checkout procedure		
	Visual inspection	Electrical safety test	Functional check
Product casing opened either for troubleshooting purpose or for replacing any of the internal parts.	All steps	All steps	All steps
Front cover, or an other external part, replaced.	All steps	Not applicable	Not applicable

Performing visual inspection

1. Remove the module and check that:
   a. The front cover is intact.
   b. All connectors are intact, clean and attached properly.
   c. The module casing and the latch are clean and intact.
   d. The patient cables are clean and intact.

Performing electrical safety tests *

Perform the electrical safety tests described in the monitor's service manual, Checkout procedures chapter. Perform the following tests:

1. Patient (source) leakage current test
2. Patient (sink) leakage current test

Performing functional check

Required tools for NMT module functional check

For a list of compatible accessories, see the supplemental information provided.

- NMT Simulator, P/N 871251–HEL
- NMT ElectroSensor
- NMT Sensor cable 3.3 m

Making connections for the functional check

1. Turn on or restart the monitor and wait until the normal screen appears.
2. Ensure that the module is connected to the monitor.

Configuring monitor for NMT module functional check

1. Configure the NMT waveform field to the screen with adequate priority.
2. Select ***Monitor Setup*** > ***Main Setup*** > ***Parameter Setup*** > ***NMT***.

3. On the ***Setup*** tab, configure the monitor. The settings depend on the monitor software version as follows:

   With host software version 3.1 or earlier, select:

   - ***Start with***: New patient
   - ***Current***: Supra
   - ***Stimulus Mode***: TOF
   - ***Stimulus Beep Volume***: 6
   - ***Cycle Time***: 20 s

   With a later host software version, select:

   - ***Start-up Settings***: AUTO
   - ***Use Supramax***: Selected
   - ***Stimulus Mode***: TOF
   - ***Stimulus Beep Volume***: 6
   - ***Cycle Time***: 20 s

   NOTE Some of these settings are not configurable before the ElectroSensor is connected to the simulator.

Configuring simulator for NMT module functional check

For instructions on how to use and configure the simulators, refer to the simulators' documentation.

1. Turn the simulator on.
2. Set the switch on the simulator to ***Fade off***.
3. Turn the response knob to ***max***.

Testing NMT measurement

NOTE With host software version 3.2, there are bar graphs for supramaximal current search, reference setting, and PTC. These graphs can be useful when testing the measurement.

1. To check the module and sensor recognition:
   a. Connect the NMT sensor cable with a NMT ElectroSensor to the module.
   b. Check that the NMT waveform field with related information appears on the screen.
   c. Check that the ***Measurement off*** message appears in the parameter window.
   d. Connect the NMT ElectroSensor leads to the NMT simulator.
   e. With host software version 3.2: Check that message changes to ***Start measurement***.

2. To check the supramaximal current search and reference setting:
   a. Press the ***Start-up*** module key to start NMT measurement (TOF).
   b. Check that:
      - The detected supramaximal current is less than or equal to 70 mA.
      - The ***Supramax search*** message changes to ***Setting reference***.
   c. With host software version 3.2: Check that message changes to ***Reference set***.
3. To check the measurement with a simulator, check that:
   a. The module gives four successive stimulus pulses with approximately 0.5–second intervals.
   b. A sound signal is heard from the loudspeaker during each stimulus pulse.
   c. The responses for the four stimulus pulses are visible on the waveform field.
   d. ***TOF%*** is within 95-105.
   e. ***Count*** is 4.
   f. ***T1%*** is within 95-105.
4. Press the ***Stop Continue*** module key to stop the measurement.

Completing the functional check

1. Select ***Discharge Patient*** or ***Reset Case*** to discard any changes made to the monitor configuration during the functional check.
2. Disconnect the test setup.

4

Configuration and calibration

Configuration

There is no service configuration for this module.

Calibration and adjustments

No calibration or adjustments are needed for this module.

5

Troubleshooting

Troubleshooting guidelines

This chapter focuses on troubleshooting technical problems. Refer to the user manual for troubleshooting monitoring problems and clinical configuration issues.

If a problem remains, contact technical support for service. To ensure accurate problem solving, please be prepared to provide the following information:

- Product name and serial number or UDI
- Hardware and software versions
- Detailed problem description
- Error messages, if any
- Configuration information (or settings file)
- Service Logs
- The troubleshooting you have done so far

Perform the specified corrective maintenance check after any corrective maintenance to the product.

Performing visual inspection

Before any detailed troubleshooting, complete a thorough visual inspection for the module.

1. Remove the module and check that:
   a. The front cover is intact.
   b. All the connectors are intact, clean, and attached properly.
   c. The module casing and the latch are clean and intact.
2. If you suspect that there are loose parts or cable connections inside the module, remove the two screws from the back of the module to detach the module box, and check that:
   a. All the screws are tightened properly.
   b. All the cables are connected properly.
   c. There are no loose objects inside the module.

Troubleshooting module functionality

Follow these instructions to identify the unit causing the functional problem.

Before you begin, ensure that the monitor is turned on, and all the modules are connected.

1. Check if there are any error messages shown in the message field.

   For a list of possible causes and solutions, see Messages related to the measurement.

2. Check the compatibility of each system component.

   For a list of the compatible monitors, modules, and accessories, see the supplemental information provided.

3. Check that there are no identical modules connected to the monitor.

   For a list of identical modules, see the supplemental information manual.

4. Visually check the accessories in use. Replace them, if necessary.

   For a list of compatible accessories, see the supplemental information provided.

5. Connect the accessories with a simulator to the module. Check that the parameters measured by the module are configured to the display with adequate priority.

6. Press one of the module keys.

7. Check that the correct menu opens or the activity starts. If nothing happens, check if there is a loose keypad cable or other problem in the module.

Viewing device information

To view the hardware, software and configuration information of the monitor, modules and/or connected devices:

1. Ensure that the module is connected to the monitor.
2. Log in to the service interface.
3. Select ***Information***.
4. Select an item on the side navigation menu or scroll down the page to view the information.

Service log files

The monitor collects information about different system events, errors and alarms to log files to help troubleshoot equipment problems. The following service logs may contain related useful information:

- ***System Logs*** records different system events, messages, clinical alarms, user interactions and internal communication events.
- ***EMBC Logs*** records module communication events and errors for E-series acquisition modules.

Viewing log files

1. Log in to the service interface.
2. Select ***Diagnostics*** > ***View Logs***.
3. Select the log you want to view. The contents of the selected log file are shown on the screen.

Downloading log files

For security reasons, the contents of the log file(s) will be encrypted with a user-selectable password before the download. Provide the password in a secure way only for the authorized receiver of the log file. Use 7-Zip open-source file archiver (http://7-zip.org/) and the password to decrypt the downloaded log file.

1. Log in to the service interface.
2. Select ***Diagnostics*** > ***Download Logs***.
3. Select the log(s) you want to download.
4. Provide a password to encrypt the contents of the log file. This password is user-selectable.
5. Depending on your access to the service interface:
   a. If you are using a service PC, you can save the log file to any storage device connected to the service PC.
      i. Select ***Download***.
      ii. Save the log file according to the instructions provided by the web browser.

      The steps to download the log file to a service PC depend on the web browser used. The web browser may also notify you about security issues. Refer to the web browser documentation for details.
   b. If you are using the local, integrated service interface, you can save the log file to a USB flash drive that is connected to one of the monitor's USB ports:
      i. Select ***Save to USB storage*** to save the log file to the USB flash drive.

      The log file is saved always to the root directory of the USB flash drive.

      NOTE Do not disconnect the USB flash drive until downloading is complete.
6. Send the log file and the password in a secure way to GE Service for further investigation.

Messages related to NMT measurement

For information regarding alarm priorities and escalation times, see the supplemental information provided.

Make sure you are familiar with the generic layout of the screen. This will help you identify where on screen the following messages appear. The message location is indicated with the following abbreviations:

- al. area = alarm area
- param. = parameter window
- wavef. = waveform area

Message	Location	Possible causes	Suggested actions
• ***Check electrodes***	• param.	With host software version 3.2 or later: • Measuring electrodes are off. • Adjusted stimulus current could not be delivered properly due to a broken connection of the stimulating electrode or cable. With an earlier host software version: Adjusted stimulus current could not be delivered properly due to a broken connection of the stimulating electrode or cable.	• Depending on the host software version: ▪ With version 3.2 or later: Check the electrodes that are shown in red in the parameter window. ▪ With version 3.1 or earlier: Check the white and brown stimulating electrodes. • Replace the NMT ElectroSensor or MechanoSensor if broken.
• ***EMG electrodes off*** Only with host software version 3.1 or earlier.	• param.	Measuring electrodes are off.	• Attach the electrodes to continue or start the measurement. • Replace the ElectroSensor if broken.
• ***Identical NMT modules***	• al. area	There are two or more NMT modules in the system.	• Remove all but one NMT module.
• ***Measurement off***	• param.	The measurement has been stopped.	• Restart the measurement if required.
• ***NMT cable removed*** Only with host software version 3.1 or earlier.	• al. area	NMT sensor cable and sensor are not connected to the module.	• Connect the NMT sensor and cable to the module.
• ***NMT measurement removed***	• al. area	NMT module is disconnected from the module slot.	• Reconnect the NMT module to the module slot.
• ***NMT sensor removed*** • ***Sensor off*** Not available with host software version 3.1 or earlier.	• al. area • param.	NMT sensor cable and sensor are not connected to the module.	• Connect the NMT sensor and cable to the module.
• ***Reference not stable***	• param.	Reference setting fails because responses differ more than 10%: • The patient has been given relaxants. • There are movement artifacts.	• Start measurement with fixed current without the reference measurement.
• ***Reference set*** Not available with host software version 3.1 or earlier.	• param.	Calibration was successful and the reference is set.	• No action required.
• ***Regional Block***	• param.	Nerve location with regional block stimulation is in progress.	• Stop regional block stimulation manually, if necessary. Otherwise, no action required.

Message	Location	Possible causes	Suggested actions
• ***Response too weak***	• param.	The maximum gain is insufficient to increase the response signal amplitude to a measurable level: • Stimulus electrodes are loose. • Response electrodes are attached to a wrong place.	• Check that the stimulus current is not too weak. • Check the stimulus electrode placement and connections. • Check that the response electrodes are not disconnected. • If the electrodes are dry, replace them. • Check that skin at the electrode site is properly prepared.
• ***Setting reference***	• param.	Reference setting is in progress.	• Wait until setting the reference level is completed.
• ***Start measurement*** Not available with host software version 3.1 or earlier.	• param.	The measurement is available.	• Start the measurement.
• ***Supramax not found***	• param.	Supramaximal stimulus current was not found. 70 mA is used as stimulus current.	• Stop measurement, reposition the stimulus and response electrodes and restart the measurement.
• ***Supramax search***	• param.	The search of supramaximal stimulus pulse is in progress.	• Wait until the search is completed.
• ***TETANIC*** Only with host software version 3.1 or earlier.	• param.	Tetanic stimulation is in progress.	• Wait until the stimulation is completed.
• ***Wait to continue*** Not available with host software version 3.1 or earlier.	• param.	NMT measurement has been stopped for one minute after tetanic stimulation.	• Wait until the message disappears.

6

Disassembly and reassembly

Disassembly guidelines

Field repair of the device is limited to replacing field replaceable units (FRUs).

NOTE Only qualified service personnel should perform field replacement procedures.

NOTE Perform the specified corrective maintenance check after any corrective maintenance to the product.

ESD precautions

All external connectors of the device are designed with protection from ESD damage. However, if the device requires service, exposed components and assemblies inside are susceptible to ESD damage. This includes human hands, non-ESD protected work stations or improperly grounded test equipment. The following guidelines may not guarantee a 100% static-free workstation, but can greatly reduce the potential for failure of any electronic assemblies being serviced:

- Discharge any static charge you may have built up before handling semiconductors or assemblies containing semiconductors.
- Wear a grounded, antistatic wristband or heel strap at all times while handling or repairing assemblies containing semiconductors.
- Use properly grounded test equipment.
- Use a static-free work surface while handling or working on assemblies containing semiconductors.
- Do not remove semiconductors or assemblies containing semiconductors from antistatic containers until absolutely necessary.
- Do not slide semiconductors or electrical/electronic assemblies across any surface.
- Do not touch semiconductor leads unless absolutely necessary.
- Store the semiconductors and electronic assemblies only in antistatic bags or boxes.
- Handle all PCB assemblies by their edges.
- Do not flex or twist a circuit board.

Before disassembly

- Note the positions of any wires or cables. Mark them if necessary to ensure that they are re-assembled correctly.
- Save and set aside all hardware for reassembly.

Required tools

- Torx screwdriver, T10
- Flat blade screwdriver
- Antistatic wristband

Disassembly procedures

Disassemble the module in the order described in this section.

For reference, see the exploded view in Service parts chapter.

Detaching the front cover

1. Detach the front cover of the module by releasing the snaps that hold the front cover to the front chassis unit by using a small flat blade screwdriver. There are 2 snaps on both sides of the module and 1 snap on the top.

Detaching the NMT board

1. Detach the front cover of the module by releasing the snaps that hold the front cover to the front chassis unit by using a small flat blade screwdriver. There are 2 snaps on both sides of the module and 1 snap on the top.
2. Remove the two screws (T10) from the back of the module.
3. While pressing the release latch, pull the module casing slowly backwards and remove it from the main body.
4. Remove the 2 screws located near the front of the chassis unit.
5. Carefully pull out the front chassis unit to detach the connector that connects the NMT board to the NMT connector board.
6. Disconnect the membrane keyboard cable and the NMT connector cable from the NMT board.

Reassembling the module

1. Reassemble in reverse order. Make sure that you:
   a. Tighten all the screws properly.
   b. Connect all the cables properly.
   c. Check that there are no loose objects inside the module.

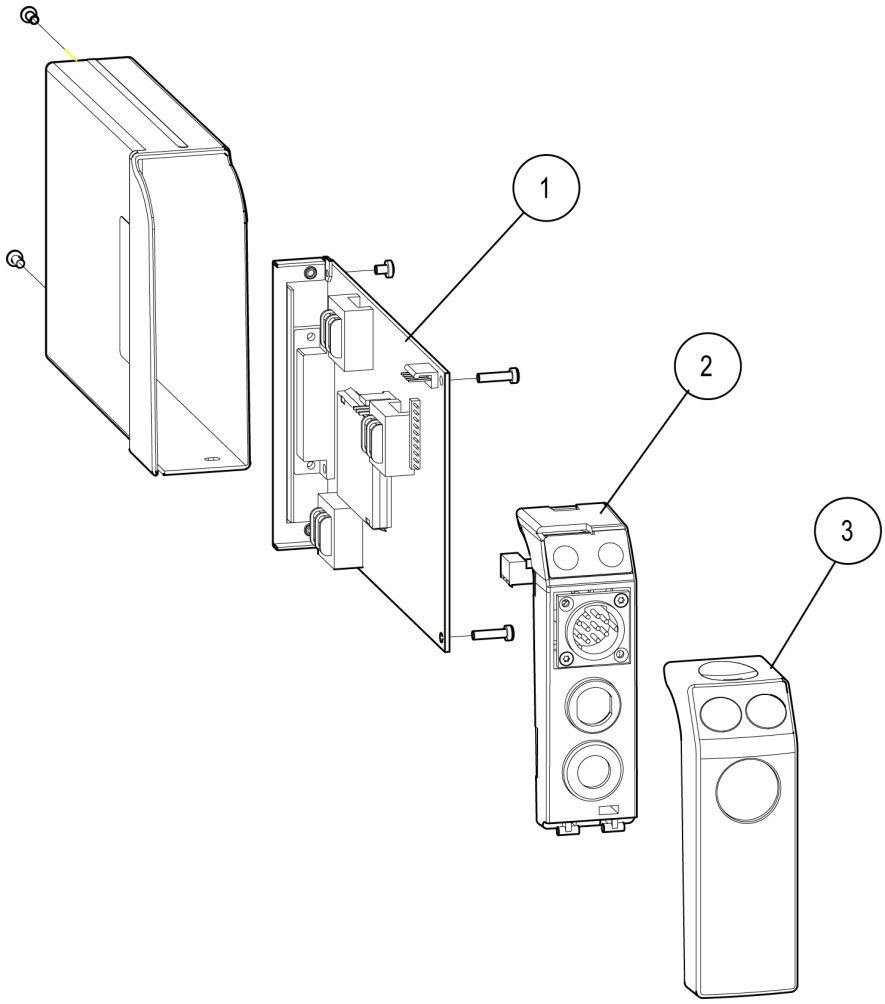
7

Service parts

Ordering parts

To order parts, contact your local GE representative. Contact information is available at www.gehealthcare.com. Make sure you have all necessary information at hand.

Exploded view of NeuroMuscular Transmission Module, E-NMT-01



E-NMT-01_SPAREPARTS 1/1

List of FRUs for E-NMT

Part number	Description
2099527-001	FRU, NMT board, E-NMT-01 (#1) • NMT Measurement Board • Metal Frame • 2 mounting screws
2081701-001	FRU, Front Chassis, E-NMT-01 (#2) • Front Chassis • Membrane Keyboard • Connector Unit • Latch • Torsion Spring
M1237377	FRU, Front Cover, Danish, E-NMT-01 (#3)

Part number	Description
M1237378	FRU, Front Cover, Dutch, E-NMT-01 (#3)
M1237379	FRU, Front Cover, English, E-NMT-01 (#3)
M1237380	FRU, Front Cover, Finnish, E-NMT-01 (#3)
M1237381	FRU, Front Cover, French, E-NMT-01 (#3)
M1237382	FRU, Front Cover, German, E-NMT-01 (#3)
M1237383	FRU, Front Cover, Italian, E-NMT-01 (#3)
M1237384	FRU, Front Cover, Japanese, E-NMT-01 (#3)
M1237386	FRU, Front Cover, Norwegian, E-NMT-01 (#3)
M1237387	FRU, Front Cover, Polish, E-NMT-01 (#3)
M1237388	FRU, Front Cover, Portuguese, E-NMT-01 (#3)
M1237390	FRU, Front Cover, Spanish, E-NMT-01 (#3)
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M1237394	FRU, Front Cover, Czech, E-NMT-01 (#3)
M1237395	FRU, Front Cover, Hungary, E-NMT-01 (#3)
M1237396	FRU, Front Cover, Russian, E-NMT-01 (#3)
M1237397	FRU, Front Cover, Chinese, E-NMT-01 (#3)
M1206392	FRU, Module Hardware Kit • 2 mounting screws for Metal Frame • 2 mounting screws for Interface Board • 2 mounting screws for Module Casing • Latch • Torsion Spring • Membrane Keypad

NeuroMuscular Transmission Module, E-NMT

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