

NeuroTrigger Basic

Powered Muscle Stimulator



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Safety Information

Validity

The information and technical data contained in this document relates to the NeuroTrigger Basic power muscle stimulator provided with this manual. Each NeuroTrigger unit is attributed a serial number which is located on the back of the unit. The information and technical data disclosed in this document are proprietary to NeuroTrigger Ltd. and may only be used and disseminated for the purposes and to the extent specifically authorized in writing by the company.

Disclaimers

All items of equipment manufactured and sold by NeuroTrigger Ltd are rigorously checked and tested prior to shipment. However the use of these units is beyond the area of the company's control. NeuroTrigger Ltd only accepts responsibility for the safety, reliability and performance of the equipment when it is operated in accordance with the instructions herein and within the given specifications.

Therefore, the user must bear full responsibility for any actions arising out of the use or misuse of this equipment. Any modifications, repairs or servicing must be undertaken by authorized NeuroTrigger Ltd personnel.

This manual is intended for the guidance of the administrator, patient, and clinician. Patients should not set up their own stimulator and must visit their physician for setup. This device conforms with IP67 Standard.

Intended Use

NeuroTrigger Basic (NTB) is a powered muscle stimulator intended for medical purposes that repeatedly contracts muscles by passing electrical currents through electrodes contacting the affected body area.

Indication for use

NeuroTrigger Basic is intended to stimulate healthy muscles in order to improve or facilitate muscle performance for maintaining/increasing muscle range of motion and for the prevention or retardation of disuse atrophy.

WARNINGS, CAUTIONS, AND NOTES The terms warning, caution, and note have specific meanings in this manual.

A **WARNING** advises against certain actions or situations that could result in personal injury or death.

A **CAUTION** advises against actions or situations that could damage equipment, produce inaccurate data, or invalidate a procedure, although personal injury is unlikely.

A NOTE provides useful information regarding a function or procedure.



- Read, understand, and practice the precautionary and operating instructions. Know the limitations and hazards associated with using any electrical stimulation. Observe the precautionary and operational decals placed on the unit.
- DO NOT operate this unit when connected to any accessories other than NeuroTrigger Y-shaped Electrodes specifically described in user or service manuals. There are two types of electrodes that differ in shape: wide & narrow versions.
- DO NOT use sharp objects such as a pencil point or ballpoint pen to operate the buttons on both the NeuroTrigger Cradle and Stimulator.
- DO NOT disassemble, modify, or remodel the NeuroTrigger Cradle and Stimulator. This may cause unit damage, malfunction, electrical shock, or personal injury.
- DO NOT permit foreign materials, liquids or cleaning agents to enter the unit, including, but not limited to, inflammables, water, and metallic objects, to prevent unit damage, malfunction, electrical shock, fire, or personal injury.
- DO NOT operate the NeuroTrigger Basic within the vicinity or environment of any therapeutic microwave or RF shortwave diathermy system in operation.
- Device is designed to comply with electromagnetic safety standards. However, there is no guarantee that interference will not occur in a particular installation. Harmful interference to

other devices can be determined by turning this equipment on and off.

- Inspect NeuroTrigger Electrodes, cables and associated connectors before each use.
- No distance is required between the equipment and all persons given that the device comes in contact with patient skin.
- This unit should be operated at 5°C to 40°C and 20% to 90% Relative Humidity.
- The unit should be transported and stored at -10°C to 50°C and 20% to 90% Relative Humidity.
- Allow the patient to assume a comfortable position during NeuroTrigger therapy session.
- Failure to use and maintain the NeuroTrigger Basic and its accessories in accordance with the instructions outlined in this manual will invalidate the warranty.
- If you have difficulty operating the unit after carefully reviewing this user manual, contact NeuroTrigger Ltd or authorized distributor for assistance.
- DO not use any parts or materials other than those supplied by NeuroTrigger .
- Safe use of electrotherapy during pregnancy has not been established.
- Caution should be used for patients with suspected or diagnosed heart problems. Application of electrode near the thorax may increase the risk of cardiac fibrillation.

- Caution should be used for patients with suspected or diagnosed epilepsy.
- Caution should be used in the presence of a tendency to hemorrhage following acute trauma or fracture, following recent surgical procedures when muscle contraction may disrupt the healing process and over areas of skin which lack normal sensation.
- Some patients may experience skin irritation or hypersensitivity due to electrical stimulation or electrical conductive medium. The irritation can usually be reduced by moistening the skin following the stimulation
- Inspect NeuroTrigger Electrode and associated connectors for signs of damage or tear before use. Replace damaged electrode immediately with another new before any treatment is applied.
- Electrode placement and stimulation settings should be based on the guidance of the prescribing practitioner or other licensed health professional.
- Portable powered muscle stimulators should not be used while driving, operating machinery, or during any activity in which involuntary muscle contractions may put the user at undue risk of injury.
- Always check the stimulation controls before treating a patient. The stimulation amplitude/intensity should always be adjusted gradually.
- All of the materials exposed directly to skin are Biocompatible.



- U.S.A. Federal Law restricts these devices to sale by, or on the order of, a physician or licensed practitioner. This device should be used only under the continued supervision of a physician or licensed practitioner.
- Be sure to read all instructions for operation before treating patient.
- The stimulation should not be applied across or through the head, directly on the eyes, covering the mouth, on the front of the neck, (especially the carotid sinus), or from electrodes placed on the chest and the upper or crossing over the heart.
- The device is not designed to be attached in a sleeping position.
- Patients with an implanted electronic device (for example a cardiac pacemaker) should not be subjected to stimulation unless specialist medical opinion has first been obtained.
- Care must be taken when operating this equipment around other equipment. Potential electromagnetic or other interference could occur to this or to the other equipment. Try to minimize this interference by not using other equipment in conjunction with it.
- Electronic monitoring equipment (such as ECG monitors and ECG alarms) may not operate properly when electrical stimulation is in use.
- Do not drop the unit on hard surfaces or submerge in water. These actions will damage the unit. Damage resulting from these conditions is not covered under the warranty.

- This device should be kept out of the reach of children.
- Use only cables and accessories that are specially designed for the NeuroTrigger unit. Do not use accessories manufactured by other companies on the NeuroTrigger unit. NeuroTrigger is not responsible for any consequence resulting from using products manufactured by other companies. The use of other accessories or cables may result in increased emissions or decreased immunity of the NeuroTrigger Basic unit.
- Contaminated sticker electrode, and gel can lead to infection.
- DO NOT use electrode if the gel circles shifted, moved, or detached from the electrode.
- DO NOT use electrode if the underlaying silver layer is exposed.
- Use of electrode with degraded hydrogel can result in burn to the skin.
- DO NOT operate this unit in an environment where other devices are being used that intentionally radiate electromagnetic energy in an unshielded manner.
- Stop treatment immediately if patient experiences discomfort or pain.
- Long term effects of chronic electrical stimulation are unknown.
- Stimulation should **not** be applied trans cerebrally.
- Stimulation should **not** be applied over swollen, infected, and inflamed areas or skin eruptions, e.g., phlebitis, thrombophlebitis, varicose veins, etc.

- Stimulation should **not** be applied over, or in proximity to, cancerous lesions.
- Stimulation should **not** be applied over the carotid sinus particularly in patients with a known sensitivity to the carotid sinus reflex.
- Using the supplied stimulation electrodes, the current density will not exceed 2mA/cm². Special caution is to be exercised when adjusting the current level beyond levels set by the clinicians, as the greater current values and small electrode area may possibly cause skin irritation or burns.
- The NeuroTrigger Basic accessories are designed for use only with the NeuroTrigger Basic.
- Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Medical electrical equipment needs special precautions regarding EMC. Portable and mobile RF communication equipment can be affected by other medical electrical devices.
- Common RF emitting devices (e.g., RFID) and electromagnetic security systems (e.g., metal detectors) may produce instability in the NeuroTrigger Basic output.
- The NeuroTrigger Basic has been tested in the presence of Equipment Under Test monitors, which caused the stimulation to stop.
- Before administering any treatment to a patient you should become acquainted with the operating procedures for each

mode of treatment available, as well as the indications, contraindications, warnings and precautions. Consult other resources for additional information regarding the application of each mode of treatment.

- Simultaneous connection of a patient to high frequency surgical Medical Electrical equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator.
- Keep Y- shaped electrode's ends separated during treatment. Electrodes in contact with each other could result in improper stimulation or skin burns.
- Electrodes should be inspected before each use. (i.e. hydration level, tack, discoloration and impurities) Follow the manufacturing guidelines on electrode packaging.
- Stimulator includes a current monitor that checks whether stimulation is delivered correctly to the electrodes; the stimulator also has a self-test mechanism that is used to detect whether the stimulator hardware modules are properly functioning. This feature is available in the application is automatically activated
- Extra security measures should be taken to avoid cybersecurity threats such as keeping the android device up to date, and checking for any future updates for the firmware.
- The password for each user should be kept hidden and changed periodically for confidential measures.
- Passwords for the application login and NeuroTrigger Stimulator are provided in the kit on a separate paper slip.

• This device contains lithium batteries, which are classified as Class 9 hazardous material UN3480. Must be handled with care by qualified personnel. Do not replace battery.



or undesirable and ineffective.

Use only electrodes and accessories designed specifically for use with the NeuroTrigger Basic. Use of other accessories and/or techniques not approved under the NeuroTrigger certification training may result in death, injury, or adverse effects to patient

DESCRIPTION OF DEVICE MARKINGS:

The marking on the unit are assurance of its conformity to the highest applicable standards of medical equipment safety and electromagnetic compatibility. One or more of the following markings may appear on the device.

Symbol	Title
SN	Serial Number
	Caution: consult Accompanying Documents
X	DO NOT THROW IN TRASH. Separate treatment from general waste at end of life
	Lithium battery
FC	Certification the electromagnetic interference from the device is under limits approved by the Federal Communications Commission
	Manufacturer

~~~	Date of Manufacture
Σ	Use-by Date
EC REP	Authorized Representative in the European Community
LOT	Batch Code
8	Refer to Instruction Manual/Booklet
QTY	Quantity
	Neuromuscular Stimulation (STIM) and sEMG. Stimulation should not be used by Patients fitted with demand style cardiac pacemakers
Ť	Keep dry
$\mathbf{\dot{\pi}}$	Type BF applied part. Have a conductive contact with the patient

# **PRODUCT DESCRIPTION**

The NeuroTrigger Basic is a powered muscle stimulator system consisting of a stimulator, disposable electrodes, a cradle, a stimulator holder, application, and charging accessories. The stimulator transfers electrical stimulations through pre-gelled Y-shaped electrodes.

NOTE: This equipment is to be used only under the prescription and supervision of a licensed medical practitioner.

#### Components

The NeuroTrigger Basic powered muscle stimulator system is composed of the following components as shown below.

#### Stimulator



Narrow Y- Shaped hydrogel electrode wide (Disposable, Single Use)



# **Charging Cradle**

# Medical USB C Charging Cable + Adapter





#### Android App





# Step By Step Treatment Guide

## NeuroTrigger Application Android Installation

- 1. Scan the QR code.
- 2. Copy the link to your browser.
- 3. Download the APK file from the link.
- 4. Install the application on your device.
- 5. NeuroTrigger Application will request to access some permissions for the app, such as Bluetooth, device location, photos and media, and network & WiFi.

## NeuroTrigger Electrode Instruction for Use

- Using a mild soap and water, clean the skin thoroughly where you will be placing the electrodes, and wait until the area is perfectly dry. The electrodes do not adhere well if any dirt, oils, creams or other cosmetics are still on the skin.
- 2. Take one electrode pouch from the NeuroTrigger Electrode box. Be careful not to bend the pouch.
- 3. Open the pouch from the tear notch.
- 4. Carefully extract the NeuroTrigger Electrode sticker from the pouch, making sure not to bend it.
- Remove the liners from the adhesive side and position the sticker on the skin, with the Y heads directly over the muscle for stimulation. The electrodes should be placed as directed by your physician. The electrode's patch connector should be free.
- 6. For setting up stimulation, follow the steps outlined in NeuroTrigger Stimulator Instruction for Use.

Please note the following points: • A clinician must provide instructions on exact electrode placement. • The safety information provided in this manual must be followed. • The complete surface of the sticker electrode should be in contact with the skin.

# NeuroTrigger Stimulator Instruction for Use

- 1. Remove the NeuroTrigger Charging Cradle from its box and unwarp its cover.
- 2. Open the cradle and take out the NeuroTrigger Stimulator.
- 3. Turn on the stimulator by pressing the ON/OFF button (circled in red) as shown in the image to the right until a green light flashes near the electrode connection side of the stimulator (see green circle).



- Make sure that your smartphone has Bluetooth turned on and pair the stimulator to the NeuroTrigger App via Bluetooth connection, by choosing the serial number of the device. The device will flash blue for one minute once connection is obtained.
- 5. Depending on the required area of application, a holder may be used to attach the stimulator to the body. The stimulator can be clipped into the holder and held in place, and the holder can be attached to the body using pre-cut DST tape supplied with the NeuroTrigger Basic package.
- 6. Clasp the stimulator into the holder and ensure it is sitting securely. Remove the DST sticker cover on both side of the holder, and attach one side of the DST tape to the holder and the other side to the desired region.



- 7. Please note that the stimulator must align with the electrode that is already attached to clean skin.
- Align a good connection between both magnet poles of the NeuroTrigger stimulator and electrode sticker. All the sticker's magnetic pins must be attached to their pairs on the NeuroTrigger Stimulator with no metal pin visible.



9. The stimulator can be used up to 30 hours. Check for a flashing red light as a sign of low battery, or the application battery indicator.

#### For recharging the stimulator:

- 10. Place the stimulator back inside the charging cradle with the stimulator button facing the same side of the USB C connector (shown in a circle).
- 11. Attach the electrical adapter to the electrical outlet may use the European converter if necessary. Plug the USB side of the charging cable to the charger, and the USB C side to the cradle.
- 12. Plug the charger into the electrical socket, and check the cradle light for charging signal, shown in the box.

- a. An orange light indicates that there is no cradle-stimulator coupling/ stimulator is not in cradle/improper coupling of the two components
- A red light indicates that the stimulator is its correct position and is charging.
- A green light indicates that the stimulator battery is fully charged.



# NeuroTrigger Application Instruction for Use

After downloading the application, a password is required to enter the application, as well as when pairing the stimulator to the application. Both 4-digit passwords are provided in the kit. Passwords can be changed after the first login to custom 4-digit password, or if permissible and supported by the mobile application, biometric access fingerprints and face recognition.

The application supports three types of users; patient, clinician, and technician. Please follow the instruction for your user type. The application will save the last user login and automatically pair to the

last used stimulator when launched, and can be activated through the setting tab.

#### Patient

Patients are capable of connecting the NeuroTrigger device and controlling functionality, which needs BLE pairing, choose your device from the available device list. You will need to provide a pairing password

The patient is then directed to the operation dashboard as shown on



the next page (left).

- Device status: Battery Level, BLE Connection Quality, Device Functionality, Electrode Quality, Running Scene.

- Stimulation control can be done using the Turn On/off button. Turn ON will start the simulation, the system allows user to control parameters (Pace 0-9 sec & Current Strength 0-9mA).
- The running scene is the stimulation parameters pre-defined by the clinician (custom scenes) or built-in on the app (fixed scenes). The clinician has four fixed pre-set programs (Indoors, Mild, Office, and Outdoors) that can be renamed & two custom programs, which can be shared by an authorized person (see image on the top right). Device will run the default scene once it starts.
- The default scene can be chosen by clicking on the green star icon on the left of each scene.
- To choose a different running scene double click the desired scene.

The clinician can share a file through email or WhatsApp. Download the file to your documents, for devices with Android 10 software and above,

Patanet 1	
Last Bales	
Patients	
ternet in re	0

move the shared file from downloads to Internal Storage – Android – Media. Not applicable for lower than 10 Android devices.

Warning: Please do not add info personal information to the database. It is at the user's discretion to add their personal information such as : first and last name, and patient ID.

#### Administrator

The administrator is the eligible technician, responsible for entering system parameters, exert system data, and perform remote maintenance.

The administrator account can navigate between 1) the programs and 2) settings screens. There will be 3 tabs placed on screen bottom.

The patient tab indicates that the administrator will have access to a list of all their patients, as well as:

- Creating/ adding new patient profiles.
- Editing patient details by doubled-clicking the patient's name.
- Searching for patients by their name or ID #.
- Deleting patients.

The program tab will allow the administrator to control the general settings, saved Scene #1, and saved scene #2

- General settings allow you to search for the patient in the search bar (shown at the top of the page in the image on the previous page).
- Saved scene #1, and saved scene #2, which are customized scenes that the user can insert the desire configuration parameters, such as stimulation pace, strength, polarity, pulse width, and

burst frequency. Also, these parameters can be shared by sending

encrypted file to patient's smartphone via standard sharing application (WhatsApp, email, Telegram, etc.).

		~
Patient	Patient ID	
Potenti Policisi	¥	

#### Clinician

The clinicians are the medical professionals instructed and trained by NeuroTrigger to modify and optimize the settings of the stimulation bursts for each individual patient, and save the stimulation parameters in the NeuroTrigger Stimulator.

The clinician can carry out the same functions as the administrator, which are mentioned in the previous section.

# **Maintenance & Troubleshooting**

#### Maintenance

The unit should be cleaned regularly using a soft cloth, lightly dampened with soapy water. Do not allow the interior of the NeuroTrigger Stimulator or Cradle to get wet during cleaning.

The NeuroTrigger electrode is a single-use electrode, and can be disposed after use. If the electrodes are dirty or no longer adhere properly, they

need to be replaced. Replace the sticker if the connecting base is damaged or the sticker liner is cut.

#### Repair, Service & Modification

Access to the interior is not required for maintenance purposes. Repair, service and modifications may not be carried out by anyone other than qualified service personnel authorized by NeuroTrigger Ltd.

Do not use the unit if it is defective. Please return it to NeuroTrigger. NeuroTrigger Ltd will not accept any responsibility where the guidelines and instructions are not followed.

### Troubleshooting

Problem	Possible Cause	Solution
BLE stimulator signal is not detected by application	Battery depleted or other unknown device have connected to stimulator	Check battery indicator, and recharge battery according to instructions in this manual. Restart stimulator, pairing the device in close proximity to the stimulator
The unit is switched on but does not respond to commands	Stimulator device malfunction or crash, Cybersecurity threat	Restart device and recheck if problem still occurs. Restart stimulator, pairing the device in close proximity to the stimulator
Stimulation stops immediately	Stimulator is sensing high impedance;	Try to press firmly on electrodes to attach thoroughly on skin.

	Electrodes are not set correctly on skin	Detach electrodes, clean skin and reattach the electrodes. Replace electrodes.
Increasing intensity causes unpleasant sensation.	Electrodes are not attached fully on skin Stimulator malfunction	Try to press firmly on electrodes to attach thoroughly on skin. Detach electrodes, clean skin and reattach the electrodes. Replace electrodes.

# Technical Information

General Specifications		
Product Type:	Electrical Mus	cle Neuro Stimulator
No. of Channels:	1	
Waveform:	Biphasic Symn	netrical current pulse
<b>Environmental Specifications:</b>		
Operation:	Temperature	5° to 40°C
	Humidity	20 – 90 % RH
Storage:	Temperature	-25° to 70°C
	Humidity	20 – 90 % RH
Physical Specification:		
Unit Dimensions:	Nonrectangula 8mm length	ar folded 10 cm X 1cm X
Weight	11 grams	

Nominal Output Voltage / Power				
Parameter	500 Ω	2 ΚΩ	10 KΩ	
Max output voltage	7.5V	30V	90V	
Max output current	15mA	15mA	9mA	
Output frequency	10-300Hz	10-300Hz	10-300Hz	
DC Component (charge)	0C	0C	0C	
Pulse Width	<b>80-400</b> μs	80-400µs	<b>80-400</b> μs	
Current Intensity Range (Per Pulse)	0-15mA	0-15mA	0-9mA	
Burst length	0.1-0.2sec	0.1-0.2sec	0.1-0.2sec	
Burst frequency	2-10sec	2-10sec	2-10sec	
Cofety Costyres				

Safety Features

There are two types of NeuroTrigger Electrodes: narrow and wide span. Both electrodes provided with the device have the same surface area; the difference between the narrow and wide is the distance and divergence angle between the two Y heads of the electrode. Your assigned caregiver will specify which electrode to use depending on your application.

The surface area of less than 2 cm² can cause current densities in excess of 2mA/cm² above certain intensities. This might cause unpleasant feelings, pain, or leave red marks in some patients; In this case, contact the manufacturer or your clinician.

### **Product Information**

- Manufacturer: Senso Medical LTD
- Customer: NeuroTrigger LTD.
- Customer's Address: Nirim 3, Tel Aviv 67060, Israel
- Equipment Model No.: NTB-KT-0003

- For labels explanation look into NT-11 labels file.
- FCC ID: 2A565NEUROTBASIC

Note: 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.

# Declaration – Electromagnetic Emissions

Declaration – Electromagnetic Immunity

# Declaration – Electromagnetic Immunity

Declaration – Electromagnetic Emissions			
<b>Emissions test</b>	Compliance	e Electromagnetic environment –	
		guidance	
RF Emissions	Group1 Class A	The NTB System uses RF energy only	
CISPR 11		for its internal function. Therefore, its	
		RF emissions are very low and are not	
		likely to cause any interference in	
		nearby electronic equipment.	
Harmonic	Class A	The NTB System is suitable for use in	
Emissions IEC		all establishments other than	
61000-3-2		domestic, and may be used in	
		domestic establishments and those	
		directly connected to the public low-	
Voltage	Complies	voltage power supply network that	
Fluctuations		supplies buildings used for domestic	
And Flicker		purposes, provided the following	
IEC 61000-3-		warning is heeded: Warning: This	
3:2013		equipment/system is intended for use	
		by healthcare professionals only. This	
		equipment/ system may cause radio	
		interference or may disrupt the	
		operation of nearby equipment. It	
		may be necessary to take mitigation	
		measures, such as re-orienting or	
		relocating the NTB System or	
		shielding the location.	

IMMUNITY	IEC 60601	Complian	Electromagnetic environment
test	test level	ce level	-
			guid
			ance
Electrostatic	8 kV	8 kV	Floors should be wood,
Discharge	contact	contact	concrete or ceramic tile. If
(ESD)	2, 4, 8,	2, 4, 8,	floors are covered with
IEC 61000-4-	15kV air	15kV air	synthetic material, the
2			relative humidity should be at
			least 30 %.
Electrical	2 kV for	2 kV for	MainS power quality should
Fast	power	power	be that of a typical
Transient/B	supply	supply	commercial or hospital
urst	lines	lines	environment.
IEC 61000-4-	1 kV for	N/A	
4	input/outp		
	ut lines		
Surge	1 kV line(s)	1 kV	Mains power quality should
IEC 61000-4-	to line(s)	line(s) to	be that of a typical
5		line(s)	commercial or hospital
	2 kV line(s)	2 kV	environment.
	to earth	line(s) to	
		earth	
	2 kV Signal	N/A	
	input/outp		
	ut) to		
	earth		
Voltage	0% UT;	0% UT;	Mains power quality should
Dips, Short	0.5cycle at	0.5cycle	be that of a typical
interruption	0°, 45°,	at 0°,	commercial or hospital
s and	90°,	45°, 90°,	environment. If the user of
voltage	135°,180°,	135°,180	the NT-11 System requires
variations		°, 225°,	continued operation during

on power supply input lines IEC 61000-4- 11	225°, 270° and 315° 0% UT; 1cycle and 70% UT; 25/30 cycles Single phase at 0° 0% UT; 250/300 cycle	270° and 315° 0% UT; 1cycle and 70% UT; 25/30 cycles Single phase at 0° 0% UT; 250/300 cycle	power mains interruptions, it is recommended that the <b>NT-</b> <b>11 System</b> be powered from an uninterruptible power supply or a battery.
Power Frequency	30 (A/m)	30 (A/m)	Power frequency magnetic fields should be at levels
(50/60 Hz)			characteristic of a typical
Magnetic			location in a typical
Field			commercial or hospital
IEC 61000-4-			environment.
8		- 14	
NOTE UT IS th	e a.c. mains v	oitage	
prior to applic	ation of the to	est ievei.	Portable and mobile PE
			should be used no closer to
			any part of the <b>NT-11 System</b> .
			including cables, than the
			recommended separation
			distance calculated from the
Conducted	3V, 6V	3Vrms,	equation applicable to the
RF		6V	frequency of the transmitter.
IEC 61000-4-			Recommended separation
6			distance

Radiated RF IEC 61000-4-	3V/m	3V/m	$d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$ $d = \left[\frac{12}{V_2}\right]\sqrt{P}$
3	3V from 0.15 to 80MHz; 6V from 0.15 to 80MHz and 80% AM at 1kHz 3V/m from 80MHz to 2.7GHz	3V from 0.15 to 80MHz; 6V from 0.15 to 80MHz and 80% AM at 1kHz 3V/m from 80MHz to 2.7GHz	$d = [\frac{12}{E_1}]\sqrt{P}$ 80 MHz to 800 MHz $d = [\frac{23}{E_1}]\sqrt{P}$ 800 MHz to 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, Should be less than the compliance level in each frequency range. D Interference may occur in the vicinity of equipment marked with the following symbol

# Separation Distance Table

Recomme	ended Separation	Distances Betw	een				
Portable A	And Mobile RF Co	ommunications I	Equipment And T	he NT-11			
System							
Rated	Separation distance according to frequency of transmitter						
maximum							
power of	150 KHZ to 80 MH7	150 KHZ to 80 MH7	80 WHZ to 800	800 WHZ to 2,5 GHZ			
transmitte	outside ISM	in ISM bands		$d = \left[\frac{23}{1}\right]\sqrt{P}$			
r	bands	1-,12,10	. 12 -	E1			
W	$d = [\frac{3,5}{V_1}]\sqrt{P}$	$a = \left[\frac{1}{V_2}\right] \sqrt{P}$	$d = [\frac{1}{E_1}] \sqrt{P}$				
0.01	0.12	0.2	0.4	1			
0.1	0.37	0.64	1.3	2.6			
1	1.17	2	4	8			
10	3.7	6.4	13	26			
100	11.7	20	40	80			

		LTE Band 5					
1720 1845 1970	1 700  1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3,	Pulse modulation ^{b)} 217 Hz	2	0.3	28	28
2450	2 400 - 2 570	4, 25; UMTS Bluetooth, WLAN, 802.11 b/g/n, RFID 2450.	Pulse modulation ^{b)} 217 Hz	2	0.3	28	28
		LTE Band 7					
5240 5500	5 100 -	WLAN 802.11	Pulse modulation	0.2	0.3	9	9
5785	5 800	a/n	^{b)} 217 Hz				

# Enclosure Port Immunity Test Specifications

Test Specifications For ENCLOSURE PORT IMMUNITY To RF Wireless Communications Equipment							
Test	Band	Service ^{a)}	Modulation	Max	Distanc	IMMUNITY	Complian
frequency	a)		b)	power	e	TEST LEVEL	ce level
(MHz)	(MHz)			(W)	(m)	(V/m)	(V/m)
385	380 -	TETRA 400	Pulse	1.8	0.3	27	27
	390		modulation				
			18 Hz				
450	430 -	GMRS 460,	FM ^{c)}	2	0.3	28	28
	470	FRS 460	± 5 kHz				
			deviation				
			1 kHz sine				
710	704 –	LTE Band	Pulse	0.2	0.3	9	9
745	787	13,	modulation				
780		17	b)				
			217 Hz				
810	800 -	GSM	Pulse	2	0.3	28	28
870	960	800/900,	modulation				
870		TETRA 800,	b)				
930	1	iDEN 820,	18 Hz				
		CDMA 850,					