



ditto™ V2 User Manual
Cleaning Guide
English

Version 2.3
30/05/2014



Manufactured by:

Diversiary Therapy Technologies Pty Ltd
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Australia

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Web: www.dtl.net.au

Model: Kit DIT-102-106

Comprising ditto™ V2 Portable Console DIT-102

ditto™ V2 Charging Cradle DIT-106



Authorised Representatives:

Emergo Europe: Molenstraat 15, 2513 BH, The Hague, Netherlands

Cleaning and Maintenance



Warning Do Not Sterilise – Do not put the ditto™ V2 Portable Console or any of its accessories in a sterilizing machine, autoclave or ultrasonic machine.



Warning Do Not Clean while Power is ON – Do not initiate any cleaning steps while the ditto™ V2 Personal Console is ON or charging. Cleaning should only be done while the device is turned OFF, and removed from the Charging Cradle



Warning Do Not Submerge ditto™ V2 Charging Cradle– Do not submerge the ditto™ V2 Charge Cradle. Wipe clean as necessary with a cloth dampened with soapy water or alcohol wipe

Cleaning

Cleaning of the ditto™ V2 must be performed before its first use and AFTER EVERY PATIENT.

This clean is performed if the ditto™ V2 Portable Console has been in use while submerged in water with a patient, i.e. in the bath. This routine clean must be performed AFTER EVERY PATIENT if the ditto™ V2 Portable Console has been submerged in a bath or tub. Please follow the steps outlined below:

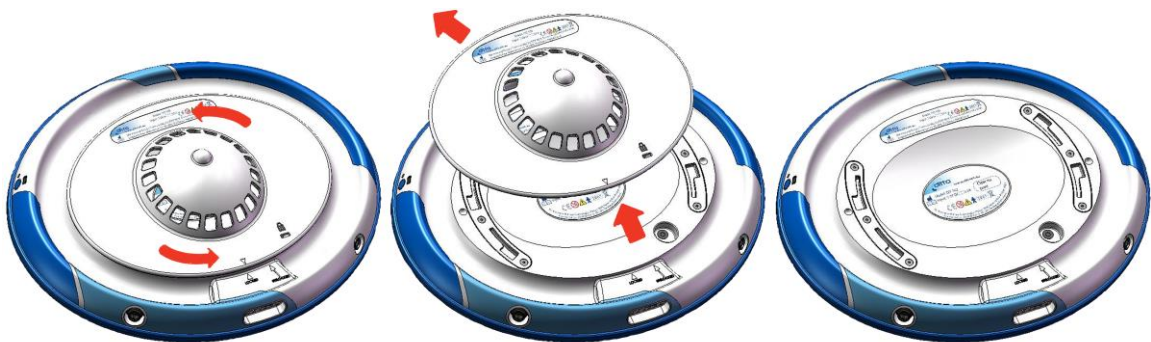
1. Wash the ditto™ V2 Portable Console, Waterproof headphones and waterproof headphone adapter with liquid detergent mixed with water. Make sure all surfaces are clean, and then dry thoroughly.
2. Wipe down all external surfaces of the ditto™ V2 Portable Console, waterproof headphones and headphone adapter with an alcohol wipe. Allow all components to dry thoroughly.

If the ditto™ V2 Portable Console has been use in the bath or tub the inside of the back plate must be cleaned also.



Note: This step is not necessary if the ditto™ V2 Portable Console has not been submerged UNLESS food, bodily fluids or other contaminants have entered the rear dome.

3. To remove the Protection Dome, turn the ditto™ V2 Portable Console so that the screen is facing down or resting on a hand, lap or a soft surface.
4. Place one hand on the back dome and twist anti-clock wise.
5. Pull the dome away from the ditto™ V2.



6. Replace the rear protection dome reversing the process. Place the dome into the slots on the back and twist it clockwise until it locks into place.

When the ditto™ V2 Portable Console has been fully charged and clean, it is ready for use or storage.

Servicing

Biomedical and Electronic Test and Tag

It is recommended that the device be bio medically and electronically tested and tagged by the individual hospital prior to use in patient areas.

Routine Inspection Before Each Use

Inspect the device and accessories for damage before each use. Any damage may have affected the sealing of the device resulting in failure if submerged. Damaged devices should be returned to the manufacturer or authorized distributor.

Periodic Servicing

It is recommended your ditto™ V2 Portable Console and associated components are serviced annually to check the condition of the waterproofing seals and battery. Return to the manufacturer or authorised distributor annually for service, in its original packaging.

If Dropped

If the ditto™ V2 Portable Console is dropped, it should be returned to the manufacturer or authorised repairer to check the integrity of the sealing.



Note: Your ditto™ V2 Portable Console contains no user serviceable parts. Opening the device will damage the waterproof seal.

Technical Description

PRODUCT CLASSIFICATION

Medical Device Directive (Europe):	Class I
Type of protection against electric shock:	Class I
Degree of protection against electric shock:	Type B
Degree of protection against ingress:	IP67 – Note: ditto™ V2 device, waterproof headphone adapter and waterproof headphones ONLY. Cradle is NOT waterproof.
Mode of operation:	Continuous
Application in flammable environment:	Equipment is NOT suitable for use in the presence of a flammable anesthetic mixture

WEIGHTS & DIMENSIONS

Packaged Dimensions	410 x 360 x 80mm (approx)
Packaged Weight	2.5 kg (approx)
Dimensions (ditto™ V2 Portable Console):	275 x 255 x 65 mm (approx)
Dimensions (ditto™ V2 Charging Cradle):	325 x 170 x 120 mm (approx)
Weight (ditto™ V2 Portable Console):	1.0kg (approx)
Weight (ditto™ V2 Charging Cradle):	0.75kg (approx)

OPERATING CONDITIONS

Power (Recharging):	100/240V AC 50-60Hz mains supply
Temperature:	0 ~ 40 °C (32 ~ 100 °F)
Max. Allowable operating temperature:	40 °C
Humidity:	ditto™ V2 device is rated IP67 (Waterproof) ditto™ V2 cradle 10-90% non-condensing
Operating time (Full Charge)	2.5 hours (approx)
Operating time (Red, recharge)	15 minutes (approx)

Magnets in the waterproof headphones and adaptor

Model number	DIT-A002-005WP ditto, DIT-102-105
Type	N50 (neo 50)
Strength	2.9 Kilogauss

STORAGE & TRANSPORT

Allow ditto™ V2 device to cool before storage.	
Store in original packaging	
Avoid impacts.	
Storage temperature:	0 ~ 40 °C (32 ~ 100 °F)
Storage Humidity:	10-90% non-condensing.
Transport:	0-40°C (32 – 100°F)

GUIDANCE AND MANUFACTURERS DECLARATION

Table 201 & 202 IEC 60601-1-2 Medical electrical equipment: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests.

Guidance and manufacturer's declaration – electromagnetic emissions		
The ditto™ V2 is intended for use in the electromagnetic environment specified below. The customer or the user of the ditto™ V2 should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
Conducted Emissions RF emissions CISPR 11	Group 1, Class B	The ditto™ V2 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
Radiated RF Emissions CISPR 11	Group 1, Class B	The ditto™ V2 is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2: 2009	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3: 2008	N/A	

Guidance and manufacturer's declaration – electromagnetic immunity			
The ditto™ V2 is intended for use in the electromagnetic environment specified below. The customer or the user of the ditto™ V2 should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2: 2008	Air Discharge: 8 kV Contact Discharge: 6 kV	Complies Complies	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
IEC 61000-4-3: 2010	230 VAC/50 Hz & 5 VDC: 80 MHz to 2.5 GHz (3 V/m)	Complies	
Electrical fast transient/burst IEC 61000-4-4: 2012	AC (230 VAC/50 Hz): 2 kV, 5/50 ns, 5 kHz	Complies Complies	Mains power quality should be that of a typical commercial or hospital environment
Surge IEC 61000-4-5: 2005	AC Power (230 VAC/50 Hz) Burst: 2 kV, 5/50 ns, 5 kHz	Complies Complies	Mains power quality should be that of a typical commercial or hospital environment
IEC 61000-4-6: 2003, A1: 2004, A2: 2006	AC (230 VAC/50 Hz): 3 Vrms	Complies	

Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11: 2004	<95% reduction for ½ cycle June 18, 2013 60% reduction for 5 cycles 30% reduction for 25 cycles	Complies	Mains power quality should be that of a typical commercial or hospital environment. If the user of the ditto™ V2 requires continued charging operation during power mains interruptions, it is recommended that ditto™ V2 be charged from an uninterruptible power supply.
	95% reduction for 5 seconds	Complies	
Power frequency (50/60Hz) magnetic field IEC 61000-4-8: 2009	3 A/m	Complies	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment



Certificate of Compliance

Applicant: Diversionary Therapy Technologies EUT: ditto™ V2
 Address: Level 11, 39 Sherwood Road Serial #: 1234
 Toowong, QLD 4066 Australia Project #: 14298-10/30

The ditto™ V2 by Diversionary Therapy Technologies was tested utilizing the following documents and found to be in compliance with the required criteria on the indicated test date.

IEC 60601-1-2: 2009, CISPR 11: 2009, A1: 2010			
Conducted Emissions	Group 1, Class B	AC Mains Terminal 230 VAC/50 Hz	June 13, 2013
Radiated Emissions	Group 1, Class B	AC Mains 30 MHz to 1 GHz	July 3, 2013
IEC 61000-3-2: 2009	Class A	AC Power, Harmonics	June 18, 2013
IEC 61000-3-3: 2008	N/A	AC Power, Flicker	June 18, 2013
IEC 61000-4-2: 2008	Criterion A	Air Discharge: 8 kV Contact Discharge: 6 kV	June 20, 2013
IEC 61000-4-3: 2010	Criterion A	230 VAC/50 Hz & 5 VDC: 80 MHz to 2.5 GHz (3 V/m)	June 17, 2013 & June 19, 2013
IEC 61000-4-4: 2012	Criterion A	AC (230 VAC/50 Hz): 2 kV, 5/50 ns, 5 kHz	June 18, 2013
IEC 61000-4-5: 2005	Criterion A	AC Power (230 VAC/50 Hz) Burst: 2 kV, 5/50 ns, 5 kHz	June 18, 2013
IEC 61000-4-6: 2003, A1: 2004, A2: 2006	Criterion A	AC (230 VAC/50 Hz): 3 Vrms	June 19, 2013
IEC 61000-4-8: 2009	Criterion A	3 A/m	June 19, 2013
IEC 61000-4-11: 2004	Criterion A	Voltage Dips:	June 18, 2013
	Criterion B	Voltage Short Interruptions:	95% reduction for 5 seconds
IEC 60529: 2001			
IP6x Dust Test			May 23, 2013
IPx7 Water Immersion Test			May 28, 2013
IEC 60601-1-1: 2012			
Drop Test			May 23, 2013

Note: The ditto™ V2 was tested in a docking station for all tests listed above. It was also tested as a standalone device for to the same standards for radiated emissions, electrostatic discharge, radiated immunity, and radiated magnetic field, on the same dates with the same results.

I, Robert McCollough, for Professional Testing (EMI), Inc., being familiar with the electromagnetic compatibility and environmental testing rules and procedures, have reviewed the test setup, measured data, and this report. I believe them to be true and accurate.

Robert McCollough

Robert McCollough
 Director of Testing Services



NVLAP 14361-00050

This report has been reviewed and accepted by Diversionary Therapy Technologies. The undersigned is responsible for ensuring that the ditto™ V2 will continue to comply with the applicable rules.

[Signature]
 Representative of Diversionary Therapy Technologies

SYMBOLS USED ON THE ditto™ V2 PORTABLE CONSOLE



'Warning' symbol- this product can prove dangerous. Only operate the device as described in the Instruction Manual.



'Not for Children under 3 years of Age' symbol. The ditto™ V2 Portable Console has small parts and these may present a choking hazard for children between the ages of 0 and 3.



'Do Not Submerge' symbol- never put the ditto™ V2 Portable Console near liquids or a wet environment while connected to a power supply.



'Note' symbol- this symbol signifies important user information which should be read and understood before operating the ditto™ V2 Portable Console.



'Battery Indication' symbol- this symbol indicates that the light below relates to battery power, charge and capacity.



'Kensington Lock' symbol- this icon indicates that this device is compatible with Kensington products. Items so marked can be secured by inserting and locking Kensington security products into the Kensington Security Slot, which will be near this symbol.



'Power On/Off' symbol- this icon relates to the button on which it is printed. Pressing this button will turn the ditto™ V2 Portable Console on and off.



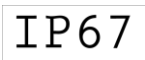
'USB Connection' symbol- this indicates that the port below can accommodate flash drives for the purpose of data download to the ditto™ V2.



'CE' symbol- European product compliance mark. This symbol indicates that a product conforms to the relevant European health, safety and environmental quality standards.



'Type B Applied Part'.



'IP67' symbol': Waterproofing grade. The ditto™ V2 Portable Console is waterproof when fully submersed in water up to 1 metre in depth.



'Li-ion Battery'- a Lithium ion battery is used in this device. It should be disposed of accordingly.