Grid Pad 10s

Safety and compliance

Created by

Smartbox

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Grid Pad 10s

This booklet contains all the information you should be aware of before using your Grid Pad 10s.

It also details compliance and the technical specification of your Grid Pad 10s.

Contents

Technical specification

Grid Pad is a communication aid designed for disabled people who have limited speech or complex access needs.

Model Number: GP10SA

Operating system	Windows 10 Pro
Software	Grid 3
Processor	Intel® Core™ i5-7Y54, 1.2GHz Base, 3.2GHz Turbo
Memory / RAM	8GB
Hard drive	SSD, 256GB
Display	10.1" 1920 x 1200 daylight bright display with toughened glass and anti-glare finish
GPU	Intel HD Graphics 615, 950 MHz
Second screen	3.9" 480 x 128 partner display with toughened glass and anti-glare finish
Sound	High quality integrated speaker
Weight	1.4kg
Battery life	7 hours AAC typical use 4 hours intensive use 58.31Wh 7880mAh Lithium-Ion

Charge time	5 hours
Tablet camera	2MP front, 5MP rear
Dimensions	260 x 189 x 60 mm
Access	2 x 3.5mm switch ports 2 x USB 3.0 port 3.5mm headphone port touch screen
Environment control	GEWA Infrared
Connectivity	Dual band wireless (AC 8265) Bluetooth 4.2 LE
Mounting plate	Daessy and Rehadapt
IP Rating	IP54
Medical	Class 1 Medical Device (MDR 2017/745)

Operating environment

Temperature	0 - 35°C
Relative humidity	0 - 90%
Atmospheric pressure	70 kPa to 106 kPa

Storage and transport environment

Temperature:	-20°C - 60°C
Relative humidity:	0 - 90%
Atmospheric pressure:	50 kPa to 106 kPa

Safety classification

Protection against electrical shock	Class II and internally powered
Mode of operation	Continuous

Symbol explanation

Symbol	Meaning
	Headphone port
	Charging port and indicator
S1	Switch port 1
S2	Switch port 2
CE	Conformity European symbol to declare conformity with EU legislation.
FC	Federal communications commission symbol to declare conformity with US legislation.
	Waste electrical and electronic equipment symbol to indicate you should dispose of this equipment in accordance with local regulations.
	Power button symbol
+	Increase volume symbol
-	Decrease volume symbol
	Read the manual symbol
	Read the manual symbol
IP54	Ingress protection rating 54
UK CA	UK Conformity Assessed symbol to declare conformity in the UK

Intended use, user and environment

Grid Pad 10s has been tested as a Class 1 medical device. Specifications and standards have been listed in the Compliance section of this manual.

Please consider these safety warnings to ensure safe operation of your Grid Pad.

Application

Intended Use

- It is used as a voice output communication aid (VOCA)
- It is used to control a Windows computer
- It is used to operate external devices via environmental control (EC)

Intended User

It is designed for individuals with complex communication and/or access needs. Complex communication and/or access needs may arise as a result of a variety of conditions including but not limited to:

- Developmental disorders, e.g. cerebral palsy, developmental verbal dyspraxia, autistic spectrum disorder (ASD), developmental language disorder (DLD), global delay.
- Acquired disorders, e.g. cardiovascular accident (CVA/stroke), dementia, traumatic/acquired brain injury (TBI/ABI)

It may also be used by individuals with complex access needs in the absence of communication difficulties for computer control,

environmental control and non-face-to-face communication e.g. including but not limited to individuals with:

- Spinal cord injury
- Degenerative neuromuscular disease (e.g. muscular dystrophy, spinal muscular atrophy)

Intended environment

It can be used in a variety of settings in which the individual is likely to wish to utilise it for the above intended use. These settings may include but are not limited to:

- supported living homes
- nursing care facilities
- schools, colleges, universities
- in the community, e.g. shops, restaurants
- hospitals (acute, rehabilitation and community)

Significant contra-indications, warnings and precautions

Although designed to assist with expressive communication, it should be used in combination with a range of augmentative and alternative communication (AAC) methods and therefore should not be relied on in isolation to enable an individual to communicate expressively.

Other methods of AAC may include the use of paper-based systems, sign language or the use of eye pointing frames. Despite this, it is recognised that individuals with signification communication and/or access difficulties will rely heavily on

a VOCA (in this instance Grid Pad) to communicate given the significant enhancement to expressive communication that a VOCA often brings.

Although designed and manufactured to be extremely robust and reliable, it is possible to lose function due to power loss or other technical issues. For this reason, it should not;

- be used as a life supporting device.
- be relied upon for well-being.
- be relied upon as the user's only way of making an emergency call or alarm.
- be used to administer medicine.
- be relied upon as the only method of interaction with EC devices.

It is also not intended to provide information which is used to take decisions with diagnosis or therapeutic purposes.

When the device is working with other equipment, there may be interference. For this reason, Grid Pad should not be used:

- in an MRI environment.
- in an X-ray environment.
- in a military environment.
- in a harsh RF environment.

Safety warnings

Avoiding hearing damage

Using headphones and speakers at high volume can cause permanent hearing loss. Always keep the volume of your device at a safe level.

Durability

Your Grid Pad is tough and rugged but must be handled with care when moving around. It has been drop tested to one metre. Please note this does not include accessories.

Water and liquids

Your device is protected from splashing water and light rain.

Do not submerge the device in water.

When the port covers are removed, the USB ports are not protected. Do not get water or liquids on the back of the device, especially in the ports or vents.

Contact with user

Type of applied part	B
Applied part	Screen, enclosure

Conditions for Safe Contact - Time

Accessible part	Contact time limit
Metal accessible part	Less than 1 minute
Plastic accessible part	Less than 10 minutes
Screen	Less than 10 minutes

Conditions for Safe Contact - Temperature

Accessible part	Maximum Temperature while Device is in use (ambient temperature 35°C)
Metal accessible part	50.1
Plastic accessible part	46.1
Screen	44.9

Touching the surface of the device with broken skin may aggravate a wound.

Infants or high-risk groups should not touch the surface of the device if there is a chance of burning the skin.

Do not leave the device on the users lap or body if they cannot remove it.

Power supply and batteries

Your Grid Pad contains a rechargeable lithium ion battery. All rechargeable batteries degrade over time. The usage time for a Grid Pad after a full charge can become shorter over time.

For optimal performance your Grid Pad should not be charged at extreme temperatures of below 0°C or above 45°C. At these temperatures your battery will charge slowly or not at all.

Do not expose your Grid Pad to fire or temperatures above 90°C as these conditions can cause the battery to malfunction, ignite or explode.

Only charge your Grid Pad with the supplied power lead. Using unofficial power supplies may cause severe damage to your Grid Pad and cause fire. If your Grid Pad's power lead is lost or damaged, contact your supplier.

When your Grid Pad's battery is depleted, and the device is not connected to a power source, the device will automatically shut down to avoid damaging the battery and hardware. The operating system will attempt to do this as safely as possible, however it is recommended to connect the power lead before your Grid Pad shuts down.

The battery that powers your Grid Pad is subject to shipping regulations. Check with your postal service or courier before shipping to ensure safe delivery of your device.

Do not place your device in a place where the power adapter plug is difficult to disconnect from the socket.

To avoid personal injury or equipment damage, only our authorised personnel are permitted to replace a Grid Pad battery.

Do not service or perform maintenance on the device while the

device is in operation. Make sure to shut the device down and unplug all cables before starting service or maintenance work on the device.

Transporting your Grid Pad

When in transit, ensure your Grid Pad is sufficiently protected from knocks and bumps.

There are strict regulations for lithium ion batteries on airplanes. Rules vary between airlines, so it is recommended to contact your airline before you travel.

Temperature

Ensure that you shut down your device before storing or placing into a bag.

If used in hot temperatures or direct sunlight, your Grid Pad may reach temperatures that can trigger an automatic shutdown. This is a safety feature to prevent lasting damage to the device. If this occurs, please wait until your device has cooled before restarting.

Mounting

When mounting your Grid Pad, follow the instructions in both your Grid Pad and your mounting system manufacturer's guide. While we have taken every precaution to make this an easy and safe process, it is up to you to ensure the device is mounted safely.

Please use the dual Daessy and Rehadapt mounting solution provided. Ensure the mounting system you select is correct for your needs and perform a risk analysis if required.

Ports & Connections

Accessories connected to ports for a SIGNAL INPUT/OUTPUT must be compliant to the IEC standard 60601-1 or 60950-1/62368-1.

Choking hazard

If damaged, small parts may detach from your Grid Pad. These can present a choking hazard. Young children and people with cognitive disabilities should be supervised when using the device. They should also be supervised when unpacking the device as packaging can present a choking hazard.

Not sterile

Grid Pad is not sterile. Do not operate with open wounds, or whilst undergoing invasive medical treatments.

Strangulation hazard

Grid Pad is supplied with a power cable and can be used with cabled accessories. These can present a strangulation hazard.

Epilepsy warning

Some people with photosensitive epilepsy are susceptible to seizures when exposed to certain lights or light patterns. If you

feel odd or nauseous when in front of your Grid Pad, particularly if you are using it with an eye gaze camera, move away from the device and consult a medical professional.

Warranty

Your Grid Pad is covered under the standard 2 year warranty from the time of purchase.

Repairs and Maintenance

Your Grid Pad is not a user serviceable device. If your device requires a repair, please contact your local dealer.

Smartbox will provide information such as circuit diagrams and component lists to maintenance personnel when necessary.

Troubleshooting and Customer Support

In most cases, restarting your device will cure any problems. To restart your device, Select **Start** and then select **Power - Shut down**. If your device has crashed, hold down the power button or remote power button for 5+ seconds to hard shutdown. Press it again to turn it back on.

If this does not fix the problem, contact support at:
thinksmartbox.com/smart-support

Please have your serial number ready. This can be found under the stand on your device.

Incidents

If a serious incident occurs in relation to the device, please report to Smartbox (repairs@thinksmartbox.com) and the competent authority of your member state.

Disposal

Please dispose of in line with local electronic waste regulations.

Battery warnings

Do not dismantle, open or shred the battery.

Do not expose the batteries to heat or fire, and avoid storage in direct sunlight.

Do not short-circuit the battery.

Do not store the battery haphazardly in a box or drawer where it may be short-circuited by other metal objects.

Do not subject the battery to mechanical shock.

In the event of a battery leaking, do not allow the liquid to come in to contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.

The charger is an important part of the equipment, do not use any charger other than that specifically (Model: MANGO40S-12BB-ES) provided for use with the equipment, and refer to the manufacturer's instructions or equipment manual for charging instruction.

Do not use any other battery with the equipment unless approved by Smartbox.

Battery usage by children should be supervised.

Keep the battery clean and dry.

Do not leave a battery on prolonged charge when not in use.

After extended periods of storage, it may be necessary to charge and discharge the battery several times to obtain maximum performance.

Retain the original product literature for future reference.

Only use the battery in the application for which it was intended.

Dispose of the battery according to local regulations.

Statement of compliance

Requirements in UK

5150MHz~5350MHz is for indoor use only.

SAR is measured with the device at 0 mm to the body, while transmitting at the highest certified output power level in all frequency bands of the device. The maximum SAR value is 0.324W/kg (body) averaged over 10 gram of tissue. This equipment should be installed and operated with a minimum distance of 0 cm between the radiator and your body.

EU / CE Statement

Hereby, Smartbox Assistive Technology Ltd. declares that this radio equipment complies with Directive 2014/53/EU. The frequencies used by the wireless networking feature of this product are the 2.4 GHz range.

The full text of the EU declaration of conformity is available here: **thinksmartbox.com/GP10s-DOC**

Applicable Legislation

This equipment complies with the requirements of:

- EU harmonised legislation
- Medical Device Regulation (EU) 2017/745 (including EMC Directive 2014/30/EU and LVD Directive 2014/35/EU)
- RoHS Directive 2011/65/EU
- WEEE Directives 2012/19/EU

Harmonised Standards

EN 60601-1:2006/A1:2013

Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

EN 60601-1-2:2015

Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests

EN ISO 14971:2012

Medical devices - Application of risk management to medical devices

EN 61000-3-3:2013

Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current < = 16 A per phase and not subject to conditional connection

EN 50581:2012

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous

substances

FCC Statement

FCC ID: **2APXM-GP10SA**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

For use in North America

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.

RF warning for Portable device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The mobile device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.60W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 1.388 W/kg.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions a minimum of 0mm from

the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

For use in Canada

IC: **24965-GP10SA**

Industry Canada Class B Emissions Compliance Statement
This Class B digital apparatus complies with Canadian ICES-003.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotopically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de

sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device is designed to meet the requirements for exposure to radio waves established by the Innovation, Science and Economic Development Canada's. These requirements set a SAR limit of 1.60W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 1.388 W/kg.

Le dispositif est conçu pour répondre aux exigences de l'exposition aux ondes radio créée par la science et l'innovation, développement économique Canada. Ces exigences limite de sar de 1.60W/kg en moyenne pour un gramme de tissu. La valeur de r - s en vertu de cette norme plus élevée au cours de la certification de produits déclarés pour une utilisation bien portés sur le corps est 1.388 W/kg.

EMC Declarations

Guidance and manufacturer´s declaration – electromagnetic emission – for all EQUIPMENT AND SYSTEMS

1	**Guidance and manufacturer´s declaration - electromagnetic emission**		
2	The Grid Pad 10s is intended for use in the electromagnetic environment specified below. The customer or the user of the Grid Pad 10s should assure that it is used in such an environment.		
3	**Emissions test**	**Compliance**	**Electromagnetic environment - guidance**
4	RF emissions CISPR 11	Group 1	The Grid Pad 10s 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.
5	RF emissions CISPR 11	Class B	The Grid Pad 10s is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
6	Harmonic emissions IEC 61000-3-2	Class A	
7	Voltage fluctuations / flicker emissions IEC 61000-3-3	Applicable	

Guidance and manufacturer's declaration – electromagnetic immunity – for all EQUIPMENT and SYSTEMS

Guidance and manufacturer´s declaration - electromagnetic immunity			
The Model Grid Pad 10s are intended for use in the electromagnetic environment specified below. The customer or the user of the Model Grid Pad 10s 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	± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrostatic transient / burst IEC 61000-4-4	± 2 kV for power supply lines 100 kHz repetition frequency ± 1 kV for input/output lines	± 2 kV for power supply lines 100 kHz repetition frequency	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 0.5 kV, ± 1 kV differential mode line-line	± 0.5 kV, ± 1 kV differential mode line-line	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0 % UT (100 % dip in UT) for 0.5 cycle at 0°, 45°, 90°, 135°,180°, 225°, 270°, and 315° 0 % UT (100 % dip in UT) for 1 cycle at 0° 70 % UT (30 % dip in UT) for 25/30 cycles at 0° 0 % UT (100 % dip in UT) for 250/300 cycle at 0°	0 % UT (100 % dip in UT) for 0.5 cycle at 0°, 45°, 90°, 135°,180°, 225°, 270°, and 315° 0 % UT (100 % dip in UT) for 1 cycle at 0° 70 % UT (30 % dip in UT) for 25/30 cycles at 0° 0 % UT (100 % dip in UT) for 250/300 cycle at 0°	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Grid Pad 10s requires continued operation during power mains interruptions, it is recommended that the Grid Pad 10s be powered from an interruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m, 50/60Hz	30 A/m, 50/60Hz	Power frequency magnetic fields should be at levels character-istic of a typical location in a typical commercial or hospital environment.
NOTE: UT is the a. c. mains voltage prior to application of the test level.			

Guidance and MANUFACTURER'S declaration – electromagnetic IMMUNITY

Guidance and manufacturer's declaration - electromagnetic immunity			
The Grid Pad 10s is intended for use in the electromagnetic environment specified below. The customer or the user of the Grid Pad 15 should assure that it is used in such an environment.			
Immunity test	**EC 60601 test level**	**Compliance level**	**Electromagnetic environment - guidance**
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM bandsa 10 V/m 80 MHz to 2.7 GHz	3 Vrms 150 kHz to 80 MHz 6 Vrms 150 kHz to 80 MHz outside ISM bandsa 10 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the Grid Pad 10s, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$ $d = \left[\frac{3.5}{E_1}\right]\sqrt{P}$ 80MHz to 800MHz $d = \left[\frac{7}{E_1}\right]\sqrt{P}$ 800MHz to 2.7GHz 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 metres(m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range b Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

a The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz.

The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

b The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range 80 MHz to 2,7 GHz are intended to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into patient areas. For this reason, an additional factor of 10/3 has been incorporated into the formulae used in calculating the recommended separation distance for transmitters in these frequency ranges.

c Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Grid Pad 10s is used exceeds the applicable RF compliance level above, the Grid Pad 10s should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Grid Pad 10s.

d Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the EQUIPMENT or SYSTEM

Recommended separation distances between portable and mobile RF communications equipment and the model Grid Pad 10s			
The Grid Pad 10s is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Grid Pad 10s can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Grid Pad 10s as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = [\frac{3.5}{V_1}]\sqrt{P}$	80 MHz to 800 MHz $d = [\frac{3.5}{E_1}]\sqrt{P}$	800 MHz to 2.7 GHz $d = [\frac{7}{E_1}]\sqrt{P}$
0.01	0.12	0.04	0.07
0.1	0.37	0.12	0.23
1	1.17	0.35	0.7
10	3.7	1.11	2.22
100	11.7	3.5	7.0
For transmitters rated at a maximum output power not listed above the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

<table>
<tr><th colspan="6">Recommended separation distances between RF wireless communications equipment</th></tr>
<tr><td colspan="6">The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between RF wireless communications equipment and the device as recommended below, according to the maximum output power of the communications equipment.</td></tr>
<tr><th>Frequency MHz</th><th>Maximum Power W</th><th>Distance</th><th>IEC 60601 Test Level</th><th>Compliance Level</th><th>Electromagnetic Environment - Guidance</th></tr>
<tr><td>385</td><td>1.8</td><td>0.3</td><td>27</td><td>27</td><td rowspan="15">RF wireless communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.

Recommended separation distance

$E = \frac{6}{d}\sqrt{P}$

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 transmitter, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:

  </td></tr>
<tr><td>450</td><td>2</td><td>0.3</td><td>28</td><td>28</td></tr>
<tr><td>710</td><td rowspan="3">0.2</td><td rowspan="3">0.3</td><td rowspan="3">9</td><td rowspan="3">9</td></tr>
<tr><td>745</td></tr>
<tr><td>780</td></tr>
<tr><td>810</td><td rowspan="3">2</td><td rowspan="3">0.3</td><td rowspan="3">28</td><td rowspan="3">28</td></tr>
<tr><td>870</td></tr>
<tr><td>930</td></tr>
<tr><td>1720</td><td rowspan="3">2</td><td rowspan="3">0.3</td><td rowspan="3">28</td><td rowspan="3">28</td></tr>
<tr><td>1845</td></tr>
<tr><td>1970</td></tr>
<tr><td>2450</td><td>2</td><td>0.3</td><td>28</td><td>28</td></tr>
<tr><td>5240</td><td rowspan="3">0.2</td><td rowspan="3">0.3</td><td rowspan="3">9</td><td rowspan="3">9</td></tr>
<tr><td>5500</td></tr>
<tr><td>5785</td></tr>
<tr><td colspan="6">Note 1: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</td></tr>
</table>

WARNINGS

- This device should not be used in the vicinity or on the top of other electronic equipment such as cell phone, transceiver or radio control products. If you have to do so, the device should be observed to verify normal operation.

- The use of accessories and power cord other than those specified, with the exception of cables sold by the manufacturer of the equipment or system as replacement parts for internal components, may result in increased emissions or decreased immunity of the equipment or system.

Manufacturer

Grid Pad 10s is manufactured by Smartbox Assistive Technology Ltd.

thinksmartbox.com

United Kingdom
Smartbox Assistive Technology Ltd
Ysobel House, Enigma Commercial Centre
Sandys Road
Malvern
WR14 1JJ

United States
Smartbox Assistive Technology Inc
2831 Leechburg Road
New Kensington
PA, 15068

Europe
Smartbox Assistive Technology (EU) Ltd
JPA Brenson Lawlor house,
Argyle Square,
Morehampton Road,
Donnybrook,
Dublin 4

Supplier support contact

_____

_____

Contacting Smartbox

Our support team are here to help.

You can reach our **UK** team weekdays on

01684 578868

You can reach our **US** team weekdays on

(844) 341-7386

You can email us at

support@thinksmartbox.com

Grid Pad 10s - Safety - UK - C
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