CLiKAPAD™

...setting the standards in portable RF Voting Systems

USER GUIDE

Keypad Model CL27
Base Station Model BS27
Detector Model CD27

ALBERT HALL
M E E T I N G S

Albert Hall, 161 Albert Street, Fleet
GU51 3RP, United Kingdom
Tel +44 (0)1252 699600
Fax +44 (0)1252 699698
www.CLIKAPAD.com

For product guidance contact:
support@clikapad.com

Specifications are subject to change without notice.

March 2005

FCC Compliance:

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.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

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

Industry Canada Compliance:

This class A digital apparatus complies with Canadian ICES-003.

Low Power Licence-Exempt Radiocommunication Devices (all frequency bands) RSS-210:

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept interference, including interference that may cause undesired operation of the device.

CONTENTS

Limited Product Warranty

Albert Hall Meetings Limited warrants the CLIKAPAD RF system for twelve months from the date of manufacture for any material or manufacturing defect in the product. This warranty does not include incorrect installation, use outside the product guidelines, and alteration after manufacture, or any component that has been abused, misused, neglected, accidentally broken, nor does it include failure of batteries/cells.

Albert Hall Meetings Limited will remedy, on a back to factory basis, any product defect or replace any component or part of the product at its discretion, provided that the owner first ascertains that the problem is not a faulty or improper connection with the computer or power source or a faulty battery/cell.

The owner should contact the vendor from whom the CLIKAPAD System was purchased or contact AHM Service for a returns reference number (RN) prior to shipping the product back:
e-mail   Service@CLIKAPAD.com or
call   +44 (0)1252 699600

Then send the product to

Albert Hall, 161 Albert Street
Fleet, GU51 3RP, United Kingdom

by prepaid freight, clearly labelled with the RN and details of the problem. The cost of repair will be invoiced if the problem is identified to have been caused by negligence, abuse or oversight.

AHM does not warrant the CLIKAPAD system as suitable for your application and expressly limits any liability to the replacement cost of the technology supplied.

CLIKAPAD voting system
Introduction

The only truly portable Radio Frequency (RF) keypad voting system, dependable, functional and lightweight and easy to transport from meeting to meeting!

CLIKAPAD is a wireless audience response system that collects data in training, meeting or conference environments using a USB Base Station (antenna) attached to a laptop PC or similar device, and credit-card size individual keypads. Keypad responses are transmitted to the Base Station via the CLIKAPAD Application Interface (API) which processes and then passes the data to the PC application (voting software).

The Audience responses may be stored or immediately displayed.

Technology

CLIKAPAD keypad, model CL27

Weight   34 grams
Size   52.8mm x 84.2 x 7.7
Power   2 x Maxell CR2032 (or similar branded cells)
Keypad   12 keys, Numeric 0-10, multi-function * key
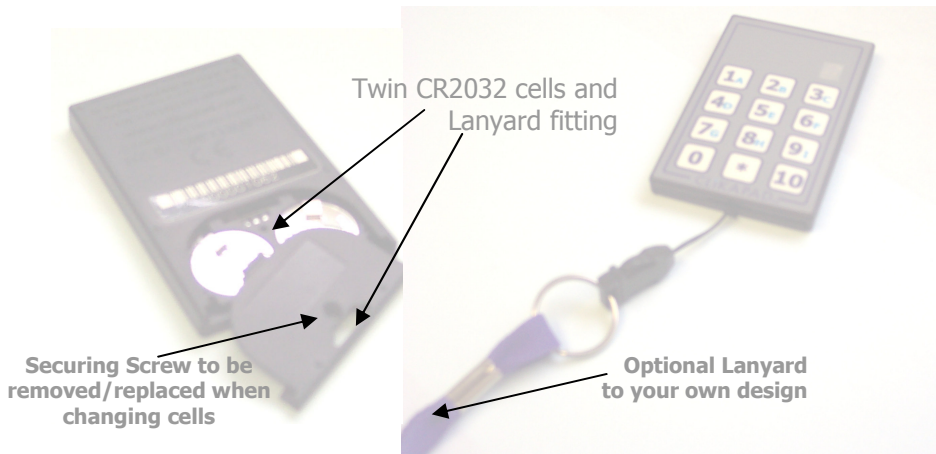Display   7-segment LED easily visible

CLIKAPAD supports software selectable Alpha operation with keys A through I and corresponding Alpha display. Selectable by the Application Software making a call through the API.

The innovative luminescent tactile membrane, useful in low light auditoriums, delivers positive feedback by way of a click each time a key is selected, hence the name CLIKAPAD!

Participants in the group each use a keypad to respond to questions presented during the meeting. Each CLIKAPAD is powered by two internal Maxell CR2032 (or equivalent major brand) coin cell batteries. AHM recommend the use of branded cells, which deliver better operation and extended life. There are no external connections.

Features

▫ *Credit card size, ultra light weight and with full size voting buttons*

▫ *Internal audible Piezo buzzer, activated by software when CLIKAPAD is sensed to be 'out of zone';*

▫ *Unique CLIKAPADdetector to help you find your CLIKAPADs if they get left under seats or in Foyer!*

▫ *Exclusively designed CLIKAPAD Base and Expander Cases to store and transport your CLIKAPADs*

▫ *Optional lanyards - can be customized for company or brand*

Twin CR2032 cells and Lanyard fitting

Securing Screw to be removed/replaced when changing cells

Optional Lanyard to your own design

CLIKAPAD *detector* model CD27
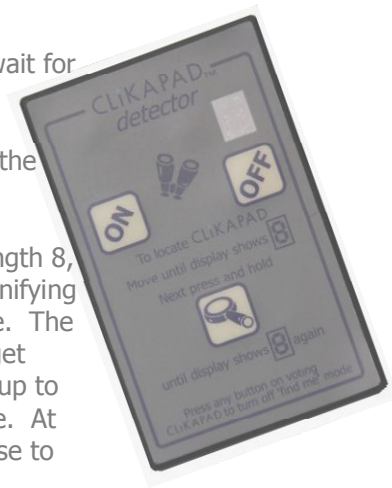
Weight   34 grams
Size   52.8mm x 84.2 x 7.7
Power   2 x Maxell (or equivalent) CR2032
Keypad   3 keys, ON, OFF, MAGNIFY (close range)
Display   7-segment LED easily visible
Luminescent tactile membrane for use in low-light areas

The CLIKAPAD™*detector* is your inventory management tool. Use it to maintain your full complement of CLIKAPADs!

To use - switch on and then wait for the display to show a signal.

Next move in the direction of the strongest signal.

When the signal reaches strength 8, press and hold down the magnifying glass to change to close mode. The display will reset and as you get closer the display increments up to strength 8 for the second time. At that point you will be very close to your mislaid CLIKAPAD.

CLIKAPAD RF Base Station model BS27
Weight   107 grams
USB Cable   Typically; Black 1.5m in length
Powered by PC-USB port, achieves the design
focus of compactness, elegance and plug-and-play
functionality and can accept responses up to 4095
CLIKAPADs on one Base Station.

Thousands of additional CLIKAPADs can be addressed
through the use of multiple base stations, using
different communication channels within the permissible
2.4GHz band. (See Channel Statement)

CLIKAPAD IDs,

UNIQUE Serial Number – Fixed ID
This ID is coded by AHM at the manufacturing stage to
deliver a UNIQUE identifier to the product to enable
large transient installations to work effectively.

SESSION ID
The SESSION ID allows the Application Software to
address a local group of keypads with a specific set of
IDs to establish the population for a particular base
station.

This would typically be used where there is more than
one base station (currently a maximum of 71) in close
proximity.

SOFT ID (CLIKAPAD Number)
Often referred to as the keypad number and applied to
the rear of the CLIKAPAD for easy reference. This
number can be displayed by the application software to
illustrate the CLIKAPADs that have yet to respond.

RF Communication

- Frequency 2.4GHz RX-TX Licence Exempt
- Channels 6 to 77
- Within the spectrum of 2.4GHz to 2.4835GHz

The proprietary CLIKAPAD communication protocol has been rigorously tested and is the subject of a worldwide patent application.

Speed and reliability are optimised by the firmware to ensure effective performance, regardless of the audience size.

Typically, a response time is reliant on the mode chosen, the dynamics of the venue and the level of interference that may be present. Interference can be generated by many devices, including lift motors, speaker systems, WiFi and Bluetooth phones.

The CLIKAPAD system is designed to find a clear channel and herd its CLIKAPAD population to the chosen channel.

Transmission from a CLIKAPAD to the base station occurs in as little as 1ms, although typically 1.2ms to 1.6ms, therefore 1,000 CLIKAPADs could respond in as little as 1.2 seconds!

In practice not everyone in the audience will press their button simultaneously. People take differing lengths of time to consider the question being posed.

Note: Allowable channels may vary according to country of use. This specification is subject to change without prior notice

Operation

Connect CLIKAPAD Base Station to an available USB port on your PC, typically a laptop/notebook. PC not included in the CLIKAPAD system.

If this is the first time you are connecting your CLIKAPAD system you need to follow the installation instructions below.

If you are running Windows XP and are connected to the Internet at the time that you connect the CLIKAPAD Base Station, it will automatically install the required drivers.

In all other cases the Windows Hardware Installation wizard will appear and you should select to install the drivers supplied by your software vendor.

PC not included in the CLIKAPAD system.

The radio frequency protocol is self-synchronising and self-acknowledging.

Not to scale

This allows the CLIKAPADs to communicate their signal to the Base Station.

CLIKAPADs can transmit a locating signal, allowing the CLIKAPAD*detector* to home in on them if they have been discarded in an auditorium or foyer, thus helping you to maintain your inventory.

Your chosen Application Software will be able to establish the Cell Status of each CLIKAPAD via the API so that the user will be able to replace cells prior to use.

Through the API, your software application will set a valid response range ensuring that all invalid responses are rejected, and thereby eliciting a valid response.

Software

The CLIKAPAD Application Software Development Program (ASDP) is in place and software vendors are encouraged to launch their own commercially available user applications for CLIKAPAD technology.

The launch software vendor for the CLIKAPAD family is ppvote limited. For more information about the ppvote portfolio of applications visit: www.ppvote.com

For details of the wider range of application software vendors visit: **www.clikapad.com**

Battery / Cell disposal

AHM strongly recommends that you use quality branded CR2032 cells. Maxell, Panasonic, SONY and Sanyo have all been tested with CLIKAPADs and offer consistently good quality and service life.

All batteries and cells should be disposed of safely so as not to pollute our planet. Please familiarise yourself with your local disposal and recycling programmes, laws and bi-laws.

Technical Specification

CLIKAPAD keypad

Range – 80 to 125 metres (approx. 264 – 412 feet) forward facing outdoors

- □ FCC ID : SMP CLIKAPAD
- □ IC: 5716A-CLIKAPAD
- □ CE marked
- □ Frequency 2.4GHz RX-TX Licence Exempt

CLIKAPAD Base Station

Range – 80 to 125 metres (approx. 264 – 412 feet) forward facing outdoors.

- □ FCC ID : SMP CLIKAPAD-BASE
- □ IC: 5716A-CLIKBASE
- □ CE marked
- □ Frequency 2.4GHz RX-TX Licence Exempt

All measurements under test conditions and offered for information purposes only. These do not form part of any supply contract.

Licence Exemption is global. Certain markets such as the USA require that Manufacturers submit their products for certification by test houses.

The CLIKAPAD family of products have been tested in the U.K. to FCC CFR47 Part 15.249 certification standards at FCC Approved and Appointed Facility, TUV Product Service, Fareham, Hampshire, UK.

The user should satisfy them selves that this product is suitable for their application and that it conforms with any Country, Regional, National and Local by-laws governing its use and operation over the stated CLIKAPAD radio frequencies.

Patents

UK, European, US & Foreign patents pending.

Troubleshooting

Do

- Position the Base Station next to your PC on a table or desk and pointing towards the centre of your audience.
- Test CLIKAPADs with your laptop before you leave your office the day before your event to make sure you have all the components: USB cable, Spare CR2032 cells, Base Station etc.
- Test CLIKAPADs on site in preparation for your meeting, before your meeting commences.

Don't

- Place the Base Station on the floor or near to a source of interference such as a CRT projector.
- Place in a metal enclosure.
- Have two Base Stations on the same channel within 150 metres of each other. They will interfere with each other and then set about changing channels.
- Duplicate CLIKAPAD Soft IDs.
- Use CLIKAPADs with low battery signals: replace both cells with NEW branded CR2032 for assured longevity and good performance.

Problem

ALL CLIKAPADs won't talk to the Base Station

- If the CLIKAPADs have worked before with this Base Station then it is most likely a communication problem. Check that the USB cable is properly fitted at both ends and that the Base Station red LED is ON. (The LED will blink off momentarily when the Base Station is busy, this indicates transmission traffic.)

SOME CLIKAPADs can't discover the Base Station

- The CLIKAPAD is probably outside of the transmission range or there is interference reducing the transmission range. In the case of

it being outside of the range (Optimal range typically 80m – 125m) the CLIKAPAD would need to be moved closer to the Base Station.

- This could be where the Base Station and/or CLIKAPAD are not configured to work with each other. In this situation your application software should seamlessly, or on operator request, send a reconfiguration message.

CLIKAPAD does not indicate anything on display or it is very dim when in session.

- Replace both CR2032 lithium cells. CLIKAPADs feature a protection circuit as specified by Maxell to ensure that no cell attempts to charge another. Therefore, if you only replace one cell you will effectively be running the CLIKAPAD off a single Cell. AHM recommends changing both cells at the same time.

CLIKAPAD refuses to allow the participant to press a button that is within the range of permissible options displayed on screen.

- Refer to your application/slide set-up as you may not have selected the correct voting scale.

CLIKAPAD emits a sound from its internal buzzer

- This could mean that your CLIKAPAD has gone out of range, if that option has been offered by your software vendor/ you have activated this option.

For the latest frequently asked questions (FAQ) and tips on using the CLIKAPAD system, please visit www.clikapad.com
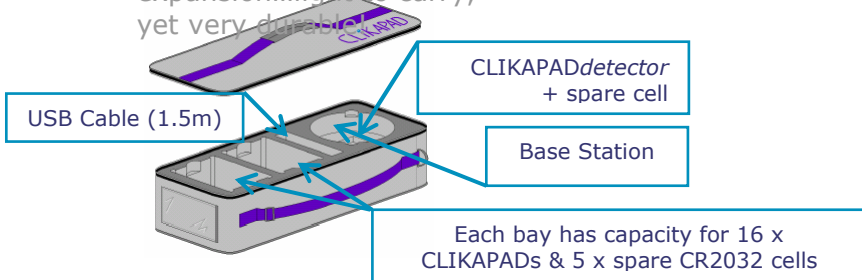
Accessories

Ask about customised
Lanyard's from your supplier
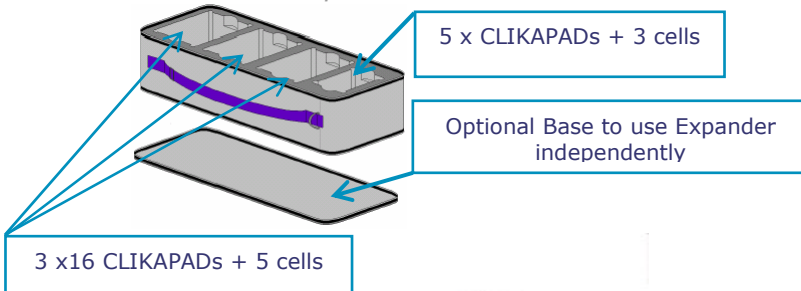or visit www.clikapad.com

CLIKAPAD™*base* case

Shown here with
detachable lid to enable
expansion…light to carry,
yet very durable.

USB Cable (1.5m)

CLIKAPAD*detector*
+ spare cell

Base Station

Each bay has capacity for 16 x
CLIKAPADs & 5 x spare CR2032 cells

As your system grows, simply add an
CLIKAPAD™*expander*…

5 x CLIKAPADs + 3 cells

Optional Base to use Expander
independently

3 x16 CLIKAPADs + 5 cells

You can keep on growing your system with CLIKAPAD™*expander*

Base + 1 exp = 85 CLIKAPADS (3.9kg/8.7lbs)
Base + 2 exp = 138 CLIKAPADS (6.1kg/13.4lbs)
Base + 3 exp = 191 CLIKAPADS (8.2kg/18.1lbs)
Base + 4 exp = 244 CLIKAPADS (10.4kg/22.9lbs)
Base + 5 exp = 297 CLIKAPADS (12.5kg/27.6lbs)
Base + 6 exp = 350 CLIKAPADS (14.6kg/32.4lbs)
(All weights approximate, conversions from metric to imperial ounces based on x 2.2)
Devices and components are not included with the purchase of a case