CLiKAPAD®

...setting the standards in portable RF Voting Systems

USER GUIDE

Keypad Model - Prioritizer P1

Base Station - SuperBase S1

Patents pending

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Specifications are subject to change without notice.

March 2009

FCC (USA) 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 Radio Communication 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.

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Limited Product Warranty

Albert Hall Meetings Limited warrants CLiKAPAD branded products for twelve months from the date of shipping from our distribution point 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.

AHM 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 (RMA) prior to shipping the product back:

Complete RMA documents and include details of the problem, label to:

CLiKAPAD Distribution, Arlington House,
Dittons Business Park, Dittons Rd,
Polegate, BN26 6HY, UK

The arrangement of couriers or shipping agents and the cost incurred is the responsibility of the owner. The cost of repair will be invoiced if the problem is identified to have been caused by negligence, abuse or oversight by the owner.

AHM will do everything possible to expedite the repair or supply a replacement, at AHM's discretion, within 5 working days of receipt back at our facility. AHM cannot control the time it takes for a package to be shipped back, although we will of course try our best to match or exceed your expectations.

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*prioritizer* voting system
Introduction

The CLiKAPAD*prioritizer* is an advanced audience response system (AARS) that can receive as well as transmit data. Lists that are sent to the CLiKAPAD*prioritizer* can be manipulated, reordered, scored, weighted and then re-transmitted to be accumulated and displayed on the projected screen along with other participant's views.

Suitable for many applications, such as Training, Risk Assessments, Customer Panels, Conferences and Events.

Designed to be resistant to harsh operating environments (RF noise) the CLiKAPAD SuperBase Base Station (antenna) can be attached to a laptop PC via USB or Ethernet, and features two transceivers to enhance collection of data and voice traffic.

Each CLiKAPAD*prioritizer* credit-card size individual keypads feature a Microphone and an Amplifier to permit individual members of the audience to participate vocally from their seats.

Voice and Data are handled by RF transmission from the CLiKAPAD*prioritizer* to the CLiKAPAD SuperBase and then on to the voting (application) software via the CLiKAPAD Advanced Application Programming Interface (AAPI). The AAPI is invisible to the user of the hardware and application software as it is delivered as a driver interface that is installed when your application software is loaded onto your PC.

Participants in the group each use a keypad to respond to questions presented during the meeting. Each CLiKAPAD*prioritizer* is powered by an internal VARTA Polyflex Lithium Polymer rechargeable cell (or an equivalent).

The CLiKAPADprioritizer also features a Micro-USB socket to enable re-charging and remote connection to a PC.

CLiKAPAD*prioritizer* model P1

Weight	35 grams
Size	52.8mm x 84.2 x 7.7
Power	1 x Rechargeable VARTA Li-Pol (or equivalent)
Keypad	13 keys, Numeric 0-10, Alpha A to I, in-meeting TEXT, Cursor/Select keys, * / delete key 10 / Send key, and shift keys.
Display	OLED display, white on black easily visible
Detect	YES[1.]
Sentry	YES[1.]

[1.] *functionality built-in, addressable with the CLiKAPAD Scanner, not available at launch but scheduled to be released in 2009*

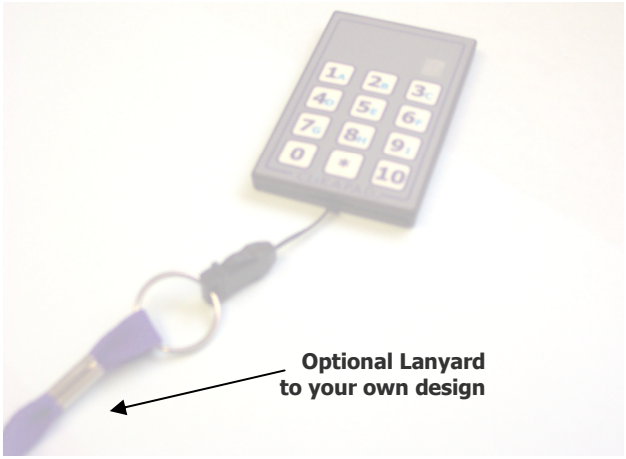
Detection functionality allows you find any mislaid CLiKAPAD*prioritizer* should any get left under seats, under papers on tables or discarded in the Foyer!

An internal audible buzzer, activated by software, sounds when device is 'out of zone'; or at the end of the session to aid recovery any missing CLiKAPAD*prioritizer*.

Shared CLiKAPAD family features

- *Credit card size, ultra light weight with full size voting buttons*
- *Exclusively designed CLiKAPAD Base and Expander Cases to store, recharge and transport your system*
- *Optional lanyards - can be customised with logo/text*

The CLiKAPAD range features innovative and luminescent tactile membranes, useful in low light auditoriums, delivering positive feedback by way of a click each time a key is selected, hence the name CLiKAPAD!



CLiKAPAD® SuperBase RF Base Station SB1

Weight	180 grams
USB Cable	Typically; Black 1.5m
RJ45 Cable	Not supplied, we strongly recommend shielded is used
Power	from PC USB connector either via PC USB socket or separate 5vDC power adaptor (not supplied)
Indicator	Bi-Color LED at rear indicates RED when USB power is supplied and GREEN when RJ45 is connected to Network

Powered through the USB port the CLiKAPAD SuperBase achieves the design focus of compactness, elegance and plug-and-play functionality that can accept responses from up to 4095 x CLiKAPAD*prioritizer* on one SuperBase.

Thousands of additional CLiKAPAD*prioritizers* can be addressed through the use of multiple CLiKAPAD SuperBases, using different communication channels within the permissible 2.4GHz band.

CLiKAPAD® SuperBase enhanced capability

The CLiKAPAD SuperBase features two antennas and two transceivers which allows for greater persistency and ensures that votes are received even in very noisy RF environments as the devices can select and move to clearer channels. This is detailed under Lost Communications later in the guide.

Another use for the twin antenna, twin transceiver is to allow for data and voice to coexist and ensure clean signal ratios.

Where there is a need to accommodate significant numbers of CLiKAPAD*prioritizers* or the audience is in a stadium or spread across multiple floors, multi-locations, local or remote the CLiKAPAD SuperBase RJ45 connection allows for multiple bases to be connected back to a single presentation PC via a Network so that the image detailing the question and results can be transmitted via a local video distribution network, Business TV or Satellite Link.

If you wish to deploy more than one CLiKAPAD SuperBase within the same environment then you would need to allocate different channels to each of the SuperBases. This will avoid extended communication periods (voting cycles) and allow for faster, swifter collection of results.

The result of this is that for instance 4 x CLiKAPAD SuperBases could be deployed, one in each corner of the room on different channels and they would then address their allocated universe of CLiKAPAD*prioritizers* and the collection of results would come in independently and the application software (consult vendor / supplier documentation) would ensure that the votes are accumulated and that each is only registered the once.

The time taken to register the votes would be decreased over that of using 1 x CLiKAPAD SuperBase by a factor approximately half if 2 bases are used or 75% where four are deployed. A key factor out of the control of the CLiKAPAD SuperBase is the speed at which the individual participant will react and respond to the question. This could be instant or they could take 20 to 25 seconds to consider the question before responding and of course every participant will react differently.

CLiKAPAD SuperBase SB1 Driver

Your chosen Application Software should be automatically install the required CLiKAPAD SuperBase Driver when you install your selected application software.

Should you be unsure if this is the case please consult with your application software vendor.

Updates will be provided via the website www.clikapad.com and all registered developers will be notified of any updates and they can contact our developer support department by sending an email to developer@clikapad.com

Activating Network (RJ45) connection:

Once a RJ45 shielded cable has been inserted into the rear of the CLiKAPAD SuperBase and connection is made with your network facility the CLiKAPAD SuperBase Network set-up pages will be available from a menu option in your chosen application software.

We have suggested to our application designers that it could be best to use the same entry description and you should be looking for:
SuperBase Network settings

Once you enter the SuperBase Network settings it will load pages, similar to that of a wireless router in web page format which will detail current or factory settings.

Uninstalling CLiKAPAD Drivers:

Most CLiKAPAD application designers will deliver an uninstall option directly from their menu system or alternatively it could be a menu options from the Programs menu. For instance Start>Programs>ppvote>uninstall ppvote, action this command and you would automatically unload the application software and the drivers suite.

CLiKAPAD*prioritizer* 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. This is the same as the BAR coded label on the rear of the keypad.

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 in close proximity.

The Session ID is also used to manage CLiKAPAD Presenters* and these need to be working on a different Session ID than the CLiKAPADs in the meeting.

**The CLiKAPAD Presenter is not yet released to work with the CLiKAPADprioritizer, it is expected to be released in 2009.*

SOFT ID (CLiKAPAD Keypad Number)

Often referred to as the keypad number and applied to the rear of the CLiKAPAD on a label for easy reference. This number can be displayed by the application software to illustrate the CLiKAPADs that have yet to respond.

In addition it is possible to interrogate the CLiKAPAD*prioritizer* and request to see the SOFT ID displayed on the OLED.

RF Communication

- Frequency 2.4GHz RX-TX Licence Exempt
- Channels 1 to 78 (78 channels)
- Each channel is divided into left-centre-middle, this we refer to as an offset capability. Providing up to 234 potential settings.
- Within the spectrum of 2.4GHz to 2.4835GHz

It is important to note that cross channel interfearnce can occur if there are two CLiKAPAD SuperBases on channels adjacent to one another. We would therefore recommend channel separation to avoid cross-talk.

The proprietary CLiKAPAD® communication protocol has been enhanced to accommodate larger data packets and voice packets 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 size of the universe (population of CLiKAPAD*prioritizers*), 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.

Transmission from a CLiKAPAD*prioritizer* to the SuperBase occurs in as little as 1ms, although this is dependent on a number of factors.

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

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

Lost Communication:

The CLiKAPAD system features an API selectable, channel change procedure should the current / default channel become noisy.

The SuperBase can be set-up to automate this procedure through one of the two transceivers to minimise voting turnaround and ensure integrity.

The SuperBase can also be instructed to (subject to application software implementation) monitor the channels and maintain a "MAP" of the cleanest channels and thus set-up PRIMARY and SECONDARY channels to implement an auto change.

Once the new channel is identified, automatically or manually the CLiKAPAD SuperBase will communicate with all CLiKAPAD*prioritizers* known in its current universe and inform them of the channel change and maintaining contact on the current and new channels until the switch is complete ensuring completeness and accuracy of transfer.

Each CLiKAPAD*prioritizer* will either need to be activated (any key press) and they will then change to the new channel or automatically actioned by a global command from the CLiKAPAD SuperBase providing the CLiKAPAD*prioritizers* are already awake.

CLiKAPAD*prioritizer* manual channel change:

The CLiKAPAD*prioritizer* would normally take an instruction to change channel from the CLiKAPAD SuperBase change channel command. However, if you wish to interrogate a specific CLiKAPAD*prioritizer* you can by selecting the internal set-up screen. This requires the holding down of the shift key and whilst held down momentarily press and release a specified key.

To change the channel manually, please follow these steps…

- ☐ Hold down the SHIFT Key and press ~~(specified key)~~ this details the current channel.
- ☐ Now press SHIFT ~~+ (specified key)~~ in quick succession. You are now in channel change mode.

- ☐ Now enter the channel you wish to change to by using the number keys and when complete please ~~press (specified key)~~ to save internally.

SESSION ID Change:

In the set-up menu there exists an option to apply a session ID, the CLiKAPAD*prioritizer* is factory set to 0.

AUTO "EN MASSE" Channel change:

The CLiKAPAD*prioritizer* keypads can be "herded" automatically to another channel via your application software over "air". Check specific process for changing with your application software vendor / supplier.

The principal is that the application software informs the SuperBase of the channel you want the CLiKAPAD*prioritizers* to move to. The SuperBase communicates on the current channel the new channel and then monitors the second radio having set this to the new channel, for the arrival of the CLiKAPAD*prioritizers* and once they all report the SuperBase will adopt the new channel as the PRIMARY Channel and then set about identifying and switching the alternative radio to another channel and informing the CLiKAPADprioritizers of the new SECONDARY Channel. Where heavy audio usage is anticipated the second channel would be used exclusively by the audio (only whilst audio is transmitting) and then once audio is complete it will switch back to being the secondary data channel.

Changing a SESSION ID:

This can be done automatically through the configuration message from the SuperBase or manually through the use of the SHIFT key and a number sequence on an individual CLiKAPADprioritizer. To perform an automatic Session ID change, please refer to your software application guide.

Accessing the SET-UP Screen to make changes:

Pressing shift plus a specified key (to be inserted) displays a menu which allows the user to revote or to view and amend the channel, secondary channel, preferred session id, preferred session name, device name, reset to factory defaults, do a session scan etc. unless password protected, the user can then select or amend these. If password protected then the password can be entered and then the user can amend them. The passwords are set using a master password known only to the system owner.

CLiKAPAD*prioritizer* Soft ID change:

The Soft ID (keypad number) is set at the factory prior to shipping to the customer. Software developers have also created Soft ID change routines to enable rapid re-programming of CLiKAPAD Soft IDs.

The Soft ID is typically changed over "air" by the SuperBase. To change the Soft ID, you need to consult with your software vendor / supplier to see if they have provided for this capability.

To discover the Soft ID assigned to a CLiKAPAD you can integrate the CLiKAPAD by pressing and holding down the SHIFT plus the 1 key and then letting go. Now look at the display the Soft ID is shown alongside the Session ID and the Channel Number.

If you wish to change the Soft ID locally on a specific CLiKAPAD*prioritizer* then a SHIFT plus number keys must be used to enter the programming mode and then the Soft ID may be changed.

It is vitally important that you do not program two CLiKAPAD*prioritizers* with the same Soft ID as this would confuse the voting as there would be clearly two people with the same ID and the consequence would be that one or both would not be able to vote.

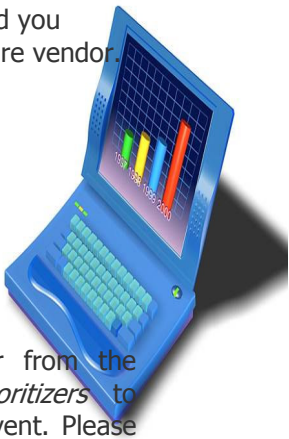
With this in mind the reprogramming sequence is kept a closely guarded secret and we only make this available to our Developers and Resellers, please consult directly with them if you have a CLiKAPADprioritizer that is in need of re-programming or return it to AHM with the number you would like it to adopt. AHM do charge for this re-programming service please enquire before shipping to: support@clikapad.com

Operation

Connect the 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 given on page 17.

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



PC not included
Not to scale

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.

** not currently available for the CLiKAPADprioritizer and SuperBase*

The CLiKAPAD*prioritizer* can be interrogated over air from the SuperBase or manually via individual CLiKAPAD*prioritizers* to establish the battery (cell) status prior to running an event. Please check with your chosen Application (voting) Software if they have implemented the ability to establish the Cell Status of each CLiKAPADprioritizer prior to use, via the API, so that the user will be able to recharge CLiKAPAD*prioritizers* prior to starting the event.

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

Cursor Keys and Select Button – List Navigation:

The CLiKAPAD*prioritizer* features cursor keys, these are identified by the green exterior and the 2 key is the up cursor, the 8 the down cursor, with 4 being left and 6 right cursor.

The round 5 key has a RED exterior to indicate that this is the select key to execute a selection.

When looking at a list on the display you would move to the item you wish to select and when the cursor is over the item you select the 5 key and this will perform the chosen task, which might be to TAG* the item or to SORT and apply an A to the left of the item and move it to the top of the list.

Shift Key – Info / Config. Mode:

The CLiKAPAD*prioritizer* features a shift key the left of the display which allows you via specific number keys to interrogate the keypad to identify the SOFT ID, Session ID, Channel #, Battery Status, Signal Strength.

The shift key is also used in conjunction with certain numeric sequences to enter programming modes which allows certain functionality to be re-configured to a specific customers needs.

Remote access to Meetings:

The CLiKAPAD*prioritizer* features an in-built Micro-USB socket and using a special Micro-USB to Std USB cable the CLiKAPAD*prioritizer* can be connected to a laptop and via the Internet you can gain access to a meeting that is registered to and logged into the CLiKAPAD Meeting Server* and participate / vote using your CLiKAPAD*prioritizer* in the remote meeting.

* currently this service is not expected to be live until the Summer 2009 although beta testing will be occurring in late Spring, early Summer. Please contact support@clikapad.com to gain up to date information or if you wish to participate in the beta testing.

Microphone / Audio operation:

The CLiKAPAD*prioritizer* features an in-built microphone and amplifier to enables the participant contribute verbally to the debate. The participate presses the Microphone button to request, this request is sent over the radio (air) to the SuperBase and in turn it passes this on to the application software.

The application software would show a request to speak on the display and the facilitator/moderator can choose to allow or decline the intervention.

The AAPI supports the facilitator/moderator to set-up periods of time or to allow open ended audio periods.

Check with your application software if it supports the Microphone operation and what features they offer to allow you to manage the audio function.

The Audio capability of the SuperBase will be shown in the Windows environment as a composite USB device and you will be able to identify it as a CLiKAPAD SuperBase and as a CLiKAPAD Audio device; speaker and microphone.

When the Microphone button is selected this sends a message to the display that is "soft" in that it can be specified by the meeting designer so it is not language dependant.

Typically it would display REQUESTING or WAIT and at the same time this is being displayed it would transmit over radio and the SuperBase would pass this request through the application software to the local display and the facilitator/moderator would be required to allow or disallow the audio interruption.

Assuming the participant has been given the right to speak the display on the CLiKAPAD*prioritizer* would be updated to say TALK NOW or something similar specified by the

meeting designer. The Microphone will now be active and the participant will be expected to hold their CLiKAPAD*prioritizer* approx 6 to 9 inches, 150 to 200mm in front of their face and to speak clearly.

The participants voice will be picked up by the internal microphone and the on-board amplifier then digitizes the speech and sends it out over the radio to the SuperBase where it is passed on to the PC as a standard USB device and then typically to the PC Sound Card and out over the PA (Public Address) system.

List functions:

The CLiKAPAD*prioritizer* delivers extended functionality by allowing the meeting / event manager to establish a list of actions / services / ideas / risks and to send this list to the display of each CLiKAPAD*prioritizer* so that the participant can then manipulate the list making their selection or prioritization.

The in-built firmware within the Microprocessor of the CLiKAPAD*prioritizer* supports the following list functions:

SORT

The ability to take the list and scroll up and down using the cursor keys until you land on top of the item you wish to move then press the round 5 key to pick up the item and use the up and down arrows to move it to the position you want it to be in the list, then the 5 key again to drop the item. You can then continue to reorder the list till you have them sorted in your priority order and when complete use the 10 key to send.

EDIT

This function allows you to select each item and alter the text before sending the list back using the 10 key.

TAG

This is a function designed so that the participant can tag items for discussion or to make a quick choice of say three or five items from the list.

The participant uses the up/down arrows to put the cursor on the item they wish to tag, then presses the 5 key to select which then causes an asterisk to be positioned on the left indicating that it has been tagged.

When all required items have been tagged the 10 key is used to send the modified selection back.
Selecting a tagged item will remove the tag.

CATEGORY

This function allows the user to take an item and allocate it to a category. More than one item can be in the same category.

The user would select an item and then select one of the keys, say the A key and this would allocate it to the A category, displaying an A to the left of the item. To Move up or down the list the user would hold down the shift key and press either the up or down arrow, repeating the process until complete and then use the 10 key to send.

ORDER

Designed to give the user a quick and easier method or re-ordering the list. As you move the cursor up or down and arrive on an item select the 5 key and this will allocate a letter to the item, if it is the first it will be an A and the item will be moved to the top of the list. The next item you identify and select will be allocated a B and that will move to the second position in the list. When you have made all the selections you wish to make you use the 10 key to send.

ALLOCATE

Here the user will be given a number of points by the facilitator/moderator and asked to allocate up to a maximum of 9 points per item until all the points have been allocated.

As the user cursors onto an item and then selects the 5 key the item is allocated 1 point and the user would then use the up arrow to increase this to the max of 9 points. When the required number of points have been awarded, to the item they press the 5 key to deselect and then cursor to the next item they wish to allocate points to.

At the top of the screen on the right side the remaining points to be allocated are displayed and as allocations occur the number will reduce to 0 when all points have been allocated. When complete the 10 key is used to send the results.

Single Item

This vote type is designed to allow the facilitator/moderator to request the user to select just one item from the list. As you select the item it automatically sends and finishes the vote.

Vote Types:

Fractional

This would be used where you wish to set a user an equation and where the result may well be a fractional answer. For example the answer to the question may be 15.45. This could be a value or a time of day and it would be entered as 15*45 then 10 to send

Multi-digit

Sometimes the facilitator/moderator wants to invite the audience to pick multiple items from a displayed list that is numbered. So for instance you could decide you like items; 3, 7, 9 and 15 from the list.

To transmit these you would enter 3 * 7 * 9 * 15 * then 10 to send. Alternatively, the firmware does support 3 ✔ 7 ✔ 9 ✔ 15 ✔ ✔.

The 10 key is the tick key or tick to send key.

Single digit

This is standard single digit voting. A question or statement is presented on the screen and you are allowed to choose one of the options as your answer. As you select the number on the keypad it is displayed and auto transmits.

Message

A message vote is executed by the facilitator/moderator and is designed to deliver a message to the CLiKAPAD*prioritizer* display.

This might be to remind you to complete a self-paced quiz or questionnaire in the lunch break or a reminder of the next seminar that is due to commence and which meeting room it is located in.

Texting:

Just as we have SMS text on our mobile phones and the text messages we send go out over the mobile phone network. The texting on the CLiKAPAD*prioritizer* is designed to be transmitted in the meeting and could be displayed on the projected screen.

Applications could include "Word Clouds" where the participant is asked to consider what is the first word you think of when we state "British Airways" and the participant might be thinking "RELIABLE", and another might be thinking "BRITISH" another might think "QUALITY" etc.

As the audience send in their thoughts the "Word Cloud" is populated and where the word has been sent by more than one person it is magnified by the popularity.

Another application is text in the missing word from a famous quotation.

You could request that the participant texts in their email address to get a copy of the proceedings at an event.

Another could be to help populate a list with ideas. The question posed might be: "Text in your ideas for saving 10% on our expenses budget"

SuperBase LED behaviour

SOLID RED
Power is on, radio not transmitting - STANDBY
FLASHING RED
Communication error or radio failure
SOLID GREEN
Connectivity established, USB only or USB and Ethernet
RAPID FLASHING GREEN
happens during voting to indicate data transfer
SLOW FLASHING GREEN
Ethernet Only established

SuperBase Ethernet Set-Up Screens:

The SuperBase Ethernet Set-Up is accessible via Microsoft Explorer and it presents itself as web pages and allows certain settings to be adjusted / modified to ensure it specifically ties in with your own networking environment.

SuperBase SD Card Slot

A Secure Digital (SD) Card can be inserted into the SuperBase via the underside of the up-stand. It should be inserted with the Text facing towards the front of the SuperBase. The front is identified as the side with the CLiKAPAD Decal attached.

The SD Card offers the event organizer an opportunity to store Graphics for onward transmission during the event to the CLiKAPAD*prioritizers* and/or to store Roster information; a list of the CLiKAPAD*prioritizers* registered to the SuperBase.

SuperBase Tripod Thread

On the underside of the SuperBase up-stand, near to the SD Card Slot there is a camera tripod thread which provides opportunity to mount the SuperBase onto either a GorrilaPod® (bendy style tripod) or a telescopic floor mounted camera tripod.

The benefit of this feature is that it enables the SuperBase to be raised up by the length of the tripod legs thus increasing its RF visibility and improving registering of votes.

The GorrilaPod® is particularly useful as it is designed to allow you to attach / mount the SuperBase to a door handle, a speaker stand and many other objects.

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*prioritizer* 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 vendor's visit: **www.CLiKAPAD.com**

Battery / Cell Life expectancy, disposal

The CLiKAPAD*prioritizer* does not have replaceable cells, known as PRIMARY Cells as it uses SECONDARY technology which is better for the environment.

Each CLiKAPAD*prioritizer* features an integral Lithium-Polymer cell pack connected to the PCB and re-charged via the Micro-USB port once plugged into either the charging/shipping case or individually into the USB port of a PC using a special cable available from AHM.

It is anticipated that the Lithium-Polymer cell fitted to the CLiKAPAD*prioritizer* will last for a number of years of regular usage and is specified to deliver 90%+ service life for 500 recharge cycles dropping to better than 50%+ for a further 500 recharge cycles, which equates to a service life of 7 to 10 yrs, typically equal to a corporate lifetime.

Should the CLiKAPAD*prioritizer* develop a cell/battery fault or requires a replacement due to long periods of non-use then AHM will be happy to quote for its replacement and to carry out the re-work and disposal of the faulty or malfunctioning cell. Please contact support@clikapad.com for a quote stating the unique ID of your CLiKAPADprioritizer and the serial number of your SuperBase.
Should you decide to dispose of your CLiKAPAD system we would suggest that you return it to AHM where we will dismantle and dispose of the components in line with laid down practice to ensure that they are disposed of safely so as not to pollute our planet.

If you decide to dispose of your CLiKAPAD system locally then please familiarise yourself with your local disposal and recycling programmes, laws and bye-laws and dispose it in such a way that it does not harm the environment.

Technical Specification

CLiKAPAD*prioritizer* keypads

Range – approximately 85 metres (280 feet) facing towards the CLiKAPAD SuperBase decal

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

CLiKAPAD SuperBase model S1

Range – approximately 85 metres (280 feet) facing towards keypad population.

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

All measurements are tested in outdoor, open space conditions and are 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 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 Pending

The CLiKAPAD*prioritizer* and the CLiKAPAD SuperBase use proprietary firmware and protocols that have been crafted by AHM to specifically meet the rigors of the live meeting environment.

These protocols and the approach that AHM has taken are covered under a number of different patent applications that AHM has been filing since its inception in 2004.

Our patents are applied for in Europe, the United States and as a PCT which provides for coverage in other PCT territories.

AHM will vigorously pursue any organization that violates or attempts to use any AHM Intellectual Property without seeking the specific agreement and licensing being granted beforehand by AHM.

Competitive landscape

Many customers will have reviewed competitive products prior to making their decision to purchase their CLiKAPAD systems.

AHM will vigorously police their Intellectual Property (IP) to maintain their competitive advantage and takes patent infringement very seriously and has accordingly retained both US and European Patent Lawyers to monitor and challenge. CLiKAPAD lawyers have established without question that CLiKAPAD does NOT infringe any competitive patent of which we are aware. In fact, CLiKAPAD is unique in its approach and is the subject of many patent applications that AHM has made.

We trust this will deliver to you confidence in your decision to purchase CLiKAPAD and assure you of our commitment to defend our products against infringement.

Troubleshooting

Do

- Position the Base Station next to your PC on a table or desk and point towards the centre of your audience.
- Test CLiKAPADs with your laptop before you leave your office at least 72hrs before your event to make sure you have all the components: USB cable, SuperBase etc. This will ensure that your have enough time to rectify any last minute issues.
- 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 CLiKAPAD SuperBases on the same channel within 150 meters of each other. They will interfere with each other.
- Duplicate CLiKAPAD Soft IDs. (Keypad Numbers)
- Use CLiKAPADs with low battery signals: recharge before the event. To charging case is designed to either fully charge up to 30 x pads in one hour or it can be set to circulate around the charging case in blocks of 30 providing a refresher charge of 10mins per block of 30 and then it moves on to the next 30 until all have a complete charge or until the point you remove the pads.

Problem

ALL CLiKAPAD *prioritizers* won't talk to the SuperBase

- If the CLiKAPADs have worked before with this SuperBase then it is most likely a communication problem. Check that the USB cable is properly fitted at both ends and that the SuperBase LED is glowing Solid RED indicating ON.
- 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 85m) 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 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 is being picked up by a CLiKAPAD Scanner* and should be moved out of the "Armed" zone or the Scanner should be switched out of Sentry mode If the CLiKAPAD that is beeping is within the conference room then the CLiKAPAD Scanner has been positioned too close to the CLiKAPADs at the back of the conference room. The solution would be to move the CLiKAPAD Scanner.

Not all CLiKAPADs are responding

- Check your "keypad set-up/universe" and check your low and high keypad numbers. Secondly, make sure the CLiKAPADs are ALL switched on by holding down the * button

* The CLiKAPAD*prioritizer* has functionality built-in, addressable with the CLiKAPAD Scanner. CLiKAPAD Scanner not available at launch but scheduled to be released in 2009

For the latest frequently asked questions (FAQ) and tips on using the CLiKAPAD system, please visit

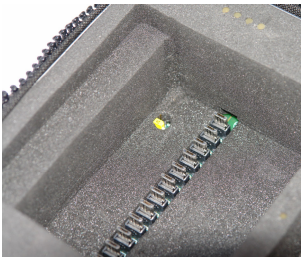
www.CLiKAPAD.com

CLiKAPAD Recharge/Transportation Cases:

The CLiKAPAD case design features a strong durable external fabric that is water resistant. Strong YKK zips are used to enable the facilitation of expandability.

The Base Case accommodates the SuperBase, Cables and Power Supply. The Power Supply output lead is channelled up into the second layer of the Case, referred to as the Intelligent Expander.

This second level of the Case accommodates up to 45 x CLiKAPAD*prioritizers* and the charging process is performed via in-built Micro-USB socket in the base of the case connected to a PCB that is sandwiched into the casing.



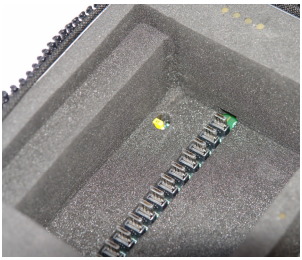
The CLiKAPAD*prioritizer* is recharged via the in-built Micro-USB socket by inserting it into the socket presented in the base of the CLiKAPAD cases.

In this example 5 x CLiKAPADprioritizers have been inserted onto vertical Micro-USB connectors in the foam carry case and the charging process has commenced.

The red light on the right of the keypads is the indicating that this BAY is being charged.

The four lights at the top indicate the progress. 1 x light = 25%, up to 4 fully lit = 100%. If it is flashing it is indicating progress

The Intelligent Expander also features a microprocessor (hidden from view) and a switch (yellow in full view) and through the flick of this switch you can change the charging method.



If you wish to expand your system to greater than 45 x CLiKAPAD*prioritizers* then you add a further Standard Expander which zips on and is connected to the Intelligent Expander and thus to the Power Supply via a discrete ribbon cable, connecting the integrated PCBs to one another. This would extend it to a maximum of 90 x CLiKAPAD*prioritizers*.

The final stage of expansion would be to add a second Standard Expander and this attaches by zip and with a discrete ribbon cable to link the now 3 x integrated PCBs together. Now you have a maximum capacity of 135 x CLiKAPAD*prioritizers*.

Mode 1 – Charge Method:

With the switch positioned farthest to the left (looking from the font of the case back towards the hinge of the lid or next expansion layer) the charging method will focus on charging all keypads in BAY 1 and BAY 2 until they are completely charged. c1 hour charge time. Then it would move to BAY 3 and complete the recharging cycle, c2hrs.

With a second expansion layer fitted the full charge process would adopt the following sequence. BAY1+BAY4, then BAY2+BAY5, BAY3+BAY6. This is expected to take c3hrs.

When a third expander is fitted the cycle is extended to include: BAY7+BAY8, and completing with BAY9. Total charge time for 135 x depleted CLiKAPAD*prioritizers* is c5hrs.

The power supply and charging circuit will support up to a maximum of 135 x CLiKAPAD*prioritizers* beyond this you would start another

stack excepting you would not need another CLiKAPAD SuperBase, as the SuperBase can talk to up to 4095 CLiKAPAD*prioritizers.*

Mode 2 – Charge Method:

With the switch positioned farthest to the right (looking from the font of the case back towards the hinge of the lid or next expansion layer) the charging method will focus on charging all keypads in BAY 1 and BAY 2 for fifteen minutes then it moves onto BAY 3.

With a 2nd expander fitted it would change the charging cycle to: BAY1+BAY 4 for fifteen minutes, then BAY2+BAY5 and BAY3+BAY6 and with a third layer fitted it would continue and charge BAY7+BAY8 followed by BAY 9, returning to BAY1+BAY4 performing a cycle until fully charged.

This would still take the same amount of time to perform a total charge but it does offer you the opportunity to "boost" charge your CLiKAPAD*prioritizers* should you want to perform a top-up charge regime in the middle of the event or perhaps you are concerned that you do not have enough time for a full charge.

Remember, it is unlikely that you will deplete the Lithium Polymer cells (if fully charged) in one event, unless of course you use the audio function extensively and even then it is very unlikely.

CLiKAPAD®*prioritizer carry/charging cases*

Not only is this a carry case but it also recharges your CLiKAPAD*prioritizers*, up to 30 in one hour if fully discharged or you can elect to switch the charging method to boost charge with a fifteen minute cycle. Shown here is the basic system case with detachable lid to enable further expansion…light to carry, yet very durable!

Basic System capacity from 15 to 45 CLiKAPADprioritizers

Expander case has capacity for up to 45 x CLiKAPAD*prioritizers* The capacity can be extended by adding two more Expander Cases bringing the recharge capacity in a "stack" of 135 x CLiKAPAD*prioritizers* The maximum number of active CLiKAPADprioritizers per CLiKAPAD SuperBase = 4095

You can keep on growing your system with CLiKAPAD®*expander*

Base + 1 exp = 45 CLIKAPADS (3. 76kg/8lbs1oz)
+ 2 exp = 90 CLIKAPADS (5.94kg/12lbs10oz)
+ 3 exp = 135 CLIKAPADS (8.12kg/171lbs4oz)

(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

Accessories

Custom length lanyards:
Ask about CLiKAPAD® customised lanyards from your supplier or visit www.CLiKAPAD.com

Tripod mounting options:
Ask about options available to mount your CLiKAPAD SuperBase to secure it to for instance a lighting rig or pole as per these illustrations