

# TechBook

## in.k500

intuitive color keypad



Compact

Full color control

Versatile





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#### **WARNINGS**

Before installing or connecting the unit, please read the following.

FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS MAY SIGNIFICANTLY SHORTEN THE PRODUCT'S LIFE TIME, AND LEAD TO FAILURES AS WELL AS HAZARDOUS CONDITIONS\*. COMMON SENSE MUST ALWAYS PREVAIL WHEN EVALUATING THE INSTALLATION AND/OR USE OF ANY ELECTRONIC CONTROL IN A FINAL APPLICATION.

- RESPECT ENVIRONMENTAL CONDITIONS LISTED AT END OF TECHBOOK.
- THIS UNIT MUST BE INSTALLED BY QUALIFIED PERSONNEL.
- ONLY QUALIFIED PERSONNEL ARE TO SERVICE THIS UNIT. THERE ARE NO USER SERVICEABLE PARTS INSIDE.
- THIS UNIT SHOULD BE INSTALLED ON A CLEAN FLAT SURFACE.
- THE GASKET ON THE BACK OF THE UNIT WILL PREVENT WATER INFILTRATION INSIDE, BEHIND THE MOUNTED SURFACE. IF THE GASKET IS DAMAGED, SEAL THE BACK OF THE UNIT WITH SILICONE TO AVOID ANY LEAKAGE BEHIND THE MOUNTED SURFACE.
- THIS UNIT MUST BE MOUNTED ON THE OUTSIDE EDGE OF THE SPA. SEE INSTALLATION SECTION FOR DETAILS.
- THE BACK OF THIS UNIT SHOULD NOT BE ENCLOSED IN A WAY THAT CAUSES WATER TO COLLECT.
   SEE INSTALLATION SECTION FOR DETAILS.
- \* HAZARDOUS CONDITION:

A CONDITION THAT IS POTENTIALLY DAMAGING AND/OR DANGEROUS TO THE OPERATOR OR SURROUNDINGS. THIS INCLUDES, BUT IS NOT LIMITED TO: FIRE, FLOODING OR OTHER WATER DAMAGE, DIELECTRIC BREAKDOWNS (PRESENCE OF HIGH VOLTAGE), ETC.

#### **MAINTENANCE**

If you have problems, do not attempt to repair the unit yourself. Return it to your dealer or service station for servicing

#### **ACCESSORY PARTS**

Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

#### **DISPOSAL OF THE PRODUCT**

The appliance (or the product) must be disposed of separately in accordance with the local waste disposal legislation in force.



Compatible spa controllers:

in.xm2, in.xe, in.yt, in.yj and in.ye with compatible software revision.

Aeware®, Gecko®, and their respective logos are Registered Trademarks of Gecko Alliance Group. in.k500™, in.xm2™, in.yt™, in.yt™, in.yj™, in.tune™, in.stream™ and in.therm™, and their respective logos are trademarks of Gecko Alliance Group.

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## Introduction





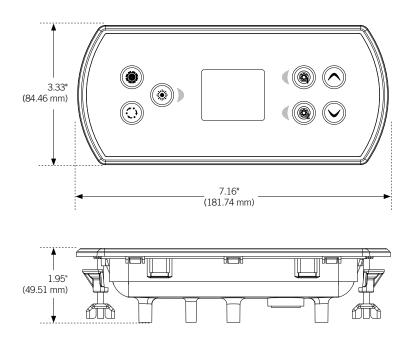
## in.k500 intuitive color keypad

The in.k500 is built with all the great features you've come to love in the in.k800, but in a smaller package. It is discreet, compact, and unobtrusively beautiful. Save space without losing out on function.



## Overview

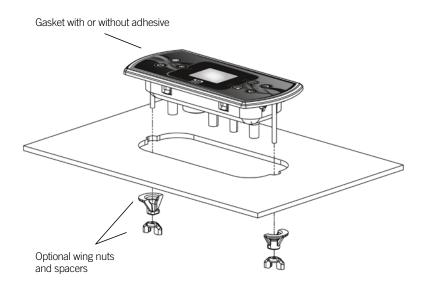
## in.k500 dimensions



## 500

#### Installation

#### Installation of in.k500



To install the in.k500, use the drilling template provided in this section.

Determine the mounting location and stick the template on chosen location.

Cut out an opening according to the template.

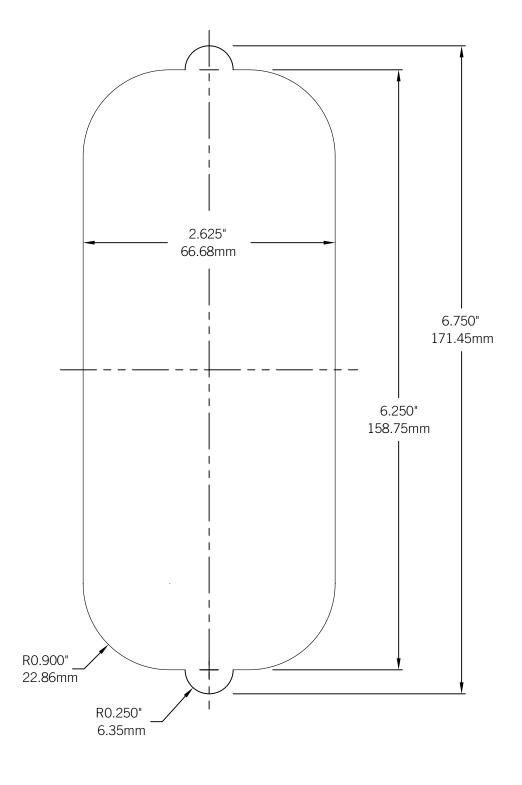
Clean the installation surface and peel the adhesive gasket from the back of the keypad.

Insert keypad and align it correctly, then ensure it is properly glued by gently pressing evenly on the entire surface.



## Installation

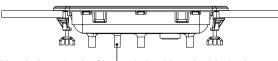
## **Drilling template**



## Installation



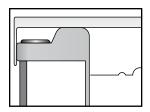
#### **Installation notes**

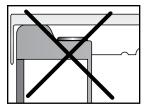


Vent hole on back of keypad should not be blocked.



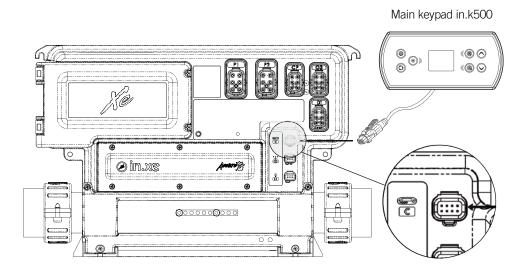
The back of the in.k500 should not be enclosed where water can gather, but instead cut out.





in.k500 must be installed on the outside edge of the hot tub, so that it is not subject to moisture trapped by the cover.

#### Connecting in.k500 keypad to the spa pack



To connect the in.k500 keypad, simply insert its in.link connector into the appropriate keypad connector of the pack enclosure (as illustrated).



#### Installation

#### **Installation errors**

Upon connecting the in.k500 to the spa pack you may see one of the following error messages:





Please follow the instructions in the message or contact your dealer for more information.

#### Power-up message

The in.k500 keypad does not store the date & time. When the in.k500 starts up after a power loss a message will prompt the user to reprogram the date and time.



#### Note:

With the in.k500 equipped with a real-time clock (RTC): If the power was lost for few hours, this message will not appear.

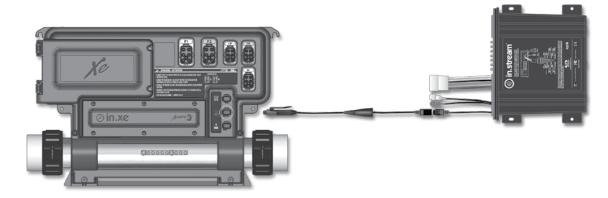


## Connecting the in.stream, in.tune and in.stream 2 to the spa pack

See Factory reset/Audio configuration section for details on setting up audio.

#### in.stream

Use the adapter cable (Part # 9920-400976) to connect the in.stream to the CO port of the spa pack.



#### in.tune

Use the adapter cable (Part # 9920-400976) to connect the in.tune to the CO port of the spa pack.



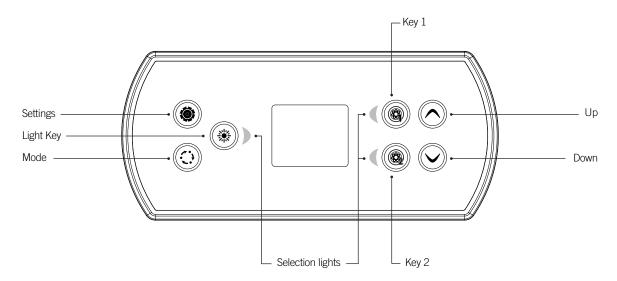
#### in.stream 2

Use the CO cable (Part # 9920-401244) to connect the in.stream 2 to the CO port of the spa pack.





#### in.k500 keypad layout



\*Functions for keys 1 and 2 will depend on your system's low level configuration.

#### Settings key

One press gives you access to a menu to manage the settings of your spa. Refer to the settings section for details about the settings menu.

#### Mode key

Successive presses on the Mode key will give access to control different optional accessories of your spa such as Audio and others. Note that if an accessory is not present in your spa configuration, its menu will not appear.

Refer to the following section to get details about the possible accessories and their detailed functionalities.

The screen will revert back to the spa mode if no key is pressed for 60 seconds.



#### **Power**

Press any button to turn the keypad on. After 30 minutes without activity it will shut off.

#### Main screen

The main screen gives you access to your accessories and water temperature. At the bottom of the screen you will see any error or maintenance messages that are present.





#### Start or stop accessories

To start or stop an accessory, press the associated button. Icons will become animated when their accessory is turned on, and inanimate when turned off. Icons on the screen will reflect the speed or state of the devices running on your spa.

When an accessory has more than two states, press the button until it reaches the desired state.



#### Water temperature

The temperature shown at the top of the screen is the current water temperature. Use the Up and Down buttons to set the desired temperature.

The set point will appear in blue at the bottom. After 3 seconds without any change to the set temperature value, the keypad will resume the normal display of messages.

When the set value is lower than the current temperature *Cooling to xx.x* will appear. When the set value is higher than the current temperature, *Heating to xx.x* will be indicated. Normally there is a short delay before the heating starts, during which *Heating Suspended* is indicated.



#### **Settings**

From the home page you can access the *Settings*, where you will find:

- Water care
- Audio (if installed)
- Standby (version 6.00 only)
- Maintenance (version 7.00 and higher)
- Date & time
- Keypad
- Wi-Fi (Version 7.00 and higher. Only available on in.touch with software 11.00 and higher.)
- Config
- Restore
- About

Use the arrow keys to move up and down in the list. To select an option, press the lit button beside it (Light button).

At any point you can press the Settings button to return to the home screen.





#### Water care

The Water Care section will help you set up your ideal filtration and heating settings. Choose from *Away*, *Beginner*, *Energy Savings*, *Super Energy Savings*, and *Weekender*, depending on your need. Use Light key to choose your setting. A checkmark will appear on the selected icon to confirm.

In Economy mode, the set point will be reduced by 20°F\*, which means that the heating system will not be engaged unless the temperature falls to 20°F below the spa's set temperature.

\* Default pack value

#### Water care modes



#### Away:

In this mode the spa will always be in economy; the set point will be reduced by 20° F\*.



#### Beginner:

The spa will never be in economy mode and will be filtering according to the pack's low level configuration.



#### **Energy Savings:**

The spa will be in economy mode during the peak hours of the day and resume normal mode on the weekend\*.



#### Super Energy Savings:

The spa will always be in economy mode during peak hours, every day of the week\*.



#### Weekender:

The spa will be in economy mode from Monday to Friday, and will run normally on the weekend\*.

\*Filtration will be reduced when the economy mode is active.







#### Modifying schedules

To see and/or modify a Water Care category, use the lit button to the right (Key 1) to open the selected Water Care menu.

Use the arrow keys to choose a schedule to modify (choice of economy and filtration schedules). Use the Light key to move between parameters.

You have several possibilities for the schedule (Mon-Fri, weekend, every day, or single days). The schedules will be repeated every week. The time and duration are set in 30 minute increments. Once you have set the schedule, use Key 1 to go back. Ensure that you have selected the desired Water Care option in the main Water Care menu.

The filtration schedule shown on the screen will apply to the main filtration pump, most likely pump 1. If your spa uses a circulation pump configured to run 24 hours, the screen will show you the purge setting instead of filtration. The purges are pre-programmed for a fixed number of minutes, therefore the duration will be set to N/A on the screen, and only the start time can be modified.



#### **Audio**

The in.k500 can be used with the in.tune, in.stream or in.stream 2 audio systems. The Audio section in the Settings menu of an in.stream gives you the option to disconnect or unpair your Bluetooth enabled device when using the in.stream.

With version 7.00 and higher, it is also possible to select Source to use a device connected by auxiliary cable or Bluetooth wireless connection.

The in.stream 2 Settings menu gives you a Source selector, a Bluetooth disconnect option, an On/Off switch and an audio control on fader, balance and subwoofer. For more information on audio functions, see the in.tune, in.stream or in.stream 2 operation section.

The Audio option will only appear in the menu for keypads that are set up for an in.stream connection. The in.stream 2 is automatically detected at power-up.





#### Maintenance (version 7.00 and higher)

From the Settings page you can access the Maintenance menu, which gives you access to the following options:

- Maintenance reminders
- Standby

Use the Up and Down keys to make a selection, and Light key to confirm.



#### Maintenance reminders (version 7.00 and higher)

The in.k500 keypad will remind you of maintenance required on your spa, like rinsing or cleaning the filter. Each task has its own duration, based on normal use.

The Maintenance reminders menu allows you to verify the time left before maintenance is required, as well as to reset the time once a task is completed.

Use the Up and Down keys to move through the list.

To reset a task select it by pressing Light key, then confirm when prompted. Once you have confirmed the task will be reset.



#### Standby (version 6.00 and higher)

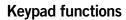
The Standby mode allows you to service your spa. Pumps will stop for 30 minutes, and automatically restart after this time.

Once Standby mode has been activated a screen will appear to show that pumps are stopped. The normal spa page will return at the end of maintenance.

Press the Key 1 to leave Standby mode and restart the spa.

#### Note:

In version 6.00 only, Standby mode is accessible directly from the Settings page.







#### Date and time

Here you can adjust the time format, change the year, date and time. Use the arrows to choose the setting that you want to adjust, and select it by pressing the Light key.

Use the arrow buttons to change the parameters, and the Light key to move between parameters. Key  $1\ \text{will}$  take you back to the main Settings menu.

#### Note:

In version 6.00 and earlier, only the day of the week can be changed, and not the year or date.



#### **Keypad settings**

In this section you can change the temperature unit and language. Use the arrow keys, and move to the setting that you would like to change. Use the Light key to choose and the arrow keys to modify.

Starting in version 7.00 you can change the display orientation. When changed, the contextual options and arrow keys adjust to the chosen orientation. The Mode and Menu keys remain unchanged, as well as the accessory keys in the main spa menu.



#### Note:

With the in.k500 equipped with a selectable rim light color modul: If the "RGB backlight" option is enabled in the spa configuration an option will appear to allow selection of the keypad rim light color.







#### WiFi (version 7.00 and higher)

For the WiFi menu to appear in the Settings menu your in.touch module must be equipped with software version 11.00 or higher. This menu allows you to connect your in.touch module to a WiFi network or to change its network.

For more details about other in.touch connection methods please see the in.touch techbook.

To connect your in.touch module to a wireless network, use the Up/Down keys to go to the WiFi option in the Settings menu and Light key to select it.

After a few seconds the available networks will appear on the screen, as well as their signal strength.

Use the Up/Down keys to move through the list. Select your network by pressing on Light key.

If the WiFi network is password protected enter it when prompted.

- Use the arrow keys to choose your letters and change the type of character (uppercase, lowercase, number, symbol).
- Use Key 2 to move the curser forward
- Use Key 1 to backspace
- Use Light key to confim

If no password is required the in.touch will connect automatically.



Once the in.touch module is connected to a WiFi network a check mark in a green circle will appear in the WiFi menu, and the network logo will change to green in Settings menu.

#### Note:

WiFi logo color in Settings menu corresponds to the in.touch connection state.

Yellow = not connected

Green = connected to a network

Yellow with wait icon = connection attempt to a network Red with wait icon = in.touch no longer detected (in.touch must be reset before next connection attempt)





#### Config

Please do not make changes in the electrical configuration section unless you are a qualified electrician.

In this section you can change the low-level configuration, number of phases, and input current. Use Up/Down to move between parameters, and the Light key to select a parameter to change. Please refer to the TechBook for your specific spa pack for details about the low level settings.

Once you have reached Number of Phases in the menu, you cannot use the arrow keys to go back up to Low-level Configuration. Please go back and re-enter the Configmenu.

The table below shows the key assignation based on the accessories selected in your pack's low level configuration. Please refer to the Quick Start Card (QSC) for specifications to identify the low level configuration for your spa.

#### Possible key mappings

Low level configuration	Key 1	Key 2	Light
1 pump	Pump 1		Light
2 pumps	Pump 1	Pump 2	Light
2 pumps + blower	Pump 1	Pump 2 + Blower	Light





#### Restore/Audio configuration

When you select Restore you will be asked to confirm your choice. Doing so will reset all settings to factory default.

Following a restore you will be asked to choose your audio source. Use the arrow key to choose between in.stream, in.stream 2, in.tune and no/other audio.

This should only be done at installation or when replacing a part.



#### **About**

This section shows information about the in.k500 software number, and the revision numbers of the different components of your system.



#### in.tune operation



#### Press the Mode key to access your in.tune.

#### Play/Pause audio

Press the Play/Pause key to start or pause the audio.

#### Adjusting the volume

Press the Up or the Down key to increase or decrease the volume.

#### Turn power On/Off (version 7.00 and higher)

Press and hold the Play/Pause key for 3 seconds to turn the in.tune on or off.

#### **Changing tracks**

Use the Last Track and Next Track keys to change tracks for the CD or AUX input. When in Radio mode, the Last Track and Next Track keys will move through preset radio stations on the selected band. To change bands or preset stations, see your in.tune manual.



#### in.stream operation



Press the Mode key to access your in.stream.

If you are using a device with Bluetooth technology, it must be connected for functions to work.

#### Play/Pause audio

Press the Play/Pause button to start or pause the audio.

#### Adjusting the volume

Press the Up or the Down key to increase or decrease the volume.

#### Turn power On/Off (version 7.00 and higher)

Press and hold the Play/Pause key for 3 seconds to turn the in.stream on or off.

#### **Changing tracks**

Use the Last Track and Next Track keys to change tracks.

#### **Disconnect or Unpair Bluetooth**

These options can be found under the Audio section in the Settings menu.

## 500

## **Keypad functions**

#### in.stream 2 operation (version 11.00 and higher)



Press the Mode key to access your in.stream 2.

If you are using a device with Bluetooth technology, it must be connected for functions to work.

#### Play/Pause audio

Press the Play/Pause button to start or pause the audio. This button is available for Bluetooth and USB only.

#### Adjusting the volume

Press the Up or the Down key to increase or decrease the volume.

#### Turn power On/Off

This option can be found under the Audio section in the Settings menu.

#### **Changing tracks**

Use the Last Track and Next Track keys to change tracks or FM stations. This is not available with Aux source.

#### Disconnect

This option can be found under the Audio section in the Settings menu.

#### Fader, Balance and Subwoofer

These options can be found under the Audio section in the Settings menu.



## **Error** messages

The list below shows the different error messages that can appear on the home screen. Refer to the troubleshooting and error codes section of the TechBook for your spa pack system.

Code	Message
HL	Warning! HL Error
FLO	No flow for more than 2 hours
FLO	No flow condition
HR	Danger! Relay stuck
OH	Warning! Spa temp. high
Pr	Warning! Temp. probes defective
AOH	Internal pack temp. high
FLC	Flow switch closed
SP in	Input voltage issue
RH NC	Comm. error in.xm2 - in.therm
RHID	in.xm2 - in.therm incompatible
SC ER	Learning mode error
F1	in.xm2 Fuse # 1 is blown
F2	in.xm2 Fuse # 2 is blown
F3	in.xm2 Fuse # 3 is blown
Hr	Danger! Thermal fuse error
UPL	The spa pack does not have valid software. Please insert valid in stick to reprogram spa pack.



## **Specifications**

#### Part number

0607-008033

#### Model

IN.K506-CL-GE1

**Environmental** 

 $\begin{array}{ll} \textbf{Operating temperature:} & -4^{\circ}\text{F} \ (-20^{\circ}\text{C}) \ to \ 149^{\circ}\text{F} \ (65^{\circ}\text{C}) \\ \textbf{Storage temperature:} & -22^{\circ}\text{F} \ (-30^{\circ}\text{C}) \ to \ 185^{\circ}\text{F} \ (85^{\circ}\text{C}) \\ \textbf{Humidity:} & \text{Up to } 70\% \ \text{condensing} \\ \end{array}$ 

Water ingress protection: IPX-5

Mechanical

**Weight:** 0.78 lb (0.35kg)

**Dimensions (W x H x D)** 7.155" x 3.325" x 1.949" (182 mm x 84 mm x 50 mm)

#### Compatibility

in.yt, in.ye, in.yj, in.xe or in.xm2 spa packs with appropriate software revision



