UNLCDHS
Product Guide

mySmart

Universal LCD programming handset

Overview

The UNLCDHS is a compact infrared handset used for the operation, configuration and programming of CP products that have the ability to be programmed via IR and/or RF.

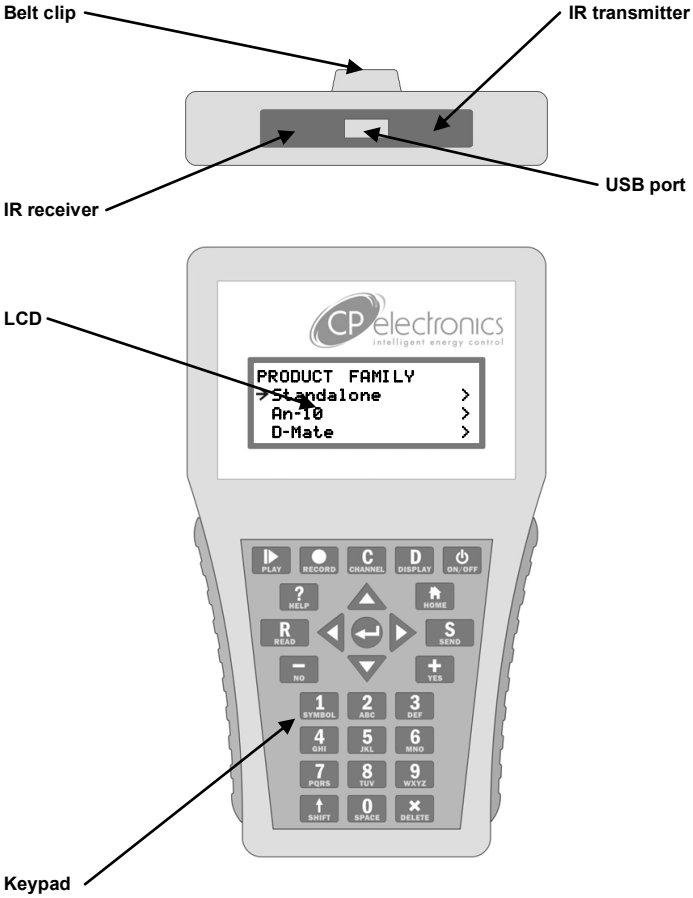
The handset has the following features:

- **USB port**: the USB connection can be used for saving device settings, updating the handset's software and as a programming connection for D-Mate programmable addressers.
- **Macros**: create and save settings that can be recalled to program devices.
- **Readback**: to read the settings from a device.
- **An-10 wireless connection**: two way communication with An-10 products.

Programming is achieved by selecting the parameter to be programmed from the appropriate menu and then transmitting the setting to a device by pressing the send button.

This Product Guide relates to software version 1.10.

Features



IR Transmitter LEDs
Sends IR code to a device.

IR Receiver
Receives IR code from a device for reading back parameters or determining the type of device that is being programmed.

LCD Screen
Backlit LCD screen with 4 lines of 20 characters. 5 levels of illumination.

Keypad
Robust tactile keypad with a positive click. Ergonomically designed to be used with one hand. Alphanumeric keys for entering parameter levels and naming macros.

USB port
Connection port for a USB flash drive / memory stick, D-Mate programmable addresser programming adaptor or CP accessories only.

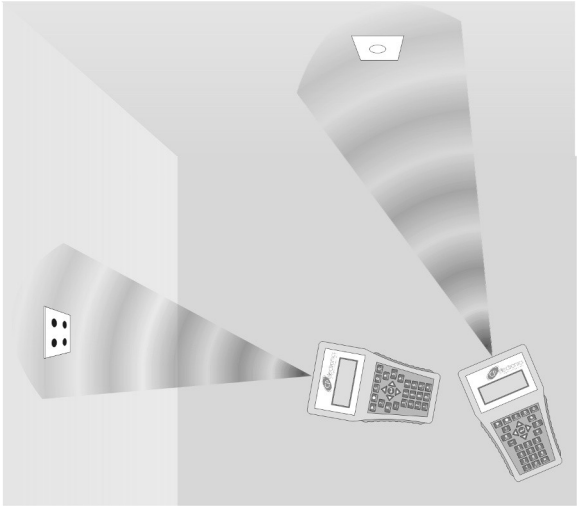
Using the handset

Pointing the handset

- You must point the handset directly at the device that you want to control or program (see opposite).
- When programming a device it is only necessary to point the handset when 'Sending' or 'Reading' a setting(s).

Understanding Device Indicators

- All devices are fitted with LED indication which gives feedback on settings they receive from the handset (see individual device's Product Guide).



Ensuring line of sight

Operation overview

Selecting a product

- Select the CP product family from the main menu (SA-standalone, An-10 etc).
- Either select the product or 'generic product'. 'Generic product' lists all the parameters that are available to a product family (some parameters may not be available for all products within a family).
- Select the parameter group to program ('Detector param' for example).

Entering parameter values

- Select the item with up/down buttons ('Timeout' for example).
- **+ and - keys**

  Use to make small adjustments, or for On/Off, Yes/No parameters.
- **Using the number keys**

  When you type a number, it adds it on to the right and scrolls the digits left.

  It may be easier to enter a leading 0 before 2 digit numbers in a 3 digit field, and same for 1 digit numbers in 2 digit fields.

  Delete removes the right hand digit, unless it is the only one.

  Entering numbers outside the specific range for a setting will result is the message 'Out Of Range' or being prevented from entering an incorrect value.

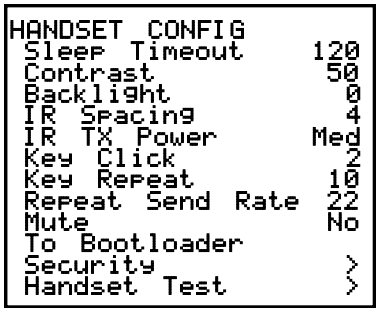
  There is no need to press 'Enter' after entering a number.

See page 5 for an example.

Handset layout

Symbol	Text	Action on Press	Long press	Shift +
	Play	Displays a full list of the items in the currently loaded macro. Press the Play button again to start sending the parameters.	None.	Brings up a list of saved macros that can be recalled for the selected product range.
	Record	Selects an item so it is a member of the current macro. *Delete the item from the macro by using delete in the review screen.*	None.	Prompts the user to select between saving the current macro or to start recording a new macro (by clearing all selected parameters).
C	Channel	Asks the user to enter a channel number to switch to. This only takes effect on devices that have more than one channel. *The Channel button works differently in Rapid and An-10 products which consist of several identical channels. Start at channel 0 per product (except for Rapid LCM, Interface and Light Switch which default to channel 1), and press C to change channel. Select a channel either by Up/Down or by number. Press Enter or Right to select the channel. All channels is at the top of the list (0 on keypad). Current channel number is displayed top right in the menu and is the selected item in the channel menu.*	None.	
D	Display	Increased backlight for 5 steps, then back to 0.	None.	To step down backlighting levels.
	On/Off	None.	Turns the device on/off.	
?	Help	Displays the help screen/further explanation for the selected item. Press help again to cancel.	None.	Shows software version number.
	Home	Goes back to the root menu for the currently selected product range.	Goes back to the main root menu.	
R	Read	Reads back the currently selected parameter.	Reads back all the selected parameters in the active menu only.	
S	Send	Sends the currently selected parameter.	Sends all the selected parameters in the active menu only (similar to macro Play but only applies to the current menu). Lux Up / Down : will raise or lower light level.	
		Selects the submenu.	None.	
		To go back along the path you came (typically up one level).	None.	
		Scroll Up/Down through the current menu or help text.	None.	Use to scroll a page Up/Down of help text.
		Selects the submenu. Also used for confirming handset configuration changes.	None.	
-	No	Selects No, or decrements the selected parameter, or is used to remove a value from a list.	Quickly/continuously decrements the selected parameter.	
+	Yes	Selects Yes, or increments the selected parameter, or is used to add a value to a list.	Quickly/continuously increments the selected parameter.	
1	Symbol	Number 1, or cycles through a list of symbols.	None.	
2-9	A-Z	Numbers 2 to 9, or cycles through the list of corresponding letters.	None.	
	Shift	Changes between uppercase and lowercase.	Toggles caps lock on/off.	
0	Space	Number 0, or the space character.	None.	
X	Delete	Deletes a single character, or item.	Deletes all characters, or all items.	

Handset Configuration



Handset Config screen

The screen shows the current values. To save a new value, press enter after changing the value. If value is out of range the unit beeps.

- **Sleep Timeout**

  The time (seconds) taken for the unit to power off when not in use. Default is 120. Range 1-999.

- **Contrast**

  LCD display contrast. Default is 50. Range 1-100.

- **Backlight**

  Sets the default backlight level. Default is 0, which is off. Range 0-100.

  Note, backlighting the display will reduce battery life.

- **IR spacing**

  Time (milliseconds) between IR messages when sending in macro mode. Default is 4 = 400ms spacing. Range 1-99.

- **IR tx power**

  There are 3 infrared transmit settings; Low, Med and High. Range: Low - 8m, medium - 15m and high - 25m. Default is Medium.

- **Key Click**

  Adds an audible beep when a key is pressed. The larger the number the louder the beep sounds . Use 0 for no key click. Default is 2. Range 0-100.

- **Key Repeat**

  The repeat rate (milliseconds) for a key that is held down. Default is 10. Range 1-99.

- **Repeat Send rate**

  When 'Send' is held down, eg for Lux up, it is the interval between IR messages (milliseconds). Default is 22. Range 1-99.

- **Mute**

  Disables all sounds. Default is No.

- **To Bootloader**
  - Resets the handset. Used for updating the software (see 'Updating UNLCDHS software' section of this document).
  - To view Bootloader and Software versions, select 'To Bootloader' then turn handset on. The version information will then be displayed.
  - To return the handset to the Config defaults. Hold button '1' while turning the handset On until the 'Product Family' menu appears on the screen.

- **Security**
  - Enter PIN

    When a special PIN number is entered the user can then access advanced Rapid programming menus and send specific IR codes. Contact Technical support for details.

- **Handset Test**

  Factory use only.

Note

Changes to Sleep Timeout, Contrast, Backlight are applied after Off/On cycle. Changes to the rest take effect immediately.

Programming example

All parameters specified in the individual Product Guides can be programmed using this handset. Refer to the product guides for information on the default values and details on the parameters. The 'Help' function on this handset gives an overview of the parameter function.

- Select a product family

```
PRODUCT FAMILY
→Standalone          >
 An-10               >
 D-Mate              >
```

- Select 'Select Product'

```
STANDALONE
→Select Product      >
```

- Select a product

```
SELECT PRODUCT
 PRM                 >
→DD                  >
 AD                  >
```

- Select the programming subset

```
DD
→Detector Params     >
 Output Ch. 1        >
 Output Ch. 2        >
```

- Scroll up or down to select the parameter to change

```
DETECTOR PARAMS
 Walk Test LED    Off
→Time Out (mins)   20
 Manual Time Out   10
```

- Change the value as required.

```
DETECTOR PARAMS
 Walk Test LED    Off
→Time Out (mins)   15
 Manual Time Out   10
```

- Press 'Send' to send parameter value to device.
- If more than one parameter has been changed. Press 'Send' for 2 seconds and all the parameters in the current menu will be sent, including those that have not been modified

Programming a battery-powered An-10 device

- Battery-powered An-10 devices must be set into a receive mode before they can be programmed.
- This is achieved by pressing the Config Button on the device. The device's LED indicator will then blink red to show it is in receive mode.
- The device will return to sleep mode if it does not receive any commands within 30 seconds.
- Permanently powered devices are always ready to receive the infrared signals provided by the handset.

Note

Please refer to the target device's instruction leaflet for the location of its Config Button.

Macro function

Creating a Macro

The Macro function enables multiple parameters to be selected and saved as a group that can be sent to a device,

- Select the programming subset (see 'Programming example' step 3 on page 5)

```
DD
 Detector Params    >
→Output Ch. 1       >
 Output Ch. 2       >
```

- Scroll up or down to select the parameter to change

```
DETECTOR PARAMS
→Time Out (mins)   20
 Manual Time Out   10
 Sensitivity On     9
```

- Change the value(s) as required.

```
DETECTOR PARAMS
→Time Out (mins)   15
 Manual Time Out   10
 Sensitivity On     9
```

- Press record once by each parameter you want to save to the macro.

```
DETECTOR PARAMS
⊜Time Out (mins)   15
 Manual Time Out   10
⊜Sensitivity On     4
```

- An inverse arrow will appear to show it is marked as a macro item.
- Continue for as many parameters as you need. Parameters from other programming subset menus can also be added.
- Press Play to review the list.

```
→
MACRO REVIEW
 Time Out (mins)   15
 Sensitivity On     4
 Switch Only
```

- You can delete an item at this stage. Delete button deletes the item pointed at with the arrow.
- Long press delete clears all items.
- Press Play again to send.

Saving a Macro

- At the Macro Review stage press Record

```
MACRO NAME
 -
```

- Enter a name for the Macro using the alphanumeric keys.

Note *An unsaved macro will be lost if the batteries are removed.*

Opening a saved Macro

- Press 'Shift' and 'Play' together and the list of saved Macros will appear.

```
MACRO NAME
 Classroom 1
→Corridor
 Refectory
```

- Scroll up or down to select the Macro to open.
- Press 'Return' to open the Macro
- The selected Macro's parameters will appear in the 'Macro Review' screen

Note *Care should be taken when naming Macros so that names are not duplicated. The macros are listed in saved order.*

Readback function

The read function allows the user to find out the settings of a particular CP device. This can be done on an individual parameter basis or all the settings. The Readback range is between 8m and 10m depending upon the CP device.

Readback of an individual parameter

- Highlight the parameter to be read from a unit.

```
DETECTOR PARAMS
 Walk Test LED    Off
→Time Out (mins)   20
 Manual Time Out   10
```

- Direct the handset towards device and press the 'Read' button. The handset will click when the parameter has been read back, the device will flash its LED, and the value will be shown against the parameter in the menu.

```
DETECTOR PARAMS
 Walk Test LED    Off
→Time Out (mins)   15
 Manual Time Out   10
```

- This can then be edited if necessary.
- Point the unit at a device and press the 'Send' button. This will then send the setting.

To read back all of the parameters in a menu

- Press and hold the 'R' (Read) button for more than 1 second.
- The handset will click every time a parameter is received
- The device will show multiple flashes of its LED
- All of the values will be shown against the parameters in the menu.
- The individual parameters may be edited and then saved as a 'Macro'.

Notes

- *If a parameter(s) has been missed because of a communication error, the missing value(s) is replaced by dashes.*
- *Press 'Enter' to reveal the previous value, or hold 'Enter' to reveal all the previous values for the menu.*
- *When reading back, the relay will temporarily be switched off, and will return to it's normal state 2 seconds after the read back has been completed.*

Updating UNLCDHS software

1. Download the latest software from www.cpelectronics.co.uk. The product page for the UNLCDHS will contain the latest software and Product Guide. The software is in the form of a Zip file. Ensure that you computer can Unzip this type of file.
2. Unzip the file and copy the contents (HS_Data.cfg and HS_Fw.hex files) to the root of a USB flash drive.
3. Insert the USB flash drive into the USB port on the Handset.
4. Use Handset Config menu and scroll down to 'To Bootloader'. Press Enter (or Right) to select.

```
HANDSET CONFIG
 Mute              No
→To Bootloader
 Handset Test      >
```

5. Hold down 'Delete' while pressing 'On/Off'. The handset will then reboot, read the USB flash drive and update itself.
6. Progress is shown. Do not remove USB drive while in progress.
7. At the end, the handset restarts the menu system.
8. Remove the USB flash drive.

Note

The version of the Bootloader and software are shown during the first start-up after loading new software or after new batteries have been inserted.

If for any reason the 'To Bootloader' function cannot be accessed, remove and reinsert the batteries, insert the USB flash drive into the USB port and follow the sequence above from item 5.

DO NOT use the USB port for connecting to a computer or any other USB accessory.

Care and maintenance

Replacing the Batteries

The battery compartment is located at the rear of the handset.

Press and slide the battery compartment door (see opposite).

Lift out the batteries from the holders and insert a replacement batteries (AAA type) ensuring correct polarity.

Slide the door back into the handset, ensuring that it clips in place.

Cleaning the Handset

The exterior of the handset can be cleaned by using a damp cloth. Stubborn marks may be removed by using a mild detergent.

Accessing the internal batteries

Technical data

Dimensions	94mm x 160mm x 25mm
Weight	0.017kg
Battery	6Vdc 4 x AAA (supplied with unit)
USB	Type A socket
Flash drive spec.	128MB min to 16GB max, FAT or FAT32, single partition drive.
IR transmit range	Low-8m, medium-15m and high-25m
Temperature	0ºC to 35ºC
Humidity	5 to 95% non-condensing
Compliance	EMC-2004/108/EC

CE

If any of these symbols are on the product or battery, the product or battery must be disposed of in the correct manner and must not be treated as household or general waste.

IMPORTANT NOTICE!

This device should be installed by a qualified electrician inaccordance with the latest edition of the AS/NZS Wiring Rules and any applicable Building Regulations.

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