Cathexis KBD-3100 Operation Manual

Contents

1   Introduction

This document details the operation of the Cathexis KBD-3100 Keyboard.[1] The KBD-3100 is an updated, USB version of the KBD-3000, and is compatible with both Windows and Linux systems. For information regarding the setup of the keyboard, please consult the KBD-3100 Installation and Setup Manual.

1.1.   Supported Systems and Software

1.1.1   Windows Systems

- Windows 7 and later.
- CathexisVision software version 5041f1 (pre-2014), and CathexisVision 2014 and newer.

1.1.2   Linux systems

- Supported OS:
  - Ubuntu 16.04.
  - Ubuntu 12.04.
  - Fedora 16 (supported only for RS232 (serial) cable connection. USB connection not supported).
- Supported CathexisVision versions:
  - CathexisVision5041f1 (pre-2014), and CathexisVision 2014 and newer if using RS232/serial cable connection.
  - CathexisVision 2019.1 and later if using USB cable connection.

1.2   Hardware Requirements

- **RS232** cable [max length 15m].
  - Not supplied.
  - Must be straight through, with male and female DB9 connectors. One on each end.
  - Additional power supply required.
- USB cable.
  - Supplied with keyboard.
  - Device powered over USB cable, no additional power supply required.
- Power supply:
  - External power supply is supplied; however power lead/cord is not.

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[1] While Cathexis has made every effort to ensure the accuracy of this document, there is no guarantee of accuracy, neither explicit, nor implied. Specifications are subject to change without notice.

o   Required if connecting via RS232/serial cable.
- Compatible PTZ camera. See www.cathexisvideo.com for list of compatible cameras.
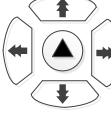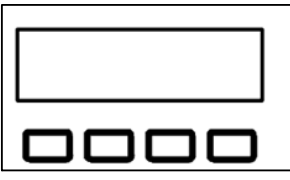
Note:
- The panic button is not supported from CathexisVision 2016 and onwards.
- The Keyboard PTZ setup button is only supported by legacy Analogue PTZ cameras. For new IP PTZ cameras, advanced functions need to be configured by accessing the camera via a web browser. Please see the KBD-3100 Operation Manual for more information.

2 Keyboard

2.1 Buttons
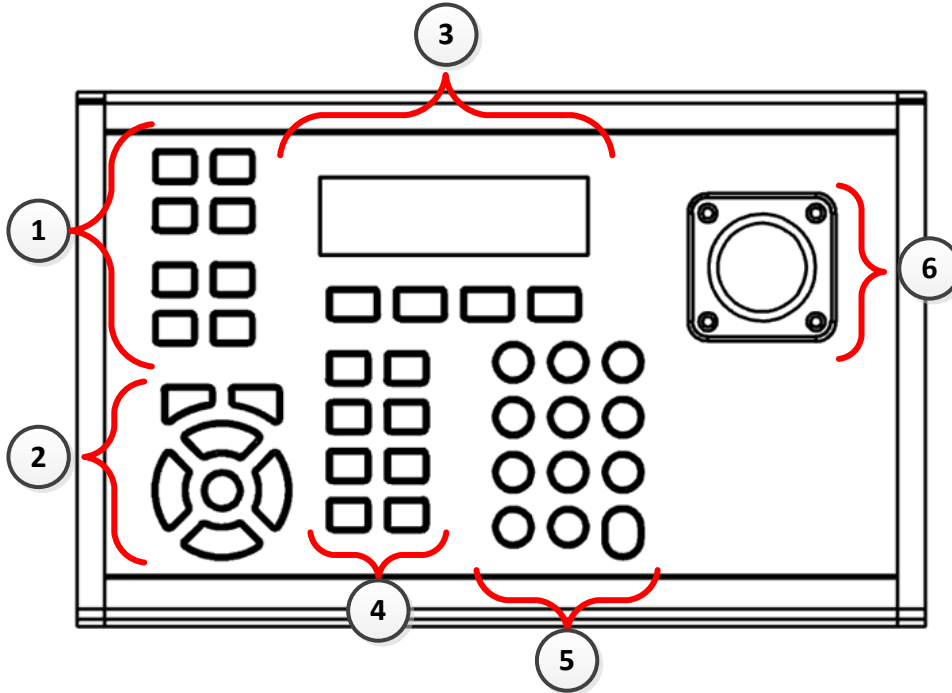
①	**ALT**	**Alt function key**. Press and hold while pressing another key to activate action indicated in blue text.	
	LOG In/Out	**Log in/out** of the keyboard.	
	F1 Setup	**F1 → Self-set function.** Alt + Setup → Open keyboard setup menu on LCD screen.	
	F2 Panic	**F2 → Self-set function.** Alt + Panic → Initiate user panic trigger. <u>Note</u>: Panic button not supported in CathexisVision 2016 and later.	
	Open Wash	**Ope**n → **Open iris.** Alt + Wash → Starts wash function (sprays water).	
	Close Wipe	**Close → Close iris.** Alt + Wipe → Starts wiping function of lens.	

	Near Stop Wash	**Near → Manually focus nearer.** Alt + Stop Wash → Stops wash.
	Far Stop Wipe	**Far → Manually focus further away**. Alt + Stop Wipe → Stops wipe function.
2	CAM	**Camera control.** CAM + camera ID + enter → switch to camera.
	MON	**Monitor control.** MON + monitor ID + enter → switch to monitor.
	Arrow keys icon	**Arrow keys.** Click ▲ to change mode of arrow keys. Navigate using arrow keys.
3	LCD Screen icon	**LCD Screen and Soft Keys**. Displays messages, status, login field and softkey options. Refer to this display frequently, as it provides useful guidance. The softkeys are unlabelled because their functions vary depending on the mode. Labels appear for each softkey on the LCD screen directly above the softkey.
4	Pattern Menu	**Pattern + pattern number → run set pattern**. Alt + Menu → opens PTZ overlay menu.
	Preset Save	**Preset + preset number → go to set preset.** Alt + Save + number + enter → saves current camera position as preset.
	Seq	**Runs a configured sequence.** Seq + sequence number +enter → runs set camera sequence.
	Salvo	**Runs a configured salvo.** Salvo + salvo number +enter → runs set salvo.
	Layout	**Selects a configured monitor layout.** Layout + layout number +enter → selects layout.
	Output Toggle	**Output + output resource ID + enter → pulse output**. Alt + Toggle + output resource ID + enter → toggle output.
	Action	**Controls site action.** Allows site actions to be triggered using the action's user ID.
	*	Asks the Video Wall monitors to identify themselves by displaying their ID numbers on the screen.
5	1 ABC	A single press selects the numeral. Quick successive presses select the remaining options for the key.

	<	**Backspace in LCD screen.**
	Enter ↵	**Enter.** Press to activate other key selections e.g. CAM + camera ID + enter → switch to camera.
6		**Joystick.** Use for dome camera control, mouse simulation cursor movement, and to move the selector in menus.

2.2 Arrow Key Modes

Arrow keys can be used to navigate up/down and left/right within certain modes.
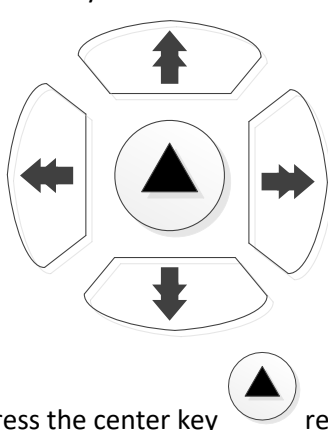
Press the center key ▲ repeatedly to change modes.

The LCD screen will indicate the mode and how to use the arrow keys.

See below for more.

Press the center key ▲ repeatedly to change modes.

Mode	Arrow Keys	Arrow Key Controls
Arrows control CAM/MON	Up/Down	Move up and down the cameras in the Resources list of the cameras tab.
	Left/Right	Move left/right between video wall monitors available to the keyboard.
Arrows control panels	All	Move between camera panels in monitor layout.
Arrows map to PTZ keys	All	Move between analogue PTZ menu options. (See PTZ section)

3 General Operations

3.1 Logging In

Operations differ when using the keyboard on a Client unit and a Server Unit. See below

3.1.1 *Client*

If logging in on a Client unit, the user does **not** have to log in on the keyboard as the keyboard receives the login details and access rights of the user currently logged into the CathexisVision Client.

3.1.2 *Log in to a Server*

If logging into a Server, the user will have to log in on the keyboard as well as the software.

1.
   On the keyboard, select the [LOG In/Out] button to display Username and Password fields on the LCD screen.

2. Using the number pad, type the username and then press Enter. [Enter]

3. Type the password, and then press Enter. [Enter]

3.2 Access GUI

The GUI must be connected to as a monitor every time the keyboard is connected. GUI monitor number is zero.

Press [MON] + 0 (zero).

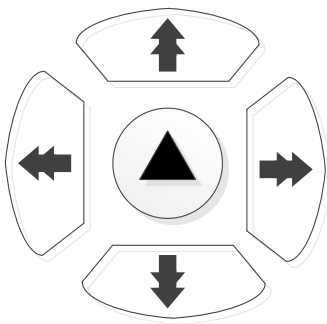## 3.3 Select/Browse Cameras

Specific cameras may be selected for view, or site cameras may be browsed.

Note: Selecting cameras requires knowing the Resource IDs of the various cameras connected to the site. Consult administrator for Resource IDs, or the KBD-3000 Setup Manual for instructions on setting Resource IDs.

![CATHEXIS logo]

3.3.1 *Select Specific Cameras*

Press [CAM] + camera resource ID + [Enter]

3.3.2 *Browse Cameras*

Press the center key ▲ repeatedly to change mode to Arrows control CAM/MON.

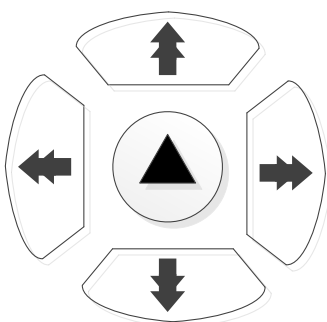Use the up/down arrow keys to browse the cameras in the Resource List.

3.4 Select/Browse Monitors

3.4.1 *Select Specific Monitor*

Press [MON] + monitor resource ID + [Enter]

Note: The GUI must be connected to as a monitor every time the keyboard is connected. GUI monitor number is zero.

3.4.2 *Browse Site Monitors*

Press the center key ▲ repeatedly to change mode to Arrows control CAM/MON.

Use the left-right arrow keys to scroll through site monitors.
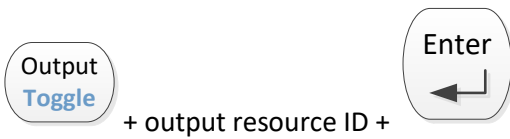
3.5   Resize Camera Panel

ALT

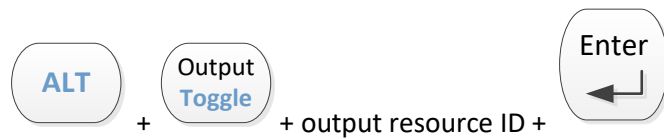+ up/down arrow key → increase/decrease number of camera panels across screen.

3.6   Pulse/Toggle Output

In output mode, the softkeys activate: refer to the LCD screen for instructions.

3.6.1   *Pulse Output*

Output
Toggle + output resource ID + **Enter**

3.6.2   *Toggle Output*

ALT + **Output Toggle** + output resource ID + **Enter**

4   Keyboard Setup

Press Alt + F1 to enter Setup Menu on LCD Screen.

Use up/down arrow keys to navigate between menu items.

4.1   Backlight Control

Backlight control
Off : On : OK : Cancel
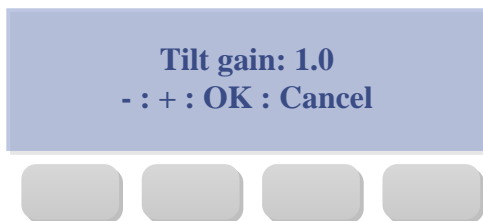
Use softkeys to select backlight options.

4.2   Tilt Gain

Set the sensitivity of the joystick tilt. The higher the tilt gain, the more sensitive the PTZ camera's tilt upwards or downwards will be.

Tilt gain: 1.0
- : + : OK : Cancel

Use softkeys to set tilt gain.

4.3   Pan Gain
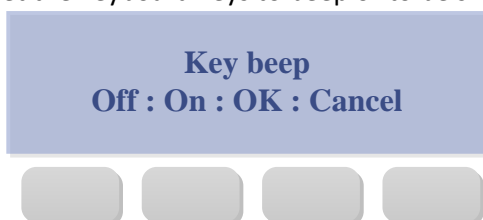
Set the sensitivity of the joystick pan. The higher the tilt gain, the more sensitive the PTZ camera's pan from left to right will be.
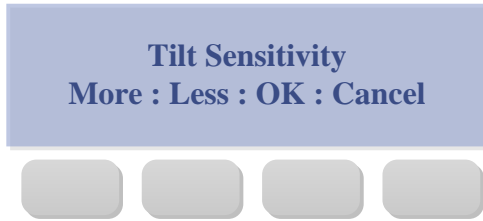
Pan gain: 1.0
- : + : OK : Cancel
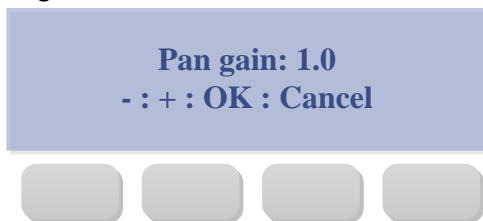
Use softkeys to set pan gain.

4.4   Key beep

Set the keyboard keys to beep or to be silent when pressed.

Key beep
Off : On : OK : Cancel

Use softkeys to key beep/silence.

4.5 Tilt Sensitivity

Set the sensitivity of the joystick tilt.

Tilt Sensitivity
More : Less : OK : Cancel

Use softkeys to set tilt sensitivity.

4.6 Pan Sensitivity

Set the sensitivity of the joystick pan.

Pan sensitivity
More : Less : OK : Cancel
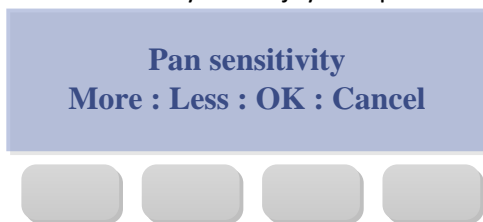
Use softkeys to set pan sensitivity.

4.7 Zoom Dead Zone

Set the zoom dead zone.

Zoom dead zone: 40
- : + : OK : Cancel
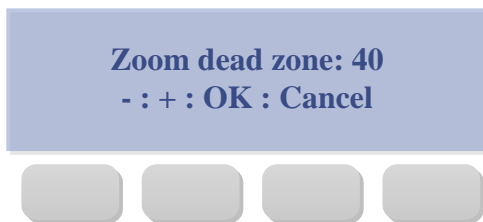
Use softkeys to set zoom dead zone.

4.8 Tilt Dead Zone

Set the tilt dead zone.

Tilt dead zone: 20
- : + : OK : Cancel
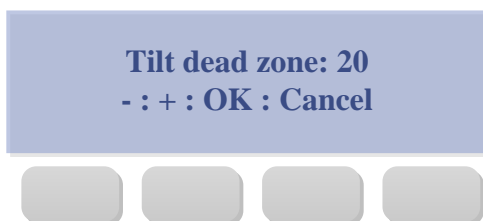
Use softkeys to set tilt dead zone.

4.9 Pan Dead Zone

Set the pan dead zone.

Pan dead zone: 20
- : + : OK : Cancel

Use softkeys to set pan dead zone.

5 PTZ Camera Controls

Make sure the PTZ camera is selected.

5.1 Move, Zoom and Focus

5.1.1 *Move PTZ*

1. Select the PTZ camera. (See above)
2. Move the joystick to aim the camera in the correct direction.

5.1.2 *Zoom In/Out*

1. Select the PTZ camera.
2. Twist the top of the **joy stick right to Zoom In**, or **left to Zoom Out**.

5.1.3 *Manual Focus*

Note: Some cameras will auto-focus.

Manually focus nearer by pressing (Near) .

Manually focus further away by pressing (Far) .

5.2 Wash/Wipe

Note: Auxiliary relays must have been wired for correct functions.

5.2.1 *Wash Camera*

5.2.1.1 *Start Wash*

Press (ALT) + (Open **Wash**) to start wash.

5.2.1.2 *Stop Wash*

Press (ALT) + (Near Stop Wash) to stop wash.

5.2.2.1   Start Wipe

Press **ALT** + **Close Wipe** to start wipe.

5.2.2.2   Stop Wipe

Press **ALT** + **Far Stop Wipe** to stop wipe.

5.3 Go to Preset

This requires knowing the preset number.

1.   Press **Preset Save** + Preset Number.

2.   Press **Enter** .

5.4 Configure Preset from Keyboard

1.   Use the joystick and buttons to move the dome camera to the required position, zoom-distance and focus.

2.   Press **ALT** + **Preset Save** and enter a preset number on the number pad.

3.   Press **Enter** .

The preset is now saved.

5.5 Run Preset Pattern

This requires knowing the preset pattern number.

1. Press **Pattern** Menu + Preset Pattern number.

2. Press Enter ⏎ .

5.6 PTZ Menu Control

If the camera supports it, a PTZ menu can be opened as an overlay over the PTZ feed in CathexisVision.

Press ALT + Pattern Menu to open PTZ menu.

The menu will appear as an overlay in CathexisVision, but the keyboard's LCD screen and softkey buttons offer navigation options.

PTZ menu control
Menu : Enter : ESC : Cancel
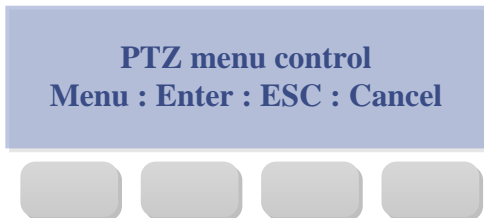
Press the corresponding softkey buttons to select either Menu, Enter, ESC or Cancel.

To navigate menu, change arrow key mode to **Arrows map to PTZ keys** using ▲ button.

Navigate in menu:	Arrow keys up/down.
Select in menu:	Right arrow key.

2. Conclusion

Please remember that this appnote was designed to deal specifically with this hardware. For further information about the CathexisVision software please consult the main manual (http://cathexisvideo.com/).

For support please contact support@cat.co.za