

## Introduction

Thank you for selecting the Excel EntertainIR™ Pillow Speaker by Crest Healthcare Supply. The Excel EntertainIR™ Pillow Speaker combines the convenience and flexibility of a standard infra-red entertainment remote with reliability and safety. Crest has chosen its proven Excel Digital platform to add a user-programmable and selectable IR control of your entertainment devices. While the non-entertainment functions remain wired to your nurse call station, the Excel EntertainIR™ is able to communicate with a multitude of entertainment devices – TV, DVD, VCR, satellite/cable set top box, etc. – through an IR signal control – the same way the device's original IR remote is used.

All the familiar functionality you have come to expect in a pendant control – Nurse Call, lighting control, etc. – has been retained, and we've added comprehensive entertainment device operation – eliminating much of the confusion and clutter that often results from several remote controls. With the Excel EntertainIR™ Pillow Speaker, the patient has access to the TV and video functions without having to get out of bed or placing a call for assistance to your staff. Buttons and functions that are rarely needed have been eliminated, resulting in a control that is easy to learn, easy to use, and easy to find. The Excel EntertainIR™ Pillow Speaker is also designed to expand your choice of entertainment equipment. We've selected industry standard technology used by essentially all universal remote manufacturers. We are providing you the flexibility to select entertainment devices that meet your patients' needs, without worries that changes in market offerings will render your choice obsolete in a year or two. The Excel EntertainIR™ Pillow Speaker platform is user-programmable to operate most consumer, commercial and healthcare entertainment devices. It is also expandable – Crest can add new code sets as new devices and new systems are introduced. Again, thank you for taking a few moments to learn more about this exciting product.

## Precautions

### Normal Use:

This device may be safely used for the activation of a nurse call signaling circuit as defined in UL 1069. User must verify plug style, voltage and wiring is appropriate for their intended use. This device has been tested safe for use by patients undergoing Oxygen Therapy - refer to labeling on the product for prescribed use in an oxygen-enriched environment. This device has also been tested to and found in accordance with requirements as defined in UL 1069 Standard for Hospital Signaling and Nurse Call Equipment by Intertek and judged eligible to bear ETL's Mark.

This device has been tested to and found in accordance with requirements as defined in UL 1069 Standard for Hospital Signaling and Nurse Call Equipment and CSA C22.2 No. 205-M1983 Signal Equipment by Underwriters Laboratories File E187389.

**ELECTRICAL:** For connection to power limited circuits of 24VDC, 0.1A or less. Make periodic leakage current measurements of all pendant control/pillow speaker circuits to verify the values are appropriate for the installation location.

**CLEANING AND STERILIZATION:** Outside of cable jacket and pendant may be cleaned with alcohol, most disinfecting and sterilization agents, or mild detergent and water.

**WARNING:** Do not use cleaning or sterilization solutions directly on metallic portions of the electrical plug, nor should the electrical plug be immersed in any cleaning solution. Submersion of the plug end of the pillow speaker will result in fluid contacting the electrical compartment of the plug and will cause corrosion or failure of the electrical contacts. Damage due to fluid submersion and subsequent corrosion of the plug electrical contacts is not covered under the manufacturer's warranty.

While every attempt has been made to make the Excel EntertainIR™ pillow speaker as moisture resistant as possible, there are still avenues for fluid intrusion, and as such, the device is NOT submersible. Do not steam sterilize the pillow speaker – high heat may destroy or distort some of the components. Maximum temperature 130° F. Gas sterilization may be used as long as the maximum temperature is not exceeded.

**WARRANTY AND CONDITIONS OF USE:** This product is unconditionally guaranteed against defects in materials and workmanship for a period of 2 years from the original date of purchase. Any use or application of this product outside the scope of this document exceeds the recommendations of the manufacturer and may result in cancellation of warranty terms. User must evaluate and validate any other applications prior to placing device into service.

## Programming the Excel EntertainIR™ Pillow Speaker

**NOTE:** Prior to programming and operation, you must install fresh batteries. Install two (2) "AA" batteries by removing two screws from battery compartment cover, pulling cover free from back of device. Insert batteries with positive terminals towards top of device (spring is negative). Replace battery compartment cover and re-install two screws.

**NOTE:** Please see "Programming the Crest Excel EntertainIR™ Pillow Speaker with Set Top Box Control" for special programming instructions for Set Top Box (STB) or Video on Demand (VOD) pillow speakers.

1. Locate your TV manufacturer in the **Entertainment Device Code** table located on page 5. Keep this handy as it will be needed in step 6.

**NOTE:** If you are not using the 10-key overlay option, please review the **Big Button Overlay Template** located on page 4 to decipher which keys correlate to the numbers 0, 1, 2 & 3. A 4 digit code will be required for this overlay as shown in the Entertainment Device Code table.

2. Press the button of the device you want to program (**TV, VCR, DVD**).

• You should get a short confirmation LED flash to show that you are in that mode.

**NOTE:** If you are programming a TV-only model (No VCR or DVD) then skip Step 2. To see the LED flashes on a TV-only model you may have to shade the pillow speaker or slightly cover it from bright light. The LED that will flash for programming will flash in the little window located on the number "1" key. On the "Big Button" overlay the LED will flash in the little window located above the word "volume".

3. Press and hold the **CC** button and while pressing this button, press and hold the **Mute** button also. The appropriate device LED will flash for 1 second confirming you are entering programming mode. Continue holding both buttons down until the appropriate device LED starts to flash.

• This should take approximately 3 seconds

4. Release **Mute** button while LED is flashing. LED will stop flashing. Continue to hold down **CC** button until the appropriate LED again starts to flash.

• This should take approximately 3 seconds

5. Release **CC** button while LED is flashing. It will stop flashing, **remaining off**. You have 15 seconds to begin entering 3 digit device code (4 digit if using Big Button Overlay).

6. Type in the 3 (or 4) digit Device Code.

• The appropriate LED will flash once after each digit is entered to signify that the digit has been accepted.

• Once the code has been entered the appropriate LED will remain off for 2 seconds followed by a 2 second flash to signify a valid code entry.

7. Test newly entered code. If code does not work try the next code from chosen manufacturer in **Entertainment Device Code** table and repeat steps 2 – 6.

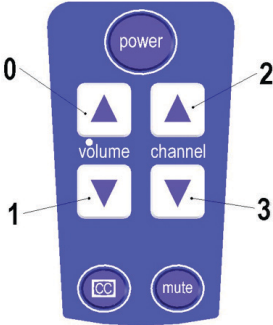
8. To program other devices or to reprogram a different code, follow steps 2 – 6 again.

**NOTE:** If at anytime during step 6 you see the LED flash 5 times very quickly, then either the code that was entered was invalid or too much time elapsed between digit entries. In this case, repeat steps 1 – 6. The remote will return to normal operation throughout steps 2 – 4 if you simply release both the CC and mute keys. In either of these two cases the remote will default back to the codes that were being used prior to programming.



# Typical Healthcare Entertainment Device Codes

Listed below are the most common devices and device codes used in healthcare facilities. If you require a code other than those provided here , please contact our Customer Support Department at 1-800-328-8908 or visit our website [www.cresthealthcare.com](http://www.cresthealthcare.com)

	TV Brand	10-Key	Big-Button
<b>Big Button Overlay Template</b>  Volume up = 0, Volume down = 1, Channel up = 2, Channel down = 3  	Zenith Healthcare TV (All CRT models & LCD models with internal interface)	001	0001
	Zenith Healthcare TV (LCD models with external interface)	004	0010
	Zenith Combo DVD	000	N/A
	Zenith Combo VCR	000	N/A
	PDI Healthcare TV	003	0003
	RCA Healthcare TV	000	0000
	Philips Healthcare TV	002	0002
	HCI Healthcare TV	006	0012
	Panasonic Healthcare TV	057	0321

### Miscellaneous Operating Information:

User-specific programming is maintained in non-volatile memory, even in the event of dead or removed batteries. Operation will be restored to the previously programmed functionality as soon as fresh batteries have been installed. Headphone option: Stereo headphones must be used for best performance when optional headphone receptacle is in use.

## Operating Entertainment devices using Excel EntertainIR™

**Note:** The Excel EntertainIR will only control those entertainment devices - TV, VCR, DVD - for which it has been programmed. If desired, operation of other devices may be programmed by the user. Refer to section: “Programming the Excel EntertainIR™” located earlier in this document.

### Operating the Television:

- Press the button labeled **TV**.
  - The LED below the **TV** button will flash quickly to show you that you are now in the TV mode.
- All buttons associated with the **TV** will now operate.
  - The Power button will turn the **TV** on and off.
  - The Mute button will mute the **TV** sound.
  - The Input button will only work if your particular **TV** features a special input, such as A/V or “S-Video”. Operation of this button is dependent upon the particular set with which it is used. On sets that do not support this function, the button will be non-functional.
  - The Enter button will be non-functional as this button is used only in the DVD mode.
  - The Volume Up and Volume Down buttons increase or decrease the **TV** volume respectively.
  - The Channel Up and Channel Down buttons sequentially change the channel up and down respectively, on the **TV**.
  - The number buttons function as entry keys for direct channel access.
  - The CC button will toggle the closed caption option on the **TV** on or off.
  - The Radio button (when present) will operate the FM radio tuner in your **TV**. Only select **TV** models offer the internal FM tuner option.

**Note:** When pressed, each button listed in a-i above will flash the **TV** LED indicating that the device is in the TV mode.

### Operating the VCR:

- Press the button labeled **VCR**.
  - The LED below the **VCR** button will flash quickly to show you that you are now in the **VCR** mode.
- All buttons associated with the **VCR** will now operate.
  - The Power button will turn on and off the **VCR**.
  - In **VCR** mode, the majority of number keys also include a red shape below the number. These commonly used shapes will operate as indicated below:
    - The Play button (5 key) will start the video playing.
    - The Stop button (8 key) will stop the video playing.
    - The Fast Forward key (6 key) will make the video fast forward.
    - The Reverse key (4 key) will either rewind the video, or while playing a tape, will make the video fast reverse.
    - The Pause key (0 key) will pause the video.
  - The Enter, Channel Up, Channel Down, CC, Radio and number buttons 1, 2, 3, 7 & 9 are non-functional while in the **VCR** mode.
  - The Volume Up/ Down and Mute buttons are also non-functional while in **VCR** mode.

Note: Pressing a valid **VCR** function key will flash the **VCR** LED indicating that the device is in the **VCR** mode.

### Operating the DVD Player:

- Press the button labeled **DVD**.
  - The LED below the **DVD** button will flash to show you that you are now in the **DVD** mode.
- All buttons associated with the **DVD** player will now operate.
  - The power button will turn on and off the **DVD** player.
  - The enter button will be used in the main menu of the **DVD** to select what you want to view on the **DVD**.
    - The channel up and down arrows can be used to navigate this menu vertically.
    - The volume up and volume down arrows can be used to navigate this menu horizontally.
  - In **DVD** mode, the majority of number keys also include a red shape below the number. These commonly used shapes will operate as indicated below:
    - The play button (5 key) will start the **DVD** playing.
    - The stop button (8 key) will stop the **DVD** playing.
    - The skip ahead button (6 key) will fast forward the **DVD**.
    - The skip behind button (4 key) will rewind the **DVD**.
    - The chapter ahead (9 key) will make the **DVD** jump to the next chapter.
    - The chapter behind (7 key) will make the **DVD** jump to the previous chapter.
    - The pause key (0 key) will pause the video.
  - The CC, Radio, input, and number buttons 1, 2 & 3 will become non-functional while in the **DVD** mode.

**Note:** Pressing a valid **DVD** function key will flash the **DVD** LED indicating that the device is in the **DVD** mode.