

# Procedure

A Guide on How to Change the BIOS Battery in a CDC five, six and seven-s fitted with a 19224 Power Distribution Board



# Description

A Guide on How to Change the BIOS Battery in a CDC five, six and seven-s fitted with a 19224 Power Distribution Board

# Contact

Cadac Holdings Limited One New Street Luton Bedfordshire LU1 5DX England

Tel: +44 1562 404 202

Email: <a href="mailto:support@cadac-sound.com">support@cadac-sound.com</a>

www.cadac-sound.com



© 2019 Cadac Holdings Ltd. Technical specifications and appearances are subject to change without notice and accuracy is not guaranteed.





#### Contents

Contents	2
Introduction	3
Tools Required	3
Changing the Battery	4
Turning on the PC	5
CDC seven-s: ONLY	6
CDC five and CDC six: ONLY	7
Access the BIOS Settings	8
BIOS Boot Settings	9
BIOS Advanced setting: M2 Hard Drive ONLY consoles	11
BIOS Advanced setting: Screens	12
Setting the Clock	14







#### Introduction

This document is a guide on how to change the BIOS battery on the CDC five and seven-s plus the CDC sixes fitted with the later 19224 power distribution board. **IMPORTANT:** If you have a CDC seven or a CDC six fitted with the earlier 19196 power distribution board then please refer to the document "*A Guide on How to Change the BIOS Battery in a CDC six and CDC seven fitted with a 19196 Power Distribution*" which will guide you through the process of changing the battery.

This process **must** be carried out by qualified Cadac representatives.

#### **Tools Required**

You will require nonconductive tool to remove the battery from the holder.

You will require a replacement CR2032 3V Lithium battery. Example below:



A T-10 TORX driver will be needed to remove front panel screws:



USB Keyboard:





Page | 3



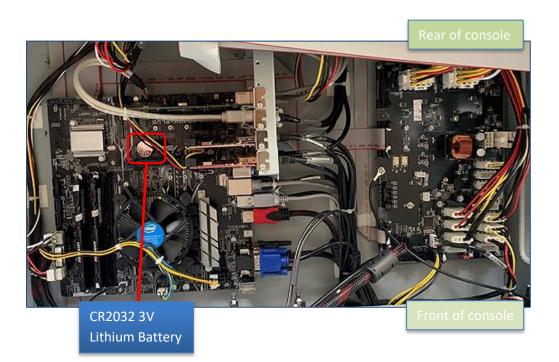
### Changing the Battery

Power up the console and backup your console's show files to a USB memory stick. This process does not wipe the memory, but it is good practice to have a backup copy in case something goes wrong. **Power down** the console and unplug the unit from the mains supply.

To access the **battery**, it will require the unscrewing of all the retaining screws (**T-10 TORX**) on the panel containing the **large 23.5**" screen. Note: The battery on the CDC seven / seven-s is under the left-hand screen.

It is not necessary to remove the screen, but it is advisable to open and prop up the panel from the top, pivoting on the edge nearest the faders. A suitable length of wood (approx. 20cm) may be useful to hold open the panel to avoid having to close the panel, or holding, during the process.

#### Position of the battery on the PC motherboard:



Use a suitable implement (non-conductive) to release the clip securing the old battery and remove it.

Fit the new CR2032 3V lithium cell battery; use a type which is a non-rechargeable, taking care not to insert the battery the wrong way around. Positive (+) terminal facing out.



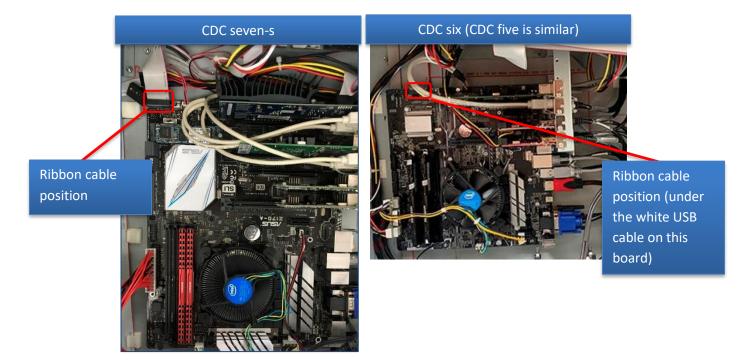




# Turning on the PC

For the BIOS to update, the computer must be disconnected from the power distribution board so that it cannot turn off the computer during the update procedure. To do this the ribbon cable attached to the motherboard from the power distribution board must be unplugged. *Warning:* This must be done while the console is still powered off.

The image below shows the location of the ribbon cable on the different consoles:



Reconnect the console to mains / PSU and it can now be **powered ON** using the main power button on the front of the console.

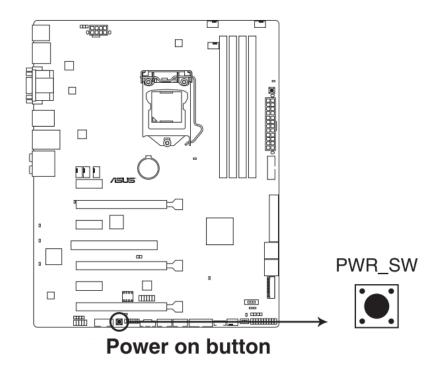






#### CDC seven-s: ONLY

If you have a CDC seven-s then you now need to press the power button on the motherboard. It is slightly obscured by the graphics card, but reachable.



The computer will now start up.

You will now need to set the BIOS. Go to page 8

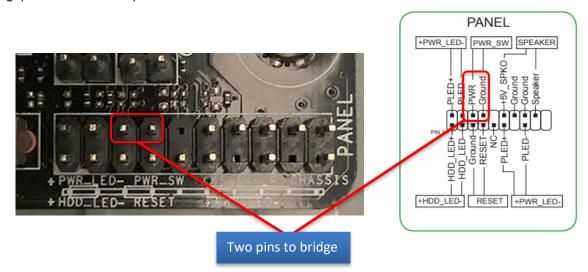




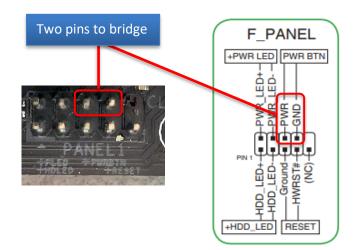


#### CDC five and CDC six: ONLY

If you have a CDC five or CDC six, then you will need to "short" the power switch pins on the connector you removed the ribbon cable from. Use your TORX screwdriver to **very quickly** bridge the gap between the two pins show below:



**NOTE:** Some newer consoles may have the 10 way connector instead of the 20 way, in which case use your TORX screwdriver to **very quickly** bridge the gap between the two pins show below:



The computer will now start up.

You will now need to set the BIOS.





Page | 7



#### Access the BIOS Settings

Connect the USB keyboard to one of the USB ports on the console - there are a number of ports on the console which can be found on the front panel, near the headphone jack or on the rear panel.

To get into the BIOS press **F2** or **Delete** on the USB keyboard when the console is starting / booting up.

The console will now **boot into the BIOS**.

When in the BIOS press **F7** on the USB keyboard to enter the **Advanced Mode BIOS** to update the settings. Alternatively, on the touch screen press **Advanced Mode**.

UEFI BIOS Utility - EZ Mod			• • •	1
Interface         Op:559 <sup>C</sup> Englan           2170-A         EXOSVer-3802           Intellio Corer (Mi) 64/260 CPU # 3-4064b           Speed; 3400 MHI           Memory: 16384 MK (20644 2133MHz)		CPU Core Voltage 1.120 V Motherboard Temperature 33°C	E2 System Turing Cash fee score ballows 0. an Daty a part certains or conception for monorest systems concertains or conception score systems (Conception) Conceptions (Co	
ORAM Status DIMALAT Consult 192MB 2133MHz DIMALAZ Consult 8192MB 2133MHz DIMALBT N/A DIMALBT N/A	SATA Informati M.a. KINGSTON SM3	on 128053240G (240.0GB)	< Normal > > > > > > > > > > > > > > > > > > >	
X.M.P. Disabled -	Intel Rapid Stor	age Schnology off	P1: KINGSTON \$M228053240G (228936M8)	
FAN Profile Cru FAN 1015 RPM Chai FAN 1875 RPM 1875 RPM N/A N/A	CPU FAN			
Char fan Cru opt fan Nia Dext fan 1 Nia Nia	QFan Contro		米 Boot Menu(FB)	
		Default(F5)   Save & Exit(F10)	Advanced Mode(F7)	Q
		Advanced M	odo	







## **BIOS Boot Settings**

The **Boot** setting screen will look like below. Select **Boot** from the top menu tab bar:

Above 4G becoming     Lot Usualed     2133 MHz     1.20       Wait For 'F1' If Error     Disabled     Capacity       Option ROM Messages     Enabled     16384 MB       Interrupt 19 Capture     Enabled     Voltage       Setup Mode     EZ Mode     -124	UEFI BIOS Utility - Advanced N				-	
Fact Boot       Enabled       3400 MHz       38°C         Next Boot after AC Power Loss       Normal Boot       Imabled				nick Note(P9)		Aonitor
DirectKey (DRCT)     Itelementation       Boot Logo Display     Disabled       Boot Logo Display     Disabled       Above 4G Decoding     Disabled       Wait For 'F1' If Error     Disabled       Option ROM Messages     Enabled       Interrupt 19 Capture     Enabled       Setup Mode     EZ Mode			Enabled	-		
DirectKey (DRCT)       Enabled       Parto         Boot Logo Display       Disabled       34x         Boot Logo Display       Enabled       34x         Memory       Frequency       Volt         Above 4G Decoding       Disabled       7233 MHz       1.20         Wait For 'F1' If Error       Disabled       Capacity       16384 MB         Interrupt 19 Capture       Enabled       Voltage       122         Setup Mode       EZ Mode       12.288 V       12.288 V			Normal Boot	-		and the fact of the second
Boot Logo Display     Disabled     34x       Boot up NumLock State     Enabled     Image: Comparison of a minimal set of devices required to launch active boot option. Has no effect for BBS     34x       Boot up NumLock State     Enabled     Image: Comparison of a minimal set of devices required to launch active boot option. Has no effect for BBS     34x			Enabled	-		.129 0
Above 4G Decoding  Above 4G Decoding  Disabled  Disabled  Disabled   Disabled   Disabled  Disabl	Boot Logo Display		Disabled	-		
Above 4G Decoding     1/2     Disabled     1/2     2133 MHz     1/2       Wait For 'F1' If Error     Disabled     -     Capacity       Option ROM Messages     Enabled     -     16384 MB       Interrupt 19 Capture     Enabled     -     Voltage       Setup Mode     EZ Mode     -     12/2       Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS     3/26 V	Boot up NumLock State		Enabled	-	Memory	
Wait For 'F1' If Error       Disabled       Capacity         Option ROM Messages       Enabled       16384 MB         Interrupt 19 Capture       Enabled       Voltage         Setup Mode       EZ Mode       122/ 12,288 V         Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS       3,264 V	Above 4G Decoding	5	Disabled	-		Voltage
Option ROM Messages       Enabled       16384 MB         Interrupt 19 Capture       Enabled       Voltage         Setup Mode       EZ Mode       1228         Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS       3364 V	Wait For 'F1' If Error		Disabled	-		11200
Setup Mode  EX Mode  EX Mode  EX Mode  EX Mode  Ex Mode  12.288 V  2.288 V  3.34  3.36  3.	Option ROM Messages		Enabled	-		
Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS	nterrupt 19 Capture		Enabled	-	Voltage	
Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS	etup Mode		EZ Mode	-		+5V 5.000 V
		t of devices required to laun	ch active boot option. Has no effe	ect for BBS		
Last Modified   EzMode(F7)			Last Modif	ind   F	Mode(E7)1	Search

#### Select the following settings:

UEFI BIOS Utility - Advanced Mo					
			at I		onitor
Fast Bool		Enabled	- 10	Stoo MHz 38	c
Next Boot after AC Power Loss		Normal Boot			
		Enabled			1290
Boot Logo Display		Disabled		34x	
Boot up NumLock State		Enabled	-		
Above 4G Decoding	\$	Disabled	-	Frequency 2133 MHz	Voltage
Wait For 'F1' If Error		Disabled			
Option ROM Messages		Enabled	-	16384 MB	
Interrupt 19 Capture		Enabled	-	Voltage	
etup Mode		EZ Mode	- ]	+12V 12.288 V	-SV 5.000
ables or disables boot with initialization of a minimal set of ot options.	f devices required to laur	ich active boot option. Has	no effect for BBS	+3.3V 3.264 V	

Set the following:

- Fast Boot Enabled
- Boot Logo Display Disabled
- Boot up Numlock State Enabled
- Above 4G Encoding Disabled
- Wait for F1 If Error Disabled







Scroll down for further Boot option settings:

09/24/2018 10:00 C English MyFavorite(F3) & Qfan Co		ick Note(F9) ⑦ Hot Keys
My Favorites Main Ai Tweaker Advanced M	Monitor <u>Boot</u> Tool Exit	Hardware Monito
Option ROM Messages	Enabled	Frequency Tempter
Interrupt 19 Capture	Enabled	- 3400 MHz 38*C
Setup Mode	EZ Mode	➡ 100.0 MHz 1.120 V
> CSM (Compatibility Support Module)		Ratio 34x
► Secure Boot		344
Boot Option Priorities	이번 이번 문제 관계 이 안전에 들어야.	Memory
	P1: KINGSTON SM228053240G	Memory     Frequency Voltage     2133 MHz 1.200
Boot Option #1	P1: KINGSTON SM228053240G	Frequency Voltage     2133 MHz 1.200 V     Capacity
Boot Option #1 Boot Option #2	PT: KINGSTON SM228053240G	Frequency Voltage     2133 MHz 1.200
Boot Option #1 Boot Option #2 Boot Option #3	Disabled	Frequency Voltage     2133 MHz 1.200     Gapacity     16384 MB
Boot Option #1 Boot Option #2 Boot Option #3 Boot Override	Disabled	Frequency Voltage     2133 MHz 1.200     Capacity     16384 MB
	Disabled	Frequency Voltage     Z133 MHz 1.200     Capacity     16384 MB     Voltage     +12V +5V

Set the following:

- Boot Option #1 must set as the main hard drive
- Boot Option #2 Disabled
- Boot Option #3 Disabled

If you **can't find a hard drive** in the Boot Options, the console is fitted with a **M2 hard drive**. Go to **Advanced** settings then use the information in the next section for a console fitted with an M2: **BIOS Advanced setting: M2 Hard Drive ONLY consoles.** 

Once you have completed that section Press **F10** on the keyboard to save the BIOS. This will save the settings and restart the console.

Then re-enter the **BIOS** and select **BOOT** and you can now complete the above Boot Option settings.

Proceed on to page 12.







## BIOS Advanced setting: M2 Hard Drive ONLY consoles

If there is an **M2 drive** fitted in the console - older consoles will have a SATA drive - this must be **set** in the **BIOS**.

Select Advanced from the top menu bar

Select Advanced\Onboard Devices Configuration

09/24/2018 10:00 C   English MyFavorite(F3) Do Qfar	Control(F6) 🖓 EZ Tuning Wizard(F11) 🕼 Quick N	ote(F9) 🕐 Hot Keys
My Favorites Main Ai Tweaker Advanced	Monitor Boot Tool Exit	Hardware Monitor
← Advanced\Onboard Devices Configuration		СРО
HD Audio Controller	Disabled 🗸	Frequency Temperture 3400 MHz 38*C
Front Panel Type	HD Audio 👻	BCLK Core Volta
SPDIF Out Type	SPDIF -	100.0 MHz 1.120 V
DVI Port Audio	Disabled -	Ratio 34x
PCI-EX16_3 Bandwidth	Auto 👻	 Memory
SATA Mode Configuration: [SATA Express_1][M.2]	M.2 ~	Frequency Voltage 2133 MHz 1.200 V
Asmedia USB 3.1 Controller	Enabled	Capacity 16384 MB
smedia USB 3.1 Battery Charging Support	Disabled	Voltage
58 Type C Power Switch	Auto 👻	+12V +5V

Set the following:

- HD Audio Controller Disabled
- SATA Mode Configuration M.2







### BIOS Advanced setting: Screens

Important: On a CDC seven / seven-s the BIOS must be set to support Multiple Monitors. Select: Advanced\System Agent (SA) Configuration\Graphics Configuration

0/24/2018 10:01 🌣   🕀 English 🖾 MyFavorite(F3) 🗞 Qfan Controk(F6	) 😌 EZ Tuning Wizard(F11) 🕞 Quick Note(F	and the second s
My Favorites Main Ai Tweaker <u>Advanced</u> Monito	r Boot Tool Exit	Hardware Morto
Advanced\System Agent (SA) Configuration\Graphics Configuration		CPU Frequency Temper
Graphics Configuration	1046	3400 MHz 38°C
Primary Display	PEG	100.0 MHz 1.120
GPU Multi-Monitor	Enabled	Ratio 34x
C6(Render Standby)	Enabled -	
VMT Pre-Allocated	64M •	Frequency Voltage 2133 MHz 1.200
		Capacity 16384 MB
		Voltage
		+12V +5V 12.288 V 5.00
		→ → +3.3V 3.248 V

Ensure the following is enable:

- **Primary Display:** PEG (NOTE: for a CDC six and CDC five this should be set to AUTO)
- iGPU Multi-Monitor- Enabled

For all consoles select Monitor from the top menu bar.

Scroll down to Anti Surge Support and select OFF

CPU Core Voltage 3.3V Voltage	+1.120 V +3.264 V	Kano 34x
5V Voltage 12V Voltage	+5.000 V +12.288 V	Memory Frequency Voltage 2133 MHz 1.200 V Capacity
Q-Fan Configuration		Voltage
Anti Surge Support hassis Intrude Detect Support	On Off	+12V +5V 12.288 V 5.000 V

Press F10 on the USB keyboard to save the BIOS. This will save the settings and restart the PC.







After the BIOS settings are complete and the computer has successfully restarted, press **Ctrl - Alt-Delete** on the keyboard and in the bottom right corner of the screen there is a **Power OFF** button, press this to power OFF the PC. Once the PC is powered **OFF** switch the **console OFF at the mains**.

Reattach the ribbon cable to the motherboard.

You can now put the screen back down and fix it in place with the TORX screws.

The console can now be restarted normally.

The clock on the console now needs to be set. See next section.







# Setting the Clock

Once the console has rebooted you will need to re-set the clock.

This is done by going into the **MENU** and select **SETTINGS** then **ABOUT**.



Once in **ABOUT** click on the time and re-set the clock to the current date and time.

Set Time an	nd Date				
09	Aug	2016	14:	27	
10	Sep	2017	15:	28	
11	Oct	2018	16:	29	
12	Nov	2019	17:	30	
13	Dec	2020	18:	31	
14		2021	19:	32	
<b>L</b>		2022	20:	33	
Store Update	Prev		Next	Up Down	

To exit press the **BACK** button.

BIOS battery change in now complete.





