Pioneer

DRM-7000 – Summary of Error Codes

Introduction

The Pioneer DRM-7000 FlexLibrary provides a series of codes to indicate problems or errors. Some codes refer to mechanical problems or request user interaction while other error messages note input mistakes. The following section provides general information about the code types. The chart includes error codes, probable causes and suggested methods to correct the errors.

Error Code Categories

Error codes for the DRM-7000 fall under seven general categories with four fatal categories, usually related to the transfer mechanism, and three non-fatal categories associated with a drive or other device.

The **fatal** error categories are as follows:

- *Disc-protruding*: The disc may be protruding from a drive, magazine or the hyper-magazine. Once an error is generated, further operation is prohibited until corrected by removing or reseating the disc. This can be performed by the administrator. Service may be required.
- *Elevating system*: Vertical movement of transfer mechanism is halted. Once an error is generated, further operation is prohibited due to obstruction, address recognition failure, or mechanical fault. In most cases, service is required.
- *Loading system*: Horizontal movement of transfer mechanism is halted. Once an error is generated, further operation is prohibited due to obstruction, status recognition failure, or mechanical fault. In most cases, service is required.
- *Door-not-opening*: This error appears only when a pending operation cannot take place until the door is opened, for example, when the shipping screws are engaged. Other than an external obstruction blocking the door, service is required.

The **non-fatal** error categories are as follows:

- *Drive unit*: Drive unit errors may require replacement or reconnecting of the drive. If a disc is in a drive when the door is opened and the drive is disconnected, the magazine address for that disc is lost. Remove the disc before reconnecting the drive.
- *Import/Export, Flip or Memory*: A message appears in the display window asking whether to continue initialization if error persists after resetting. If no additional errors occur, User mode is enabled but the problem device may not be available until serviced.
- *Warning messages* (not handled as errors): Minor problems that may not affect initialization or other systems may need service soon but not immediately.

Error Code Chart

The chart codes are as follows:

- EC – Error Code
- Display – message appearing on the unit's LCD display panel or on the Controller system
- Possible Cause – a brief statement indicating the problem area or situation
- Check Item – suggested areas or items to investigate for problems
- Possible Solutions – one or more answers for each error code condition

EC	Display	Possible Cause	Check Items	Possible Solutions
E83	disc set NG	Disc protruding	Remove each magazine until the buzzer stops sounding. Use the Hyper submode to eject the hyper-magazine as well.	If the buzzer sounds while adding or removing a magazine, check the magazine for mis-aligned or tilted discs. If the buzzer is silent after reinserting the magazine, the error is automatically canceled.
		D-Guide or *Chuck* mechanism protruding	If the buzzer continues to sound after removing all magazines, confirm that the carriage base block is in the default position.	If the *D-Guide* or *Chuck* on the carriage base block protrudes, there may be damage to the assembly. Call Pioneer Service number.
		Defective sensor	If the buzzer continues to sound after the carriage base returns to the default position, verify that the light sensor is unobstructed.	If the sensor is unobstructed, close the door and reinitialize the system. If the buzzer continues to sound, the sensor may require service. Call Pioneer Service number.
E86	elev motor FG NG	Rotary encoder trouble	Service is required.	Call Pioneer Service number.
E87	elev. sensor	Elevating address sensor trouble	Service is required	Call Pioneer Service number.
E88	elev. motor lock	Elevating motor locked	Remove all magazines first. Note the position of the carriage base and confirm that it corresponds to the location shown on the system (read-out in Test mode). If the location information is correct, close the door and reinitialize the system.	If the E88 error appears again after reinitializing, call Pioneer Service number.
		Elevating address sensor or rotary encoder trouble	If the selected address is different from the listed location on the carriage base while the base is at the top or bottom position, the sensor may have failed.	Call Pioneer Service number.
		Foreign object contamination	If the carriage base is lodged in the highest or lowest position, there may be something caught in the mechanism.	Call Pioneer Service number.
E89	elev. timeover (Normal timeover value is set to 10 seconds)	Belt has slipped off in the elevating drive	Service is required	Call Pioneer Service number.
		Timing inaccuracy	Service is required	Call Pioneer Service number.
		Encoder plate error; deformed object adhered, etc.	Service is required	Call Pioneer Service number.

EC	Display	Possible Cause	Check Items	Possible Solutions
E97	loading SW NG	Dislodged or disconnected flexible cables	Service is required	Call Pioneer Service number.
		Removal of the switch arm in the carriage base block	Service is required	Call Pioneer Service number.
E98	loading mech NG	Grease shortage around steel ball (6)	Service is required	Call Pioneer Service number.
		Abrasion of parts in the loading mechanism	In System Administrator mode, use the *Info-Run statistics-Number of times-Load/Unload* to check the number of operations performed.	If the number is greater than four million, service is required. Call Pioneer Service number.
E99	loading timeover	Mechanism adjustment inaccuracy	Service is required	Call Pioneer Service number.
		Dislodged belt	Service is required	Call Pioneer Service number.
		Loading motor worn out or experiencing other trouble	From the System Administrator mode, use *Info-Run statistics-Number of times-Load/Unload* to review the number of operations. If the number is greater than two million, service is required.	Call Pioneer Service number.
		Abrasion of parts in the loading mechanism	From the System Administrator mode, use *Info-Run statistics-Number of times-Load/Unload* to review the number of operations on expendable parts.	If the number is greater than four million, service is required. Call Pioneer Service number.
		Demo mode preparation failure	If this error is returned when attempting to send a disc to a particular slot, check for discs previously left in that slot.	In the All Slot Aging Demo mode, discs must be set in the hyper magazine slots one through four. All other magazines/slots must be empty.
		Insertion error of the drive connector	During transfers from one bay to another, a disc may touch something. If this happens, the drive's interface connection may be affected.	Open the rear door and check the drive connections. If a disc remains in the drive, remove the disc before reconnecting the drive.

EC	Display	Possible Cause	Check Items	Possible Solutions
EF3	door open NG	Object pressing against door	Check the physical access to the door and remove any obstacles.	Verify the clearance area in front of and around the access door.
		Plunger trouble	Execute the DOOR submode from the System Administrator mode. Listen for the sound of the plunger moving.	If the plunger is silent, service is required. Call Pioneer Service number.
		Door lock mechanism trouble	If the door fails to open after five attempts, the mechanical parts (springs and rods) may be jammed.	Call Pioneer Service number.
		Door switch trouble	If the error registers while the door is open, service is required. Call Pioneer Service number.	Call Pioneer Service number.
EF8	MTE mecha NG	Demo mode preparation failure	If the error occurs during the Demo mode execution, verify that the proper number of discs fill the slots.	In the Hyper(magazine)-Drive Demo, discs must be in hyper-magazine slot 1 through slot 16.
		Mechanism adjustment inaccuracy	Service is required	Call Pioneer Service number.
E9A	MTE sensor NG	Disc detection sensor trouble	Press the door switch to cancel the operation. Use the Test mode, *Diag-Robotics-Collectivity* to check disc loading and unloading operations.	If an asterisk (*) appears in the display window, continue with normal operations. For other results, Service is required. Call Pioneer Service number.
EA*	D# connect NG	Strap terminal connector (DR-R7181) disconnected	Open the rear door and verify that the drive's strap terminal and drive bay (Bay 1 through Bay 16) correspond to the proper error code's suffix (0 to F). Check all drive connections.	If a drive's strap terminal is loose or disconnected, reseat the drive. If the strap terminal is connected properly, remove the drive and close the door to reinitialize the system.
EB*	D# setup NG	Strap terminal connector (DR-R7181) disconnected		
EC*	D# stop NG	Strap terminal connector (DR-R7181) disconnected		
ED*	D# damper NG	Motor or drive-circuit trouble	Use the Test mode, *Diag-Robotics-Individually-Clamper-Manual*, to attempt to manually operate the suspected drive clamper.	If the clamper remains inoperative, perform the same check on other drives. If other drive clampers are ok, replace defective drive.
		Switch trouble	Service is required	Call Pioneer Service number.

EC	Display	Possible Cause	Check Items	Possible Solutions
EE0	hyper timeover	Motor or drive-circuit trouble	Service is required	Call Pioneer Service number.
		Dislodged or disconnected connector assembly	Service is required	Call Pioneer Service number.
EE1	1-unit timeover	Motor or drive-circuit trouble	Service is required	Call Pioneer Service number.
		Dislodged or disconnected connector assembly	Use the Test mode, *Diag-Robotics-Individually-Clamper-Manual*, to attempt to manually operate the suspected drive clamper.	If the clamper remains inoperative, drive clamper may be defective. Replace drive.
EE9	mail timeover	Motor or drive-circuit trouble	Service is required	Call Pioneer Service number.
		Dislodged or disconnected connector assembly	Service is required	Call Pioneer Service number.
EF1	EPROM memory NG	Memory trouble	Inaccurate data may be automatically erased. After the initialization is complete, use the System Administration mode/Info submode, to check *Contents*.	If all Disc Detection information is listed as Uncertain, repeat a *probe* using the Probe submode.
			Use the System Administration mode/Info submode, to check the *Error Log*.	If the error code is undefined, simultaneously press and hold the ESC and FUNCTION buttons for four seconds. Follow the instruction shown in the display window to clear the error log.
			Use the System Administration mode/Info submode, to check the number of operations and the unit's running time.	If the numbers are abnormal, simultaneously press and hold the ESC and FUNCTION buttons for four seconds. Follow the instruction shown in the display window to reset the data.
			If the initialization fails continually generating an error code such as EF8, clear the memory with *All Erase*.	Move the cursor to *Info* on the first screen of the Test mode. Simultaneously press and hold the ESC and FUNCTION buttons for four seconds. Follow the instruction shown in the display window to restore the memory. Initiate a Probe to finish the procedure.
EF2	address missing	Adjustment inaccuracy	Service is required	Call Pioneer Service number.

EC	Display	Possible Cause	Check Items	Possible Solutions
EF9 EFA	mail sensor NG	Tray-position sensor switch trouble	Service is required	Call Pioneer Service number.
		Disc-sensor switch trouble	Service is required	Call Pioneer Service number.

Warning Messages not handled as errors (Service is required):

Warning Message	Check Items
Fan* stopped or locked	Check the standard fan (Fan #1) and the backup fan (Fan #2).
Fan* connected NG	Check the connection to the standard fan (Fan #1).
Hyper eject and insert	Test the Hyper submode (under the System mode) functions properly (eject/insert). Verify that the touch memory may be read after inserting a hyper magazine.

The solutions provided in this bulletin are usually effective in solving common problems. If service is required, please contact your Pioneer Service representative at 800-421-1613

For function and operation, application solutions, upgrades, and further assistance with the DRM-7000 disc-library system, please click the Service & Support tab (Business Product Support) on the Pioneer website: www.pioneerelectronics.com or contact Pioneer Technical Support at 310/952-2111.