QD-DVD MultiDrive Series

User's Manual

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Introduction

The QD-DVD MultiDrive Series includes the QD-DVD 123, QD-DVD 125, and QD-DVD 127. Each is a high speed, low cost DVD Recordable duplication system from Microboards Technology, LLC.

The QD-DVD MultiDrive is perfect for any user requiring easy copying of audio, video, or Data CDs. Superior technology allows the QD-DVD MultiDrive to ship without a hard drive. LED indicators provide the user with status of the duplication process, minimizing the number of faulty discs.

Applications suited for the QD-DVD MultiDrive include Pro Audio, Multimedia, Government / Education, Software Development, Medical Imaging, and Data Interchange.

Unpacking your system

When unpacking your duplicator, confirm the following items are included:

- QD-DVD MultiDrive duplicator
- Power cable
- Manual
- DVD-R disc
- USB cable
- Zulu2 CD/DVD recording software Installation Disc

If any of these items are missing, please contact Microboards Technology Technical Support.

IMPORTANT: Please keep all the packing for your QD-DVD MultiDrive duplicator. If your unit ever needs to be sent in for service, it must be returned in the original packing or the warranty will be voided.

Installation

- Connect the power cable to the QD-DVD MultiDrive duplicator and plug in to a protected power outlet strip or UPS power supply.
    Note for Installation:
    1) The socket outlet shall be installed near the equipment and be easily accessible.
    2) Do not block cooling fans.
- Turn on power to the duplicator.
- The system will go through initialization and then display: 1. Copy.
- The system is now ready to use.
- For USB Mode, connect to a PC via an unoccupied USB port. This mode must be enabled in the Advanced Setup Menu (See pages 17-18).

Basic Instructions

Buttons and LCD

There are four buttons and an LCD on the front panel of the QD-DVD MultiDrive duplicator.

LED display: Shows the menu items and any status messages that may come up during operation

ENT button: The ENT button, used to start a duplication process or enter into an area in the menu structure.

ESC button: The ESC button, used to stop an operation or move up the menu structure.

▲ button, used to scroll up in the different menus.

▼ button, used to scroll down in the different menus.

Hardware Description

QD-DVD 123

Controller Interface
DVD Reader Drive
DVD Recorder Drives
Power LED
Power Switch

The QD-DVD MultiDrive system consists of a DVD reader, 3, 5, or 7 DVD Recorders (based on model), USB Connection, and Controller module.

The master discs always go into the DVD reader drive (top).

The blank media will always go into the DVD Recorder drives.

The power switch and power LED are also located on the front of the QD-DVD MultiDrive duplicator.

The USB Connection is located on the back of the QD-DVD MultiDrive.

The LCD display will show the different menu selections and also information pertaining to the recording process. Here is a typical example of what is displayed during the COPY process:

Displays the function being performed, such as Copying or Testing, and shows the record speed during duplication.

Shows the percentage completed for this action.

Copying – DVD   **71%**

1269.5 MB   **01:15**

Displays the amount of data left to be recorded. This number starts at the capacity of the master and counts down.

Shows the time remaining to complete this action. This number also counts down.

Main Menu

```
┌──────────────────────────────────────────────────────────────────────────────────────────────┐
│                                                                                                │
1.0 Copy ──ENT──▶ Source Disc ──▶ Copying–52x 17% ──▶ 1.0 Copy    Load Next ──ENT──┘
                  Analyzing...     150.4MB    01:15     OK 07      Blank Disc
   │         └──────────────────────────────────────────────ESC
   ▼
2.0 Test ──ENT──▶ Source Disc ──▶ Testing–52x 17% ──▶ 2.0 Test   Load Next ──ENT──┘
                  Analyzing...     150.4MB    01:15     OK 07      Blank Disc
   │         └──────────────────────────────────────────────ESC
   ▼
3.0 Test & Copy ──ENT──▶ Source Disc ──▶ Copying–52x 17% ──▶ 3.0 Copy  Load Next ──ENT──┘
                         Analyzing...     150.4MB   01:15     OK 07     Blank Disc
   │                └──────────────────────────────────────────ESC
   ▼
4.0 Verify ──ENT──▶ Preparing..... ──▶ Copied disc is now ──▶ 4.0 Verify
                                        being read            OK  07
   │            └──────────────────────────────────────ESC
   ▼
5.0 Compare ──ENT──▶ Preparing.... ──▶ Copied disc is now ──▶ Compare  OK: 7
                                        being compared with    Fail: 0  Diff: 0
   │                                    the master disc
   │            └──────────────────────────────────────────ESC
   ▼
6.0 Prescan ──ENT──▶ Source Disc ──▶ Scaning 24x 15% ──▶ PreScan OK
                     Analyzing...     6204MB   01:15
   │            └──────────────────────────────────ESC
   ▼
7.0 Disc Info ──ENT──▶ Source Disc ──▼──▶ Total 01 Sessions ──▼──▶ Total 04:15 ──▼──▶ Session01 ──▼──▶ Track01
                       Analyzing...       Total 01 Tracks          Totat 37.0 MB       Track01 - 01.      CDXA 37.1 MB
   ▼
8.0 Edit Track ──ENT──▶ 8-01. Track Extraction ──▶ Select Track ◀────────────────────────────────────┐
                        CD to CD Edit              1/10    0514                                        │
   │               ◀──ESC                             │ENT or ▼           ENT= Select that track number
   │                                                  ▼                   ▼= Skip that track number
   │                                              Select Track
   │                                              +10/10   0514
   │                                                  ▼
   │                                              Select Track
   │                                              End  3 Trk 13:36
   │                                                  │ENT
   │                        NO                        ▼
   │                   ◀──────────────────────── End Edit disc ──YES──▶ Copying–52x Edit ──▶ Burn Complete ──ESC──▶ Continue edit ──YES──▶ Insert Next Master
   │                                              And burn? YES          3/10 ?  2/3            OK 01                Next Disc? NO
   │                                                                                                                    │NO
   │                                                                                                        Close all disc's
   │                                                                                                        Session? YES
   │                                                                                                            │ENT
   │                                                                                                        Closing Sesion
   │                                                                                                        Please wait....
   │                                                                                                            ▼
   │                        ESC                                                                      ◀──ESC── Close Complete
   │                   ◀── 8-02. Track Extraction ──ENT──▶ Select Track ──ENT──▶ Playing Track– 1          OK: 7   Fait 0
   │                        Play Audio Track               1/16  0245            00:15 / 02:45
   │                            ▼                                                                       ◀─────ESC
   │                        ESC
   │                   ◀── 8-03. Edit Track ──ENT──▶ Close all Disc's ──YES──▶ Closing Session ──▶ Close Complete
   │                        Close Session           Session? YES                Please wait. ...      OK 7    Fait 0
   │                                                     │NO
   ▼
9. Setup ──▶ See the
             Setup Menu
             (page 14)
   │
   ▼
10. USB Mode ──▶ USB L.H Mode ──▼▲──▶ Back to S.A Mode? ──YES──▶ Reboots QD-DVD
   │                                       │NO
   │  Press and Hold the ESC
   │  button for 3 seconds
   ▼
11. Adv Setup ──▶ See the Adv
                  Setup Menu
                  (page 17)
```

Functions

There are 9 different functions for the QD-DVD MultiDrive duplicator: Copy, Test, Test & Copy, Verify, Compare, Prescan, Disc Info, Edit Track and Setup.   For the Setup options, please refer to pages 14-16.

These instructions refer to using 7 DVD recorder drives (available only in the QD-DVD 127), but the QD-DVD MultiDrive will operate using any number of the available recorder drives.

Copy

The Copy function is used to copy your master disc to the blank media. The QD-DVD MultiDrive duplicator will be in Copy mode when it is turned on. The display will read:

```
1. Copy
```

Place your master disc into the DVD reader drive (top).

Place your blank media into the DVD recorder drives.

Press the ENT button on the controller interface.

The data will now be copied to the blank discs.
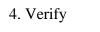
```
Copying – 16x      48%
2.3GB            03:15
```

When the job is completed, the recorded discs will be ejected from the recorder drives.
The display will read:

```
1.0 Copy
OK: 07
```

NOTE: CD masters must be copied to CD media, and DVD masters must be copied to DVD media.

Test

The Test function is used to simulate copying your master disc to the blank media. To use the Test function, press the ▼ button on the controller until Test is displayed:

```
2. Test
```

In Test mode, the blank media will remain blank and can be used again.

Place your master disc into the DVD reader drive (top).

Place your blank media into the DVD recorder drives.

Press the ENT button on the controller interface.

The duplicator will now simulate writing to the blank discs.

```
Testing – 16x      48%
2.3GB            03:15
```

When the job is completed, the recordable discs will be ejected from the recorder drives.
The display will read:

```
2.0 Test
OK: 07
```

Test & Copy

The Test and Copy function will perform both operations, one after the other. If the Test portion passes without errors, the system will automatically start the Copy process.

To run the Test and Copy function, press the ▼▲ buttons until the display reads:

```
3. Test & Copy
```

Place your master disc into the DVD reader drive.

Place your blank media into the DVD recorder drives.

Press the ENT button on the controller interface.

The duplicator will now simulate writing to the blank discs.

```
Testing – 16x      48%
2.3GB           03:15
```

When this operation completes, the unit will start the Copy process:

```
Copying – 16x      48%
2.3GB           03:15
```

When the job is completed, the recorded discs will be ejected from the recorder drives.
The display will read:

```
3.0 Copy
OK: 07
```

Verify

The Verify function will check to see if the recorded discs can be read. This is different from the Compare function. The Verify function will not compare itself with the master disc. It is only checking to see if the discs that were recorded can be read back.

To run the Verify function, press the ▼▲ buttons until the display reads:

```
4. Verify
```

Place the copied discs into the DVD recorder drives.
Press the ENT button on the controller interface.

The copied discs will now be read. Once completed, the display will show:

```
4. Verify
OK: 07
```

Compare

The Compare function is used to compare the master disc with the copied discs. The Compare function will only work with Data masters. If your master disc has audio or video (VCD) on it, the Compare function will not work.

To use the Compare function, press the ▼▲ buttons until the display reads:

```
5. Compare
```

Place your master disc into the DVD reader drive.

Place your copied discs into the DVD recorder drives.

Press the ENT button on the controller interface.

The duplicator will now compare the copies to the master disc. When completed, the display will read:

```
Compare        OK: 7
Fail: 0        Diff: 0
```

Press the ▼ button and the following screen will appear:

```
Src:01        CD-RW
Total:   15.2MB
```

Press the ▼ button again and the following screen will appear:

```
Tgt: 00        CD-RW
  Identical
```

Prescan

The Prescan function is used to verify the master disc can be read correctly.

To use the Prescan function, press the ▼▲ buttons until the display reads:

```
6. Prescan
```

Place the master disc into the DVD reader drive and press ENT.
The Prescan starts and the following screen appears:

```
Scaning – 16x    46%
2.3GB          03:15
```

Once the scanning is complete, the following screen will appear:

```
PreScan OK!
```

Disc Info

The Disc Info function displays information on the type of master disc placed in the DVD reader drive.

To use the Disc Info function, press the ▼▲ buttons until the display reads:

```
7. Disc Info
```

Place the master disc into the DVD reader drive. Press the ENT button. The source is analyzed. The following screen appears:

```
Source Disc
(Analyzing)
```

The following 4 screens display a variety of information about the master disc. The screens are reached by pressing the ▼▲ buttons.

```
Total 01 Sessions
Total 01 Tracks
```

```
Total: 04:15
Total: 37.0MB
```

```
Session 01
Track 01 - 01
```

```
Track 01
CDXA   37.0MB
```

Edit Track

The Edit Track function allows you to select multiple tracks from different master discs and place them on one Audio CD. The maximum number of tracks that can be written to the CD is 99. In the Edit Track function, there are three options: CD to CD Edit, Play Audio Track and Close Session.   **Play Audio Track will not function, as the reader drive does not include a headphone jack.**

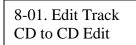The Edit Track functions are not applicable to DVD media.
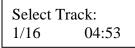
CD to CD Edit

To use the CD to CD function, press the ▼▲ buttons until the display reads:

```
8. Edit Track
```

1.   Press the ENT button. The following screen appears:

```
8-01. Edit Track
CD to CD Edit
```

2.   Place the first master audio CD into the DVD reader drive. Place the blank CDs into the recorder drives. Press the ENT button and the following screen appears:

```
Select Track:
 1/16          04:53
```

3.   To select a track that you want to burn to the blank discs, press the ENT button. This will put a + symbol in front of that track:

```
Select Track:
+ 1/16        04:53
```

4.   Press the ▼▲ buttons to scroll through the tracks on that CD, selecting the tracks you wish to record.

5. Once all of your tracks are selected for that master, press the ▼ button until the display reads:

```
Select Track:
End    1Track   04:53
```

This screen shows the total number of tracks selected from the master disc and the total time of those tracks.

6. Press the ENT button. The following screen appears:

```
End Edit Disc
And burn?   YES
```

Note: Pressing the ▼ button and selecting NO takes you back to Editing tracks.

7. Press the ENT button to begin recording the selected tracks to the blank discs. The following screen appears:

```
Copying – 48x Edit
1/16    →    1/1
```

8. Once the tracks are copied to the blank discs, the following screen appears:

```
Burn Complete!
OK: 07
```

9. Press the ESC button to take you to this screen:

```
Continue Edit
Next disc?  NO
```

If you wish to continue to add more audio tracks to the discs in the recorder drive, press the ▼ button to change the NO to YES. Then press Enter.

The reader drive will open and ask you to put in the next master disc. Place the new master disc into the drive and close the tray. Go to step 3 and repeat the process.

Once you have completed copying the audio tracks to the recorder drive discs, you will need to close the discs.

10. At this screen, leave the selection as NO and press ENT:

```
Continue Edit
Next disc?  NO
```

Once ENT is pressed, the following screen appears:

```
Close all disc's
Sessions?  Yes
```

11. Press the ENT button. The following screen appears:

```
Closing Session
Please wait….
```

Once the discs are closed, the following screen appears:

```
Close Complete
OK: 07      Fail: 00
```

Close Session

The Close Session function is used only if you did not close an audio CD, as described in the Edit Track / CD to CD Edit section. You can use this function to manually close the discs.

To use the Close Session function, press the ▼▲ buttons until the display reads:

```
8. Edit Track
```

Press the ENT button. The following screen appears:

```
8-01. Edit Track
CD to CD Edit
```

Press the ▼ button until the display reads:

```
8-03. Edit Track
Close Session
```

Make sure your recorded audio CDs are in the recorder drives.

Press the ENT button. The following screen appears:

```
Close all disc's
Sessions?  Yes
```

Press the ENT button. The display will indicate that the discs are being closed.

Once the discs are closed, the following screen appears:

```
Close Complete
OK: 07      Fail: 00
```

The discs are now complete.

USB Mode

The USB Mode function is used to enter and exit USB mode, using the recorder drive as an external burner for a PC. The other functions of the QD-DVD MultiDrive will not be available until you return the unit to Stand-Alone mode. Connect the QD-DVD MultiDrive to a PC with a USB 2.0 connection for optimal performance.

NOTE: If this menu option is not available, please refer to pages 17-18 for instructions on how to access the Advanced Setup menu and enable USB Mode.

To use the USB Mode function, press the ▼▲ buttons until the display reads:

```
10. USB Mode
```

Press the ENT button. The following screen appears:

```
USB L.H Mode
```

The QD-DVD MultiDrive is now ready for using as an external burner connected to a PC.
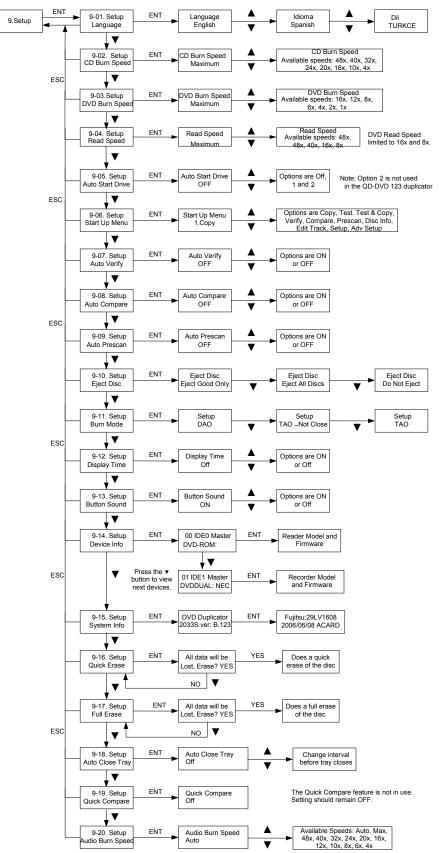
Exiting USB Mode:
With the display reading USB L.H MODE, press the ▼▲ buttons to exit USB L.H Mode. The display will change to:

```
Back to SA-Mode?
Yes
```

The ▼▲ buttons allow you to change from Yes to No. YES will reboot the QD-DVD MultiDrive and return you to Stand Alone Mode, NO will allow you to remain in USB Mode. Press ENT to make your selection.

Setup

9.Setup	ENT→	9-01. Setup Language	ENT→	Language English	▲▼	Idioma Spanish	▲▼	Dil TURKCE

ESC

9-02. Setup CD Burn Speed	ENT→	CD Burn Speed Maximum	▲▼	CD Burn Speed Available speeds: 48x, 40x, 32x, 24x, 20x, 16x, 10x, 4x

9-03.Setup DVD Burn Speed	ENT→	DVD Burn Speed Maximum	▲▼	DVD Burn Speed Available speeds: 16x, 12x, 8x, 6x, 4x, 2x, 1x

9-04. Setup Read Speed	ENT→	Read Speed Maximum	▲▼	Read Speed Available speeds: 48x, 48x, 40x, 16x, 8x	DVD Read Speed limited to 16x and 8x.

ESC

9-05. Setup Auto Start Drive	ENT→	Auto Start Drive OFF	▲▼	Options are Off, 1 and 2	Note: Option 2 is not used in the QD-DVD 123 duplicator

9-06. Setup Start Up Menu	ENT→	Start Up Menu 1.Copy	▲▼	Options are Copy, Test. Test & Copy, Verify, Compare, Prescan, Disc Info, Edit Track, Setup, Adv Setup

9-07. Setup Auto Verify	ENT→	Auto Verify OFF	▲▼	Options are ON or OFF

9-08. Setup Auto Compare	ENT→	Auto Compare OFF	▲▼	Options are ON or OFF

ESC

9-09. Setup Auto Prescan	ENT→	Auto Prescan OFF	▲▼	Options are ON or OFF

9-10. Setup Eject Disc	ENT→	Eject Disc Eject Good Only	▼	Eject Disc Eject All Discs	▼	Eject Disc Do Not Eject

9-11. Setup Burn Mode	ENT→	Setup DAO	▼	Setup TAO –Not Close	▼	Setup TAO

9-12. Setup Display Time	ENT→	Display Time Off	▲▼	Options are ON or Off

ESC

9-13. Setup Button Sound	ENT→	Button Sound ON	▲▼	Options are ON or Off

9-14. Setup Device Info	ENT→	00 IDE0 Master DVD-ROM:	ENT→	Reader Model and Firmware

Press the ▼ button to view next devices. ▼

		01 IDE1 Master DVDDUAL: NEC	ENT→	Recorder Model and Firmware

ESC

9-15. Setup System Info	ENT→	DVD Duplicator 2033S ver: B.123	ENT→	Fujitsu:29LV1608 2006/06/08 ACARD

9-16. Setup Quick Erase	ENT→	All data will be Lost, Erase? YES	YES→	Does a quick erase of the disc

NO ▼

9-17. Setup Full Erase	ENT→	All data will be Lost, Erase? YES	YES→	Does a full erase of the disc

ESC

NO ▼

9-18. Setup Auto Close Tray	ENT→	Auto Close Tray Off	▲▼	Change interval before tray closes

9-19. Setup Quick Compare	ENT→	Quick Compare Off		The Quick Compare feature is not in use. Setting should remain OFF.

9-20. Setup Audio Burn Speed	ENT→	Audio Burn Speed Auto	▲▼	Available Speeds: Auto, Max, 48x, 40x, 32x, 24x, 20x, 16x, 12x, 10x, 8x, 6x, 4x

The Setup menu includes many settings the user can select to customize the use of the QD-DVD MultiDrive duplicator. Please refer to the chart above for the location and options of these settings. A description of the options in the setup menu follows.

Language

The QD-DVD MultiDrive duplicator has two language options, English and Spanish. English is the default setting.

CD Burn Speed

The default CD record speed for the QD-DVD MultiDrive is Maximum (48x). The other available record speed options are: 40x, 32x, 24x, 20x, 16x, 10x, and, 4x. Note that some burn speeds are not supported by CD-R media, and will burn at the next lowest supported speed.

DVD Burn Speed

The default DVD record speed for the QD-DVD MultiDrive is Maximum (16x). The other record speed options are: 12x, 8x, 6x, 4x, 2x, and 1x.

Read Speed

The default CD read speed for the QD-DVD MultiDrive is Maximum (48x). The other read speed options are: 48x, 40x, 16x, and 8x.

Auto Start Drive

The Auto Start Drive is used to automatically start recording, once the master disc and blank discs are inserted into the drives.

There are 3 options for this setting, Off, 1 and 2. To use this feature, change the value from OFF to 1. The 2 setting is not used. Once the value is set to 1, the system will automatically start recording once a master and blank discs are detected.

Startup Menu

The Startup Menu selection allows you to select the main menu item that appears when the QD-DVD MultiDrive duplicator starts up. The default setting is 1. Copy. Any of the 9 menu items can be selected.

Auto Verify

The Auto Verify function can be turned On if you wish to verify every copy you make with the QD-DVD MultiDrive duplicator. The verify function checks the copied disc, to see if it can be read. It does not compare the copy with the master disc. The default setting is Off.

Auto Compare

The Auto Compare function can be turned On if you wish to Compare every copy with the master disc. The Compare function only works with Data master discs. If there is audio or video on the master disc, the Compare function will not work. The default setting is Off.

Auto Prescan

The Auto Prescan function can be turned On if you with to Prescan every master disc before recording. The default setting is Off.

Eject Disc

There are 3 options for the Eject Disc setting:
1. Eject good discs only
2. Eject all discs
3. Do not eject discs

The default setting is to eject the good discs only.

Burn Mode

There are 3 options for the Burn Mode setting:
1. DAO   (Disc At Once)
2. TAO – Not Close   (Track At Once, not closed)
3. TAO   (Track At Once, closed)

The default setting is DAO. It is recommended that this setting be used.

Display Time

The display time function is used to display the total record time, after the recording is completed. The default setting is Off.

Button Sound

The Button Sound function is used to turn on or off the beep sound a button makes when pressed. The default setting is On.

Device Info

The Device Info function displays a variety of information about the reader and recorder drives, including model number and firmware revision. Please review the Setup Menu on page 14 for more details.

System Info

The System Info function displays a variety of information about the controller module, including model number and firmware revision. Please review the Setup Menu on page 14 for more details.

Quick Erase

The Quick Erase function is used to Erase CD-RW and DVD-RW media. This option performs the Quick erase of the discs.

Full Erase

The Full Erase function is used to Erase CD-RW DVD-RW media. This option performs the Full erase of the discs.

Auto Close Tray

The Auto Close Tray function will automatically re-close the recorder trays based on the selections made in the Auto Start Drive settings. Select the time period (in seconds) from those shown. The default setting is OFF

Quick Compare

The Quick Compare function is not enabled on the QD-DVD MultiDrive. The default setting of OFF should not be changed.

Audio Burn Speed

This allows you to set the burn speed for Audio discs independently of the CD Burn Speed. This burn speed setting will always be used during duplication of audio discs. Note that some burn speeds are not supported by CD-R media, and will burn at the next lowest supported speed.

Advanced Setup Menu

11. Advanced Setup	—ENT→	11-01 Adv Setup Under Run Protect	—ENT→	Under Run Protect ON	▲ ▼ → Options are ON or Off

ESC — 11-02 Adv Setup Overburn —ENT→ Overburn Off   ▲ ▼ → Options are ON or Off

ESC — 11-03 Adv Setup Read Error Skip —ENT→ Read Error Skip OFF   ▲ ▼ → Options are ON or Off

ESC — 11-04 Adv Setup Burn-In —ENT→ Burn-In Erase & Copy   ▲ ▼ → Burn-In Test   To Be Used by Service Personnel ONLY

ESC — 11-05 Adv Setup Update Firmware —ENT→ Update F/W A321 To B.123? YES —YES→ Firmware is updated   NO

ESC — 11-06 Adv Setup Compare Firmware —ENT→ Last update F/W OK!

ESC — 11-07 Adv Setup H/W Diagnostics —ENT→ Runs through controller diagnostics

ESC — 11-08 Adv Setup Load Default —ENT→ Load Default Config? YES —YES→ Load Default OK!   NO

ESC — 11-09 Adv Setup ISRC & MCN —ENT→ ISRC & MCN ON   ▲ ▼ → Options are ON or Off

ESC — 11-10. Adv Setup USB Option —ENT→ USB Option On   ▲ ▼ → Options are ON or Off

ESC — 11-11. Adv Setup CD-Text —ENT→ CD-Text On   ▲ ▼ → Options are ON or Off

ESC — 11-12. Adv Setup Disc Counter —ENT→ Disc Counter View —ENT→ View disc counts

ESC — 11-13. Adv Setup Update Drive F/W —ENT→ **NOT IN USE**

Accessing the Advanced Setup Menu

The Advanced Setup menu includes options for the more advanced user. If you have any questions about using these functions, please contact the Microboards technical support department.

To access the Advanced Setup Menu, press and hold the ESC button for three seconds.

UnderRun Protect

The UnderRun Protect feature allows the recorder to use Burn Proof during recording. This setting defaults to ON and should remain on. This feature protects against making "coasters" or bad discs. Again, this setting should always remain ON.

Overburn

The default setting for this feature is OFF. This feature is not supported by the QD-DVD MultiDrive duplicator. Overburn can be used with certain CD recorders, allowing more data to be burned to the disc.

Read Error Skip

The Read Error Skip feature is used if you wish to ignore read errors during duplication. The default setting is OFF and it is highly recommended that this setting is not changed. If it is turned ON, there is the possibility of creating discs that are not the same as the master.

Burn-in

The Burn-in function is used to test the operation of the QD-DVD MultiDrive duplicator and is for service purposes only. This function should only be used if directed by Microboards Technical Support.

Update Firmware

The Update Firmware feature is used to update the controller firmware.

1. To update the firmware: Place the firmware CD into the reader drive (top).
2. Press the ENT button
3. The display will show the current and update firmware versions, as shown to the right:
4. Press the ENT button to complete the firmware update.
5. The duplicator will reboot automatically after installing the new firmware.

```
Update F/W      A.987
To B.123    YES?
```

Compare Firmware

The Compare Firmware function is used to compare the firmware installed on the controller with the firmware on the CD.

H/W Diagnostic

Hardware Diagnostics runs a number of tests on the controller. Normally this function is used by service personnel.

Load Default

The Load Default feature will set all the values back to the factory default settings.

ISRC & MCN

The ISRC (International Standard Recording Code) & MCN (Media Catalog Number) feature allows you to copy this information from a CD audio master to the blank disc. The default is OFF.

Switch USB Mode

The Switch USB Mode allows you to enable or disable the ability to use the QD-DVD MultiDrive recorder drive as an external burner for your PC. Selecting ON will allow access to the USB Mode menu, which will appear as menu item 10. Selecting OFF will hide the option in the main menu.

The QD-DVD MultiDrive cannot use any function while operating in USB Mode.

CD Text

This feature allows CD-Text content to be copied from master to blank. The default is OFF.

Disc Counter

This feature allows you to view the number of successful and unsuccessful burns. The JC OK entry is for successful burns for the entire unit; you can also view the individual drive performance by using the ▼▲ buttons.

Update Drive F/W

This feature is not used by the QD-DVD MultiDrive.

Specifications – QD-DVD MultiDrive Series

Model	Recorders	Dimensions, inches (H x W x D)	Weight, lbs
QD-123	3	10.5 x 8 x 17	21 lbs
QD-125	5	17 x 8 x 18	33 lbs
QD-127	7	17 x 8 x 18	37 lbs

- Product Interface ATAPI/ IDE
- Max Read Speeds: CD 48x, DVD 16X
- Max Write Speeds: CD 48x, DVD 16X
- System Display LED
- Write Method Auto Detect (DAO, TAO)
- Operation Mode COPY, TEST, PRESCAN

- Data Buffer 32 MB
- Firmware Upgrade Via CD-ROM
- AC Input: 115/230 VAC; 8/5 AMPS MAX; 50-60Hz
- Maximum Operating Temperature: 25 Degrees C.
- Relative Humidity: 30% - 80% non-condensing.

- Supported Formats: CD-ROM Mode 1 & 2 CD-DA, CD-ROM/XA Video CD, Game CD, Mix Mode, Multisession, HFS CD Bridge, Photo CD, CD Extra, CD Text; DVD-ROM, DVD-+R, DVD-+RW, DVD-+R DL, DVD-VIDEO

CAUTION: Disconnect AC Power Cord Before Servicing. High Voltages Present with Unit Powered Off and Line Cord Connected.

Technical Support

For technical questions or support issues, contact Microboards Technology technical support:

United States	**Europe**	**Japan**
PH: 952-556-1639	PH: +44 (0) 845 230 7800	PH: 03-3561-2266
FAX: 952-556-1628	www.microboards.co.uk	www.microboards.co.jp
support@microboards.com		
www.microboards.com		

Please have the Model and Serial Number of your QD-DVD available when contacting Technical Support.

FC

Any unauthorized modification to this equipment may result in the revocation by the FCC of the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and antenna
- Connect the equipment into an outlet on a circuit different than that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

CE

This product is in conformity with the EMC Directive (89/336/EEC) through compliance with the following European standards: EN 55022, EN 55024. The CE mark has been affixed in accordance with the CE Marking Directive 93/68/EEC.

Canadian Department of Communications (DOC) Statement

This Class B digital apparatus complies with the Canadian ICES-003 Issue 4:2004. Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canade.

Appendix 1 List of Functions

1 Copy
2 Test
3 Test & Copy
4 Verify
5 Compare
6 Prescan
7 Disc Info
8 Edit Track (for CD only)
   8-1 CD to CD Edit
   8-2 Play Audio Track
   8-3 Close Session
9 Setup
   9-1 Language (Default is English)
   9-2 CD Burn Speed (Default is Maximum)
   9-3 DVD Burn Speed (Default is Maximum)
   9-4 Master Read Speed (Default is Maximum)
   9-5 Auto Start Drive (Default is Off)
   9-6 Startup Menu (Default is Copy)
   9-7 Auto Verify (Default is Off)
   9-8 Auto Compare (Default is Off)
   9-9 Auto Prescan (Default is Off)
   9-10 Eject Disc (Default is Eject Good Only)
   9-11 Burn Mode (Default is DAO)
   9-12 Display Time (Default is Off)
   9-13 Button Sound (Default is On)
   9-14 Device Info
   9-15 System Info
   9-16 Quick Erase
   9-17 Full Erase
10. Adv Setup
   10-1 UnderRun Protect (Default is On)
   10-2 Overburn (Default is Off)
   10-3 Read Error Skip (Default is Off)
   10-4 Burn-in
   10-5 Update Firmware
   10-6 Compare Firmware
   10-7 H/W Diagnostic
   10-8 Load Default
   10-9 ISRC & MCN (Default is Off)
   10-10 Switch USB Mode

Appendix 2 LCD Messages

Normal Conditions:

Initialize SDRAM...Initialize the memory of the system.
Detect Drives...Detect what drives are connected with the system.
User Abort!...Cancel the job during operation.
Analyzing...Analyze the source disc.
Source Drive Not Ready..Source drive is not ready to read.
Target Drive Not Ready...Target drive is not ready to write.
Source Disc Not Ready.. Source disc is not ready to be read.
Target Disc Not Ready... Target disc is not ready to be written into.
Erasing disc...The system is erasing the data on the disc.
Fail to get Drive Info!... The drive information cannot be obtained.
Fail to get Src Disc Info!............................... The information of source disc cannot be obtained.
Save new config Fail!..................................... The new setting of configuration cannot be saved.
Load Default Config?...Do you want to load the default settings?
Preparing... The system is preparing to record.
Check Target Please Wait ....The system is checking the target device.
Audio Disc!!! Can't compare!............................... The system cannot compare the audio discs.
Identical.. The comparison results are the same.
Read disc error ....During comparison the disc cannot be read.
Cannot read TOC.. The system cannot read the contents of disc.
TOC not match.. The comparison results are not the same.
Target overflow................................. The target disc hasn't enough capacity to store new data.
Target Disc Not Empty!!!... The target disc still has data.
Press a Key to Eject Good Disc………………Press any key to eject the good disc after copying.
Press a Key to Eject Fail Disc.......................Press any key to eject the failed disc after copying.
CD-RW does not Support the Func.................................. CD-RW doesn't support this function.
Hold ESC to exit.. Press **ESC** for a second to terminate the test.
All data will be lost, erase?..............All data on the disc will be lost. Confirm the erasing of data.
Erase Finished.. The erasing of data comes to an end.
No Erasable Disc in CD-RW!!...........................The disc on the CD-RW device is not rewritable.

Audio Editing:

Lost selected Tracks?... Abort the selected tracks and delete them.
End edit disc and burn?...................................... Finish the music disc editing and start to copy.
Continue edit next Disc?................................ Ask if you want to continue the music disc editing.
Target Overflow Re-Select............. The disc capacity is not enough to store the selected tracks.
Close all disc's session?.. Confirm the closing of disc sessions.
NO AUDIO track in this disc... The source disc has no audio track.
Insert next disc.... Insert the next audio disc.
Sessions were closed already!............................. The disc sessions have already been closed.
Tgt overflow, del last trk?.............. The disc capacity is not enough to store the selected tracks.
Ins empty disc Continue?................... Do you want to insert a blank disc and continue copying?

Firmware Update:

Invalid firmware Disc.. The disc doesn't contain a valid firmware.
Updating F/W...The system is updating the firmware.
Update F/W xxx to yyy?................ Do you want to update the firmware version from xxx to yyy?
Searching F/W .... The system is searching for a valid firmware.
Check Sum Error!.. The updated firmware has errors.
Last update F/W OK!... The firmware is updated successfully.
Last update F/W Fail!.. The firmware is not updated successfully.
Flash ROM fail!.... Data cannot be written into Flash ROM.