



# KORG

## **Main Features**

- 4-track digital recorder featuring two-track simultaneous recording, with 8 virtual tracks per track for a total of 32 tracks!
- Easy and intuitive knob-based user interface allows instant access to effects, rhythm patterns, virtual tracks and digital editing with dedicated knobs.
- High capacity Compact Flash™ data storage provides a stable and quiet recording medium with plenty of recording time! Compact Flash cards of up to 2 GB can be used!!
- Built in USB connectivity allows you to easily-transfer data to your computer for backup, playback and editing.
- XLR and ¼ inch inputs accommodate-microphone, guitar, keyboards, etc.
- Korg's REMS modeling, technology delivers 93 effect types that can be used for guitar, insert, master or final effect processing. 100 preset effect programs and 100 user programs.
- Effects include accurate amp, cabinet and microphone modeling simulations, as well as a large variety of multi-effects including reverb, delay, pitch-shift, chorus, tremolo, flanger, phaser and more!



- Favorite knob for instant recall of frequently used preset and custom effects settings.
- A full suite of non-destructive editing tools including copy/paste, punch in/out, as well as time compression/expansion and more!
- 87 built-in rhythm/metronome patterns and chromatic tuner are built-in.
- Full-range internal condenser microphone!
- Includes 64MB Compact Flash card and AC adaptor

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## **The D4 Digital Recorder**

The D4 is a digital multi-track recorder that uses Compact Flash as its recording and storage medium, and provides high-quality audio using the MPEG1 Layer 2 recording format. A 2GB Compact Flash card provides up to 70 hours of recording time (single track/economy mode)! You can record from any external sources, and you can also use the built-in condenser microphone to record acoustic instruments and vocals. The D4 provides two ¼ inch inputs and one XLR input, allowing you maximum flexibility to record up to two different sources (like vocal and guitar, or the stereo outputs of a keyboard) simultaneously! Once you've recorded your songs, you can transfer them to your computer (Mac or PC) for backup and conversion to MP3 or .WAV formats, etc., using the built in USB connector. The included Compact Flash card contains one demo song. You can use this song to jam along with, to learn the mixing, effects, and other functions in the D4, and then if you like, erase the data on the card and use it for your own projects.

## **Getting Started**

#### Install the included 64MB Compact Flash card:

Make sure that the power is OFF before inserting or removing a Compact Flash card.

Inserting the card:	Insert the card in the right panel Compact Flash slot, with the card label facing upwar		
	Firmly push the card all the way into the card slot.		
Removing the Card:	Grasp the ridge located on the underside of the card and pull it out toward you.		

#### Get connected:

- 1. Connect the included AC adaptor to the rear panel **DC 9V** jack.
- 2. Make your external instrument connections as follows:
  - To connect a guitar or bass: plug into the rear panel INPUT 1 jack, and set the INPUT 1 switch to GTR.
  - To connect a microphone with an XLR connection: Plug into the top panel INPUT 2 XLR connector, and set the rear panel INPUT 2 switch to EXT.
  - To connect a microphone using a ¼ inch connection: Plug into the rear panel INPUT 1 jack, and set the INPUT 1 switch to MIC.
  - To connect line level instruments such as a keyboard: For mono connection, use INPUT 1 and set the INPUT 1 switch to LINE. For stereo connection, use both INPUT 1 and 2 and set both INPUT 1 and 2 switches to LINE.
  - To use the built-in condenser MIC: On the rear panel, set INPUT 2 to INT.

As with any microphone, remember to watch your monitor speaker and headphone levels when using a microphone, as feedback can occur.

#### Power up, and listen to the demo song:

- 1. Connect the D4 to a powered stereo monitoring system, using the rear panel **MASTER OUR L/R** RCA jacks. If using headphones, connect them to the right panel headphone jack.
- 2. To power-up, first lower the **MASTER** fader to 0, and set the rear panel **POWER** switch to **ON**.
- 3. Set the Track Faders 1-4 to "7". (that's right between 6 and 8  $\bigcirc$  )
- 4. Press the ▶ play key to begin playback of the first demo song "BOA Blues", and raise the MASTER Fader to a comfortable listening level. If using headphones, set the volume control on the right side panel to a desired level. When finished, press the stop key to stop playback.
- 5. Try the transport controls before you go any further; you'll notice that they work a lot like a portable CD player, and should be easy and familiar to use.

#### Transport Control Tips:

- During playback, pressing the ◀◀ rewind key **once** resets the song back to the beginning (will also return song to the beginning when playback is stopped).
- **Holding down** ◀◀ "rewinds" the song and will playback in reverse at double speed.
- Holding down ▶▶ "fast-forwards" or plays back the song at double speed.
- During playback you can **press and hold** the ► play key to play back at half speed.

## **The Mode Knob**

The MODE Knob makes it easy to access the D4's eleven different modes of operation, listed below:

LOCATE	SONG SEL	SONG EDIT
NEW SONG	CARD	USB
REC MODE	SYSTEM	TRK EDIT
V-TRK	RHYTHM	

#### To select Modes, just rotate the MODE knob!

#### There are also four "sub modes":

Effect	Effect Write	Tuner	Punch-Rec
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After you've finished this guide, you can find more information on each MODE in the D4 owner's manual, beginning on page 24.

## **Recording Basics**

#### Create a new song:

- Set the MODE knob to "New Song". The display will indicate the song grade ("SngGrade") and "Std" will be flashing > Now use the VALUE dial to select the desired song grade. For this exercise, select "Std" grade. (Song grade information is below)
- 2. After choosing the song grade, press the ► **CURSOR** key on the right (flashing). The display will briefly indicate "WORKING", and then "New Song". That's it you're almost ready to record!
- To rename songs, see page 29 of the owner's manual, but for now, leave the song name set to "New Song"....

Information on Song Grade selection (based on the included 64MB card):

- Eco: Economy, extended-length recording (Max. time, 64MB, 1 Track: 132 minutes)
- STD: Standard, very high quality, normal use (Max. time, 64MB, 1 Track: 64 minutes)
- HiQ: High audio quality (Max. time, 64MB, 1 Track: 44 minutes)

#### Set up the Rhythm and Tempo for your new song:

- 1. Set the **MODE knob** to "RHYTHM". The name of the currently selected rhythm pattern will be displayed.
- 2. Use the **VALUE dial** to select a pattern. *Note: If the display indicates "off", rotate the VALUE DIAL to the right, until you hear a drum pattern.*
- 3. Press the ► CURSOR once, to display "Tempo", and then use the VALUE dial to adjust the tempo. The cursor will also take you to the beat (time signature) and "level" adjustment if needed.
- The drums NEED NOT be recorded to the tracks, but instead are always synchronized to the recorder and to your recorded tracks! This means you can audition new rhythm patterns whenever you like!
  - 4. Press the **EXIT** key twice the rhythm playback will stop.
- For a list of rhythm patterns, available time signatures, and recording count-in options, please refer to page 91 in the D4 owner's manual.

## The D4 Effects

The D4 provides four types of professional effects:

- Guitar/Mic effects
- Insert/ Guitar+Vocal effects
- Master effects
- Final effects

The effect types available can be selected by pressing the keys just to the left of the Track Faders.

The D4 includes 93 effect algorithms (including Korg's amazing REMS sound modeling effects), with 100 preset/100 user effect programs. If you select the effect type **GUITAR** (for recording on input - mono/1 track only) or **INSERT** (for stereo instrument recording - stereo in/out, stereo track bouncing, etc.), you can apply effects as you record.

If you select **MASTER** as the effect type, you can send the signal from any track to an effect for overall processing. If you select **FINAL** as the effect type, you can apply an effect to the master L/R bus, and use this effect as a mastering processor for track bouncing and other track-related operations.

#### Using a Guitar to record...

#### Get ready to record:

1. Plug your guitar into **INPUT 1** and set the **INPUT 1** switch on the back panel to **GUITAR**.

#### Tune up:

- 2. Press the **TRACK ASSIGN 1** and **2** keys simultaneously to enter Tuner mode **>** When finished tuning, press the **EXIT** key to exit Tuner mode.
- Entering Tuner mode bypasses the currently- assigned effect.
  - 3. Press the TRACK ASSIGN 1 key- the key will light.
  - Track 1 is automatically selected as your recording destination. To arm a different track, press the PAN knob above the desired track's fader.
  - 5. Press the GUITAR/MIC FX key (left of the faders) the key will light.
  - 6. Rotate the **VALUE dial** to select an effect program.
  - 7. Press **Exit** to leave the effect sub-mode.
- When using the Guitar/Mic effects, you can only select one track for recording.

#### **Record your first track...**

#### Set your levels and then record:

- 1. While you play, adjust the **INPUT LEVEL 1 knob** above the **TRACK ASSIGN** keys. Set this knob so that you achieve a fairly hot level *without* the INPUT 1 LED lighting.
- 2. Adjust the FADER for the previously selected destination TRACK to achieve a fairly hot level without reaching the "CLIP" (distortion) level in the LCD display.
- 3. Press the record key it will blink, and you'll hear the previously selected rhythm pattern you are now in record-standby mode > Play your instrument to rehearse, and then...
- 4. Press the  $\blacktriangleright$  play key to record and press the  $\blacksquare$  key when you are finished recording.
- 5. Press the **PAN knob** to disarm the record track, and then press the **<<** key once, to go to the song beginning.
- 6. Press the ► play key and listen to your results > Press the key to stop playback.

#### Recording a stereo source such as a keyboard:

- 1. Set the **INPUT 1 and 2** switches both to **LINE**, and connect your keyboard to **INPUT 1 and 2**.
- 2. Press the **TRACK ASSIGN 1** key; track 1 is automatically elected as your recording destination (if you wish to record on track 3 and 4, press the **PAN knob** above the **TRACK 3 fader**).
- 3. Press the **TRACK ASSIGN 2** key; track 2 is automatically selected as your recording destination (unless track 3 was selected in the previous step, then track 4 will automatically be armed).
- Press the INSERT/GTR+VO key. The key will light > Now use the VALUE dial to choose an effect program and press Exit to leave the effect sub-mode.
- 5. While playing, adjust the **INPUT LEVEL 1 knob** above the **TRACK ASSIGN** keys. Set this knob so that you achieve a fairly hot level *without* the INPUT 1 LED lighting. Repeat process for **INPUT LEVEL 2.**
- 6. Adjust the FADERS for the previously selected destination tracks (1 /2 or 3/4) to achieve a fairly hot level without reaching the "CLIP" (distortion) level in the LCD display.
- 7. Follow steps 3-4 in the previous section to record and playback the song, disarming both tracks for playback by pressing the respective **PAN** knobs.

#### **Virtual Tracks**

There are **32 Virtual tracks** available for recording on the D4. Each of the four tracks contains eight Virtual tracks, allowing you to record multiple takes, and then choose your favorite take from the Virtual tracks. For more information on how to use Virtual tracks, see the D4 owner's manual, pages 30-31.

### A recap of basic recording:

- 1. Choose an input and plug in your instrument or microphone, or use the internal mic.
- 2. Choose the desired input type (GTR, MIC- EXT or INT or LINE).
- 3. Press the appropriate **TRACK ASSIGN** key (1 or 2).
- 4. Track 1 is automatically selected as your recording destination. To arm a different track, press the **PAN knob** above the desired track's fader.
- 5. Adjust trim level above track assign button, and then adjust fader level.
- 6. If you want to record with an effect, choose either **GUITAR/MIC** for mono or **INSERT/GTR+VO** for stereo.
- 7. Use the VALUE dial to choose an effect; then press Exit.
- 8. Make sure your Input and Fader levels aren't clipping!!
- 9. Press the record key followed by the ► play key, and record!!
- For information on how to Mixdown your multitrack recordings to DAT, MD or other sources, see the D4 owner's manual, page 51,

#### Using the Favorite knob

The **PRE/FAVE** (Favorite) knob gives you instant access to effect programs at any time.

The D4 comes shipped from the factory with 11 effects printed on the top panel and registered to the Favorite knob. You can easily change this and store your own effects.

#### Registering effects to the Favorite knob:

- 1. Choose an effect program by pressing the appropriate **FX key** (i.e. GUITAR/MIC, INSERT/GTR+VO, MASTER, FINAL); then scroll through the programs with the **Value dial**.
- 2. Press the WRITE KNOB key (below the PRE/FAVE knob). The display will indicate "knobPosi."
- 3. Use the VALUE dial to select the PRE/FAVE KNOB position where you want to register the effect (1-11), and then press the CURSOR ► key. The display will then indicate "Write OK?"
- 4. Press the **CURSOR** ► key again, and the display will indicate "Finish!" The effect will now be registered to this **PRE/FAVE KNOB** position for instant recall!

#### Selecting effects with the Favorite knob:

- 1. Rotate the **PRE/FAVE knob** to select the desired effect.
- 2. To bypass the currently selected effect program, press the illuminated **FX key** (GUITAR/MIC, INSERT, BTR+VO, MASTER or FINAL).
- 3. To turn the effect off, press and hold the illuminated **FX key**.

## Creating a 2-track (Stereo) MP2 conversion for transfer and playback on your computer

You'll need to have standard media software installed on your computer to go through the following section. If you do not have the required software, you can download it from www.microsoft.com (Windows Media Player) or www.apple.com

(QuickTime Player). Playback of D4 transferred audio currently works with Windows ME 2000 or later, and Mac OS 9.4 or later.

In order for you to playback D4 songs on your computer, you'll need to convert the D4 song data to a stereo MP2 format file first:

- Choose the song you wish to covert; select SONG SEL with the MODE knob, choose the song with the VALUE dial and then press the CURSOR ► key (make sure the song is set to play from the song beginning).
- 2. Set the MODE knob to "REC MODE".
- 3. Use the VALUE dial to select "ConvrtMP2".
- 4. Press the **EXIT** key to return to play mode.
- 5. Press the TRACK 1 PAN knob; both track 1 and 2 record select LED's will light.
- 6. Begin playback of the song and adjust the panning for each track as needed, as well as the **TRACK** and **MASTER faders**. Make sure that the track and master (left and right) levels are not clipping.
- 7. Reset to the beginning of the song once you are satisfied with the playback levels.

If the rhythm guide is on, the rhythm playback will also be recorded in the next step. If you don't want the rhythm to record, press the **AMB/RHYTHM** knob to turn the rhythm off.

- 8. Begin recording: Press the key and the ► key, and when the song has finished playing back, press the key.
- 9. A new song (sharing the same title) will now be created in stereo MPEG audio layer 2 format.

#### Backing up your songs to a computer:

- 1. Connect a **USB cable** (not included) between the D4's rear panel **USB port** and your computer's USB port (PC or Mac).
- 2. Use the **MODE Knob** to select **USB**.
- 3. When the display indicates "Ready?", select "Yes" with the VALUE dial, and then press the CURSOR ► key (the display will then read "CrdReady").

On a Windows-based system: A drive named "Removable Disk" is added under 'My Computer'.

**On a Mac-based system:** A drive named "Unnamed" is added to the desktop.

When you open the removable drive that was added to your computer, you will see the contents of the card that is inserted in the D4.

(Make sure to leave the song folders intact whenever you backup or restore data. Do not open the folders and try to transfer files from within, as the <u>entire folder</u> needs to be transferred.)

You can now copy the desired song/effect data to your computer. D4 song data from your computer can also be written to the card.

After copying, you can launch your media player software and playback your song, email it - even burn a CD from it!

**To disconnect from your Windows PC:** Select the card icon on the computer's taskbar > Once you've selected to safely remove the hardware/drive, you will be prompted: "It is safe to disconnect the USB mass storage device" > press the D4's **CURSOR** > key > When the display indicates "Complete" select YES with the **VALUE dial** and then press the **CURSOR** > key > you can now unplug the USB cable.

For Macintosh computers: Drag the "Unnamed Drive" into the Trash, or select and highlight the drive on the desktop, and then select "Eject" from the "Special" menu > Make sure the D4 display changes from "CardLock" to "CdNotRdy", and then press the D4's **CURSOR** ► key > When the display indicates "Complete", select "YES" with the **VALUE dial** and press the **CURSOR** ► key > you can now unplug the USB cable

#### More information on using Compact Flash...

#### **Deleting a song from the Compact Flash card:**

- 1. Select **SONG SEL** with the **MODE knob**, choose the song with the VALUE dial and then press the **CURSOR** ► key.
- 2. Set the MODE knob to SONG EDIT.
- 3. Select the delete operation by rotating the VALUE dial to "Delsong", and then press the CURSOR ► key. The display will now indicate "DestSong".
- 4. Press the **CURSOR** ► key. The display will indicate "Del OK?" and "YES" will be flashing if not, use the **VALUE** dial to select "Yes".
- 5. Press the **CURSOR** ► key. The display will indicate "Sure"?> Use the **VALUE dial** to select "Yes", and then press the **CURSOR** ► key. The song will now be deleted from the card.

#### Formatting Compact Flash cards:

In order to use a Compact Flash card on the D4, it must be formatted on the D4 itself. Cards formatted on computer or any device will not be recognized by the D4. See the D4 owner's manual, page 55 for more information.

## Be sure to read the D4 Owner's Manual for more in-depth information, and visit <u>www.korg.com/D4</u> for new D4 support documents, tips and tricks!

