EasyStart

D16XD *Xtended Definition*
Digital Recording Studio
TouchView *REMS* CD-RW *24bit/96kHz*

KORG

D16XD Main Features

- Intuitive 320x240 tilt-able TouchView display, plus dedicated Effect and EQ knobs
- 16 / 24bit recording / playback @ up to 96kHz, with No Audio Compression
- 40 channel, 12 buss digital mixer (69bit processing)
- Up to 16 track simultaneous recording with optional AIB-8 input board
- 8-XLR inputs w// switchable phantom power, plus 8- ¼ TRS balanced inputs w/26dB pads and trim – expandable to total 16 inputs with optional AIB-8 board
- Eight ANALOG compressors (Before A/D conversion), expandable to 16 with ACB-8 option
- 16 track recorder plus a dedicated stereo master track – also used for track bouncing - a total of 144 virtual tracks!
- 4 band fully parametric EQ per channel plus 8 band parametric master EQ
- Up to 11 simultaneous effects per song: 8 inserts, 2 masters and a final song effect. Includes REMS mic, amp and cabinet effects (56bit)
- Automation with 100 Scenes per song
- 6 Locates and 100 Marks, and extensive digital editing of songs and tracks
- 265 PCM rhythm / metronome patterns
- Huge internal 40 GB IDE hard disk
- Internal CDRW 24x16 CDRW for ripping, mastering and backup
- USB for easy connection to computers – for backup and WAV file transfers
- Digital expansion with optional DIB-8 ADAT-compatible board

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Getting Started:

Creating and Working with a New D16XD Song:

Quick Overview of Modes

In this section, you'll tour some powerful features of the D16XD while working with the 24bit/96k demo song. In the second section, you'll create your own recording. Complete the first section now, so that you can become familiar with the main features, and get comfortable with navigation. You'll find the well-designed top panel, TouchView display and dedicated knobs around the display make working with the D16XD a breeze!

Transport controls shown as follows:
[●] = RECORD   [▶] = PLAY   [■] = STOP   [◀◀] = REWIND   [▶▶] = FAST FORWARD

First, connect the AC power cable. Make sure that the **MONITOR LEVEL** knob or **HEADPHONE** level knob is turned down first, and then connect audio cables from the **MONITOR OUT L/R** jacks on the rear panel of the unit to your stereo powered monitor system (or connect headphones to the **PHONES** jack on the front panel). Press the **[MAIN]** power key on the rear panel ➔ press the **[ON]** key (under the **red** standby light) on the top panel.

Work with one of the demo songs as you tour the mode keys:

!   *If the demo song "**TAKE ME AWAY**" is not already loaded in the D16XD, please restore it from the D16XD Factory Data CD that came with the unit. To restore the data, see the Owner's Manual page 84, and then come back to this guide to continue….*

1. Press the **[SONG]** key then press the **"SelectSong"** tab in the display ➔ press "**001: TAKE ME AWAY",** and then press **"Select".**

2. Press the **"Edit Song"** tab ➔ press "**Copy**", and then press to highlight "**A: 001**" in the display ➔ rotate the **DIAL** clockwise to the highest-numbered song displayed – this is the next available **empty** song location ➔ press "**Yes**", and then press "**OK**".

3. Now to un-protect the copied demo song: Press **"Protect"** ➔ press **"OFF",** and then press **"OK"**. Note that the rest of the song edit functions are now visible and accessible in the display.

4. The song is set to loop continuously, but for the copied song, turn the loop feature off: Press the **[REC/PLAY MODE]** key located to the left of **"LOOP"** indicator (lit). Press **"Loop Play"** in the display to turn it **off** (unlit).

5. Press the **[▶]** key to start playback of the demo song. Slowly raise the MONITOR or PHONE level knob to a comfortable listening position.

[METER] Meter Track View

The Meter Track View displays regions of audio, levels for playback tracks, effects, output levels as well as the currently selected virtual tracks, track names and locate points.

As the song continues to play…

2. Press the **[METER]** key in the lower right corner of the adjustable display.

3. You can change this view to display CH-Input, Pre or Post Fader meter levels, and also select your choice of Track or Fader views. Try it: Press the " ▶ " popup button in the upper left corner of the display ➔ under **Select View:** press **"FaderView"** then press **"OK"**. Now you're viewing meter levels in addition to Fader and Pan settings for the song!

[CH VIEW] Channel View

This screen displays the settings and status of a single channel. Level, pan, effects, EQ, etc. are all accessible on one page!

1. Press the**[■]** key to stop song playback.

2. Press the **[CH VIEW]** key ➜ select different channels by pressings the **[CH SELECT]** keys (yellow) above the faders, or press the **"CH"** in the upper left corner of the display and use the **DIAL** to change channels.

3. Press the **"Ch Routing"** tab. Here you can view the signal flow for the selected channel.

[TRACK] & [SCRUB] Virtual tracks and Track editing

1. Press the **[TRACK]** key. This screen displays the currently selected virtual track for each channel. You can name your tracks by pressing the **"Rename"** button in the display. There is also a handy time saving preset name list available! Press the **"Rename"** button, then press the ”▼” popup next to the name. Here you can scroll through the list and select one of the preset names ➜ press **"Cancel".**

2. Press the **"MasterTrk"** tab. There are eight virtual stereo master tracks available to mix (bounce) down to. These are used to bounce tracks and mixdown finished songs for CD burning.

3. Press the **"EditTrk"** tab, then press the " ▶ " popup button in the upper left corner of the display next to **"CopyTrk",** to view the list of editing functions. Leave **"CopyTrk"** selected and press **"OK".**

Perform and edit on a vocal track:

Now you'll locate and move the "laugh" on the vocal track (at the end of the song) to the beginning of the song…

1. Press and hold **[STOP]** and then press the **[MARK JUMP] [>]** key to move to the end of the song.

2. Press the **[SCRUB]** key. Select track eight (the vocal track) by pressing the " ▶ " popup button in the upper left corner of the display and select **"Trk 8"** ➜ Press **"OK".**

3. Use the **DIAL** to scrub over the vocal track. Scrub counterclockwise to the beginning of the laugh (at approximately 00:01:00.234) ➜ press **[STORE]** then press **[LOC 1/IN]**. This stores the in point. Scrub to the end of the laugh (at approxiamtely 00:01:01:300) ➜ press **[STORE]** then **[LOC 2/OUT]** to store the out point. Now we have a region of audio for editing.

4. Press the **[TRACK]** key ➜ press the **[<] [MARK JUMP]** key to return to the beginning of the song ➜ press **[STORE]** and then press **[LOC 3/TO]**. This stores the location of where you will paste the region of audio selected.

5. Leave the edit type set to **"CopyTrk"**. Select track **"8"** for the "Source" and select track **"8"** for "Destination" " ➜ press **"Exec"** then press **"Yes"** and then **"OK"**.

6. Now cut the laugh from the end of the song. Press the " ▶ " popup button in the upper left corner of the display and select **"EraseTrk"** from the list, and then press **"OK"** ➜ for "Destination" select track **"8"** ➜ press **"Exec"** then **"Yes"** and then **"OK"**.

7. Press the **[▶]** key to playback the song and hear the result.

! *You can undo edits or recording (Up to 16 levels) by pressing the **[UNDO]** key, and then select the level and press "Undo".*

[SCENE] Scene Automation

With the scene automation a song can contain 100 "snapshots" of the mixer settings. Fader, Pan, EQ and effects settings are stored with a scene and can be recalled automatically during playback.

1. Press the **[MIXER]** key ➜ press the **"FADER/PAN AUTOMATION"** button in the display then press the **"Mixer View"** tab.

2. Press the **[<] [MARK JUMP]** key to return to the beginning of the song. Push faders **1-8** and the **MASTER** fader all the way up then all the way back down. When the song is played back you will see the on screen faders return to their settings stored in the scene. Press the **[▶]** key and watch the display.

Creating and deleting Scenes:

1. Press the **[▶]** key and let the song playback for about 10 seconds then press **[■].**

2. Make some dramatic adjustments to faders **1-8** and the **MASTER** fader. Press the **"EditScene"** tab.

3. Press the **[STORE]** key, then press the **[SCENE]** key. See the new scene in the list. Rename it by pressing **"Scene_002"** in the display then press the **"Rename"** button in the display. (You can pick from a list as well) Name it and press **"OK'**.

4. Playback the song from the beginning to hear the result. You can make changes to a scene by making the desired adjustments and pressing **"OverWrite"** in the display. The changes are applied to the <u>currently active</u> scene.

5. Press the **[<] [MARK JUMP]** key. Press the Automation **"ON"** button in the display to switch it to **"OFF"** . Select YOUR scene then press **"Delete"** in the display to delete it. Leave automation **OFF**.

6. Press the **"Scene Filter"** tab. Here parameters can be made unchangable by scenes or "filtered".

(See the D16XD Owner's Manual pages 52-54 for more on Scene automation)

[EFFECT] Effects & Fully Parametric EQ

The D16XD has a multitude of high quality (56bit) effects to choose from. There are three effect sections (Insert, Master and Final). Up to **11** effects can be used simultaneously in a song! There are 128 preset and 128 user insert effect programs. Master and Final effects provide 32 preset and 32 user effect programs. These can be saved "Globally" or with a particular song.

(See the D16XD Owners Manual Pages 56-57 for DSP power and effect allocation based on recording settings (i.e. 24Bit VS. 16Bit)

The D16XD provides a 4-band fully parametric EQ on every channel (Separate Input and Playback EQ) and an 8-band fully parametric Master EQ. There are 50 EQ presets, plus 50 user locations.

1. Press the **[EFFECT]** key then press the **"EFFRouting"** tab. Here we see the effects that are being used in this song. Insert effects can be used as input effects recorded with the incoming signal (indicated by the "**IN**" at the far left) or as playback track effects (indicated by the "**TR**"). To change this, press the "**IN**" or "**TR**" and rotate the **DIAL**. To the right of this parameter is the channel in which each insert effect is applied. This can be changed in the same way.

2. Press the **"InsertEFF"** tab then press the **[CH SELECT]** key for channel **8**. While playing the song, make some adjustments to the "Mono Compressor" effect using the four dedicated effect **CONTROL** knobs just below the Touchview display.

3. Insert a different effect here: Press the " ▶ " popup button in the upper middle of the display, to bring up the effect catagories. Select the **"Modulation&Pitch"** category ➔ Select **"P082:Octave Voice"** ➔ Press **"OK"**. (whatever happened to the Chipmunks anyway?) Try a few different effects from several categories while the song plays back. (Press **[<] [MARK JUMP]** to return to the beginning of the song when it ends)

4. Press the **[CH VIEW]** key ➔ press the **SEND INTERNAL [1]** key located in the top right hand corner of the adjustable display ➔ rotate the **SEND** knob right, to add more reverb, or rotate left for less. You can view the send level amount updated in the display (Send E1).

5. You can make EQ adjustments by using the dedicated EQ controls to the right of the display. To select EQ presets, press **[MIXER]** ➔ select **"EQ/ATT/PHASE"** ➔ press the **"EQ Library"** tab.

[MIXER] All mixer settings instantly accessible!

Here you will find access to input/output assignment, pairing faders, scene automation, the analog compressors, EQ, effect sends etc.

[TEMPO] Tempo, Time signature and Rhythm

There are 265 preset metronome / rhythm patterns in the D16XD. These patterns can be used to create a drum track or Tempo Map with pattern, tempo and time signature changes. The Rhythm Patterns /Tempo Maps that you build do not use actual tracks, but can be recorded to tracks if desired. *(See the D16XD Owner's Manual page 61)*

1. Press the **[TEMPO]** Key, and then press the **"Prev))"** (Preview) button in the display.

2. Press the **" ▶ "** popup button in the lower left of the display (**Metro04 L1** is currently selected). Audition some of the patterns by pressing to select them in the display, and by using the **<scroll bar>** or the **DIAL**. When finished, press **"Cancel"**, and then press **"Prev))"** to turn previewing off.

!   *In a 24Bit 96kHz song, you will only be able to select Metro, Hi Hat and Blank.(In the following section, you can try them all)*

Creating and Working with a New D16XD Song

In this section, you will go through the basic steps of creating a new song: Assigning the input, applying effects and EQ to your input source, basic recording procedures, as well as mixing down, burning a CD and backing up your song to a computer. You will need a guitar or microphone <u>and a blank CD-R </u>for this section.

Select a new song:

1. Press the **[SONG]** key, and then press the **"SelectSong"** tab in the display.

2. Press the **"New"** button in the display ➜ select the **"New Song Type"** as **"44.1kHz / 16bit"** ➜ press **"OK"**. The display will indicate **"00X: Song00X"** - the next available empty song location. The New Song Type setting you've just selected is one of five selections specifiying the sampling frequency and bit depth available for recording. Both 44.1kHz/16 bit and 48kHz/16bit allow for 16 track simultaneous recording/playback (with the optional AIB-8 board). (*For more information on Song Type settings, see the Owner's Manual page 135*)

3. Rename the song by pressing **"Rename"** in the display. Press **"ClearAll"** ➜ name the song "QUICKTOUR", and then press **"OK'**.

Assign an input and apply one of the analog compressors:

1. Make sure that the **PAD** keys above the **TRIM** knobs are in the **up** position, and that the **TRIM** knob is set all the way left to -12dB.

2. Connect a guitar to the **GUITAR IN** jack on the front panel**. Or..** If you are going to use a microphone, **make sure that the PHANTOM power switch for INPUT 1 (located on the back of the unit) is set to OFF, unless your condensor microphone requires phantom power.** Then connect your mic to **INPUT 1** on the top panel.

3. Press the **[MIXER]** key, and then press **"INPUT/OUTPUT CH ASSIGN"** in the display. Here, you can select which track each input will be recorded onto, by pressing the icon that looks like a ¼" phone jack and using the **DIAL** to set the input ➜ select **"1"** for **"SOURCE"** on Channel 1. (This is the default)

4. Press the **green [REC/PLAY]** key for **Channel 1**, and it will change to **red** (record status)**.**

5. Gradually raise the channel fader **1** to **-0-,** and as you play or speak, adjust the channel **TRIM** knob so its LED indicator indicates steady green and yellow during the maximum or loudest input. Avoid red, as it indicates clipping.

6. Press the **[MIXER]** key, and then press the **"ANALOG COMP"** button in the display ➜ press the **"OFF"** button for channel 1 in the display to turn it **"ON"**.

7. Press **"Recall"** in the display ➜ press the **" ▶ "** popup button to choose a preset. For guitar, select **"P029 E.G.Rhythm"** press **"OK"** then **"Yes"**. For a microphone, select **"P030:Male Vocal1"** or **"P32:Female Vocal1"**.

! *If the guitar you are using has active pickups, you may need to press the PAD key (-26dB), and turn the TRIM knob up to set the appropriate input level.*

! *You can also make changes to the compressor preset, and then name and save it to one of 50 user programs by pressing the "Store" button in the display.*

(See the D16XD Owner's Manual pages 46-47 and page 115 for more on the analog compressors, and pages 42-45 /page 100 for more on inputting audio)

Assign effects and EQ to the input:

1. Press the **[EFFECT]** key then press the **"InsertEFF"** tab. In the upper left corner of the display make these settings "**IN**" "**CH: 01**" "**InsEFF1**". Press the **" ▶ "** popup button to choose an insert effect. If you are recording a guitar, select **"Multi"** then select **"P120: BOUTIQUE CLEAN"** and press **"OK"**. For a microphone, select **"SFX&etc"** from the Mono effect catagories then select **"P109: Studio Mic&Pre"** and press **"OK"**

2. Press the **"MstrEFF1"** tab ➜ Press the **" ▶ "** popup button to choose a master effect. Select **"Reverb&Delay"** ➜select **"P002: Smooth Hall"** then press **"OK"**

3. Press the **[CH SELECT]** key for channel **1** ➜ Press the **[CH VIEW]** key. Press the **SEND INTERNAL [1]** key located in the top right hand corner of the adjustable display. Rotate the **SEND** knob right to add some reverb.

4. Press the **[MIXER]** key ➜ press **"EQ/ATT/PHASE"**. Press the **"EQ Library"** tab. For guitar, select **"P15: E.G. Clean"** ➜ press **"Recall"** then **"Yes"**. For microphone, select **"P25: Male Vocal 1"** or **"P27: Female Vocal 1"** ➜ press **"Recall"** then **"Yes"**.

Record with the Metronome / Rhythm Patterns:

1. Press the **[TEMPO]** key, and then press the **"SetUp"** tab ➜ in the lower left of the display, press the **" ▶ "** popup button and select **"004: 8bt Rock1"**, and then press **"OK"**.

2. Press the **"Rhythm On"** button in the display ➜ press **"Prev<))"**, and then set the desired tempo. When finished, press to turn **"Prev<))"** OFF.

3. Press the **[METER]** key (lower left corner of the display) ➜ press the **[●]** button (it will blink red), and then press the **[▶]** button to start recording ➜ when finished recording, press **[■]** and then press **[<] [MARK JUMP]** to return to the beginning of the song**.**

4. Press the **red [REC/PLAY]** key for Channel **1** so that it changes to **green,** and then press the **[▶]** button to playback the track.

If you want to overdub another part, repeat the steps, starting with the "Assign an input" section, only this time use Channel 2.

(See the D16XD Owner's Manual pages 61-64 for more on the Metronome, Rhythm patterns and Tempo Maps)

Mixdown and master your song:

The D16XD has a dedicated stereo Master Track for boucing and mixing. The Master Track contains eight virtual tracks, allowing you to record eight different virtual mixes and pick your favorite for burning to CD. And before final mastering, each song also provides access to a Master EQ and mastering (Final) effect.

1. Press the **[MIXER]** key and select **"EQ/ATT/PHASE"** ➔ press the **"MasterEQ"** tab. Here you can make fine adjustments to the mix of a song. Make some adjstments while playing back the song.

2. Press the **[EFFECT]** key ➔ press the **"FinalEFF"** tab ➔ press the **" ▶ "** popup button and select the **"Dynamics&Filter"** category ➔ select **"P039: StudioCompressor"** ➔ press **"OK".**

3. Press the **[METER]** key ➔ press the **[MASTER TRACK STATUS]** key to record enable the **MASTER TRACK** for mixdown (Lit red).

4. Playback the song and make sure the **MASTER fader** level is not clipping (MST L.R at the far right of the display) When you are ready to record, press **[<] [MARK JUMP]** to return to the beginning of the song ➔ press the **[●]** key (it will blink red), and then press the **[▶]** key to begin recording.

5. To play back the mix, press the **[MASTER TRACK STATUS]** key so it turns **green** (play).

(See the D16XD Owner's Manual pages29-34 and 67-68 for more on Mixdown and Mastering)

Create an audio CD of your song:

1. Insert a blank CD-R in the CD-RW drive. Press the **[CD]** key, and then select **"CD WRITER"** in the display.

2. Press the **"Add"** button in the display ➔ select the song **"QUICKTOUR"** ➔ press **"OK"**, and then press **"Yes"**.

3. Press the **"Write to CD"** button in the display, and then press **"Yes".** The display will indicate "Making Image File", followed by "Writing CD" ➔ when propted **"Write Another CD?"** press **"No"**.

4. To listen to the CD on the D16XD, press the **[CD]** key ➔ select **"CD PLAYER"** press **"CD Monitor"** to turn monitoring on then press the play **" ▶ "** button in the display.

5. Now you can remove the CD from the drive and listen to your first D16XD recorded CD on your stereo while sipping your favorite beverage. Enjoy!

(See the D16XD Owner's Manual Pages 78-81 for more on CD burning and the CD modes)

Backup your data to computer using USB:

The D16XD has a 2GB partition dedicated for file transfers to/from the computer via a USB connection. First, the data must be copied to the 2GB partition, and then that partition can be mounted on your computer desktop. Individual tracks can by transferred as WAV files, or entire songs can be backed up. Now to backup your song…

1. Connect a USB cable from the D16XD to your computer.

2. Press the **[SYSTEM]** key ➔ press the **"Backup"** tab.

3. Press the **"Exec."** button in the display to backup the currenlty selected song, **"QUICKTOUR"**

4. Press the **"DiskUtility"** tab, and then press **"USB Slave Mode"** in the display.

5. The 2GB partition will mount on the desktop and will show up as **KORG D16XD**, complete with a cute little icon of the recorder.

6.   On a PC this can be found by opening My Computer; on a Mac it will mount directly on the desktop. Double click this icon to open it ➜ open the **KORG** folder ➜ open the **BACKUP** folder ➜ drag the file **TAKE_M01.DBK** to your computer HD to place a copy on the hard disk.

7.   On a PC perform the "Unplug or eject hardware" command; on a Mac drag the **KORG D16XD** icon to the trash, and then press **"Exit"** on the D16XD display to exit USB Slave Mode.

(See the D16XD Owner's Manual Pages 82 and 92 for more on backing up and restoring data)

Important D16XD Owner's Manual References