

PRODUCT OVERVIEW

TASCAM's 788 Digital Portastudio brings together an 8 track hard disk recorder, a full featured and flexible digital mixer, plus two assignable effect processing engines. The hard disk recorder offers 250 virtual tracks per song, and non-destructive editing with 999 levels of undo and redo; this gives you complete freedom to experiment without fear of losing anything. The mixing section offers complete routing flexibility. The 8 tracks, 6 analog inputs, and 2 stereo effects can be mixed together for an 18 input mixdown. The effects can serve as stereo effects, dynamics, or even as a multi-effect processor for guitar effects. At the end of the session, an approved SCSI CD-R or CD-RW drive can be connected for data back-up and creating audio CDs directly from the 788 itself. For more tracks, multiple 788s can lock together with MIDI Time Code.



- Records 8 Tracks to Internal or External Hard Drive
- Digital Mixing Section Offers 8 Full Featured Channels, Plus 6 Input Submixer and 8 Channel Cue Mix
- 2 Built-in Assignable Effect Engines
- Non-Destructive Editing with 999 Levels of Undo/Redo
- Waveform Views with Scrubbing
- 250 Virtual Tracks Per Song
- Auto Punch with up to 99 Hands-Free Takes
- 24 Bit A/D and D/A
- Uses approved CD-R and CD-RW drives for data back-up, restoring, and CD mastering.
- Input "D" Switchable to Guitar Level Input with Guitar Effect Processing
- 6 Analog Inputs
- $\pm 6\%$ Varispeed Control and Slow Speed Audition
- Advanced MIDI Implementation with MTC, MMC and MIDI Clock
- Lock Multiple 788s together with MTC

APPLICATIONS

The 788 Digital Portastudio is a complete recording solution from first concept to final product. The powerful production features and simple user interface make this a wonderful recorder for users of all levels.

Home Studio • Project Studio

With pristine, uncompressed digital fidelity, the 788 will make your project shine with all the brilliance you put into it. The 788 takes complete advantage of the hard disk medium, offering non-destructive editing with 999 levels of undo/redo and 250 virtual tracks, giving you the flexibility to experiment with different parts or try new edits without fear of exceeding your undo history limit.

The digital mixing section offers a 3 band EQ with high and low shelf bands and a parametric mid, 2 stereo aux sends, and a user friendly virtual patchbay. Add to all of this 2 built in effect engines, complete MIDI control and sync implementation plus built-in support for an approved CD-Recorder for creating session back-up and archival CDs or creating standard audio CDs.

Live Shows • One Man Band

The compact size of the 788 is a natural for portable applications. Whether you're playing over backing tracks or recording your show live, the 6 analog inputs in addition to the 8 tracks will allow plenty of space for your instruments. Plus, with built in effects and scene recalls, you can save yourself a couple rack spaces of processors, as well as from having to set-up the mix every night. Just recall it.

Guitar Players • Bass Players

The built-in instrument-level input and multieffect processors allow you to simply plug your instrument into the 788 and pick your sound.

SPECIFICATIONS

Performance Specifications:

Frequency Response:	20Hz~20kHz ± 1 dB
Dynamic Range:	> 82dB
Channel Separation:	> 80dB
Total Harmonic Distortion:	< .01% (1kHz tone)
Internal Hard Drive:	7.5GB
Maximum Record Time:	1 hour, 52 minutes (24 bit, 8 tracks at a time) 3 hours, 18 minutes (16 bit, 8 tracks at a time)

Input Specifications:

Inputs A-D:	1/4" TRS connectors -50dBu ~ +4dBu @ 4kOhms
Aux Input:	(2) 1/4" Phone connectors -10dBV @ 15kOhms
Stereo Output:	(2) RCA connectors -10dBV @ 820 Ohms
Monitor Output:	(2) RCA connectors -10dBV @ 820 Ohms
Aux Output:	(2) 1/4" Phone connectors -10dBV @ 820 Ohms
Headphone Output:	1/4" TRS, 60mW per side, 30 Ohms
Remote Port:	1/4" Phone, Accepts TASCAM RC-30P Punch-In Pedal
MIDI Ports:	(2) 5 pin DINs
SCSI Port:	SCSI-2, 50 pin

General Specifications:

Standard Accessories:	(2) XLR-TRS adapters 3' SCSI-2 (50 pin) to Centronics (50 pin) SCSI cable TASCAM CDR-788 External CD-Recorder, or other 788 approved TEAC CD-R drive* TASCAM RC-30P Punch-in Pedal
Optional Accessories:	26W
Power Consumption:	Main Unit: 3.1kg (6.9 lbs)
Weight:	Power Supply: 1.55kg, (3.4lbs)
Dimensions:	16.3" x 3.7" x 11.3" (413.5x95.1x287.8mm)

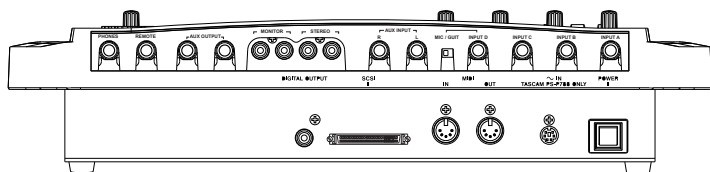
* See Approved CD-Recorders on page 3 for details of drives approved for use with the 788.

TOUR OF THE 788

Whatever your project, the TASCAM's 788 Digital Portastudio will have the tools you need. With top quality sound, flexible routing and editing, deep processing capabilities, advanced mixdown functions, plus the ability to add a CD-Recorder for data back up or mastering audio CDs, the 788 can take you from start to finish of most any project all by itself.

Ins and Outs:

The input section of the 788 is very flexible. Inputs A-D offer TRS plugs that can accept mic or line levels, balanced or unbalanced. Input D also has a toggle switch to accept a guitar level input, allowing direct connection of your guitar or bass which can be used with built-in guitar processing. There is also a stereo Aux Input, which offers two phone jacks for plugging in stereo sources like drum machines, synths, effect processors, etc. Any of these inputs can be assigned to any mixer channel easily from the surface of the 788 by simultaneously pressing the buttons for the input and the channel.



There are separate outputs for the monitor section and the stereo mix, allowing you to monitor different points or adjust the volume without affecting the recording or mixdown. For external digital devices, the stereo output is also available as SPDIF digital out. A stereo Aux Send output allows integration of external effect processors, the creation of additional headphone cue mixes, or it can double as a stage monitor mix output for a live band application.

Recording Section:

The audio is all recorded with TASCAM's own hard disk recording engine, providing 8 tracks of uncompressed, high fidelity recording and playback. Controls for locate points are provided on the surface of the unit, along with standard project navigation keys like Return to Zero and Last Recording Point. When you need to overdub and

punch in on tracks, single button punching in and out makes the process easy. If you want a hands free approach, try using a punch-in pedal, or even using the Auto Punch feature.

Auto Punch will punch in exactly where you select every time. The points can be selected by either setting the IN

and OUT locate points around the area you want to punch in on, or the 788 can be told to simply punch-in on your last recording. (So, you can perform the punch manually, then have Auto-Punch duplicate that timing exactly.) Once engaged, the Auto Punch will perform up to 99 takes which you can individually audition and select which one you want. If you decide later that you may have preferred one of the other takes, the Last Take Load function allows you to recall your last Auto-Punch session so you can audition them all over again!

If editing is your bag, you'll appreciate having the most common editing functions (COPY, MOVE, and SILENCE) all on the surface

of the 788. More advanced editing functions are accessible in the TRACK EDIT menu. Plus, the ability to edit across tracks, or on multiple tracks at the same time makes the process easier than ever.

The addition of track scrubbing and waveform displays (with multiple zoom controls) will help you find the edit points faster. Plus, with 999 levels of undo / redo, you can feel free to experiment with different edits without fear of losing anything.



For users who need to integrate into other systems, the 788 can generate MIDI Clock or MIDI Time Code (MTC) for locking up drum machines, sequencers, or other studio devices. For those who collaborate with other musicians, the 788 can chase MIDI Time Code, which means it can be locked to another 788, an MX-2424, a DA-78HR, or even recorders and personal studios from other manufacturers.

Mixing Section:

The mixing section in the 788 offers a powerful environment for shaping, routing, and combining the sound the way you want. The EQ on the main channels offers a 3 band EQ with high and low sweepable shelf bands and a parametric mid band with "Q" control. The Effect and Aux Sends can be assigned as pre or post fader, for optimal set up for effect and monitor routing purposes. Plus, with separate routing and scene memories, the 788 can store and recall your favorite settings.

For those who need more inputs on mixdown, the 788 offers an input submixer, which can be used to bounce tracks live, or it can be used to bring in more inputs on mixdown. Using the input submixer, you can hear your 8 tracks, 6 sources from the analog inputs plus the two stereo effects built in to the 788 for a grand total of 18 sources on mixdown.

Built-in Effects

The 788 has two high quality effect engines built-in that are assignable to different tasks. Both effect engines can be assigned as stereo effect processors on sends. Effect 1 can also serve as a multi-effect processor, designed to produce fantastic guitar processing. Effect 2 can be assigned as a dynamic processor on the stereo output, or as a bank of dynamics - one for each channel on the main mixer.

When the effects are assigned as stereo effects, they operate as processors on the Effect Send and Aux Send. The processors are both capable of producing a wide range of high quality effects including reverb, delay, chorus, pitch shifter, flanger, phaser, and reverb + gate. A library of user definable presets holds 128 patches for recall at any time.

Effect 1 can be switched to operate as a multieffect processor which will provide up to five simultaneous effects. The effects are tailored for guitar and bass, although can be used for other



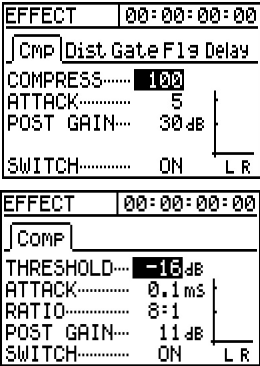
TOUR OF THE 788 (Continued)

instruments as well. The effect chain can be assigned to any input. An independent multi-effect processor library stores 128 user definable presets, allowing you to recall your favorite patches at any time.

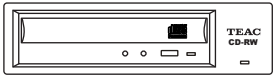
Effect 2 can be switched to act as a dynamics processor, either placing independent dynamic processors across every channel on the mixer, or it can be set to be a single stereo dynamic on the stereo output. The dynamics also sport their own dynamic library, with an additional 128 user definable presets.

CD-Recording

An optional CD-Recorder can be connected to the 788 for data back-up, or burning audio CDs. There are three drives approved for use with the 788, providing CD-R and CD-RW solutions.



The audio CD recording offers a number of different options. First of all, each song has a "Master Track" which will hold the mixdown of the song. The Master Track is recorded in real time, capturing the complete mixdown of the machine. You do not have to reserve tracks on the machine for the mixdown, so you can have all 8 tracks, the 6 inputs, plus the two effect processors all targeted to the Master Track.



Once you've got the Master Track recorded, there are two ways to record the audio CD:

- 1) The audio can be recorded one track at a time, leaving the CD open for more songs to be added later. (This simulates a stand alone CD-Recorder.) Once you're happy with the CD, you finalize it, and it's ready to play on a standard CD player.
- 2) You can choose multiple songs to be recorded all at once. The 788 will record the CD in one complete pass, making a 100% Red Book compliant CD which is appropriate for mass production facilities.

APPROVED CD-RECORDERS

If you want to use a CD-R drive to master your audio CDs or back up your project, you can use one of three approved CD-R drives. The drives and general specification are listed in the chart below.

The **CDR-788** comes with an external TEAC 6x24 drive. Specifically assembled for the 788, this affordable bundle is perfect for those who simply want to use the CD-R drive with the 788, or for people that already have CD-R software for their computer.

For musicians who are also looking for CD-R software for the computer, TASCAM's CD-R Pro and CD-R Deluxe bundles may be the perfect fit. These advanced bundles include TEAC CD-R drives that are approved for use with the 788, a dual platform SCSI card and extensive audio and data CD authoring capabilities. For more information on these bundles, download the TechDoc on these bundles from the TASCAM web site.

TEAC CD-Recording Technology

Drive:	TEAC CD-R56S	TEAC CD-R58S	TEAC CD-W512S
Maximum Record Speed:	6x (900 KBPS)	8x (1.2 MBPS)	12x (1.8 MBPS)
Maximum Rewrite Speed:	N/A	N/A	10X (1.5 MBPS)
Maximum Read Speed:	24x (3.6 MBPS)	24x (3.6 MBPS)	32x (4.8 MBPS)
MTBF:	50,000 POH	50,000 POH	50,000 POH
Notes:	<i>This is the drive found in the CDR-788 bundle. This drive can also be found in the CD-R624M, CD-R624W, and CD-R Deluxe bundles.</i>	<i>This drive can be found in the CD-R Pro bundles.</i>	<i>This drive will be available late in Q4, 2000.</i>

TOP & BACK PANELS

