

POCKETRAK 2G Specifications

Hardware		
Body	Dimensions (W x H x D)	1 1/4 inch (34.2 mm) x 4 5/8 inch (119.5 mm) x 1/2 inch (13 mm)
	Weight	1.7 oz (49 g) including battery
Memory	Capacity	2 GB
	Available Battery	AAA alkaline battery x 1/AAA eneloop rechargeable battery x 1
Battery Life	eneloop Battery Measurement	yes
	eneloop Recharge	yes (90 minutes)
Playback	AAA Alkaline	MP3: 25 h, PCM: 9 h
	AAA NI-MH	MP3: 19 h, PCM: 8 h 30 m
Battery Life	AAA Alkaline	MP3: 22 h, PCM: 9 h 30 m (Earphone), MP3: 14 h, PCM: 6 h (Speaker)
	AAA NI-MH	MP3: 17 h, PCM: 9 h 30 m (Earphone), MP3: 11 h, PCM: 6 h (Speaker)
LCD	LCD Type	Dot matrix, backlit display
Others	Language	English
		Internal Stereo Microphone, Internal Speaker, Ext. Mic. Input (stereo recording available), LINE IN Recording (microphone input switchable)
Recording		
Recording Format		Linear PCM, MP3
Recording Configuration		Internal Microphone, Ext. Mic. Input, LINE IN (Automatic song divide available)
Recording Time/	PCM stereo	3 h 10 m, 40 – 20 kHz, 44.1kHz, 16 bit, 1411 kbps
Frequency Response/	XHQ stereo	35 h 20 m, 40 – 15 kHz, 44.1kHz, 128 kbps
Sampling Frequency/	HQ stereo	71 h, 40 – 7.5 kHz, 22.05 kHz, 64 kbps
Bit Rate	SP stereo	142 h, 40 – 3.5 kHz, 11,025 kHz, 32 kbps
	LP mono	284 h, 40 – 3.5 kHz, 16 kHz, 16 kbps
Other Functions		Voice Automatic Recording System, ALC (Auto Level Control) ON/OFF, ALC sensitivity select (High/Middle/Low), Level meter display (ALC OFF 31 steps/peak hold/LED peak), Security function, Timer rec, Time stamp, Rec monitor, File delete confirmation
Playback		
Playback Format		MP3, WMA, WAVE, DRM10-WMA
Clear Voice Function		yes
Repeat		ONE, ALL, Random, Count down (five seconds)
Musical Function		EQ (NOR/POP/ROCK/JAZZ), BASS
Playback Speed		Slow PB (75%), Normal (100%), Fast PB (120%)
Other Functions		Title display (ID3 Tag), Play list (m3u format), Alarm PB (Beep/FOLDER)
Computer connection		
Data Transfer	Connection	USB direct (slide connector)
	Transfer Speed	USB 2.0 High Speed, 1500 kbps
Connection	Mass Storage Class	yes
Accessories		

USB cable (for PC connection), AAA eneloop rechargeable battery, Stereo earphone (inner ear type), Carrying leather case, DVD-ROM

• Continuous recording time will depend on the type of battery used as well as the battery's manufacturer, the conditions under which the battery is being used, and the condition under which it has been stored. Proper operation cannot be guaranteed when a battery other than the supplied eneloop battery or an alkaline battery from a reliable manufacturer is used.

System Requirements

Computer	Windows®-based computer with built-in USB interface Macintosh® computer with built-in USB interface
OS	Windows® Vista / Windows® XP

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For details please contact:

 **YAMAHA**
YAMAHA CORPORATION
P.O. BOX 1, Hamamatsu Japan
www.yamahasynth.com
Printed in Japan



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 **YAMAHA**

POCKET RECORDER
POCKETRAK
CX / 2G



This document is printed on chlorine free (ECF) paper with soy ink.



Ultra-compact High-quality Recording for Any Application

The Yamaha POCKETRAK CX and POCKETRAK 2G make recording great sound anywhere easier than ever. Whether you need ultimate portability and convenience, or superlative stereo recording quality, one of these state-of-the-art recording tools will deliver the perfect blend of features and performance for your application.



POCKETRAK CX POCKETRAK 2G

POCKETRAK CX



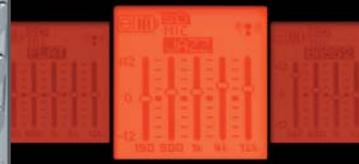
Only 92 grams with battery and pocket size.

Large X-Y microphone pair for outstanding stereo.



Approx. 54 hours recording / playback (with alkaline battery).

5-band graphic equalizer.



Eneloop rechargeable battery supplied.



Supports high-capacity microSD cards (2G card supplied).



Cubase AI4 software included.



Direct USB 2.0 computer connection via supplied cable.



Left Side Panel

Front Panel

Right Side Panel

<Actual size> W:46.5 mm x H:129.5 mm x D:17.5 mm, 92 g (Including battery)

A Pocket Recorder Built for Serious Sound

If your recording needs demand the best possible sonic quality as well as unprecedented portability and convenience, the Yamaha POCKETRAK CX is just what you're looking for. This 92-gram all-in-one recorder will record or play for 54 hours on a single AA alkaline battery, and deliver a level of sound quality that you can take to serious post production if necessary (Steinberg Cubase AI4 audio workstation software is supplied). The built-in X-Y stereo microphone assembly is of outstanding quality, offering detailed spatial imaging without phase problems. The POCKETRAK CX is an ideal tool for recording band rehearsals, live performances, and any type of field recording that requires maximum reproduction quality.

Extended Recording and Playback Time

Advanced LSI technology that achieves top-class sonic quality as well as low power consumption means you get unprecedented extended recording and playback performance in a compact package that weighs only 92 grams, including battery. Using the most accurate linear PCM recording mode you can record continuously for up to 21 hours and 30 minutes on a single battery charge. If stereo MP3 recording suits your needs you can record for up to 44 hours.* The corresponding continuous playback times are 24 hours 30 minutes, and 54 hours, respectively. The POCKETRAK CX comes with an environment-friendly rechargeable Eneloop battery that is charged automatically whenever the unit is connected to your computer via the supplied USB cable.

* Maximum size for a single audio file is 2 GB.

High Capacity microSD Memory Cards

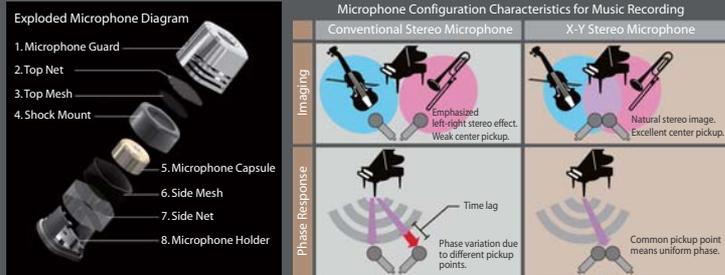
The POCKETRAK CX stores audio data on a convenient microSD memory card that contributes both to high storage capacity and the unit's compact, lightweight form. A 2 GB microSD card is supplied, and with it you can record up to 3 hours of top-quality audio in 44.1 kHz linear PCM format, or up to 35 hours of stereo MP3 audio at 128 kbps. The POCKETRAK CX complies with the standard microSD cards specifications, so you can use compatible cards with higher capacity for extra audio capacity if needed.

Recording mode	microSD card Max. time			
	512MB	1GB	2GB	4GB
Linear PCM (48 kHz)	40 m	1 h 20 m	2 h 50 m	5 h 40 m
Linear PCM (44.1 kHz)	45 m	1 h 30 m	3 h 05 m	6 h 15 m
Stereo MP3 (320 kbps)	3 h 30 m	7 h 00 m	13 h 35 m	27 h 50 m
Stereo MP3 (192 kbps)	5 h 50 m	11 h 50 m	22 h 45 m	46 h 30 m
Stereo MP3 (128 kbps)	8 h 50 m	17 h 50 m	34 h 05 m	69 h 50 m
Stereo MP3 (64 kbps)	17 h 40 m	35 h 40 m	68 h 15 m	139 h 40 m
Mono MP3 (32 kbps)	35 h 30 m	71 h 20 m	136 h 30 m	279 h 30 m

The listed recording times are approximate. Actual recording time will depend on the specific microSD memory card used. If multiple audio files are recorded the total recording time will be less than listed above. The maximum size of any single audio file is 2 GB.

Top-quality X-Y Stereo Microphone

The built-in X-Y stereo microphone assembly include two directional microphones mounted at a 90° angle to each other. While providing extremely wide coverage, this system delivers astonishingly natural stereo imaging with smooth, uniform response from full left to full right, without the level variations and phase anomalies that plague common stereo microphones. The microphones themselves are constructed of parts and materials that were carefully selected to deliver optimal recording precision and clarity without compromise. To further maximize the microphone assembly's performance it is mounted outside the POCKETRAK CX casing in a solid shock-resistant die-cast aluminum frame.



Stunning Sound

The POCKETRAK CX is capable of recording in uncompressed linear PCM (WAV) format at up to 48 kHz providing sound quality that is better than audio CDs, as well as in compressed MP3 format. Two linear PCM modes are provided, corresponding to audio CD and DVD quality sound. MP3 recorded is the best choice for extended recording times, but at the best quality setting (44.1 kHz, 320 kbps) delivers outstanding sound quality with full frequency response up to 20,000 Hz.

A Pocketful of Advanced Functions

Recording

- Wolfson stereo CODEC chip for low power consumption and outstanding audio quality.
- Fine manual record input level adjustment in 80 increments.
- High-pass filter automatically reduces wind noise and low-frequency rumble.
- Auto level control function for optimum speech recording quality.
- Peak limiter prevents overload and distortion on sudden high-level transients.
- VARS function automatically starts recording when a specified input signal level is detected.

Editing

- Divide recorded audio files at any specified point.
- Apply fade-ins and fade-outs to recorded linear PCM files.
- "Recycle Bin" folder makes it possible to retrieve deleted files.

Playback

- High output built-in speaker allows instant review of recorded material.
- MP3 file playback speed can be varied without changing pitch (70%, 100%, and 150%).
- One-touch Phrase Play function rewinds and replays a specified number of seconds.
- 5-band equalizer makes it possible to tailor the playback sound for optimum response.

And more...

More than Just a Recorder

Connected to your computer via the supplied USB cable the POCKETRAK CX is recognized as an external USB drive, allowing you to easily transfer audio files to your computer. You can also transfer audio files from your computer to the POCKETRAK CX for playback: it makes a great music player that can handle MP3, WMA, and protected WMA files. And the supplied Cubase A14 audio workstation software gives you advanced editing and overdubbing capabilities for files that you've recorded on the POCKETRAK CX and transferred to your computer.

Everything You Need

A photo-tripod compatible screw socket is provided on the rear of the unit, and a microphone stand adaptor is supplied so it can be conveniently mounted on a variety of supports. The POKETRAK CX is also supplied with slip-on windscreens that effectively cut wind noise when recording outdoors.



Carrying Pouch Stereo Earphones USB Cable AA Eneloop Battery Windscreen Microphone Stand Adaptor microSD Memory Card (2 GB)

Cubase AI4 Audio Workstation Software Supplied

The Cubase AI4 software bundled with the POKETRAK CX harnesses the power of the Steinberg Cubase 4 digital audio workstation to provide a set of advanced software tools that are easy to use while delivering extensive recording and production capabilities. In addition to advanced audio recording and editing, Cubase AI4 offers a range of MIDI sequencing capabilities, an entire suite of VST effect plug-ins, and a HALion One sample player featuring selected waves from the famed Yamaha Motif synthesizers.

Cubase AI4 Features

- Cubase 4 audio engine.
- 48 audio tracks and up to 64 MIDI tracks.
- 25 VST effect plug-ins, including 15 new VST3 plug-in effects.
- HALion One software sample player with selected Motif waves.
- Plug and Play VST/MIDI setup.
- Studio Connections Integration.
- 20 MIDI music styles and 480 audio drum loops included.



Cubase AI4 System Requirements

Windows®

- OS** Windows XP Home or XP Professional (both with Service Pack 1 installed)
- CPU** Pentium 1.4 GHz or better
- RAM** More than 512 MB
- HDD** Free disk space of 1 GB or more

Macintosh®

- OS** Mac OS X Version 10.4 or higher
- CPU** Power Mac G4 1 GHz / Core Solo 1.5 GHz or better
- RAM** More than 512 MB
- HDD** Free disk space of 1 GB or more



POKETRAK CX Specifications

Hardware		
Body	Dimensions (W x H x D)	1 13/16 inch (46.5 mm) x 5 1/16 inch (129.5 mm) x 1 1/16 inch (17.5 mm)
	Weight	3.25 oz (92 g), including battery
Memory		microSD/ microSDHC card (2 GB microSD card, supplied)
Battery	Available Battery	AA alkaline battery x 1/AA eneloop rechargeable battery x 1 (supplied)
	eneloop Battery Measurement eneloop Recharge	yes (220 minutes)
Battery Life	AA Alkaline	MP3: 54 h, PCM: 22 h
	AA eneloop	MP3: 44 h, PCM: 21 h 30 m
Playback	AA Alkaline	MP3: 54 h, PCM: 24 h 30 m (Earphone)
Battery Life	AA eneloop	MP3: 45 h, PCM: 23 h (Earphone)
LCD	LCD Type	Dot matrix, Backlit display
	Language	English
Others		Headphone Jack (Stereo mini: ø3.5mm x 1), Ext. Stereo Mic In Jack (Stereo mini: ø3.5mm, Line In Jack switchable x 1), microSD card slot x 1

Recording		
Recording Format		Linear PCM, MP3
Recording Configuration		Internal Stereo Microphone, Ext. Stereo Mic In, Line In (Automatic song divide available)
Recording Time (using 2GB microSD)/ Frequency Response/ Sampling Frequency/ Bit Rate	PCM stereo (48 kHz)	2 h 50 m, 40 – 23 kHz, 1536 kbps, 16 bit
	PCM stereo (44.1 kHz)	3 h 5 m, 40 – 21 kHz, 1411 kbps, 16 bit
	MP3 stereo (320 kbps)	13 h 35 m, 40 – 20 kHz
	MP3 stereo (192 kbps)	22 h 45 m, 40 – 20 kHz
	MP3 stereo (128 kbps)	34 h 5 m, 40 – 15 kHz
	MP3 stereo (64 kbps)	68 h 15 m, 40 – 7.5 kHz
	MP3 mono (32 kbps)	136 h 30 m, 40 – 6.5 kHz
Other Functions		Voice Automatic Recording System, ALC (AutoLevel Control) ON/OFF, Mic Sensitivity Select (ALC ON: 2 steps, ALC OFF: 80 steps), Recording Peak Limiter, 5-band Graphic Equalizer (8 presets/User), High Pass Filter, Self Timer, Timer Rec, Rec Monitor, File delete confirmation

Playback		
Playback Format		MP3, WMA, WAV (WAV file playback is own recording file only.)
Repeat		Repeat, Random, Count down (five seconds), Phrase Play, A - B repeat
Equalizer (using Earphone)		5-band Equalizer (6 presets/User), Bass
Playback Speed (Not available on PCM)		Slow PB (70 %), Normal (100 %), Fast PB (150 %)
Other Functions		Play list Playback, Skip Search, File edit (divide, fade in/ out)

Computer connection		
Data Transfer	Connection	USB cable (Bundled)
	Transfer Speed	USB 2.0 High Speed, 1500 kbps
Connection	Mass Storage Class	yes

Accessories		
		Stereo Earphone x 1, USB cable x 1, AA eneloop rechargeable battery/Wind screen x 1, 2 GB microSD card x 1, Cubase AI4 DVD, Carrying porch x 1, Owner's Manual x 1, Mic Stand Adaptor x 1

System Requirements

Computer		
Computer		Windows®-based computer with built-in USB interface Macintosh® computer with built-in USB interface
OS		Windows® Vista / Windows® XP / Mac OS X Version 10.4 / 10.5

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POCKETRAK 2G



**2 GB memory:
3 hours PCM recording with
tilt-up stereo microphone.**



**1.7 oz (49 grams):
lightweight and pocket size.**



**Long-lasting rechargeable
battery included (19 hours
consecutive MP3 recording).**



Built-in speaker.



**Cubase AI4 software
included.**

**Direct USB 2.0
computer connection.**



Front Panel



Right Side Panel



Rear Panel

<Actual size> W: 34.2 mm x H: 119.5 mm x D: 13 mm, 49 g (Including battery)



Advanced Recording Capability In Your Pocket

There are so many compelling reasons to record band rehearsals or music lessons for later review that a portable recorder is an essential item. Recording conferences and meetings has become a matter of course too. Naturally, the smaller and lighter that recorder is, while delivering top-class sound quality, the better. Weighing only 1.7 ounces (49 grams) complete with battery, the Yamaha POKETRAK 2G Pocket Recorder is an unbeatable choice. It's only a half-inch (13 millimeters) thick and will slip unobtrusively into a shirt pocket. But this diminutive, lightweight package contains a large 2-gigabyte memory plus advanced digital audio technology that lets you record and play back with outstanding quality.

In addition to a CD-quality linear PCM recording mode that lets you record up to 3 hours of music, there are a number of MP3 modes that provide significantly longer recording times. The supplied long-lasting rechargeable battery can keep the POKETRAK 2G running for up to 19 hours continuously when recording in MP3 mode. Slide out the built-in USB connector and connect the POKETRAK directly to your computer to transfer files back and forth, and use the bundled CUBASE AI digital audio workstation software to edit and enhance your recordings with pro-level control.

If sound is important to you, there's simply no reason not have a Yamaha POKETRAK 2G Pocket recorder with you at all times.

Only 1.7 Ounces and 1/2 Inch Thick—Take it Everywhere!

The POKETRAK 2G is so light and compact that there's no reason not to take it with you wherever you go. In addition to recording rehearsals and lessons for later review and study, you'll always be prepared to capture the sounds of nature or the city, samples for audio production, meetings, lectures, and much more.



2 GB Memory for High Audio Quality and Extended Recording Times

The POKETRAK 2G features a capacious 2 gigabytes of memory built in so that it can deliver outstanding sound quality as well as extended recording times as required. When you want maximum sonic quality in stereo you can record using the linear PCM mode for up to 3 hours and 10 minutes with full CD quality (44.1 kHz, 16 bits).

Linear PCM and MP3 Recording Times

Record Mode	Frequency (Hz)	File Extension	Compression	Data Size (per min.)	Application
Linear PCM	40–20000	.WAV	None	Approx. 12MB	Original CD production.
	XHQ 40–15000	.MP3	Low	Approx. 1MB	Rehearsals and practice.
HQ 40–7500	Medium		Approx. 0.5MB	High-quality for meetings.	
SP 40–3500	High		Approx. 0.25MB	Standard quality for meetings.	

Note: Due to the characteristics of the internal memory, recording times may be slightly shorter in some cases.

■ High-sensitivity Tilt-up Microphone

In addition to superior basic performance, the built-in stereo microphone can be tilted upward when the POKETRAK 2G is placed on a desk or table to minimize sound degradation due to reflection from the surface as well as pickup of mechanically transmitted noise. This high-performance microphone delivers excellent sound quality and signal-to-noise performance in a variety of recording situations.



S/N Comparison with Conventional Voice Recorder



■ Level Meters and ALC for Optimum Record levels

For maximum quality when recording music you'll want to set the record level manually. In manual mode the record level can be adjusted in 31 steps (0-30), and the POKETRAK 2G has level meters and a peak indicator that make setting optimum levels quick and easy. For speech you can let the POKETRAK 2G set the record level for you automatically by simply switching the ALC (Automatic Level Control) function ON. When ALC is ON the POKETRAK 2G will automatically maintain the best recording level for maximum clarity and intelligibility.



Long-lasting Rechargeable Battery

The POKETRAK 2G comes supplied with an advanced Sanyo “eneloop” rechargeable battery that can power the unit for up to 19 hours of continuous MP3 recording.

To recharge the battery simply plug the POKETRAK 2G directly into a USB port on your computer.

Thanks to advanced Sanyo technology the eneloop battery can be recharged up to 1,000 times, and does not suffer from the self-discharge problems of similar batteries so it will be ready for use at any time.

You can also use a standard alkaline battery to power the POKETRAK 2G, but the supplied eneloop battery is probably the only battery you'll ever need.

Details about Sanyo eneloop technology and trademark information can be found at: http://www.overseas.sanyo.com/products_catalog/products/batteries/batteries/eneloop.html



DRM10 Playback Support and Comprehensive Playback Functions

In addition to being a superb recorder, the POKETRAK 2G functions as a high-quality digital audio player as well! DRM10-encoded WMA or MP3 files that you have encoded from CDs you own or have purchased from online music sites can be transferred from your computer and played on the POKETRAK 2G. And like any accomplished audio player the POKETRAK 2G has a range of playback features that can make listening more flexible and enjoyable.



Other Features

Built-in speaker provides a quick and convenient way to check your recordings.

Variable playback speed lets you speed up play back by 20% for faster review, or slow it down by 25% for improved intelligibility (MP3 and WMA only).

Record via the built-in microphone or via the line input when recording from other playback devices.



Direct USB 2.0 Computer Connection

To transfer files to or from your computer and/or charge the battery, slide out the built-in USB connector and connect the POKETRAK 2G directly to a USB port. The POKETRAK 2G is USB 2.0 compatible for maximum data transfer speed: an hour of recorded sound can be transferred to your computer in approximately 10 seconds. Transfer recordings to your computer and email them right after they've been recorded!



You might also want to transfer recordings to your computer for post-production using the supplied Cubase AI4 digital audio workstation software, or simply for backup and storage.

Cubase AI4 Digital Audio Workstation Software Included

The Cubase AI4 software bundled with the POKETRAK 2G Pocket Recorder harnesses the power of the Steinberg Cubase 4 digital audio workstation to provide a set of advanced software tools that are easy to use while delivering extensive recording and production capabilities. Cubase AI4 makes it easy to use material recorded with the POKETRAK 2G as a basis for further recording and production, or for creating podcasts with extraordinary creative control and flexibility. In addition to advanced audio recording and editing, Cubase AI4 offers a range of MIDI sequencing capabilities, an entire suite of VST effect plug-ins, and a HALionOne sample player featuring selected waves from the famed Yamaha MOTIF synthesizers.



Cubase AI4 Features

- Cubase 4 audio engine.
- 48 audio tracks and up to 64 MIDI tracks.
- 25 VST effect plug-ins, including 15 new VST3 plug-in effects.
- HALionOne software sample player with selected MOTIF waves.
- Plug and Play VST/MIDI setup.
- Studio Connections Integration.
- File Interchange between Steinberg software and Yamaha hardware.
- 20 MIDI music styles and 480 audio drum loops included.

Cubase AI4 System Requirements

Windows®

- OS** Windows XP Home or XP Professional (both with Service Pack 1 installed)
- CPU** Pentium 1.4 GHz or better
- RAM** More than 512 MB
- HDD** Free disk space of 1 GB or more

Macintosh®

- OS** Mac OS X Version 10.4 or higher
- CPU** Power Mac G4 1 GHz / Core Solo 1.5 GHz or better
- RAM** More than 512 MB
- HDD** Free disk space of 1 GB or more