INTRODUCTION

The diatonic single reed harmonica is at an exciting stage in its short history. Invented in the 1820s, it began as a German folk instrument but was quickly adopted by people worldwide, and adapted to many music styles and cultures. For over a century it has been the world's biggest selling instrument in terms of units sold, retaining its mass appeal through the vagaries of musical fashion. But now modern players and technicians are pushing it to its limits, seeking ever more sophisticated performance from this simple instrument, which remains essentially unchanged since the late 19th century.

The standard tuning which emerged from early experiments (widely called the Richter Tuning) was designed for a vamping style of play in the home key of the harmonica, a kind of 'oom-pah' sound that befitted its German origins.

The bottom octave was tuned for chordal accompaniment in the tongue blocking style, and the melody was played out of the right side of the mouth in the middle and upper octave. To extend the range, the upper octave reversed the breathing pattern. The iconic harmonica that incorporated these qualities was the Hohner Marine Band, released in 1896.



Cheap but well made and with a pleasing tone, it spread around the world, selling hundreds of millions. The Marine Band and similar harmonicas became especially popular in the United States, where they were adopted by the African Americans for the emerging style of Blues music.

They discovered a wonderful thing: that many of the notes could be bent in pitch for a wailing, soulful sound. Furthermore, if you played in a key a fifth away from the key of the instrument (eg. in G on a C harmonica), the soulful lower draw notes became the main notes of the new home key. Thus 'Cross Harp' or 'Second Position' was born.

This Blues style of playing became refined and popularised in the US by great artists such as Sonny Terry, Little Walter, the two Sonny Boy Williamsons, and many others. It spread to the wider music scene and around the world from the 1960s onwards.

By the 80s and 90s adventurous players such as Howard Levy were pushing the boundaries of the instrument, stylistically and technically. Levy developed the

overbends (overblows and overdraws) which, together with normal bends, made the diatonic harmonica fully chromatic through embouchure control alone. He used this new ability to play advanced jazz; others (notably Carlos Del Junco & Jason Ricci) have popularised the overblow style for more popular blues and rock music.

However, overbending is extremely difficult to master, and requires harmonicas to be set up by hand with microscopically fine settings of reed/slot tolerances, reed gaps and curvatures. The best of these instruments are only available at high prices from a small number of specialist customisers, with long waiting lists; nowadays all serious overblow players use such custom harps, or spend hours customising their own.

Because of its playing difficulty and the cost/time of achieving the delicate instrument setup required, the overblow style on the Richter tuned harmonica remains intrinsically elitist. While many can pop out a rough overblow or two, only a handful of players around the world (probably fewer than fifty by 2010) have mastered all the overblows and overdraws to the extent that they sound seamlessly fluent (indistinguishable from other notes, consistently in tune & musically pleasing).

Overbending is slowly gaining traction amongst general players, because it is perceived as the only practical way to achieve chromaticism on the standard 10 hole diatonic. Other approaches involving mechanical changes to the harmonica (such as half-valving and adding passive 'enabler' reeds for extra note bending) are espoused by a few, but they alter the sound of the instrument and are no easier to control.

Currently, if players want to use the standard un-valved 10 hole harmonica and play chromatically, they are faced with having to learn how to overblow and overdraw. Many take it up reluctantly, because of the high level of difficulty in fully mastering the technique - not to mention the expense of acquiring the hand-customised harps that make overbending work to its best.

Almost imperceptibly, and without much comment, this has led to a significant shift from where the harmonica started out. It began as a cheap, easy to play, massproduced people's instrument. But in both technique (the challenging overblow style, so far mastered by very few) and in the fine details of physical construction (the expensive hand-built harps needed to achieve it), the modern 10 hole diatonic harmonica has shifted a long way from its original status and intent.

I have enormous respect for the brilliance of the top overblow players and the hand customisers who make their harps. That angle of attack has achieved a lot and will continue to develop. However, I believe there is room for an alternative approach to chromaticism honouring the harmonica's roots as an inexpensive popular instrument, whilst enhancing its relevance for contemporary music styles.

Luckily there IS another way to offer all players (amateurs and professionals alike) a highly expressive diatonic harmonica of traditional construction, which can be played easily in all the popular keys and positions, with excellent chromatic ability. All this, plus it still sounds great using inexpensive harps out-of-the-box with no special setup.

That's what this book is all about.

THE POWERBENDER

It's a new scale layout for the 10 hole diatonic called the POWERBENDER Tuning.

Yes, I know what you're thinking!! Many alternate tunings have been devised for the harp and they have not achieved mass success. But this one is different. It represents the culmination of 30 years experimenting to create personal alternate tunings. Each one is really usable; I've proved that by recording 18 albums with various earlier alternate tunings. They all have excellent qualities that remain valid for those who wish to explore them further, and will be described and demonstrated in other books.

However, I believe that in the POWERBENDER I have hit a winning combination of strengths that rivals the Richter tuning for all-round playability, but surpasses it for expressiveness, ease of play and contemporary relevance.

The POWERBENDER is a new universal tuning updating the 10 hole diatonic for modern music styles, which emphasize note bending and fluent improvisation in different keys. It builds on all the best parts of the traditional Richter tuning, while altering the scale to make the real juicy, important notes much easier to obtain, with fantastic expressive ability throughout the whole three octave range.

Its beauty and strength is that it relies overwhelmingly upon draw bending for chromaticism and expression, an easy technique all players master quickly. Every draw note bends a semitone or more. Overblows are still available but significantly reduced in importance, as they are not required for most playing.

This book will prove that eleven major and minor keys in eight positions can soulfully be played on the POWERBENDER without overblows, by anyone who can bend draw notes. It's that simple.

A development of my earlier tuning experiments, the POWERBENDER reached its final form in 2008; since then I have adopted it as my main tuning for improvising in blues, jazz, rock, folk and pop styles. It's such an easy and sweet sounding tuning on out-of-the-box harps that anyone who tries it quickly gets hooked.

My positive personal experience with the POWERBENDER and the overwhelming "Wow!" reaction it gets from serious players have encouraged me to make it public. I'm offering this instructional book/CD along with a pre-tuned harp, so others can explore the POWERBENDER for themselves. Let's look at the new layout in detail.



THE NITTY GRITTY

Below is a diagram of the POWERBENDER compared with Richter Tuning, showing bends and necessary overbends for full chromaticism.

(Overdraws are no longer possible on the POWERBENDER. That will be a relief for many! Blow bends are also eliminated. You can get overblows on <u>every</u> hole, but most are enharmonic with the blow note in the next hole up, so not required for most playing. However, if you want to use them, that feature does offer some cool applications for alternate phrasing... (see p. 41). Since most overblows are not new notes, for the sake of simplicity I haven't shown them here).

RICHTER TUNING (blow reeds at top)



POWERBENDER TUNING (blow reeds at top)

Overblows	Eb					Ab		Eb	Ab	C#
	С	Ε	G	С	D	F	Α	С	Ε	Α
	1	2	3	4	5	6	7	8	9	1
	D	G	В	D	2	G	В	D	G	<u>C</u>
Draw Bends	Db	F-F#	Ab-A-Bb	Db	Eb	F#	Bb	Db	F-F#	Bb-B

You can instantly see from the diagrams that the POWERBENDER presents a simpler, steamlined picture to achieve the same result. Playing it is much simpler too...



Here's how they compare:

KEEPING the BEST from the PAST

- Same Three Octave Range as a 10 Hole Richter Harp
- Same Familiar Lower Octave for Chord Rhythm and Blues Licks

NEW, DIFFERENT and BETTER

- Same Breathing Pattern Throughout: Blow Note always Lower than Draw (no confusing switch in top octave, as on Richter tuning)
- Familiar Low Octave Draw Bend Licks Now Possible Everywhere
- Simplified Technique: No Blow Bends to Learn
- Simplified Technique: No Overdraws to Learn
- Every Draw Reed Bends at Least a Semitone
- Easy Chromatic Runs using Bends Only
- Simple, Soulful Draw Bends replace Richter Overblows and Overdraws
- Overblows Available on Every Hole (but not important for most playing)
- Top Octave Easy to Play, with Big Expressive Draw Bends
- Intuitive Tuning, Simple to Learn. Similar Phrasing in Each Octave
- Easy to Play in Common Positions: 1^{st,} 2nd, 3rd, 4th, 5th, 6th, 11th, 12th
- Many Positions can be Played Both Major or Minor Without Overblows
- Play Easily in Eleven Major & Minor Keys without Overblows
- Sounds Great on any Stock Harp (*no embossing, average reed gaps*)
- Suits Standard Setup (no valves) or Half-Valving it's up to the Player
- Better Tuning for Contemporary Music Throughout the Range (easier and more expressive phrasing for Pop, Rock, Jazz, Folk...)

OK, that's the sales pitch - I hope it's got you intrigued! Now let's get down to hearing the POWERBENDER in action.

WORKING WITH THE BOOK and CD

Before we start, all the exercises and tunes in this book pre-suppose an ability to bend draw notes accurately. If you can't, master that skill first!

I use a pucker embouchure, so all the examples on the CD are played that way. Tongue-blocking is perfectly possible on the POWERBENDER, but the chords/intervals you get will of course be different to Richter. It represents a blank sheet for adventurous tongue-blockers who want to get new sounds with their existing technique.

I've chosen an A harp as the basis for this book. It's a nice range and a very useful harp for jamming with blues and other popular styles. <u>There is a tuning diagram for the POWERBENDER A harp on p. 41</u>. My harps are half-valved, but that's purely a personal preference: the POWERBENDER works great either valved or stock (unvalved). Let's jump in straight away and sample those juicy draw bends...

Track 1



Fun, huh! Instantly you can hear how expressive the POWERBENDER is, and how easy to play throughout the range. OK, Stop!! That's enough enjoyment - now it's time for some serious study...

Because most harp players are comfortable with thinking of POSITIONS instead of keys or modes, that's how I'll approach explaining and demonstrating the POWERBENDER.

Pentatonic scales are a great initial way to learn positions. They are 5 note scales that pick out the important notes of a key, major or minor. They're the really <u>usable</u> notes that always sound good when the chord shifts to denote a new key scale. A New Zealand musician friend once described the pentatonic notes to me as "The notes you can take to the bank!" - which sums it up pretty well.

They sound good in themselves, and provide a great platform for further harmonic exploration. So I'll use pentatonic scales throughout this book as the best introduction to learning the different positions on the POWERBENDER, and then explore further, into full seven note scales and chromatic variations.

The musical examples are in three forms: standard written notation, harmonica tablature, and as sound clips on the CD (fast and slow). The tablature is easy to read; here's how it works:



That means: blow hole 1 - draw 1 - blow 2 - draw 2 - draw bend 3 - blow 4. Lines above the draw arrow indicate the amount of draw bend (one line is a semitone bend, two lines means bend down two semitones). It's very simple and intuitive; you'll quickly get used to it.

For those who read standard music notation, because we're using an A harmonica, I've retained the key signature of A on the stave regardless of the key of the music. This is so you can see the sharps and flats as they relate to the notes of your A harp.

The POWERBENDER was originally conceived with 2^{nd} Position (Cross Harp) in mind, but it's great in all the commonly used positions, and then some! 2^{nd} , 3^{rd} & 4^{th} can now be played easily in both Major and Minor versions without overblows.