

DIATONIC HARMONICA TECHNIQUES

This table lists a large variety of techniques that can be used for playing the diatonic harmonica. These are in some order of difficulty; however, even simple techniques can require much practice and expertise to master. **The harmonica is sometimes called *the easiest instrument to play, but the most difficult to master.*** While that is certainly arguable, don't think that becoming an expert on the harmonica is easy or will happen over night, despite what some book titles might lead you to believe...

This table should give you an idea about "where you are" in your ability, and what techniques you still need to master.

Diatonic Harmonica Techniques

Technique	Remarks
Wow, you can make noise *sucking* too!	Playing should be done by breathing through the harmonica, not by thinking about blowing or sucking. We talk about blows and draws, but it's about inhaling and exhaling. The breathing should come from the diaphragm. Breath control is as important in harmonica playing as in singing. The air should be slowly inhaled and exhaled. Practice playing a note and holding it for as long as you can, being careful not to get dizzy. Also practice breathing in as much air as you can.. hold it.. now breathe in a little more, and a little more. Practice breathing in and out as fast as you can--think of a panting dog.
Simple 1st position play (i.e. "straight harp")	Many traditional "camp fire" songs are easy for the beginner, like "Oh Susanna", "Red River Valley", "Clementine", etc. These are normally played by ear and use 1st position where the key of the song is the same as the key of the harp. The middle octave is most often used, where a full diatonic scale is available without requiring any bends.
Chords and Chugging Rhythms	The harmonica lets you play chords as well as single notes, and the chords are easier to get than single notes. The chords can be used as backing rhythms to compliment melodic play. The tongue block embouchure is normally used so that chords can be played and then blocked to produce single notes. Chord chugging can make use of rhythmic breathing patterns.
Single notes	Because of the close proximity of the holes on diatonic harmonicas, some technique and practice is required in order to get clean single notes. The way of putting the mouth on the harp is called embouchure, and several different embouchures can be used to get single notes. The main embouchures are the pucker or lip block, the tongue block, and the U-block or slotted tongue.

The 2 Hole Draw	The hole-2 draw is often problematic for beginners, and sometimes the 1 draw as well. Many beginners think there's something wrong with the harp, because this note won't play. The usual reason is a "pre-bend" condition where the mouth/vocal tract shape causes a flatted note or keeps the note from sounding. The beginner should concentrate on a mouth shape for making an "eeeeee" sound, and might want to let a little air in through the nose <i>at first</i> to help play the note. If you can draw holes 1-2-3 and hear the 2 draw note, you know the harp is okay.
Hand techniques	Cupping the harp with the hands, and opening/closing the hands and fingers is a common and traditional way to achieve very characteristic harmonica specific sounds. The key is getting a very air-tight cup with the hands, which mutes the sound. Opening and closing this cup creates the characteristic "wah-wah" sound of the harmonica.
Multiple key harmonicas	Diatonic harmonicas come in all different keys (i.e. C, D, E, ... Ab, Bb, F#, etc.). The normal range of harps from low to high (such as when harps are offered in a set) is G at the low end to F# on the high end, but doubled keys add high G and low harps from D (or even low C).
Note articulations	The tongue can be used to start or attack notes differently, which changes the color of the notes and adds variety to the sound of the harp. These <i>articulations</i> can be associated with various spoken syllables, like saying "ta" or "ka" or "da" or "ha" or "ga", etc. Articulation can also be done by slightly lifting the upper lip off the harp and replacing it in a sort of "biting" or "kissing" the harp fashion. Articulations are easiest using the pucker/lip block embouchure, but can also be done using tongue blocking.
Shakes	A <i>shake</i> is a rapid alternation between adjacent holes. Shakes are similar to trills, but the notes are more than 1/2 step apart. Sometimes shakes are called "warbles". Shakes are commonly done by shaking the head from side to side, but can also be done by moving the harp from side to side, twisting the harp, or some combination thereof. More advanced shakes can incorporate note bending to add variety.
2nd position (i.e. "cross harp")	2nd position is the most commonly used approach to playing blues, rock, and country music. The scale for 2nd position is a 5th higher than the natural key of the harp, for example, for a key of C harp playing it in 2nd position means playing in the key of G. 2nd position starts on the 2 draw and uses mostly draw notes, especially on the low end of the harp, rather than mostly blow notes as in 1st position (the key of the harp). The draw notes provide more possibilities for bends and expressive vibrato than the blow notes.
Draw Bends as ornaments	When beginners first achieve draw bends, which are available on holes 1-6, they are primarily quick changes from the natural note, like a quick flattening of a note continuously bending a little down and then back up to the primary note. In other words, the bent notes are not used as notes in their own right. The note bends, but the player has little control over the depth and duration of the note.
Blow Bends as ornaments	Blow bends are available on holes 7-10.

Dip bend	A <i>dip bend</i> is a quick smooth bend into the note to be played. This technique is frequently used to ornament notes, especially on the draw notes. It is done by initially attacking the hole as a bent note, then gradually releasing the bend to slide into the final note. Or, the hole can be started unbent, and a smooth gradual bend can be used to slide into the final bent note.
Glissando	A glissando is a sequence of notes played in rapid succession that ends on the primary note to be played. Play a single note and then slide the harp around in your mouth. that is essentially a glissando. The notes in a glissando are not individually articulated, but are played as a single continuous physical movement. A "ripped" glissando is essentially an articulation of the final note.
Diaphragm Tremolo	Diaphragm tremolo is distinct from throat vibrato , and as its name implies it emphasizes the diaphragm instead of the throat, though each is used to a certain degree. It is characterized by a volume oscillation tremolo as opposed to a pitch oscillation vibrato. However, when using vibrato on a held bend, the diaphragm is used to gently add the tremolo, and the pitch will vary due to the pressure changes. Diaphragm tremolo is basically achieved by repeating "ha ha ha ha" as when making a laughing sound. Often the term vibrato is used instead of tremolo to mean either vibrato or tremolo.
Draw Bends for note production: - Full bends - Intermediate Bends	Draw note <i>alterations</i> are so-called bends that alter the natural pitch of a note to a different usable on-pitch note. The word "bend" implies a continuous pitch change, but bends on the harmonica do not have to be changes from other notes--in other words, a bend as an altered note can be played separately from other notes, and the natural note need not be played at all. Draw bends in holes 2 and 3 have bend ranges more than a single half step (semi-tone), while draw bends in holes 1, 4, and 6 have a half step range. Bends tend to alter most easily to the extreme range, called a <i>full bend</i> , and notes between the natural note and the most altered note are called <i>intermediate bends</i> , and are more difficult to achieve, control, and maintain on pitch than normal bends.
Blow Bends for note production	Holes 8 and 9 have a half step blow bend, while hole 10 has a whole-step bending range.
Rhythm and melody together (i.e. <i>vamping</i>)	Using a tongue blocking technique, rhythm chords and melody can be played at the same time. Normally a chord containing the melody note is played, and then notes of the chord are blocked from being played by using the tongue. Similar effects can be achieved with a lip block by opening and closing the embouchure or rolling the harp up at the back to go from a chord to a single note. This technique is often used on the bottom 3 holes where lip blocking is more difficult.
Playing from a Rack	A <i>rack</i> is a device that holds the harp so you can play hands-free. Usually the rack goes around your neck. Often a "wing nut" is used to hold the rack tight at a pivot point, and often the rack will slip and push away from your mouth. Using two conical washers or a lock washer can help keep the rack tighter.

Amplified play	Traditional blues style harp is played amplified through a microphone. The mic and the amp work together to produce the sound, and what you should get depends on what you like to hear. Traditional mic's are bullet shaped vintage or vintage reissued models like the Shure Green Bullet, Astatic JT30, Hohner Blues Blaster, etc., though many players use ordinary vocal mics such as the Shure SM-57 and SM-58. The Shaker brand mics are smaller, lighter and easier to cup than traditional bullet style mics Tie clip electret mics can also be used, and these are easier to cup tightly and produce acoustic-style hand effects. Preferred amplifiers are normally tube amps, and vintage Fender amps are highly valued as harp amps. Popular amps include the Fender Bassman, the Bassman ReIssue (RI), the Fender Champ, Fender Princeton, etc. Many players prefer amps with reverb, or use separate reverb "tanks". Digital or analog delay pedals are a common effect in amplified play.
Slurs and double stops	A <i>slur</i> is where a bit of an adjacent note is played along with the primary note. A <i>double stop</i> is where two notes are played at the same time with essentially equal strength. Double stops can be played using bent notes and combinations of bent and un-bent natural notes, especially on holes 1-4. It is even possible to play an overblow so that both reeds sound and two notes are generated. A slur has a primary note and a softer secondary note. Slurs can add a "bite" to a note, especially when amplified. When playing 2 notes together think about 1)Blending the sound or 2)giving each note its own voice. T
Split Intervals - 4-hole octaves - 5-hole octaves	<i>Split intervals</i> are notes that are played that have intervening notes blocked out, normally by the tongue. The most common split interval is an octave, for example holes 1 and 4 blow or draw at the same time, with the tongue blocking out holes 2 and 3. Hole 4 and 8 draw also form an octave, with holes 5, 6, and 7 blocked out.
Octave Shakes	An octave split interval is played and rapidly alternated with an adjacent octave, as in a 2-hole shake with single notes, by shaking the head and/or harp. This effect is heard relatively infrequently on the diatonic, but was used by classic blues harpers like Little Walter on songs like "Blues With A Feeling" and "Got My Mojo Working". This is a commonly used effect on blues chromatic.
Resonance - Vocal tract - Hands/cup	Resonance is a reinforcing of sound waves that amplifies a note. Achieving good tone on a harmonica requires resonance, and tuning the vocal tract to the note being played. This requires opening the vocal tract and playing "from the diaphragm". Hand resonance can add to the player's vocal tract resonance and further amplify a note. Very minute changes to the hand cup can produce or eliminate this resonance.

Vibrato	Throat vibrato is a slight wavering of a note's pitch similar to the effect singers use. Throat vibrato, as distinct from <u>diaphragm tremolo</u> , is mainly felt in the throat as a pinching of the air stream. In reality both throat vibrato and diaphragm tremolo use elements of both the throat and the diaphragm, but the emphasis is different as the names imply. Throat vibrato is a very important technique that should be learned by everyone. It is very frequently used and adds much to the tone and note shaping capabilities of the harp. There are other types of vibrato that can be achieved by moving the mouth or the lips. A slight chewing motion, or chin vibration produces a kind of vibrato, as does a motion similar to whistling a vibrato. Similar vibratos can be achieved by articulating "oy oy oy" or "yo yo yo". These non-throat-vibrato techniques are especially useful on bends and overbends, as well as notes that don't respond as well to throat vibrato.
Tongue Slap	A <i>tongue slap</i> is a technique where a chord is played for a brief time, then all but one or two notes are suddenly blocked out with the tongue. The air that had been flowing through normally 4 holes is suddenly diverted to 1 or 2 holes, and the sudden blocking of 2 or 3 holes causes a kind of slapping sound. The tongue slap is one of the characteristic techniques often used with the tongue block embouchure, and serves to thicken up the sound of the harp and punctuate single notes.
Flutter tongue/tongue lift effects (i.e. rapid vamping)	A <i>flutter tongue</i> or <i>rapid vamping</i> technique is where (normally) a split interval is played and the tongue is rapidly and repeatedly removed and replaced off and back onto the blocked notes. It causes a rapid switching between a chord and an interval like an octave, or even a single note.
Tongue Rolls	A tongue roll is where a note is played and the tongue is vibrated or rolled as in a Spanish-style rolled-R. This is a seldom used effect more than a normal playing technique.
Whoops	A "whoop" is using your voice to whoop or holler while playing the harp. This is normally a seldom used effect rather than a standard playing technique. You can also do barks, clicks, and other mouth or voice effects in conjunction with playing the harp. Sonny Terry and Peter "Madcat" Ruth make frequent use of this kind of effect.
Growl	A growl is an effect used in conjunction with deep draw bends. The soft palette at the back of the mouth is relaxed and allowed to vibrate; it's kind of like snoring while playing. This vibration along with the bent note causes the growl sound.
Back-Pressure Chords	By using a very air tight hand cup it is possible to play the harmonica backwards, by having air enter through the back of the harp in addition to through the front. In essence, your cup is so tight that when you play a note the air pressure builds up in your hand cup and flows back into the harp. Similarly, a draw note causes enough of a vacuum to suck air into the harp through other non-played holes. You block the holes you don't want to sound with your thumb or finger and use the back-pressure activated notes along with the played note to create new chords.

3rd position (i.e. "draw harp")	As 2nd position is playing in a key a 5th above the natural key of the harp, 3rd position is playing in a key another 5th higher than the natural key of the harp, e.g. for a key of C harp, 2nd position is the key of G, and 3rd position is D. 3rd position play starts on the hole 1 or 4 draw. The natural mode of 3rd position is a minor key so 3rd position is often used to play with minor key songs. A complete 3rd position blues scale is available on the first two octaves, so this is a common position for blues next to only 2nd position in frequency of use.
Knowing where you are	Beginners usually don't know right where they are on the harp at all times, while expert players usually do. As you gain more techniques like bends and overbends, it becomes important from a technique standpoint (separate from a musical standpoint) to know where you are because each hole plays differently; some bend well, some don't, some bend more or less than others, some are draw bends and others are blow bends, some holes are good for overbends and others not so much. Musically, you need to know what note you're on, and where the other notes are. You need to become extremely familiar with the harp note layout, both within a hole and across the harp.
Able to go where you want	Once you know where you are, you need to be able to visualize where you want to go, and you need to be able to get there accurately. This is more difficult when you are going to holes not adjacent to the current one. Corner switching from a tongue block embouchure can make octave jumps and other intervals easier to hit accurately than pucker/lip-blocking since the mouth doesn't have to move far because the tongue is moving too.
Playing both ends of the harp	There are usually 2 different octaves (sometimes 3) where you can start playing your song, lick, riff, or phrase...the bottom end and the top end. You should be able to play the same thing starting in different octaves, as long as you don't run out of harp.
Special Tunings	Special tunings are modifications to the standard diatonic layout of notes, which is the <i>Richter</i> tuning. Common special tunings include the natural minor, which provides a minor key for normal 1st and 2nd position playing, the Lee Oskar Melody Maker, which raises the b7ths (i.e. hole 5 draw) to Maj7th and raises hole 3 blow a whole step, Steve Baker Specials which adds a duplicate of the low 3 holes as the 1st 3 holes an octave lower, country tuning, etc. etc. These special tunings make playing certain styles easier than using normal Richter tunings.
Train Songs	Train songs use train-like rhythms on chords on the low 3 holes, and work best on lower key harps (like G and lower). A train whistle is simulated by drawing holes 3 and 4 at the same time. One articulation that mimics a train is "Tah hooka tooka hooka" where only the "hooka" is played exhaling, and many variations on that theme, like "Tooka hooka tah hooka". Other fast tongue articulations can be used to augment the breathing pattern, such as "diddly hooka diddly hooka tah hooka diddly hooka".

Multiple Embouchures	The 3 primary embouchures are the pucker/lip block, the tongue block, and the (relatively seldom used) U-block. The lip block and tongue block can be used for different effects, so it is good to learn and use both and be able to switch back and forth easily depending of the effect you want. Many players believe the best blues tone can only be achieved by using the tongue block. Many effects and techniques require use of the tongue block embouchure.
Playing out of both corners (of the mouth); TB left and right	Tongue blocking is typically done with the tongue blocking holes on the left with the single note being played by the right corner of the mouth. It is also useful to be able to block on the right and play out of the left corner, for fast accurate note jumps (corner switching) and playing holes 1-3.
Bends from all embouchures and corners	Many players bend from one embouchure, like a pucker/lip block, and not from another, like the tongue block. It is best to be able to bend from all the different embouchures and both sides of the mouth.
Split interval bends	It is possible to bend both notes of a split interval, e.g. an octave, at the same time. You can also bend one note of an interval to form an octave, for example the 3 draw whole step bend (3") and the 6 draw.
Tongue Switch Shimmer	The tongue switch shimmer is an effect where the tongue is rapidly switched from side to side to allow opposite corner holes to sound. This can be done extremely rapidly.
Draw Bend Vibrato	Getting a smooth vibrato on draw bends requires a delicate control and balance between the throat and the diaphragm. Without this delicate control the vibrato becomes very chunky.
Blow Bend Vibrato	Blow bend vibrato also requires a more delicate control than vibrato on straight "unbent" notes.
Speed	Speed playing requires note and rhythmic accuracy and control of rapid changes to breath direction. It is easy to overuse speed, which can detract from musical expression.
12th Position	12th position (sometimes called "1st flat") is the key with one more flat than the key of the harp, or equivalently a 4th above the key of the harp. For example, on an F harp 12th position is the key of Bb. 12th position is useful for melodic play in a major key. To play 12th on the bottom of the harp you need to be very good at the 2 draw whole step bend and the 3 draw whole step bend.
Positions 4-12	Learning positions 4-12 requires additional familiarity with the diatonic note layout. The natural scales associated with position play correspond to various modes. Best use of these

	positions requires the ability to play chromatically by using either valves or overblows. 5th and 12th positions are particularly useful.
No speed needed	Sometimes speed can be used as a crutch to hide defects in playing. Attention to details and nuance of note formation, tone, timing, and phrasing can require more expertise than merely playing fast. Details and mistakes are more exposed during slow play than during fast passages. Speed is best when the precision and nuances required for beautiful slow play are incorporated in the fast passages as well.
Valved Bends	Valved bends use only a single reed for the bend, rather than both reeds as in a normal diatonic bend. Valved bends have a greater potential range than normal bends, but require a different attack and bending approach.
Overbends (i.e. overblows and overdraws)	Overblows and overdraws activate the opposite-than-normal reed as an <i>opening</i> reed as opposed to the normal <i>closing</i> reed activation. Overblows activate the outer "draw" reeds to a note about 1/2 step above the natural draw note, while overdraws activate the inner "blow" reeds to a note about 1/2 step above the natural blow note. Overblows require relatively narrow or tight reed gaps. Achieving overbends requires much more focus and finesse than ordinary bends, with much stricter requirements on mouth/throat shape and pressure.
Bending overbends and overbend vibrato	It is possible to bend the pitch of overblows and overdraws, and add effects such as vibrato to the overbends. Overbends themselves require much greater facility with the harp than normal bends, and further bends and effects require still greater control and expertise.
Chromatic play	By using overbends and/or valved (isolated reed) bends in addition to normal bends and the natural notes it is possible to play every note on a diatonic harp, that is, to play a diatonic chromatically. This adds enormous capability to the diatonic and especially position play. However, it is extremely difficult to get tonal or timbral consistency between unbent, bent, and overbent notes.
Jazz	The ability to play the diatonic chromatically brings jazz into the realm of the diatonic. Jazz is a difficult genre on any instrument, and especially so on an instrument such as the diatonic that requires advanced techniques to make available all the chromatic notes.
Counterpoint	Counterpoint is more than one melody at the same time. By sophisticated use of single notes, double-stops, playing out of both sides of the mouth, and split intervals, simultaneous melodies can be played on the diatonic harp. Diatonics have one advantage over chromatics in this area because wider splits are possible due to the smaller hole size of diatonics as compared to chromatics. Special tuned harps are often used for counterpoint play.
Chromatic play in all keys	Since a single diatonic harmonica has all chromatic notes available (though some have a different timbre than natural notes), it is <i>possible</i> to play every key diatonic in every key. This of course requires a great deal of practice and study.. very few can do it.

*House of the Rising Sun by The Animals (for
harmonica)*

-6 -6 -7 7 8 -8 -6 -6
-10 -10 -10 9 8 8
-10 -10 -10 -7 7 8 -8 -6 -6 -6 -6
-6 -6 -6 6 5 6 -6

-10 -10 -10 9 7 -8 -6
-10 -10 9 8 8
-10 -10 -10 9 7 -8 -6 -6 -6 7
-6 -6 6 5 6 -6

-10 -10 -10 -10 9 7 -8 -6 -6
-10 -10 -10 -10 9 8 8
-10 -10 -10 -10 9 7 -8 -6
-6 -6 7 -6 -6 -6 6 5 6 -6
-5 -6 -7 7 8 -8 -6
-6 -10 -10 -10 9 8 8
10 -7 7 8 -8 -6 -6 -6 -6
-6 -6 -6 -6 6 5 6 -6

Knocking On Heaven's Door by Bob Dylan (for harmonica)

5 5 5 5 -4 -4 4 -4
5 5 -4 -4 4 -3 4
4 5 5 -4 -4 -4 4 -4 4 -4
4 5 5 -4 -4 4 5 4 4 -3"
5 5 -4 -4 -4 -4 4 -4
5 5 -4 -4 -4 4 -3 4 -3"
5 5 -4 -4 -4 -4 4 -4
5 5 -4 -4 -4 4 -3 4 -3"

5 5 5 5 -4 -4 4 -4
5 5 -4 -4 4 -3 4
4 5 5 -4 -4 -4 4 -4
4 5 5 -4 -4 4 5 4 4 -3"
5 5 -4 -4 -4 -4 4 -4
5 5 -4 -4 -4 4 -3 4 -3"
5 5 -4 -4 -4 -4 4 -4
5 5 -4 -4 -4 4 -3 4 -3"