0. Music Theory? No Thanks!

Tune your box to GDG or GDGB, go to cbgitty and buy one of these books with scale and chord charts, \$22.99 each:

3-String Cigar Box Guitar "The Ultimate Collection" How-to-Play Book for GDG tuning https://www.cbgitty.com/books-cds-posters-more/books/3-string-cigar-box-guitar-the-ultimate-collection-how-to-playbook-by-brent-robitaille/

4-String Cigar Box Guitar "The Ultimate Collection" How-to-Play Book for GDGB tuning https://www.cbgitty.com/books-cds-posters-more/books/4-string-cigar-box-guitar-the-ultimate-collection-how-to-playbook-by-brent-robitaille/

Otherwise the following informations will help you to get started with elementary music theory:

You know the key and you have a chord sheet of a song but you don't know how to play it...

Let's start: our tuning is GDG, key is G major, scale is G-A-B-C-D-E-F#-G, and the chord sheet looks as follows:

- A: / G G / D⁷ D⁷ / D⁷ D⁷ / G G / G G / C C / D⁷ D⁷ / G G /
- B: $/ D D / A^7 A^7 / A^7 A^7 / D D^7 /$
- A: /...

Definition: diatonic chord means a chord be built up exclusively from the notes which are part of the scale of some key, in our case exclusively from G-A-B-C-D-E-F# of the G major scale.

G, C, D are diatonic triads, built up from root, flat or sharp 3rd (3 or 4 semitones), and diminished or perfect 5th (6 or mostly 7 semitones).

 D^7 , A^7 are diatonic 7th chords, built up from diatonic triads, with a flat or sharp 7th (10 or 11 semitones) added.

By the way: as we will learn, we yet know even more about these chords: G, C, D are triads with root, sharp 3rd and perfect 5th, D^7 , A^7 are 7th chords with root, sharp 3rd, perfect 5th, and flat 7th.

Let's start with a neck diagram drawn on a strip of paper where you mark the semitones for each string of your box: for GDG tuning:

G#	А	A#	В	С	C#	D	D#	E	F	F#	G \star	G#	А	A#
D#	E	F ★	F#	G \star	G#	A *	A#	В \star	С	C#	D	D#	Е	F \star
G#	А	A#	В	С	C#	D	D#	E	F	F#	G \star	G#	А	A#

By the way: if you have a chord sheet for key of E, but your box is tuned to GDG, you can just draw a neck diagram as if the box would be tuned to EBE: above the 15th fret most boxes sound rather tiny, and so you can get an idea of how the song proceeds.

G Chord

G chord: 3rd is A# or B, 5th is D: A# is not part of the scale, so the triad with root on G is GBD, with the inversions BDG and DGB: swapping the notes of top and bottom string you get variants which are not proper triads:

GBD	DGB	BDG	GDB	DGB	BGD
root position	swapped	1st inversion	swapped	2nd inversion	swapped
7	12	0	4	4	7
9	9	0	0	5	5
0	7	4	0	7	4

Why all these variants sound different? Let's have a look at their internal intervals: try them out all three proper dyads of the triad:

root position	G	sharp 3rd B flat 3rd					D									
	G		perfect 5th													
1st inversion				В	flat 3r	ď	D		4	th		G				
				В		flat 6th G										
2nd inversion					D 4th G sharp 3rd						Brd	В				
						D sharp 6th							В			

Which variant sounds best? Which one sounds best with the following D⁷ chord? I favour the variant where the root of the chord equals the root of the scale and 3rd and 5th are in their natural order: GBD, especially for the first chord which anchors the song to key G major.

D⁷ Chord

 D^7 chord: 3rd is F or F#, 5th is A, 7th is C or C#; F and C# are not part of the scale, so the full 7th chord is DF#AC. With three strings only, we have three possibilites: omit the root, omit the 5th, or omit the 3rd:

Omit the root:

F#AC	CAF#	ACF#	F#CA	CF#A	AF#C
1st inversion	swapped	2nd inversion	swapped	3rd inversion	swapped
5	11	11	14	2	5
7	7	10	10	4	4
11	5	14	11	5	2

Omit the 5th:

DF#C	CF#D	F#CD	DCF#	CDF#	F#DC
root position	swapped	1st inversion	swapped	3rd inversion	swapped
5	7	7	11	11	5
4	4	10	10	0	0
7	5	11	7	5	11

Omit the 3rd:

DAC	CAD	ACD	DCA	CDA	ADC
root position	swapped	2nd inversion	swapped	3rd inversion	swapped
5	7	7	14	2	2
7	7	10	10	0	0
7	5	14	7	5	5

C Chord

Now the C chord: 3rd is D# or E, 5th F# or G: D# is not part of the scale, and G is the perfect 5th so the C chord is CEG:

CEG	GEC	EGC	CGE	GCE	ECG
root position	swapped	1st inversion	swapped	2nd inversion	swapped
0	5	5	9	9	12
2	2	5	5	10	10
5	0	9	5	12	9

As with the G chord, I favour here the variant where the root of the chord equals the root of the scale and 3rd and 5th are in their natural order: CEG.

Chords of the A Part

G	G	D^7	D^7	D^7	D^7	G	G	G	G	С	С	D^7	D^7	G	G
-	I	V^7	V^7	V^7	V^7	I	I	Ι	-	IV	IV	V^7	V^7	-	I
7	7	5	5	5	5	7	7	7	7	0	0	5	5	7	7
9	9	4	4	4	4	9	9	9	9	2	2	4	4	9	9
0	0	7	7	7	7	0	0	0	0	5	5	7	7	0	0

The Roman numbers refer to the steps of the chord progression: I is tonic, IV subdominant, V is dominant: I - V - I and I - IV - V - I are common chord progression in folk songs and country music.

B part

Now part B: $/ D / D / A^7 / A^7 / A^7 / D / D^7$ /: what we can see here: $/ D A^7 D / corresponds$ to $/ G D^7 G$ / but one 5th higher: here the key must have changed, because G major has Am⁷ with ACEG, but key now is D major with scale D-E-F#-G-A B-C#-D with A⁷ with AC#EG.

D Chord

Now the D chord: 3rd is F or F#, 5th is G# or A: F is not part of the scale, and A is the perfect 5th so the D chord is DF#A:

DF#A		F#AD		ADF#	
root position	swapped	1st inversion	swapped	2nd inversion	swapped
2	7	7	11	11	14
4	4	7	7	12	12
7	2	11	7	14	11

A⁷ chord, with 5th omitted

3rd is C or C#, 5th is D# or E, 7th is G or G#: C, D#, G# are not part of the scale, so the full 7th chord is AC#EG, with the 5th omitted AC#G:

AC#G	GC#A	C#GA	AGC#	GAC#	C#AG
root position	swapped	1st inversion	swapped	3rd inversion	swapped
12	14	2	6	5	12
11	11	5	5	7	7
14	12	6	2	0	5

B Part Chords

D	D	A ⁷	A ⁷	A ⁷	A ⁷	D	D ⁷				
I		V7	V7	V7	V7	-	I/V^7				
11	11	12	12	12	12	11	5				
7	7	11	11	11	11	7	4				
7	7	14	14	14	14	7	7				

Here the final dominant 7th chord D^7 is ambiguous: tonic (I) in the context of part B, but dominant (V) for the following part A:

Chords of the A Part

G	G	D ⁷	D ⁷	D ⁷	D ⁷	G	G	G	G	С	С	D ⁷	D ⁷	G	G
I	I	V ⁷	V^7	V ⁷	V^7		I			IV	IV	V ⁷	V^7		I
7	7	5	5	5	5	7	7	7	7	0	0	5	5	7	7
9	9	4	4	4	4	9	9	9	9	2	2	4	4	9	9
0	0	7	7	7	7	0	0	0	0	5	5	7	7	0	0