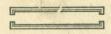
THE MARVEL TRANSPOSING DISC

"THE SLIDE-RULE OF MUSIC"



WHAT IT WILL DO

AND
HOW TO DO IT

The Marvel Transposing Disc What It Will Do

and

How To Do It

THE MARVEL TRANSPOSING DISC was invented to solve the difficulties of transposition. The many problems in this process and the necessary data used in their solution are illustrated below—the numbers corresponding to the numbers on the reverse side for THE MARVEL TRANSPOSING DISC.

THE MARVEL TRANSPOSING DISC shows:

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on		This Book
1.	The Signatures of all Major and Minor Keys	. 1
2.	The Chords of all Major and Minor Keys.	1
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	A. How to Write a Solo Melody (Lead) Part for Any Instrument.	9 & 10 & 11
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THE MARVEL TRANSPOSING DISC

1. The Signatures of All Major and Minor Keys.

These require no explanation.

2. The Chords of All Major and Minor Keys. These are the key or fundamental chords.

3. The Scales of All Major and Minor Keys.

A thorough knowledge of these scales is the secret of transposition. It will be particularly noticed that the various scales given below are in accordance with the directions on THE MAR-VEL TRANSPOSING DISC.

(A) Chromatic Scales.

1. Key of C. C# D D# E F F# G G# A A# B C 2 3 4 5 6 7 8 9 10 11 12 13 and the reverse descending.

2. Key of A. C C# D D# E F F# G G# A 4 5 6 7 8 9 10 11 12 13 and the reverse descending.

3. Key of F. Ab A Bb B C Db D Eb E F 4 5 6 7 8 9 10 11 12 13 and the reverse descending.

(B) Major Scales.

1. Key of C.

D E F G A B C ascending.
2 3 4 5 6 7 8 Major Scale Numbers.
3 5 6 8 10 12 13 Chromatic Scale Half-tones. and the reverse descending.

2. Key of A.

A B C# D E F# G# A ascending.
1 2 3 4 5 6 7 8 Major Scale Numbers.
1 3 5 6 8 10 12 13 Chromatic Scale Half-tones. and the reverse descending.

3. Key of F.

F G A Bb C D E F ascending.

1 2 3 4 5 6 7 8 Major Scale Numbers.

1 3 5 6 8 10 12 13 Chromatic Scale Half-tones. and the reverse descending.

(C) Minor Scales.

1. Key of C.

Eb F G A B C ascending.
3 4 5 6 7 8 Minor Scale Numbers.
4 6 8 10 12 13 Chromatic Scale Numbers.

Eb D C descending. Bb Ab G F 3 2 1 Minor Scale Numbers. 4 3 1 Chromatic Scale Half-1 Chromatic Scale Half-tones.

2. Key of A.

F# G# A ascending.

5 6 7 8 Minor Scale Numbers.

8 10 12 13 Chromatic Scale Half-tones.

E D C B A descending.
5 4 3 2 1 Minor Scale Numbers.
8 6 4 3 1 Chromatic Scale Half-1 Chromatic Scale Half-tones.

3. Key of F.

G Ab Bb C D E F ascending.
2 3 4 5 6 7 8 Minor Scale Numbers.
3 4 6 8 10 12 13 Chromatic Scale Half-tones.

Eb Db C Bb Ab G F descending. 4 3 2 1 Minor Scale Numbers. 6 4 3 1 Chromatic Scale Numbers.

Note F, in key given in song (F), changes to Note C, in key shown in slot (C). Note Gb, in key given in song (F), changes to Note C#, in key shown in slot (C). Note G, in key given in song (F), changes to Note D, in key shown in slot (C).

Note Ab, in key given in song (F), changes to Note D#, in key shown in slot (C).

Note A, in key given in song (F), changes to Note E, in key shown in slot (C).

Note B, in key given in song (F), changes to Note F, in key shown in slot (C). Note B, in key given in song (F), changes to Note F#, in key shown in slot (C).

Note C, in key given in song (F), changes to Note G, in key shown in slot (C).

Note Db, in key given in song (F), changes to Note G#, in key shown in slot (C). Note D, in key given in song (F), changes to Note A, in key given in slot (C). Note Eb, in key given in song (F), changes to Note A#, in key given in slot (C). Note E, in key given in song (F), changes to Note B, in key given in slot (C). Note F, in key given in song (F), changes to Note C, in key given in slot (C). Thus it can be seen at a glance just what any note in the song in the key of F will

4. To Transpose From One Note to Another.

Music is very often published in only one key, and the extreme notes may be too high or too low for certain voices or instruments. These extreme notes can be changed to any others and a corresponding new key will result. THE MARVEL TRANSPOSING DISC shows this process with but a moment's work.

Example:



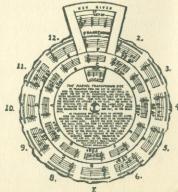
(A) A certain singer, whose highest note is D, cannot use this song because it reaches the note G. Therefore, the note G must be changed to the note D-the rest of the song and the key changing accordingly.

How to change the song.

- 1. Set the indicator (marked Key Given) on the key of the song to be transposed (in this song the key of F).
- 2. Select the note to be changed (in this song the note G) on the large disc.
- Turn the note wanted, found on the small disc (in this song the note D) directly under the note to be changed (G). 4. Now, the slot in the small disc will show the

new key necessary to have the note D the highest note in this song. (This new key will be the key of C.)

- 5. Now, each note of the song, selected on the large disc, belonging to the key of the song, shown by the indicator, will be changed to the note directly under it, on the small disc, belonging to the new key, shown in the slot in the small disc.
 - Thus (referring to the numbers on the illustration): (The selection of the chromatic scales of both keys is advised so that the notes selected in the transposition will conform to the keys, that is, # notes for # keys and b notes for b keys.)



Then the song re-written in the key of C (with D the highest note) will be like this: If the music is instrumental instead of vocal it will be seen that the transposition can be performed equally as well.

When the lowest note of the song is too low for the singer (or in-

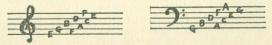
- strument) the same process is followed-
 - 1. Setting the Indicator on the key of the song.
 - 2. Selecting the note to be changed on the large disc.
 - 3. Turning the note wanted directly under it.
 - 4. Noting the new key in the slot.

change to in the key of C.

5. Observing that all the notes in the song selected on the large disc, belonging to the key of the song, change to the notes directly under them, on the small disc, belonging to the new key in the slot.

NOTE.—THE NOTES ON THE LARGE DISC ALWAYS BELONG TO THE KEY SHOWN BY THE INDICATOR, AND THE NOTES ON THE SMALL DISC ALWAYS BELONG TO THE KEY SHOWN IN THE SLOT.

NOTE.-Notes on the Bass staff can be transposed as easily as those on the Treble staff if the alphabetical names are correctly observed.



The different staves and their relation to each other will be found on the reverse side of THE MARVEL TRANSPOSING DISC.

5. To Transpose From One Key to Another.

Music is often transposed from one key to another to fill certain requirements. If the change is simple and the piece of music is short, the whole process will involve but little labor. But if the change is difficult and the piece of music is long, or if it is desired to arrange a medley in one key from pieces, all of which may be in different keys, then the difficulties of transposition will be thoroughly emphasized. THE MARVEL TRANSPOSING DISC simplifies any transposition so that it is but little more labor than the copying.

Example:



It is desired to change this song from the key of G to the

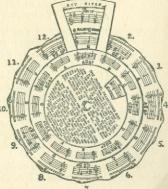
key of Bb.

How to change the song.

1. Set the indicator (marked Key Given)
on the key of the music to be transposed (in this song the key of G).

- Turn the slot in the small disc until it shows the key wanted (in this case the key of Bb).
- 3. Now, each note of the song, selected on the large disc, belonging to the key of the song, shown by the indicator, will be changed to the note directly under it, on the small disc, belonging to the key wanted, shown in the slot in the small disc.

Thus (referring to the numbers on the 10.) illustration): (The selection of the chromatic scales of both keys is advised so that the notes selected in the transposition will conform to the keys, that is, # notes for # keys and b notes for b keys.)



- 1. Note G, in key given in song (G), changes to Note Bb, in key wanted (Bb) shown in slot.
- 2. Note G#, in key given in song (G), changes to Note B, in key wanted (Bb) shown in slot.
- 3. Note A, in key given in song (G), changes to Note C, in key wanted (Bb) shown in slot.
- 4. Note A#, in key given in song (G), changes to Note Db, in key wanted (Bb)
- 5. Note B, in key given in song (G), changes to Note D, in key wanted (Bb) shown in slot.
- Note C, in key given in song (G), changes to Note Eb, in key wanted (Bb) shown in slot.
- 7. Note C#, in key given in song (G), changes to Note E, in key wanted (Bb) shown in slot.
- 8. Note D, in key given in song (G), changes to Note F, in key wanted (Bb) shown in slot.
-). Note D#, in key given in song (G), changes to Note Gb, in key wanted (Bb) shown in slot.
- 10. Note E, in key given in song (G), changes to Note G, in key wanted (Bb) shown in slot.
- 11. Note F, in key given in song (G), changes to Note Ab, in key wanted (Bb) shown in slot.
- 12. Note F#, in key given in song (G), changes to Note A, in key wanted (Bb) shown in slot.
- 13. Note G, in key given in song (G), changes to Note Bb, in key wanted (Bb) shown in slot.

Thus it can be seen at a glance just what any note in the song in the key of G will change to in the key of Bb.

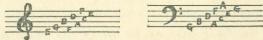
Then the song re-written in the key of Bb (the key wanted) will be like this:



If the music is instrumental instead of vocal it will be seen that the transposition can be performed equally as well.

NOTE.—THE NOTES ON THE LARGE DISC ALWAYS BELONG TO THE KEY SHOWN BY THE INDICATOR, AND THE NOTES ON THE SMALL DISC ALWAYS BELONG TO THE KEY SHOWN IN THE SLOT.

NOTE.—Notes on the Bass staff can be transposed as easily as those on the Treble staff if the alphabetical names are correctly observed.



The different staves and their relation to each other will be found on the reverse side of THE MARVEL TRANSPOSING DISC.

6. To Transpose From One Key Up or Down.

The musical rule of # the fourth note (the sixth half-tone) or b the seventh note (the twelfth half-tone), counting up, to change the key, may be demonstrated thus:

(A) 1. C D E F G A B C Major Scale Key of C. 1 2 3 4 5 6 7 8 Major Scale Numbers.

It will be observed that if a # is applied to the fourth note of this scale the result will be:

C D E F# G A B C Major Scale Key of G.
(4) 5 6 7 1 2 3 4 Major Scale Numbers.
(8)

2. C D E F G A B C Major Scale Key of C.
1 2 3 4 5 6 7 8 Major Scale Numbers.

It will be observed that if a b is applied to the seventh note of this scale the result will be:

C D E F G A Bb C Major Scale Key of F.
(5) 6 7 1 2 3 4 5 Major Scale Numbers.
(8)

(B) Since a # raises a note a half-tone and a b lowers a note a half-tone, it will be observed that one will cancel the other making natural the note to which both are applied.

Thus in keys that already have # or b the result will be:

A B C# D E F# G# A Major Scale Key of A.
 1 2 3 4 5 6 7 8 Major Scale Numbers.

When a b is applied to the seventh note of this scale:

A B C# D E F# G A Major Scale Key of D.

(5) 6 7 1 2 3 4 5 Major Scale Numbers.

(8)

2. Eb F G Ab Bb C D Eb Major Scale Key of Eb. 1 2 3 4 5 6 7 8 Major Scale Numbers.

When a # is applied to the fourth note of this scale:

Eb F G A Bb C D Eb Major Scale Key of Bb. (4) 5 6 7 1 2 3 4 Major Scale Numbers.

7. To Substitute For a Key With Many # or b.

When music is written in the keys of 4# or 5# or 4b or 5b, or other keys having many # or b, it often seems difficult to play. It can be played much easier by substituting mentally a new signature, thus changing the key, and playing the notes, excepting accidentals, as written. The accidentals will change according to the change made in the key.

Example:

which makes all the notes written (except accidentals, which must be changed separately) one half-tone lower.

This rule applies to the following keys, the upper being the one written and the lower the one played by substitution.

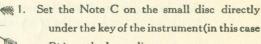
8. To Transpose (or Key) For Any Key, Band or Orchestra Instrument.

(A) Music for the piano, violin or voice is often transposed so that cornets, clarinets, flutes, saxaphones, horns and other instruments can play it. Some instruments have tuning slides to adjust their differences in keys, but generally parts in special keys are written for them. THE MARVEL TRANSPOSING DISC, with but a moment's work, shows the key and the entire transposition necessary so that any instrument can play piano, violin or vocal music.

Example:



1. It is desired to change this song, so that a Bb cornet, can play the melody (accompanying the piano, violin or voice in this key). How to change the song.



Bb) on the large disc.

Holding it there:

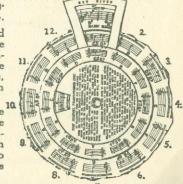
#2. Turn the indicator (marked Key Given) until it shows the key of the music to be transposed (in this song the key of Db).

 Now, the slot in the small disc will show the new key necessary so that a Bb cornet can play the melody (accompanying the piano.

violin or voice in the key of Db). This new key will be the key of Eb.

4. Now, each note of the song, selected on the large disc, belonging to the key of the song, shown by the indicator, will be changed to the note directly under it, on the small disc, belonging to the new key, shown in the slot in the small disc.

Thus (referring to the numbers on the illustration): (The selection of the chromatic scales of both keys is advised so that the notes selected in the transposition will conform to the keys, that is, # notes for # keys and b notes for b keys.)



- 1. Note Db, in key given in song (Db), changes to Note Eb, in key shown in slot (Eb.)
- 2. Note D, in key given in song (Db), changes to Note E, in key shown in slot (Eb).
- 3. Note Eb, in key given in song (Db), changes to Note F, in key shown in slot (Eb).
- 4. Note E, in key given in song (Db), changes to Note Gb, in key shown in slot (Eb).
- 5. Note F, in key given in song (Db), changes to Note G, in key shown in slot (Eb).
- 6. Note Gb, in key given in song (Db), changes to Note Ab, in key shown in slot (Eb).
- 7. Note G, in key given in song (Db), changes to Note A, in key shown in slot (Eb).
- 8. Note Ab, in key given in song (Db), changes to Note Bb, in key shown in slot (Eb).
- 9. Note A, in key given in song (Db), changes to Note B, in key shown in slot (Eb).
- 10. Note Bb, in key given in song (Db), changes to Note C, in key shown in slot (Eb).
- 11. Note B, in key given in song (Db), changes to Note Db, in key shown in slot (Eb).
- 12. Note C, in key given in song (Db), changes to Note D, in key shown in slot (Eb).
- 13. Note Db, in key given in song (Db), changes to Note Eb, in key shown in slot (Eb).

Thus it can be seen at a glance just what any note in the song in the key of Db will change to in the key of Eb.

Then the song-rewritten in the key of Eb (so that a Bb cornet can play the melody) will be like this:



If the music is instrumental instead of vocal it will be seen that the transposition can be performed equally as well.

NOTE.—THE NOTES ON THE LARGE DISC ALWAYS BELONG TO THE KEY SHOWN BY THE INDICATOR, AND THE NOTES ON THE SMALL DISC ALWAYS BELONG TO THE KEY SHOWN IN THE SLOT.

8. (A) 2. If it is desired to change the song above in the key of Db so that an Eb saxophone can play the melody (accompanying the piano, violin or voice in the key of Db):

1. Set the Note C on the small disc directly under the key of the instrument (in this case Eb) on the large disc.

Holding it there:

2. Turn the indicator (marked Key Given) until it shows the key of the music to be transposed (in this song the key of Db).

3. Now, the slot in the small disc will show the new key necessary so that an Eb saxaphone can play the melody (accompanying the piano, violin or voice in the key of Db). This new key will be the key of Bb.

4. Now, proceed in transposing the same as for the cornet given on pages 9 and 10, noting, however, that for an Eb saxaphone the melody part of this song must be changed from the key of Db to the key of Bb.

Note.—The Eb saxaphone (baritone) sometimes plays the bassoon parts, when written with this kind of a signature:



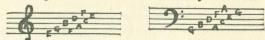
This means that the bassoon part in the key of Db must be played in the key of Bb by an Eb saxaphone, reading the notes as if they were written on the Treble staff instead of the Bass staff.

If it is desired to change the song above in the key of Db so that F horns, Db piccolos or flutes, A cornets or clarinets or any other special key instruments can play the melody, proceed in the same manner as for the instruments given above.

MELODY PARTS FOR ANY INSTRUMENTS CAN BE WRITTEN FROM ANY MELODY SCORE BY FOLLOWING THE PROCESS GIVEN

ABOVE.

Note.—Notes on the Bass staff can be transposed as easily as those on the Treble staff if the alphabetical names are correctly observed.



The different staves and their relation to each other will be found on the reverse side of THE MARVEL TRANSPOSING DISC.

Sometimes it is desired to transpose a part for some instru-8. (B) ment so that another instrument can play it. If both parts are for special key (Bb, Eb, etc.) instruments, the operation can be simplified by the use of the piano, violin, voice or bass instrument parts, since the keys of the parts for all instruments can be found from any of these parts. If none of these parts are available the key in which they would be can be found from any other part. THE MARVEL TRANSPOSING DISC shows any of these relations with but a moment's work.

Example:



KATHLEEN MA-VOURNEEN, THE

It is desired to change this song, written for a Bb cornet, so 1. that an Eb saxophone can play it (accompanying the cornet in it's key).

How to change the song.

1. Set the Note C on the small disc directly under the key of the instrument (in this case Bb) to be transposed from, on the large disc.

Holding it there-

Turn the indicator (marked Key Given) until the key of the part to be transposed appears in the slot in the small disc (in this song the key of A).

Now, the indicator (marked Key Given) will show the key of the piano, violin and voice parts that are played with the Bb cornet part in the key of A. This new key will be the key of G.

Considering the piano part as in the key of G, the Eb saxaphone part will be found to be in the key of E. (See directions for saxaphone transposing on page 11).

Set the indicator (marked Key Given) on the key of the Bb cornet part (in this song the key of A).

Turn the slot in the small disc until it shows the key of the Eb saxaphone part (in this song the key of E). 7. Now, each note of the song, selected on the large

disc, belonging to the key of the song, shown by the indicator, will be changed to the note directly under it, on the small disc, belonging to the new key, shown in the slot in the small disc.

(This is the same operation as transposing from one key to another. See pages 5 and 6 for full details.)

Then the song re-written in the key of E (so that an Eb saxaphone can play the

melody) will be like this:



KATHLEEN MA- VOURNEEN, THE

If the music is instrumental instead of vocal it will be seen that the transposition can be performed equally as well.
NOTE.—THE NOTES ON THE LARGE DISC ALWAYS BELONG TO THE

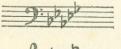
KEY SHOWN BY THE INDICATOR, AND THE NOTES ON THE SMALL DISC ALWAYS BELONG TO THE KEY SHOWN IN THE SLOT.

8.(B)2. If there is a part written on the Bass staff and it is desired to have an instrument using the Treble staff play it, the transposition can be performed as simply as from Treble staff to Treble staff if the alphabetical names of the notes are correctly observed.

Example:

It is desired to change a 'cello part in the key of Db, so that an Eb saxaphone can play it (accompanying the 'cello in it's key).

How to change the part.



 This instrument ('cello) plays in the same key as the piano. (If the instrument does not, the corresponding piano key must be found. See page 12.)



2. Therefore, the Treble staff will not be changed in key.



 The correct key for an Eb saxaphone to play the 'cello music in Db, will be found to be Bb. (See page 11.)



4. Then the change in key and in clefs can be shown thus. The notes can be written, as in transposition for saxaphone on page 11, or the part can be marked like this, and played as if it had the new signature.

Note.—Notes on the Bass staff can be transposed as easily as those on the Treble staff if the alphabetical names are correctly observed.





The different staves and their relation to each other will be found on the reverse side of THE MARVEL TRANSPOSING DISC.

8.(C)
1. How to Transpose an Orchestra Arrangement.

If it is desired to transpose a whole orchestration, the different instrumental parts must be taken separately. First, transpose the piano part, and all other parts that have the same key, from the key given in the music to the key wanted (see page 5). Then, find the keys necessary for the special key (Bb, A, F, etc.) instruments so that they can play with the piano in the new key (see page 9) and transpose their parts from the keys given to the new keys necessary.

The parts for instruments using any staff can be transposed as easily as those for instruments using the Treble staff if the alphabetical names of the notes are correctly observed. The different staves and their relation to each other will be found on the reverse side of THE MARVEL TRANS-

POSING DISC.

8. (C)
2. How to Transpose a Band Arrangement.

If it is desired to transpose a whole band arrangement, the different instrumental parts must be taken separately. First, ascertain the key of the arrangement, either from the bass instrument parts or by finding what the key of the piano part, that could be played with any of the instruments, would be (see page 12). Then, transpose the parts that are written in the key of the arrangement to the key wanted (see page 5). Then, find the keys necessary for the special key (Bb, A, F, etc.) instruments so that they can play with the arrangement in the key wanted (see page 9), and transpose their parts from the keys given to the new keys necessary.

The parts for instruments using any staff can be transposed as easily as those for instruments using the Treble staff if the alphabetical names of the notes are correctly observed. The different staves and their relation to each other will be found on the reverse side of THE MARVEL TRANS-

POSING DISC.

9. To Transpose From One Clef to Another.

(A) Music is often transposed from one clef to another so that instruments that ordinarily play from only one clef can play music not written for them. When the clefs are in the same key the transposition can be performed by observing the relations of the clefs and their staves to each other and changing the notes accordingly.

Example:
The relative positions of a note on the Bass and Treble staves.



(B) When the clefs are in different keys—first, transpose the notes from the key given to the key wanted without changing the clef. Then change the notes from the clef given to the clef wanted.

Example:

The transposition of the note D in the key of A, on the Treble staff, to the note Bb in the key of F, on the Bass staff.



Note.—The notes on the staff of any clef can be easily transposed if the alphabetical names are correctly observed. It will be noticed that the signature of any key always governs the same notes, regardless of the staff on which it may be placed, and that by this fact the alphabetical names of the notes on any staff can be determined.

Note.—The different clefs and their staves and their relation to each other will be found on the reverse side of THE MARVEL TRANSPOSING DISC.

10. The Different Clefs and Their Staves.

The different clefs, where they are used, and the relation their staves bear to each other and to the great staff, will be found on the reverse side of THE MARVEL TRANSPOSING DISC.

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