Time Unit Box System
TUBS

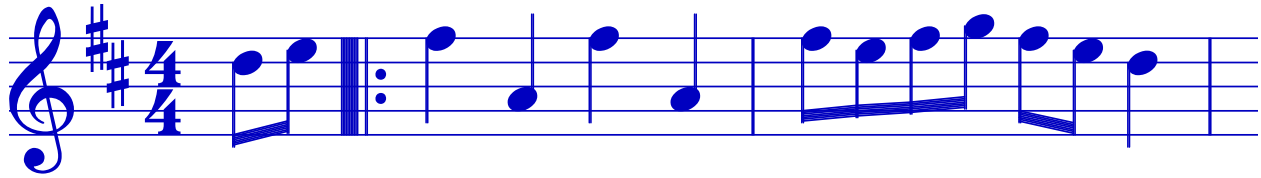
The Time Unit Box System (TUBS) was created by musicologists as a device for notating the complex rhythms of African music. Standard notation of African rhythms is difficult to write and difficult to read. TUBS permits anyone to examine and comprehend complex rhythms.

TUBS is a system of one or more rows of boxes. Each box represents one unit of time. That unit might be an eighth note, a quarter note, a sixteenth note. This unit is the *smallest* duration of time in the sequence being notated. A symbol (often an X) is placed in a box when a musical sound is to be produced. An empty box represents silence. Rows indicate what each hand or each drum part is doing.

TUBS can be adapted to indicate pitch or strike style for percussionists by replacing the X symbols with indication of pitch or type of strike.

Here is an example of TUBS in use.

The standard notation of the fiddle tune *Liberty* is:



A TUBS representation conveys only the rhythm of the phrase. The smallest time duration is an eighth note.

X	X	X		X		X		X		X	X	X	X	X	X	X	

TUBS is not very helpful in representing a single melodic line like this. But when polyrhythms need to be studied, TUBS is invaluable

Here is a TUBS representation of a 3 against 2 polyrhythm.

Right Hand	X		X		X	
Left hand	X			X		