Ding (Unity) User Instructions

About this Document

This document has chapters describing how to join an existing virtual tower and also how to set up a virtual session.

This document is updated each time that changes are made to the Ding software. Therefore it is best not to print it because it will soon go out of date. Instead, if possible, view in a Window in part of your screen.
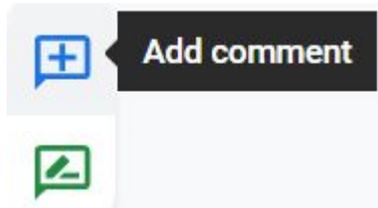
 If you have any suggestions for improvement to this document then please point to the right margin at the relevant part of the document and add a comment using the blue button.

Introduction to Ding

'Ding' is an app which allows bell ringers to practise online.

'Bob' is an app which works with Ding and automatically rings any bells which don't have a human ringer allocated; thus a single person, or bands which don't have a full complement, can practise.

'Ding Unity' is a newer version of Ding which can be installed on many platforms. Its improved graphics allow ringers to develop their 'ropesight' and to alter their striking time according to the weight of the bells. References below to 'Ding' apply to 'Ding Unity'.

The instructions below suggest you should 'click' on the screens, but if you are using a touch screen device then obviously tap rather than click.

There is a Facebook page https://www.facebook.com/groups/dinging where the latest information can be found.

Ding (Unity) is developed by Giles Wood. It runs on Windows, Mac, Linux, Android and any Chromebook capable of running an Android app..An iPhone/iPad version partially exists, but thanks to Apple's restrictions we need a volunteer with a Mac who knows how to compile and ship it.

"Ding" is a version of Bob that was written for the standard version of Ding. The Unity version incorporates many of the features of Bob, so you don't need to run the separate version of Bob, but it does offer a couple of features that aren't in Ding Unity (yet), principally the option to choose Rounds until you press Go. There is also a wider range of ringing speeds available. However, when you are running Ding Unity there is no reason to start up Ding unless you want to use those extra features.

Ding is work in progress so go to the Ding Facebook page to read Giles's notifications regarding new releases.

Installation instructions are shown in Appendix B.

Ding screens Overview

Ding displays seven screens:

1. **Entry screen** - join or create a virtual tower
2. **Bob Setup screen** - select method to be used by Bob
3. **Band Placement screen** - allocate ringers to bells and change conductor if required
4. **Ringing screen** - this is where you ring the bells. The things that are most relevant to the Conductor are on your left, and everything else is on your right, with the screens that you are most likely to want nearest at hand.
5. **Preferences/Options/Configuration screen** - mouse/key settings for hand and backstroke, view style (ropes or buttons) and band layout (linear, semicircle, 3D)
6. **Chat screen** - send a message to other ringers in the same virtual tower
7. **Information screen** - lists the ringer, who is on what bells and "ping" (network) times

On the sides of the screen are arrows which you can click on to move to the next or previous screen.'

Join an Existing Session

Select the Tower to Join

Start Ding and enter your name at the top of the box shown.

In the 'Join a Tower' box, any existing towers will be listed. Click on the tower you want to join and click OK. The conductor will see your name in the list of ringers.

The Zoom meeting ID and password may be displayed beside the tower name - see screen shot. Start Zoom and enter the information.

Set Your Preferences

Click '>' THREE times to go to the page which allows you to setup your preferences:

Viewing Style

Move the Style slider to select your preferred view - ropes or buttons.

The Style slider offers two options for viewing the ringing; a numbered 'button' view and a bell ropes view.

If you are wanting to learn:

- a method then the numbered button view is likely to be convenient
- Ropesight and bell weights, then the bell rope view will be better.

Layout - adjust the slider to choose between views which show:

- Linear - treble on the right (like a piano)
- Linear - left to right with treble being on the left
- Semicircle
- 3D circle

The Buttons View screen

If you have chosen the numbered buttons view then you will see …
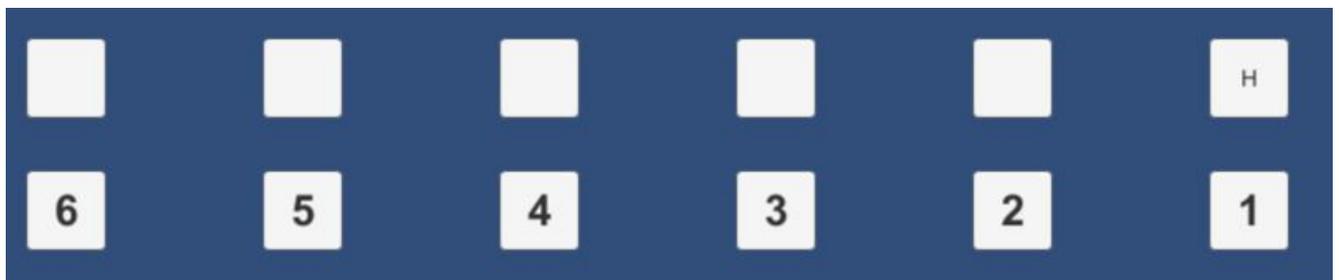
Your bell number will have an H above it. By pressing the H on your keypad you can ring your handstroke and by pressing B the backstroke. The slider controls are for use on touchscreens and it also responds to a tap.

The Ropes View screen

Linear view - click on '**Viewpoint**' (top left) to adjust your viewpoint.

3D View - The ringing room has a floor with mats showing the bell numbers, and labels showing who is ringing each bell.
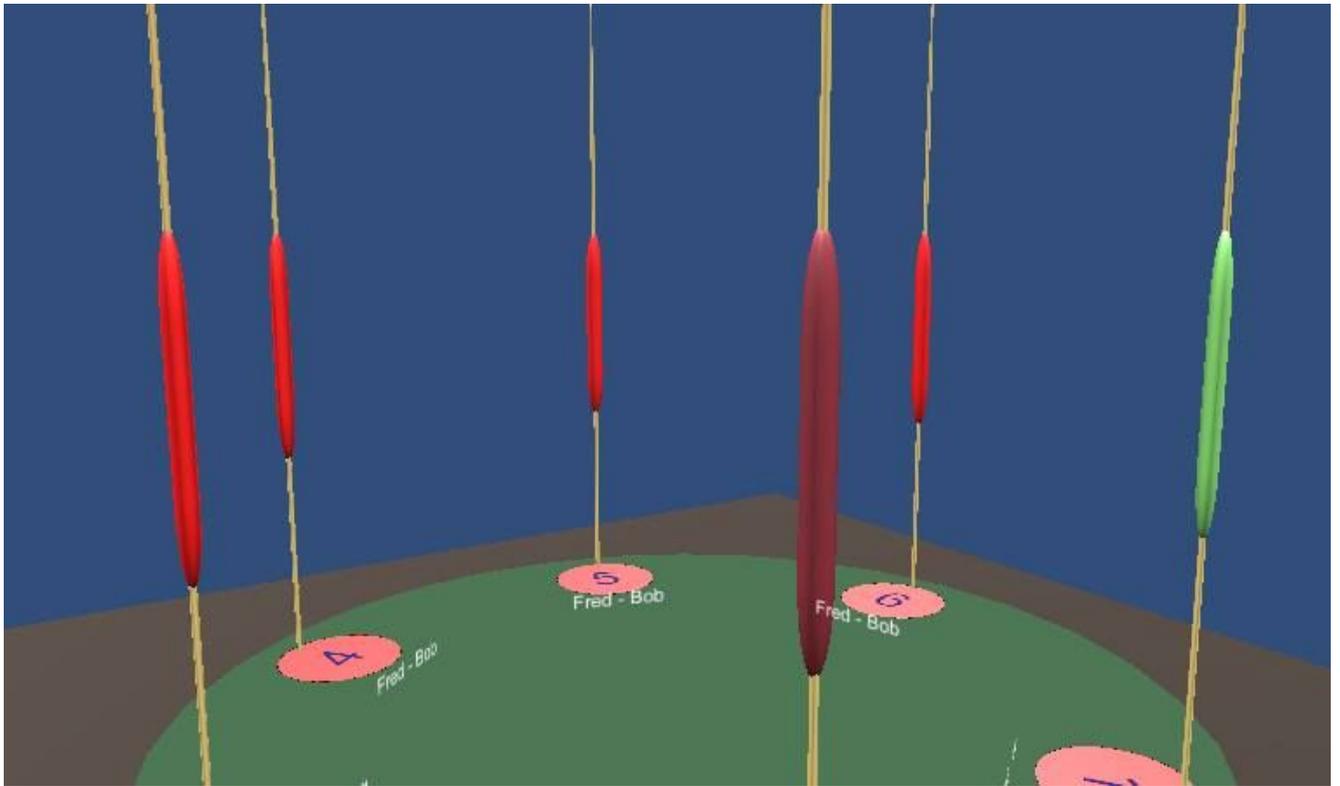
The treble's sally is green.

Your own sally is a deeper red (including if you are ringing the treble)

In the 3D view you can adjust your viewpoint of the bells. Press and hold the left or right KEYBOARD arrow keys to move around the ringing circle. Use the up and down arrow keys to view it from higher or lower. And use the screen Up and screen Down keys to zoom in and out in the 3D view. You need to press and hold the screen Up / screen Down key to see it happening. Worth mentioning that these keys are commonly called PgUp and PgDn on laptop keyboards - many users have never noticed them! That way you can get the best viewpoint on your bell.

Chat/Message screen

This is where you can send messages to other ringers or the conductor.

Creating a Session

This section describes how to use Ding to ring on your own or arrange a session with other ringers.

Ding is set up and operated using a series of screens. On the sides of the screen are arrows which you can click on to "turn the screen".

Creating a Virtual Tower

On the Ding opening screen enter your name.

At the bottom of the screen, where it says 'Create a Tower', enter a name for the virtual tower. The 'Tower Name' and Description should mean something to those who you invite. Some find it useful to put the Zoom meeting id and password into the tower name then when others join the tower they can see the Zoom details.

When you create a new tower you automatically become the conductor, and a band is set up for 12 bells with you on the treble and Bob on the other bells. This means that you can immediately ring rounds on twelve using the H and B keys, or the mouse wheel.

Click on > to see the next screen.

Bob Setup

There are two reasons why you would want to use Bob. One is to request Bob to ring some of the bells for you, the other is to help with keeping the ringing straight when someone goes wrong. If you don't want to do either of these things then you don't need to set the method.

 If you don't enter a method then Bob assumes that you wish to ring rounds.

 The 'Choose a Method' box has a dropdown arrow allowing you to select some of the most common methods such as Plain Bob, Grandsire and Stedman. You can also select 'Custom' and enter the place notation manually in the numerical identification of the method. Appendix A lists the most commonly rung methods. Just copy the numbers into the Method Selection box and click OK.

Place notation defines a lead of a method. Whilst there are prominent exceptions among the methods you first learn, in most methods Bobs and Singles alter the last change of the lead. In Plain Bob Minor, the last change of the lead is normally 12 (meaning that first place and second place stay unaltered whilst the others swap). The Bob is 14, and the Single is 1234.

If you don't enter a method then Bob assumes that you wish to ring rounds.

The large box allows spliced ringing.

Immediate Go/Stop - There is an option to Go/Stop only on command from the conductor (tower bell style) instead of two rounds and go (handbell-style).

Force Pace - Ability for Bob to force the pace of ringing: the "Force Pace" option tells any Bob bells to ring at a set rhythm regardless of what other bells do

Peal Speed - The peal speed is only relevant if Bob is ringing some of the bells, as it tells Bob what gap to leave. Adjust the ringing speed to suit your session.

Setting Up and Allocate the Bells to Ringers

You now have to allocate the bells; click the right side arrow to move to the bell allocation screen.

Move the 'How many bells' slider to adjust the number of bells to be rung. A maximum of 16 bells are allowed.

You will see that, by default, you have been nominated as the conductor and allocated the treble and Bob will ring all the other bells. You can change this by clicking the drop down arrow against any bell. When other ringers have joined the tower their name will appear in the drop-down list.

Ding Unity includes a copy of Bob, so for every user who is running Ding Unity you will see two ringers listed, themselves and the copy of Bob that is running in their version of Ding Unity. Meanwhile the separate version of Bob is just called "Bob". (There are more technical ways to get it to use a different name, detailed on the dinging.co.uk website).

In theory you could get all of your band members to set up the method on their Method screen, and then assign the bells to each person's copy of Bob. There wouldn't be a lot of point though! Technically speaking the bells are being rung by one computer each instead of one human each, but

there's not much difference compared with having a single copy of Bob ringing all of them, except perhaps that you could put each bell on a different peal speed in order to mock up some poor striking.

In practice, it's possible to use other people's copy of Bob if they have a better internet connection. Another reason to do it is to spread the workload of running a practice, by delegating the job of setting up Bob to another ringer.

Preferences Setup

Click the right side arrow TWICE to skip the Ringing Screen and move to the next setup screen.

Mouse	✓	Click one button for handstroke and another for backstroke
Keyboard	☐	The same key for both hand and backstroke
Bells	——O————	Medium
Style	————————O	Bell ropes
Layout	O————————	Linear - treble on the right (like a piano)
Key	————O————	D
Peal Speed	————O————	0
Local Handling	✓	Ideal for solo practice; experimental for bands
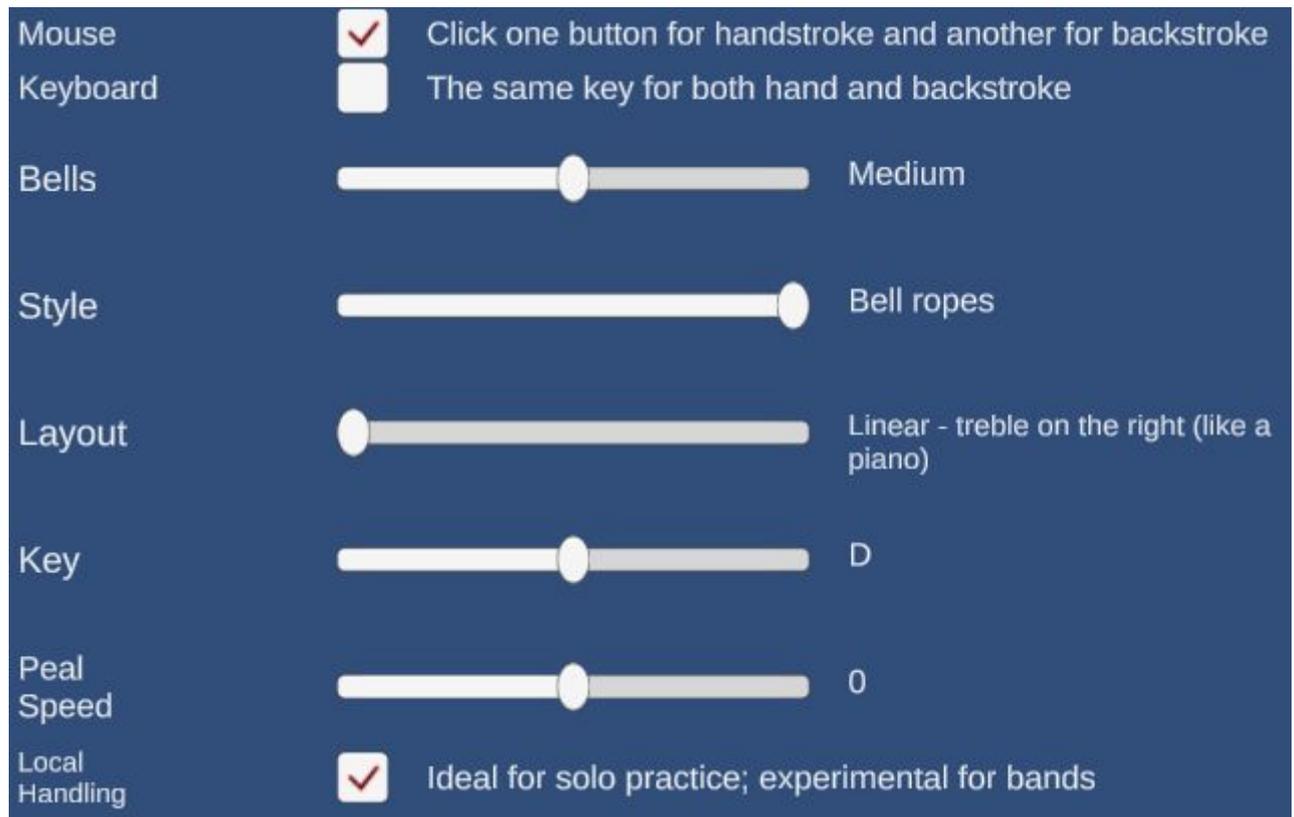
Bells (Weight) - you can vary the bell weight with the slider.

Key - of the tenor

Peal Speed

Local Handling - removes the internet delay. This option is recommended for solo ringing but experimental for band ringing.

Ringing screen

The ringers' names are shown above the bells in the buttons and linear/semi-circle ropes mode. The slider is intended for people using smartphones.
Use the H and B keys for handstroke and backstroke; or, if you have a mouse wheel, use that - away is handstroke, back is backstroke.

Both the 'numbered buttons' and the 'bell ropes' view offer the following actions:

Here's treble q	Go w	That's All e	Stand r	Bob t	Single y		Reset

Communication with Bob

Here's treble - Bob to start the treble - Q
Go - W triggers a "Go Next Time" at any point. This has two uses:
- as a "Go Again" command used when you come into rounds.

- when you have entered the method into Bob but you have an all-human band who ring rounds for a period before starting the method, the Go button is useful to tell Bob when you are actually starting.

Usually Bob expects to ring one whole pull of rounds and then start the method, stopping automatically when you reach rounds, so there is no need for the Go button. Ding has the option to stay in rounds until you press Go.

Reset - Before you start ringing, it is quite common for people to try out their bells to make sure they are working. However, doing this confuses Bob. When you pull off in rounds, he thinks that some of the bells have already rung, so he rings too soon. You use the Reset button to tell Bob to ignore any of these tryouts that have gone before. Much the same applies if you start ringing a method and then decide to start again - if you don't press Reset then Bob thinks you are continuing where you left off.

Communication with Ringers

There are buttons which inform Bob but are primarily for the use of conductors who don't have verbal communication with the other ringers:

That's All - E - brings the method/rounds to a gradual end. This button isn't often used - the conductor usually just says 'That's All'. You would only need to use it if you weren't able to talk to the other ringers, or if you were using the option (in Ding) to keep going with the method until That's All is pressed.

Stand - R - immediate end to ringing. Again, in practice the conductor would just say Stand, so there aren't many cases where you would need to use this button.
Bob - now modify the sequence of changes
Single - Similar to a bob, but more of the bells make places rather than changing in a different direction.

Document compiled by Lenka Stokes and Giles Wood

Appendix A - Place Notations

Method	Place Notation	Bob	Single

Bastow Bob Doubles	5.125.5.1		125#123
Cloisters Doubles	3.1.5.1.3.1		
Grandsire Cinques	3.1.E.1.E.1.E.1.E.1.E.1.E.1.E.1.E.1.E.1	3.1	3.123
Grandsire Doubles	3.1.5.1.5.1.5.1.5.1	3.1	3.123
Grandsire Triples	3.1.7.1.7.1.7.1.7.1.7.1.7.1	3.1	3.123
Plain Bob Doubles	5.1.5.1.5/125	145	
Plain Bob Maximus	x1Tx1Tx1Tx1Tx1Tx1T/12141234		
Plain Bob Minor	x16x16x16/12141234	14	1234
Plain Hunt Doubles	5.1		
Plain Hunt Minor	x16/12	14	1234
Stedman Cinques	3.1.E.3.1.3.1.3.E.1.3.1	E#9	E#90E
Stedman Doubles	3.1.5.3.1.3.1.3.5.1.3.1		
Stedman Triples	3.1.7.3.1.3,1		
Kent Treble Bob Minor	34x34.16x12x16x12x16,16		

You can find the place notation of any method by typing the full name of the method and "place notation" into Google. E.g. "Bristol Surprise Maximus Place Notation".

Appendix B - Downloading and Installing Ding

If the installation instructions change then Giles will update the instructions on Facebook. What follows may therefore not be the most up-to-date.

For Windows, Mac and Linux

For the source app go to Giles's Ding Development folder here: Ding
Some people have reported that their anti-virus product interferes with the installation. If so then it is probably easiest to temporarily switch off your anti-virus product.
Windows: right click on dingUnity64.zip and download and open it, and run the setup file that is in it. Windows will warn you that it is from an unknown source. However, it is quite safe as we know where it came from. So ignore the warning and run it anyway.
When the installation completes, an icon for Ding (Unity) should appear on your Desktop and Start Menu.
Giles Wood has created a video which demonstrates how to install Ding on a Windows computer. In Facebook search 'Ding Unity Installation'
Windows (32 bit): For old windows machines that can't run 64-bit applications, use dingUnity32.zip.
Mac: right click on mac.zip and download it. Extract it and then run ding.app/contents/macOS/ding

Linux: right click on Linux.zip and download it, then unzip it, make the file 'ding' executable and run it.

For Android

go to https://play.google.com/store/apps/details?id=com.Ding.Ding.