U-Turn Round
Manual

V2.2

Safety Guide

Read this guide carefully before using or installing the product.

Preventing accidents and protecting the health to the user of the U-Turn Round.

- For disposal of old electrical equipment please follow the guidelines associated with your country/territory or ship the unit back to blackbox-av and we will dispose/recycle the unit. The symbol on the left indicates that this product shall not be treated as household waste. Instead it shall be handed to applicable collection points for the recycling of electronic equipment. If you dispose of this unit correctly you will be helping prevent future harm to the environment which is caused by poor waste management of this type of equipment.

Preventing damage to the product and malfunctions

- Do not operate the unit below -20 or above 60 degrees Celsius. Battery performance will be affected by colder temperatures.
- When deciding on a suitable installation point please follow the installation guides for your particular product to protect it from environmental damage. The post electronics are waterproof but cannot be submerged in water so do not install in an area which is prone to flooding. We have designed our products to be tough and durable but we cannot guarantee it against vandalism and this should be considered when selecting a suitable installation point.
- When selecting a suitable installation location, please consider both the local wildlife or if in a residential area the local people from excessive noise pollution.

Warranty

Blackbox-av provides a 12 month warranty with this product. For further information or advice please contact **info@blackboxav.co.uk**

Your new U-Turn Round

In the Box:

1. U-Turn Round
2. USB (128MB)
3. USB Programmer
4. Manual
5. Security Bit

U-Turn Round

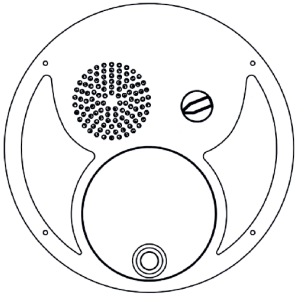
Our unique, third generation, wind-up dynamo powered digital sound store. Updatable via the included USB Programming Dongle. It's available as Standard or as Oversized.

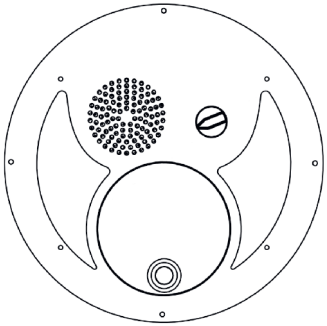
Self-Powered

Select, Turn, Listen... Visitors can select a message via the selector dial, with up to eight message options

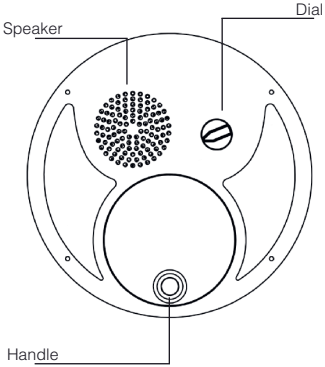
Install Anywhere

The U-Turn Round is designed to be fitted onto a pole and is suitable for both indoor and outdoor use. The unit is both vandal and weather resistant; being constructed with a tough, durable stainless steel casing.





Setting Up



Overview

The Dial
Simply choose between 1-8 messages via the selector.

The Handle
Once a message has been selected, wind the handle to power the unit. You will be instructed to 'please turn me till the message plays'.

The Speaker
After the U-Turn has gained enough power, it will begin to play your selected message through the speaker.

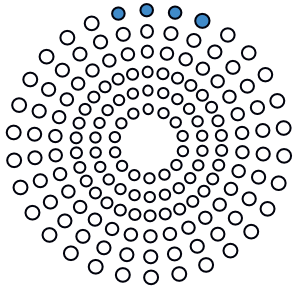
First Time Setup

When your U-Turn first arrives it will be in transit mode; simply insert the dongle with the USB attached (the drawing on the following page demonstrates where to insert the dongle) into the unit and wind. It will state 'please turn me till the message plays' then proceed to play the U-Turn welcome message. From this point the unit will operate normally.

Configuring your U-Turn

Using the USB Programmer

There are various configuration options for your U-Turn Round. To access each setting you simply need your USB Programming Dongle (included with your U-Turn Round) with an attached USB stick.



Configuration Settings

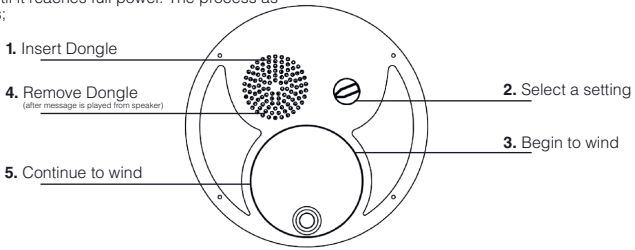
Ensure the U-Turn isn't playing a message and insert the Dongle & USB stick into the speaker holes indicated in the diagram.

Note: The USB does not need to have content on it unless you intend to Upload New Content.

To access a setting; you must choose from the available settings below that are assigned to the numbers on the selector (the following pages go into detail about these settings):

1. Volume Adjustment
2. Individual Track Statistics (since last erase)
3. Total Track Statistics (since last erase)
4. Upload New Content
5. Factory Settings (turn message beeps on / off)
6. Serial Number (retrieve the units unique serial number)
7. Complete Total Track Statistics (cannot be erased)
8. Erase Statistics

Once you choose a setting, wind the U-Turn until you're asked to remove the dongle. Once the dongle has been removed, continue to wind the unit until it reaches full power. The process as follows;



Accessing a Setting

1. Volume Adjustment

Here you can set the volume level from 1-10. Simply follow the process on page 4 and choose 'Volume Adjustment' on selector 1.

After you have wound the U-Turn to full power, it will go through the volume options starting at 1 and ending on 10. Once the U-Turn reaches your desired volume level, turn the selector between levels 1-8.

You will hear a 'Thank You' and a beep to indicate the level has been saved to the unit.

2. Individual Track Statistics

Gain access to the statistics for each individual track plays. Simply follow the process on page 4 and choose "Individual Track Statistics" via selector 2.

After you have wound the U-Turn to full power, it will provide play statistics for each track in turn, from 1-8. Each number will be given up to 6 digits. For example; if track 1 has been played 238 times the U-Turn will say;

"Total Messages for track one are as follows, two three eight"

Note: These statistics are erased using setting 8.

3. Total Track Statistics

Gain access to the total plays for every track combined. Simply follow the process on page 4 and choose "Total Track Statistics" on selector 3.

After you have wound the U-Turn to full power, it will provide play statistics for every track combined. The number will be given up to 6 digits. For example; if the number of plays for tracks 1-8 combined is equal to 1023 the U-Turn will say;

"one, zero, two, three"

It will repeat this number twice.

4. Upload New Content

You can update the 8 tracks available on your U-Turn Round and change the 'Please turn me' and 'I'm paused' messages. Please see the programming section for further information.

5. Beep Settings

(beeps on/off)

Disable the end of message beeps that are set as standard on the U-Turn Round. Simply follow the process on page 4 and choose “Beep Settings” on selector 5.

6. Serial Number

Gain access to your U-Turn’s serial number & firmware version. Simply follow the process on page 4 and choose “Serial Number” on selector 6.

After you have wound the U-Turn to full power, it will give you your serial number (up to 6 digits), followed by the firmware version. For example;

‘Your U-Turn Round serial number is, “one, two, zero, four, seven, three - version number 4.1”.

7. Total Track Statistics

Access the statistics for total all time plays. This number cannot be erased unlike selector 2 and 3. Simply follow the process on page 4 and choose “Complete Total Track Statistics” on selector 7.

After you have wound the U-Turn to full power, it will provide the total all time play statistics (up to 6 digits). For example, if the unit has been played 179,456 times it would say;

‘Total messages played please note that this counter cannot be reset - one, seven, nine, four, five, six’

It will repeat this statistic twice.

8. Erase Statistics

Erase the statistics given in settings 2 & 3. **It does not erase the total stored play statistics given in setting 7.**

This option will allow you to track plays periodically and still keep track of total overall plays.

To begin, simply follow the process on page 4 and choose “Erase Statistics” on selector 8.

After you have wound the U-Turn to full power, the unit will state;

‘Warning you are about to reset the stat counters, if you wish to cancel this please turn the dial now’

There are then 5 warning beeps. Turn the dial before the 5th beep to cancel the reset - If you do not, the unit will proceed to reset the counters for setting 2 & 3.

Programming your U-Turn

Content for your U-Turn Round is stored on a USB stick (supplied pre-programmed). We suggest you use this as a template for uploading your own content.

Should you need to use a different USB stick we suggest you format the new stick first to 'FAT' or 'FAT 32'.

To program your content you will need;

1. 2 x standard messages (A1 & A2 - "Please turn me" and "I'm paused".)
2. 8 x audio messages (1-8)
3. USB stick (included)
4. USB Programming Dongle (included)

1. Windows OS

Windows OS is required to program your U-Turn Round using a PC or Laptop (XP - 10). **MacOS is not supported due to hidden files generated by the OS.**

2. A1 & A2

These two .mp3 files are included on the USB stick and are responsible for the messages;

A1 - "Please turn me till the message plays"
A2 - "I'm paused, please turn me some more"

They **must** be named A1 and A2. Changing these files allows you to customise the messages should you need to alter their phrasing or language. They must always be the first two files added to the USB stick. A1 being dragged in first, then A2.

Your A1 file **must** play to a maximum of 2.9 seconds, whilst your A2 file **must** be 2.9 seconds.

Note: Your files must be dragged onto the file in the order followed:

Your A1.mp3 file
Your A2.mp3 file
Your 1-8 audio tracks

Note: Your audio tracks must be dragged seperately one at a time.

3. 8 Audio Messages

You will need 8 audio files to upload to the U-Turn Round. Even if your U-Turn only utilises a portion of the audio slots, you will still need 8 files for upload. These tracks must be 16MB or less in total, due to the UTR's internal storage space.

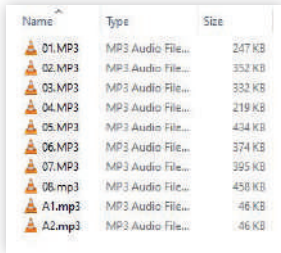
The audio messages must be named "0x.mp3" where x is an integer 1-8.

This means there will be 10 files in total (including A1 & A2), if you attempt to program your U-Turn Round without the correct number of files it will tell you and the upload will fail).

Note: If you do not have the USB stick provided, use a USB stick less than 1GB in size if possible, if you have issues uploading your files please first retry with a different USB stick.

4. The Connection Slots

You should now have 10 files on your USB stick, including A1 & A2 as seen below:



To program content onto the U-Turn Round you must connect your USB stick to the USB Programming Dongle and insert into the connection slots located in the speaker grill.

5. Uploading Content

Now you must follow the process on page 4 and choose “Upload New Content” on selector 4.

1. Wind the Unit and it will tell you to “Please turn me till I reach full power, I will tell you when to stop”. Once full power is reached the U-Turn will tell you it’s “transferring files”.

The unit will tell you if you need to wind the U-Turn again during the transfer for additional power. If so this will be indicated with beeps.

This process should take approximately 2 minutes. To confirm that the files are being transferred, check the speaker grill. If there is a red LED visible, this means files are transferring.

2. When the transfer is complete, you will hear “Thank you, please remove the Dongle and USB Content Uploader”.

Your content is now updated.

6. Learning Mode

After programming new content the U-Turn needs to learn how much power is required to play each track.

This will then minimise how much winding needs to be done by users in the future.

You will need to wind the handle for each track. Turn the selector to 1, then turn the handle. Ensure you keep winding until the track has started playing. This is all it needs to learn the length of the track.

Once track 1 stops playing or finishes, follow the same process for tracks 2-8.

After all tracks have gone through the Learn Mode, they’ll be able ready to play to your users!

7. Status Lights

Status lights will indicate the current state of the U-Turn.

Red - Power

Green flashing - Ready/Playing

Green solid - Paused

Reddish Orange - Programming mode

Flashing red - Content Uploading

Installation Guide - U-Turn Round

Plinth Mounted

1. Remove the 4 dome head security screws from the bag supplied.

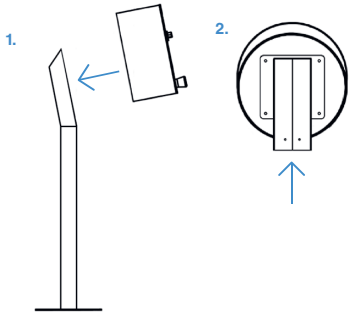
2. Align the mounting holes on the base of the U-Turn to the corresponding holes of the angled head of the plinth. Screw and tighten the 4 dome head security screws through the plinth into the back of the U-Turn.

Post Bracket

1. Remove the 4 dome head security screws from the bag supplied.

2. Align the mounting holes on the base of the U-Turn to the corresponding holes of the angled head of the plinth. Screw and tighten the 4 dome head security screws through the plinth into the back of the U-Turn.

3. Fix Bracket and U-Turn to post.



Installation Guide - U-Turn Round Oversized Through Panel

The Oversized U-Turn Round is designed to be secured in place through a panel, please see technical drawings on page 17 for required dimensions.

Technical Information

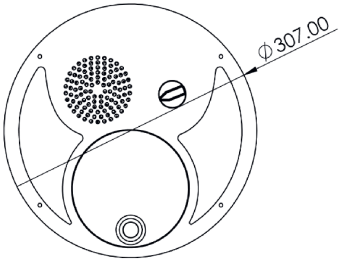
U-Turn Round

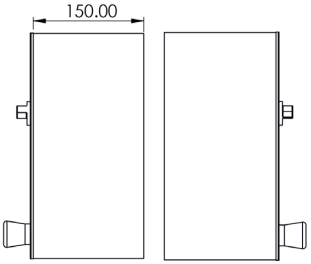
Unit Weight	9.6Kg
Packaged Weight	10.5Kg
Package Dimensions	320 x 420 x 420mm
Unit Dimensions	155 x 307 x 307mm
Message Storage Medium	16MB Flash Memory
Maximum Number of Messages	8 Messages
Message Encoding Format	.MP3
Maximum Total Message Length	16 Minutes with audio @ 128kbps
Recommended Message Length (Tracks 1-8)	- < 2 Minutes per Message @ Volume 5 or lower - < 1m 20s per Message @ Max Volume
Frequency Range	75Hz - 20kHz
Power	Hand cranked dynamo charging internal capacitors (approx 2 minutes of message play time at full charge)
Audio Playback Time	2:1 turn to play ratio @ max volume. 10s turning = 20s Playback 30s turning = 1m playback
Audio Output	1W into 8ohm Speaker.

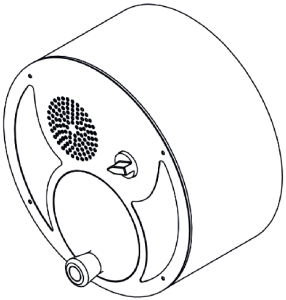
U-Turn Round Oversized Through Panel

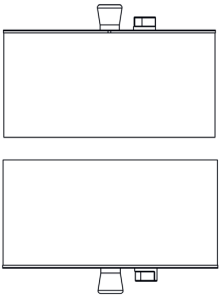
Unit Weight	10Kg
Packaged Weight	10.9Kg
Package Dimensions	320 x 420 x 420mm
Unit Dimensions	150 x 340 x 340mm

Technical Drawings - U-Turn Round

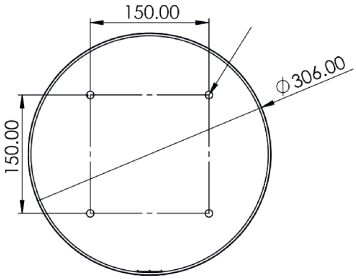




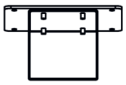


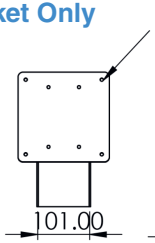


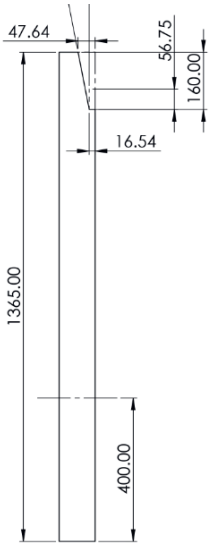
M6 Thread

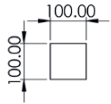


Technical Drawings - Bracket Only

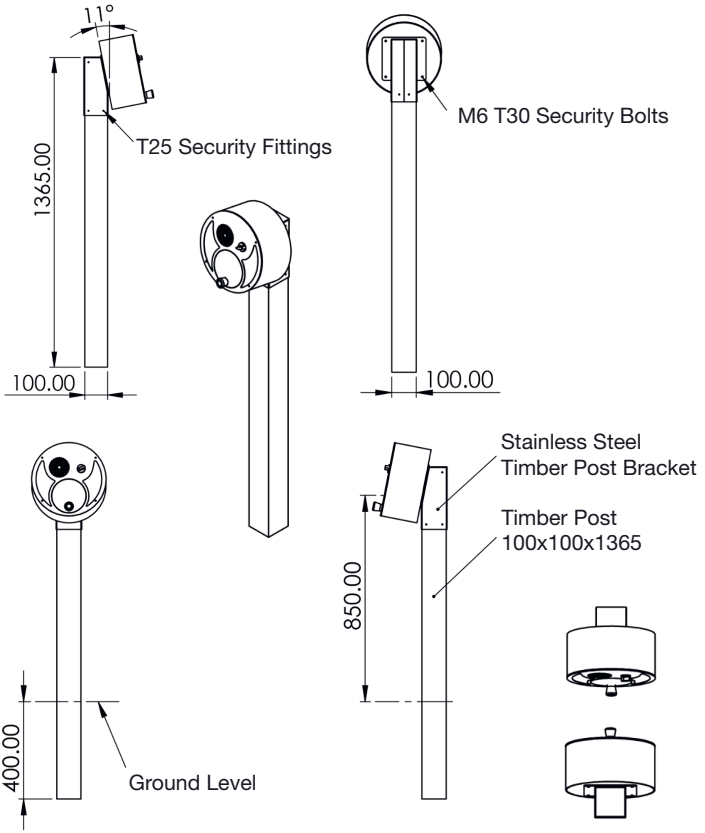




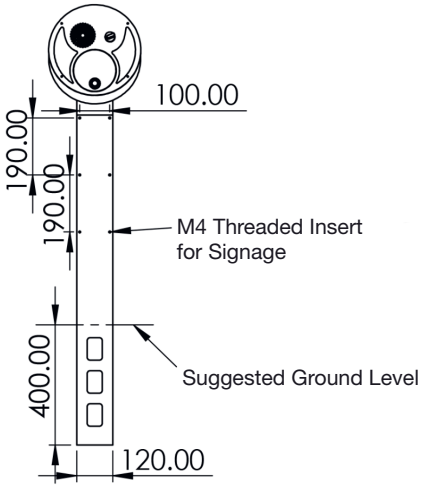


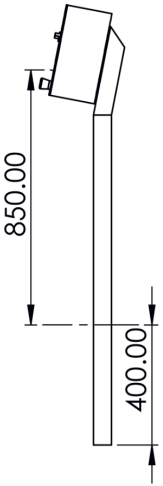


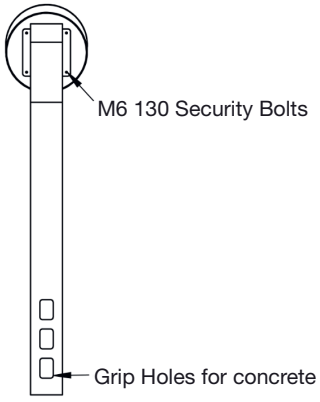
Technical Drawings - In-Ground Timber

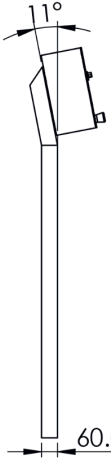


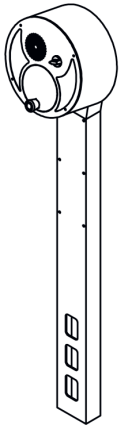
Technical Drawings - In-Ground Metal



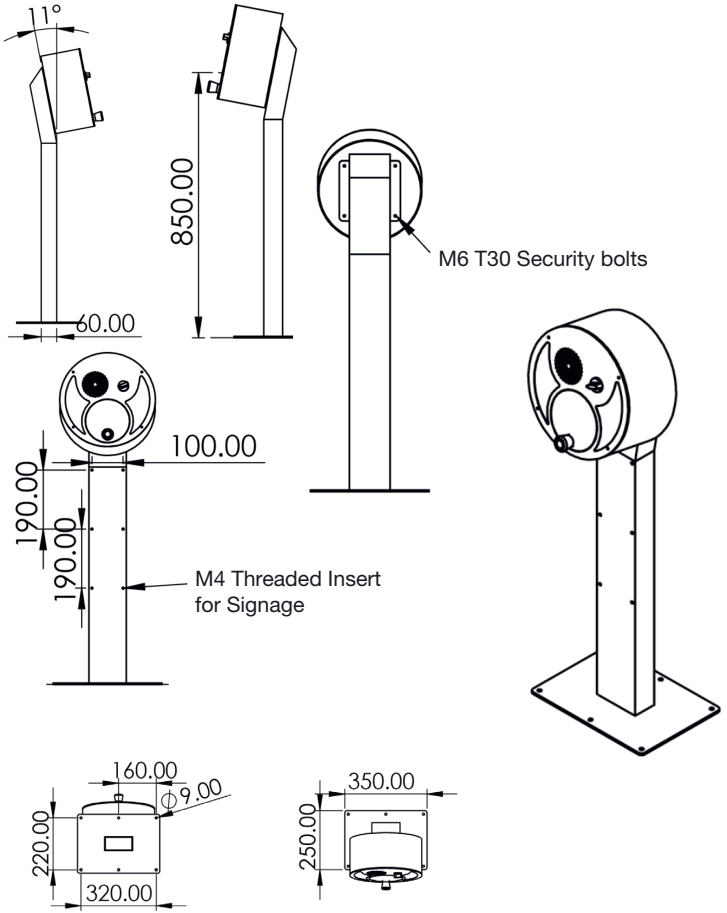




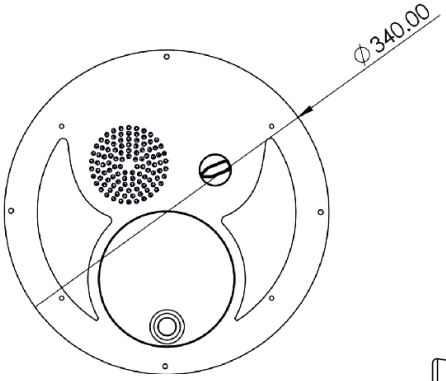


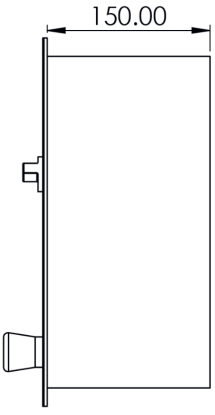


Technical Drawings - Plinth Mount

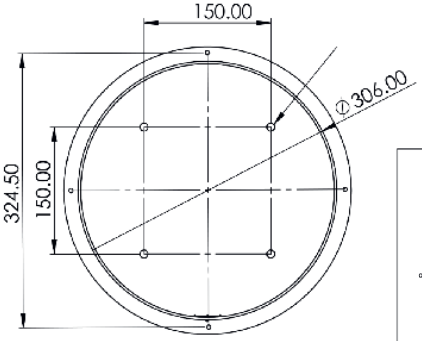


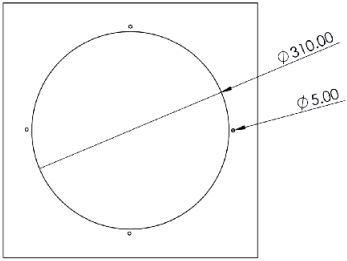
Technical Drawings - U-Turn Round Oversized Through Panel





M6 Insert





Notes

Notes

blackbox-av
audio video interactive

the
interpretationshop