WELCOME

Thank you for purchasing U-Turn Round and congratulations on choosing a product that is not just ecological in the way it is used by not requiring mains power but is also ecologically sound in that over 90% of the product can be recycled when it reaches the end of its life.

U-Turn Round is one of a range of innovative 'no power required' products from blackbox-av. We are committed to developing eco friendly interpretation products based on green power generation technologies which not only promote the eco credentials of us and our customers, but also introduce practical examples of new technology use to the public, enhancing acceptance, generating interest and most importantly, helping them learn about your garden, trail or interpretive subject.

Thank you again for purchasing a blackbox-av product. We look forward to dealing with you again soon.

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OPERATIONS GUIDE

We have tried to keep the operation of the U-Turn Round as simple as possible...

1. Select a track from the 8 available.

2. Turn the handle round in either direction. (Keep turning until the message plays.)

3. Listen to the message.

SPECIFICATIONS

Messages

Message storage medium:	64MByte Flash Memory (on board)
Maximum number of messages:	8. Must be 8 files on card no more, no less.
Message encoding format:	Windows PCM (*.wav)
Message sampling type/rate:	16 bit mono / 22.05, 16.0, 11.025 KHz
Maximum total message length:	>48 minutes@ 11.025KHz
Memory Erase Time:	Approx 90 seconds
Programming Transfer Rate:	Approx 20seconds/MByte of message

Message selection via 8 position magnetic dial
Please note: Programmers are not provided as standard with the U-Turn but are available at additional cost.

Message Output

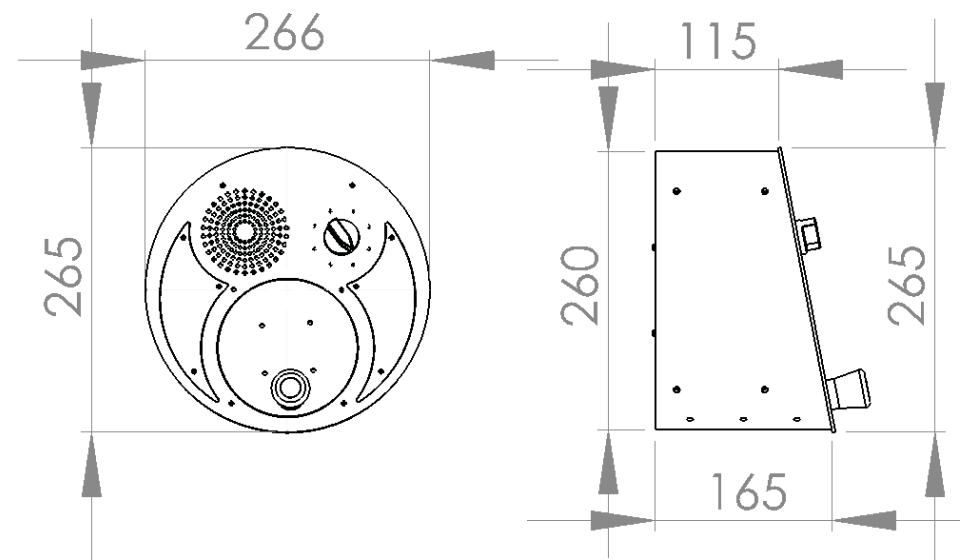|	
Playback sample type/rate:	12 bit mono / 22.05, 16.0, 11.025 KHz
Audio output:	0.75W into 8ohm speaker
Freq. range:	75Hz-20kHz

Power

Hand cranked dynamo charging internal capacitors
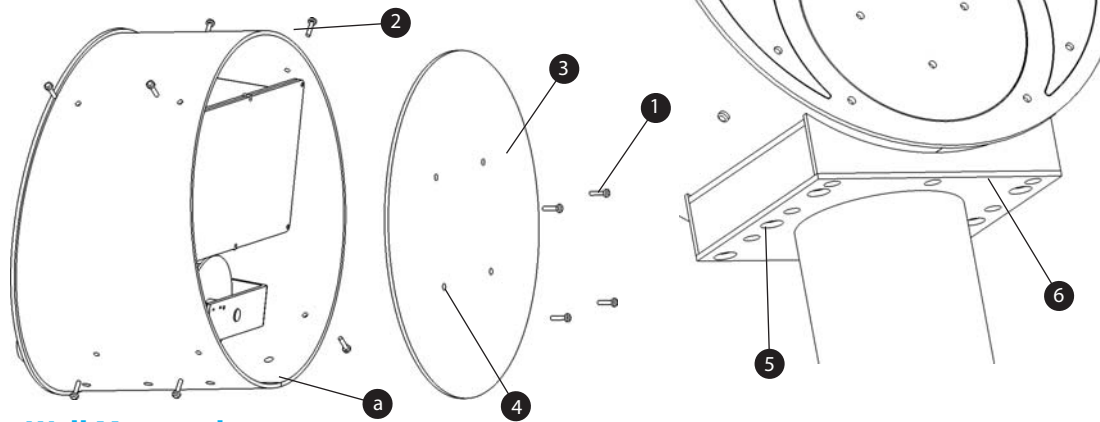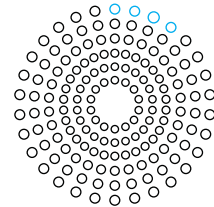(approx 2 mins. message play time)

Weight

Unboxed 8KG
Boxed 9.5KG

Size

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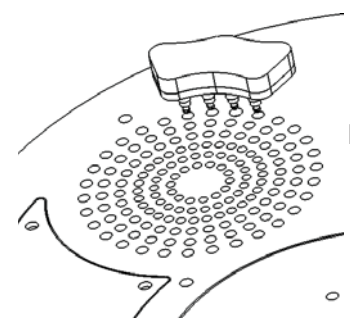audio video interactive

INSTALLATION GUIDE

Wall Mounted

a. Remove the 4 rear security screws (1). Remove 4 security screws (2) and detach the rear panel (3) from the unit (a).

b. Using the rear panel (3) as a template mark 4 points through the four fixing holes(4). Ensure that the panel is straight.

c. Drill the four marked holes and using appropriate fixings secure the rear panel to the wall through the 4 fixing holes(4). If attaching to an uneven surface take care not to over tighten as this could cause the plate to distort.

d. Offer the unit up to the rear plate. Slide the tube over the fixing tabs. Align the holes, insert and tighten the 4 rear security screws (4).

Post Mounted

a. Remove the 6 dome head security screws from the bag supplied. Place the U-Turn Round on the post collar (6).

b. Align the mounting holes on the base of the U-Turn to the corresponding holes of the collar (6). Screw and tighten the 6 dome head security screws (5) through the collar into the base of the U-Turn

Export Post Mounted

a. Fix collar and post adapter using screws (5) through the collor into the base of the uTurn.
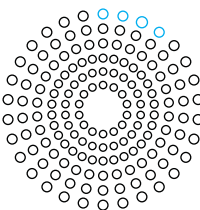
b. Fix collor and uTurn to post.

ADJUSTING THE VOLUME

There are 4 preset volume levels for the U-Turn which can be selected via the programming port. Once selected, the volume setting is stored and this level will be used for all messages.

1. Ensure the U-Turn is not playing a message.

2. Fully insert the volume dongle or programmer head into the four clear speaker holes. (See Diagram right & below) Note – If you are using the programming head please ensure that the SD card is removed.

3. Wind the U-Turn handle for about 10 seconds until the volume setting message is heard - "Volume level 1". The U-Turn will then repeat this message but with the volume number changing from 1 through 4 and back to 1. The volume level changes for each message to match the volume setting i.e. 1-4.

4. When the desired volume level is heard you should remove the dongle (or programmer head) before the next volume message is played. This sets the volume to the last setting played.

5. The U-Turn will beep momentarily to indicate that the volume level is stored and the unit is ready for use at the new setting.

6. Test the volume setting by winding the U-Turn handle. Store the dongle or programmer safely for future use.

For a full list of FAQ's and video guides visit our website
www.blackboxav.co.uk/u-turn-round

GETTING PLAYBACK STATISTICS

ERASING PLAYBACK STATISTICS

The U-Turn Round is now capable of playback statistics which tell you the playback total.

1. Ensure the U-Turn is not playing a message.

2. Fully insert the volume dongle or programmer head into the four clear speaker holes. (See Diagram right & below) Note – If you are using the programming head please ensure that the SD card is removed.

3. Turn the selector to 2. Wind the U-Turn handle for about 10 seconds until the unit speaks "playback total zero zero zero zero one" meaning the unit has played back the message once. The unit will reset at 999,999 plays.

4. When you remove the volume dongle the U-Turn will beep to indicate it is ready for standard playback.

5. Test the playback by winding the U-Turn handle and listening to a message. Store the dongle or programmer safely for future use.
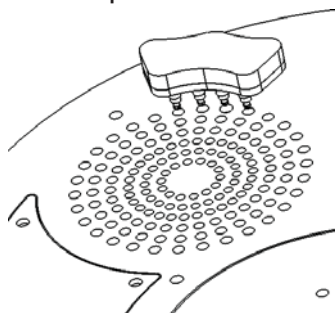
GETTING SERVICE PLAYBACK STATISTICS

Service stats are the total number of plays that the unit has ever played.

Follow steps 1&2 above.

3. Turn the selector to 7. Wind the U-Turn handle for about 10 seconds until the unit speaks "playback total zero zero zero zero one" meaning the unit has played back the message once. This figure is not erasable.
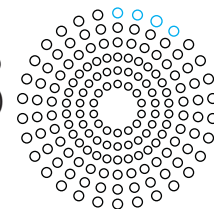
Follow setps 4&5 Above

For a full list of FAQ's and video guides visit our website
www.blackboxav.co.uk/u-turn-round
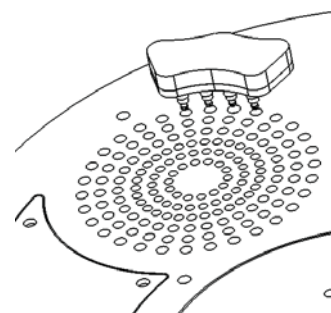
You may wish to generate statistics for different seasons or times of the year and so we included an erase feature of the U-Turn.

1. Ensure the U-Turn is not playing a message.

2. Fully insert the volume dongle or programmer head into the four clear speaker holes. (See Diagram right & below) Note – If you are using the programming head please ensure that the SD card is removed.

3. Turn the selector to 8. Wind the U-Turn handle for about 10 seconds until the unit plays 4 warning beeps. If you wish to cancel the erase simply remove the dongle from the unit before the end of the 5 pairs of warning beeps.

4. To confirm that the playback total has been erased follow the "Getting Playback Statistics" guide on the left hand page.

5. Test the playback by winding the U-Turn handle and listening to a message. Store the dongle or programmer safely for future use.

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PROGRAMMING GENERAL INFO

The audio files are initially created on a computer. The files are copied to an SD card which is inserted in the hand-held programmer.
The programmer is then connected to the U-Turn Round and the file transfer process is started. The files are copied to the UTR audio board and stored on the internal on board memory. After completing the transfer, the programmer is removed from the U-Turn and it is ready for use.

SD card

The SD card MUST be formatted as FAT with a blank volume name before copying the 'wav' files. To FORMAT right click the SD drive icon from 'My Computer' and selecting FORMAT.

Audio Files

Files MUST be PCM (wav) named 01, 02, 03, 04, 05, 06, 07, 08. No less than 8 tracks.
Files Must be PCM (wav) Mono, 16 bit, 22.05KHz, 352kbps
Files should be normalized to 100% amplitude for best quality during playback.

Audio Encoding guide

This guide will assist you in converting your audio files to the correct format:
http://www.blackboxav.co.uk/product-downloads/audio_encoding_guide.zip

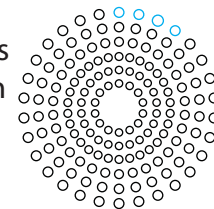at this time otherwise the computer will assume the card is in use and will not allow it to be removed.

The programmed card should then be inserted to the programmer with the label side up.

PROGRAMMING PROCEDURE

The procedure for copying the files into the U-Turn internal system is as follows:-

WARNING – Please make sure that the U-Turn has been powerless for 30 mins.

1.   Ensure the SD card is inserted in the programmer and the programmer is switched OFF before beginning the programming process.

2.   Look carefully at the speaker holes; you should notice 4 holes which are clear from the protective mesh. They are located in the outer ring, top right of the speaker hole array.
(See diagram) Align the programmer head pins to the 4 outer holes of the speaker grill. Do not force the pins in to the holes.

3.   Switch the programmer ON – the RED LED lights, wait until the RED LED flashes.

4.   Turn the U-Turn handle until the AMBER LED lights and remains lit until the memory is fully erased (approx 90 seconds).

5.   If the AMBER LED does not light after about 5 seconds winding, remove the programmer, switch the programmer OFF and wait about 1 minute. Then repeat from step 2.

6.   The GREEN LED will then flash as the message data is transferred. This could take several minutes (20 seconds per MByte of data).

7.   When all messages are programmed, all 3 LEDs go off, and the U-Turn will beep. – Switch OFF the programmer and unplug the head of the programmer.

8.   Wait until the U-Turn stops beeping and then play all messages to check that they have been successfully loaded.

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CONNECTOR COLLAR

We have designed this connector collar to supply to existing U-Turn customers. This collar fits the old style pole so its an easy to upgrade to the U-Turn Round.
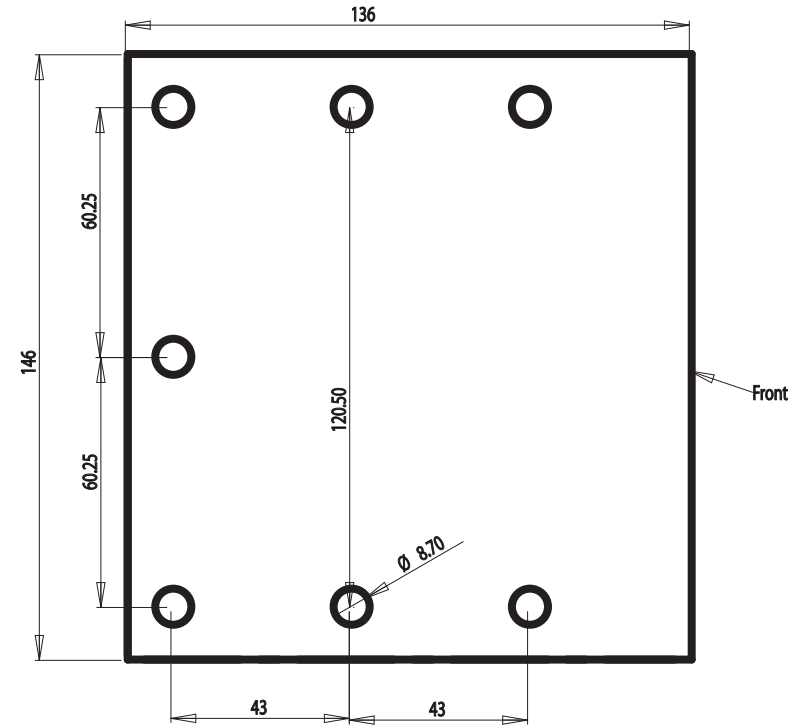
EXPORT COLLAR

If you are based outside the UK for us to ship a pole will be quite costly, so to save you money we suggest you make a basic pole to the following specifications. We then supply this export collar which contains the complex connections to hold the U-Turn Round in place.

TOP OF POLE

Below is a template that shows the holes you will require in the top of your post to fix the collar to.

POLE SUGGESTION

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