

::Bones

Neat as a pin with Speakout tags



Dear Speakout customer,

This overview wants to illustrate the many possibilities Speakout offers you in your household or working place by exploring the range of different tags.

Many of these ideas were brought up by customers like you and we would like to motivate you as well to feed back your proposals or new applications with Speakout and the various tags. We like to publish them and make them available to the many people that could use them!

We wish you a lot of fun testing new ideas.

Sincerely,
Bones Inc., Switzerland

1. Introduction

Printed or written tags are used in the whole world to label objects. Electronic tags have the advantage that they can be heard acoustically. Thus, they enable a wide range of applications in household, office and leisure. They enhance the organization, autonomy and mobility of the individual.

In the following we refer to tags not only as adhesive tags; other types such as plastic cards, rings or washable buttons are mentioned as well.

We would like to describe you the various kinds of tags in two ways: Firstly, we introduce each tag with its characteristics and secondly we make a virtual walk through the rooms of a common household, describing in each room, such as living room, kitchen, bathroom, etc., the typical applications of tags.

Electronic tags work on RFID basis. This mystic abbreviation means nothing else than „Radio Frequency Identification“. Information is transmitted by means of magnetic waves over a distance of a few millimeters or centimeters. The huge advantage of this technology over the traditional optical bar code technology is that an object does not need to be targeted exactly before the reader, and its rotation is mostly irrelevant. Objects can even be read from their backside or completely hidden. For instance, you can find tags inside a box or CD cover. However, a weakness of RFID technology is the incompatibility with metal in the immediate environment. For instance, you cannot directly tag a can of beans with an RFID sticker. While trying to read the tag, the readers magnetic waves are completely swallowed by the can and make a communication with the tag impossible. Fortunately, for this application there are dedicated metal proof tags in shape of a ring. This ring tags are explained later. These rings could be fixed on a can with an elastic band.

Non-adhesive tags can be used in a fridge or freezer without problems. Adhesive tags probably don't work well in a fridge since their sticking glue gets prudish - rendering the built-in antenna of the tag unusable.

Magnetic waves as used in Speakout are not dangerous. They are harmless for people, animals and plants.

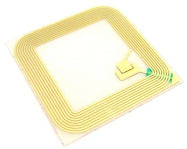
2. Description of individual tags

Tags can be delivered as stickers, plastic cards, buttons or rings. The stickers mark objects permanently. Please do not try to remove a sticker from a body because almost everytime the tags printed antenna will be destroyed, making the tag useless. Instead, you can change your voice record for each tag unlimited times. This option makes stickers ideal to tag bodies with changing content. Plastic cards, buttons and rings in turn were designed to move from one target to the next one.

Tag square (TAGSQ1), sticker

- Side length 40 mm.

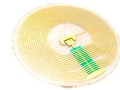
This sticker is an all-rounder. It's a compromise between size and reading range. This tag suits objects with smooth sides like boxes, envelopes, folders, CD covers, sorting boxes, board games, food boxes and so on.



Tag small and round (TAGRO1), sticker

- Diameter 25 mm.

This type is suitable for small, smooth objects. The small size is pro and con at the same time: The tag needs very little space to fit on bodies, but the reading range is limited to a few millimeters.



Tag for CD's and DVD's (TAGCD1), sticker

- Diameter 35 mm, with hole in the middle

As the name suggests this tag is to label CD's and DVD's. You stick the tag directly on the disk on its top side. This is the side without thinning around the center, unlike the bottom side. Don't stick anything on the bottom side. Also, never put anything outside the center. Objects put off-centric will make run the disk noncircular, which could damage your CD drive seriously. To put a tag properly in the center of a disc, release the tag from its carrier tape and put it onto your small finger, with the sticking side away from your hand. Now put the disc with its top side first onto this finger and stick the tag onto it. To finish, flatten the tag with your thumb. Please do this sticking process very carefully. Any attempt to release a tag from a CD will most certainly destroy the tag.



Tag in credit card sized format (TAGCC1)

- Dimension 85 by 54 mm.

This type has an excellent reading range of up to 5 cm because of its big size. This card works very well to mark folder backs and to insert it into envelopes or pockets.



Laundry buttons (TAGLA1), washable

- Diameter 15 mm, size 2 mm.

These buttons are especially suited for clothing. They can be washed up to 100 degree Celsius and also be frozen. The reading range is very good. Due to their small size, laundry buttons work well with Velcro detachable marks, for instance to tag medicament packages (see below).



Metal proof button with hole in middle (TAGRO2)

- Diameter 32 mm, size 7 mm.

This button works also on metal. It can be easily attached to mid sized objects with a rubber band, for instance a can of beans.



Velcro points (TAGVEL)

- Can be used very good with small buttons (TAGLA1).
- Diameter 13 mm.

Use Velcro points to use tags unlimited times on multiple objects. Velcro points consist of a soft part (loop point) and a hard part (hook point). Stick the hook point on the tag and the loop point on the object to tag, for example a medicament box. Upon depletion of medicament, detach first the tag together with the hook point and then dispose the box with the loop point. You can reuse the tag by simply putting it on another object, again with a Velcro point. This is the reason why in a Speakout set you receive 10 hook points but 30 loop points.



3. Examples of use

In the following we want to describe a walk through a common home and to advise of possible use cases of Speakout tags.

3.1. Living room

CDs and DVDs

You can label all CD's and DVD's with the special CD tag that contains a hole in the middle. To put a tag properly in the center of a disc, release the tag from its carrier tape and put it onto your small finger, with the sticking side away from your hand. Now put the disc with its top side first onto this finger and stick the tag onto it. To finish, flatten the tag with your thumb.

Programmed buttons on your phone and emergency numbers

You can draw your phone in bigger size on a sheet of paper and attach a tag to each drawn button. On these tags you can record the names or functions that the phone

buttons are for. The same can be done for instruction manuals, remote control, adapters and electronic devices in general. Also, it is suitable for board games.

3.2. Bedroom

Clothing

Mark your clothing with the small laundry buttons. You can sew the buttons into the garment at a suitable position. Don't worry - the buttons are washable and extremely tough. They survive a dryer without problems.

Clothes hanger

For plastic clothes hanger you can use small round stickers. For metal clothes hanger you can utilize the metal proof rings and hang them around the hook of the hanger. Alternatively, fix the the tag with a rubber band or a cord.

For shoes or clothes-pins the same concept applies.

3.3. Kitchen

Metal

In the kitchen we find many things made of metal, so most tags are unusable. But fortunately we have the metal proof rings, which can be attached with an elastic band or a cord.

Packaging

For objects that are often exchanged, such as boxes or spice containers, you can use small tags or buttons with Velcro points. Stick the hard hook point on the tag and the soft loop point on the object. After having used up the content of the container, dispose the packaging with the Velcro point and reuse the tag for another package.

Frozen food

For frozen food like sauces, meals, meat and so on you can utilize the plastic cards. Use one card for several products or one card for a whole frozen drawer. To mark a drawer, attach a card on its front and record what is inside.

Wine bottles

The problem with wine bottles is that they stand out of the shelf and have closings made up of thin metal (tin). For that reason you have to stick the tag on the neck of the bottle and not on its top capsule. Alternatively, use the metal proof rings and attach them with a rubber band on the bottle.

More objects

Be creative! Use tags also for spices, jam, Tupperware, identically shaped products, tea, cleaning and washing agent, spray can, shopping lists and much more.

3.4. Office

Folders

For folders with a wide back (55 mm) you can use plastic cards. They have the advantage that they could be used by everybody since in addition to tag them electronically, they can be marked with a permanent marker.

Files

File sleeves and hanging files can be marked with stickers or plastic cards. For hanging files the sticker has to be placed apart of the leading metal trail. Another possibility is to put the sticker on a piece of carton and place it into your hanging file.

More

This principle can be used as well for documents, envelopes, books, credit cards, disks and much more.

3.5. Bathroom

Medicaments

Medicament packages can be marked with a square tag and your pharmacist will be pleased to record important, specific information like indication, validation, side effects and so on for you. You can reuse the packaging several times and simply refill its content. Alternatively, you can fix a tag with a Velcro point and reuse it. In any case, please pay attention that the validation will be updated correctly when re-using tags.

More objects

Use this possibilities for cosmetics, soap, and many more things.

3.6. Hobby

Sorting and organization

Each little shelf in a type case or toolbox can be marked very easily with a small round tag. Alternatively you can put a small button into each shelf.

More objects

You can grade wool into the different colors and mark each of them. Similarly, you can organize tools like drills or screws. Furthermore, you can label liquids and cleaning agents, bags and boxes.

4. Final remark

Do you have some tips and tricks for using RFID-tags? Please inform us! We are pleased to publish your ideas. Just send an e-mail to info@bones.ch.

Bones Inc.
11/2007