

ROBOSAPIEN SECRET #1: **AUTONOMOUS WANDERING**

“Onward Valiant Steed! There are dustbunnies to conquer!”



Your robot has a secret that will allow him to wander about so that when he touches something with his heels, fingers, or toes, he will perform a reflex task, then carry on. Using this, he can push boxes, play simple soccer, karate chop anything in his path, or wander around picking things up when he finds them, without you having to control him.

It works like this. Normally, his touch sensors (**R>** and **L>**) are set to default ("Ooo", and "Ouch") so when he walks into something he will just stop.

However...

If his sensor reflexes are **not** default, then when he touches something while walking he will execute that reflex program (different from left or right), then return to the walking mode he was in **before** the reflex played.

1 – BASIC OBJECT AVOIDING

For example, after power-on wakeup has finished, type in this...

Press R>
BACKWARD,
LEFT TURN button (above the L> button)
Press P>

STOP

Press L>
BACKWARD
RIGHT TURN button (above the R> button)
Press P>

STOP

Select – STOP (arm reset)

When finished, press **FORWARD**

He will now wander for five minutes, backing up and turning away every time he touches or kicks something. By giving him an occasional forearm motion by the remote he will continue to wander, otherwise he'll just go to sleep if he does not hear an I/R command after five minutes.

2 - MAZE MODE:

A basic backup when he hits something will definitely take him out of harms way, but it takes time and will not allow him to get out of corners. The following reflex programs allow him to do just that, and lets him quickly wander around hallways or furniture.

Press R>
Select - LEANFWD
Select - BACKWARD
Select - BACKWARD
Select - LEFT TURN button (above the L> button)
Select - LEANBWD
Press P>

Press STOP

Press L>
Select - LEANFWD
Select - BACKWARD
Select - BACKWARD
RIGHT TURN button (above the R> button)
Select - STOP
Press P>

Press STOP

Press Select – STOP (arm reset)

When finished, press **FORWARD**

The right side will hug walls, while the left will make him steer clear of them.

3 - SOCCER MODE:

By changing the direction of his reflex action, he can turn **into** something, rather than away from it. For example, he can kick his accessory cup around quite effectively with the following program...

Press R>
Select - Right turn button (above the R> button)
Press P>

Press STOP

Press L>

BACKWARD

Select - Left turn button (above the L> button)

Press P>

Press STOP

Select – STOP (arm reset)

When finished, press **FORWARD**

Now he can kick around his accessory cup or other things with less chance of loosing them. A few coins in the bottom of his cup will keep it from sliding too far ahead of him while he kicks it.

4 - BOX PUSH:

He can also push boxes (equal to or larger than a tissue box) and other things around. Anything he can touch with his sensors is fair game.

Press R>

Select - RIGHT TURN button (above the R> button)

Select - LEANFWD

FORWARD

Select - LEANBWD

BACKWARD

LEFT TURN button (above the L> button)

Press STOP

Press L>

Select - LEANBWD

Select – Select - BULLDOZER

Select - BACKWARD

Select - BACKWARD

RIGHT TURN button (above the R> button)

Select - STOP

Press STOP

Press Select – STOP (arm reset)

When finished, press **FORWARD**

He will now push boxes and other objects about in two different ways.

5 -WANDERING NINJA:

Take a swing, at everything. A cardboard paper towel tube will fit tightly in his right hand allowing him to thrash things safely but with amusing results.

Press R>

Select – RIGHT STRIKE 1

Select - BACKWARD

Select – FORWARD

Select – Select – ROAR

BACKWARD

Left turn button (above the L> button)

Press STOP

Press L>

Select – LEFT STRIKE3

Select – RIGHT STRIKE3

Select - BACKWARD

Select - BACKWARD

Select - Right turn button (above the R> button)

Select - STOP

Press P>

Press STOP

Press Select – STOP (arm reset)

When finished, press **Forward**

Sleeping pets beware.

6 – FIND AND GRAB MODE:

Set him to pick stuff up and throw it around. His accessory cup works well.

Press R>
Right shoulder up
Right turn button (above the R> button)
Select – RIGHT PICKUP
Select - Select - BULLDOZER
Select – RIGHT THROW
Select - STOP

Press STOP

Press L>
Left shoulder up
Left turn button (above the L> button)
Select – LEFT PICKUP
Select - BACKWARD
Select – LEFT THUMP
Select - STOP

Press STOP

Press LEFT TURN, LEFT TURN

He will now walk in circles looking for objects, pick them up, and toss them. Has also been known to work with small laundry articles.

7 - PARTY MODE:

For a more sophisticated example that will entertain people at a party, type in this...

Press R>
Select - Select – HIGH5
Select - BACKWARD
Select - Select - TALKBACK
Select - BACKWARD
Select - RIGHT TURN button (above the R> button)
Select - STOP

Press STOP

Press L>

Select - BACKWARD

Select - Select - DANCE

Select - BACKWARD

LEFT TURN (above the L> button)

Select - Select - WHISTLE

Select - STOP

Press STOP

Press FORWARDS

He will now entertain any that touch him with a hello and grunts, or a song, dance and a whistle, before backing up and turning away. He will also do the same thing if left in a spin-in-place mode, or walk-turn mode by pressing either turn button twice.

8 - FIVE-MINUTE BURP-FART FEST:

For a less... sophisticated example that will entertain people at a party, type in this...

Press R>

Select - Select - BURP

Press STOP

Press L>

Select - Select - OOPS

Press STOP

Press BACKWARD

As soon as he hits a wall, he will randomly “entertain” for 5 minutes.

9 – Super Wander Mode (advanced):

The time it takes to run a reflex program does **not** take away from the time taken for wandering. If you put a **LISTEN** command in the touch reflexes, then the robot will wait for up to 2 hours for a sound letting it walk again. In a noisy place like a small room with a loud TV or stereo, the following program can possibly keep your robot wandering for many hours.

Press R>
BACKWARD
Select – LISTEN
Left turn button (above the L> button)
Select – LISTEN
Select - STOP
Select – LISTEN

Press STOP

Press L>
BACKWARD
Select – LISTEN
Right turn button (above the R> button)
Select – LISTEN
Select - STOP
Select – LISTEN

Press STOP

Press Select – STOP (arm reset)

When finished, press **FORWARD**

The right side will hug walls, while the left will make him steer clear of them.

Many such combinations are possible. Variations are encouraged.

Have fun.

Notes:

- While wandering, your RoboSapien will continue wandering for 5 minutes unless he gets a refresh signal from his IR controller (press a forearm action button quickly every few minutes, for example).
- If you **do** want him to stop walking after playing a touch reflex, put a **STOP** command at the end of your reflex program. He will execute any touch reflex, but then completely stop moving after he hits this command in your program.
- He does not respond to touch sensors when he's executing a touch reflex, but he does respond to any **LISTEN** sonic triggers in your reflex program.
- This mode works for all walking modes of the robot, not just forward. He can walk in large circles at night and scan whatever he touches with his flashlight hands, for example, using WALK-TURN (**Select – TURN**)
- **Select – STOP** puts his arms into the best position for sensing objects in front of him. If his forearms are inwards, his shoulders will get caught on walls. If out too far, then he will trigger on anything his fingertips touch.
- Press **R> - P>** and **L> - P>** to clear his touch-reflex sensors to default.