



Communicating with Crickets

Here's an outline of how you can go about making your own "Dancing Crickets". Start by building two LEGO "creatures," each with two motors and a Cricket to control them.

One of the creatures will act as a "leader," the other as a "follower". Here is a procedure for the leader:

```

to lead
  ab, repeat 6 [onfor 10 rd] ; do a little dance
  send 1 ; send a signal to indicate
  ; "I'm done with my dance"
  waituntil [newir?] ; wait for signal from the follower
  lead
end

```

The leader does a dance, sends a signal to the follower telling it to do a dance, and then waits for a response before repeating its own dance.

Here is a procedure for the follower:

```

to follow
  waituntil [newir?] ; wait for signal from the leader
  ab, repeat 10 [onfor 5 rd] ; do a little dance
  send 2 ; send a signal to indicate
  ; "I'm done with my dance"
  follow
end

```

Download the procedures into both Crickets. Start the **lead** procedure running in one Cricket and the **follow** procedure in the other Cricket. And watch the Crickets dance!

Now try to design your own dance steps for the dancing Crickets.
For example, try giving each Cricket several different dance steps,
and use different IR signals to trigger different dance steps.
You might write a procedure something like this:

```
to follow
  waituntil [newir?]           ; wait for signal from the leader
    if ir = 3 [dance1]         ; if IR signal is 3, run dance1 procedure
    if ir = 4 [dance2]         ; if IR signal is 4, run dance2 procedure
  send 2                       ; send a signal to indicate
                                ; "I'm done with my dance"
  follow
end
```