Thank you very much for your purchasing DS80. Please read this user manual before using in order to use it proper way. Also please keep this user manual and guarantee carefully.
1. Detecting wireless tapping device / Wireless camera tapping device

1. Pull out antenna
2. Press electric supply button
3. If DS110 is not connected to DS80, it shifts into the “Signal” mode automatically
4. Searching tapping

※ Through checking the reception sensibility indication lamps, move and angle antenna to the direction which sensibility levels become higher. If sensibility level become above level 8, Alarm signal ( ) is lighted on state indication window.

※ If sensibility becomes level 10, wireless Tapping Device may be around there.

※ Also, wireless Camera may be around that area. Search it with naked eye and then check whether there is pin hole lens or not. (Wireless camera tapping device)

2. Detecting wired camera.

1. Connect DS110 to of DS100 main body
2. Press electric supply button
3. If DS110 is not connected to DS80, it shifts into the “Camera” mode automatically
4. Searching tapping

※ The method to use DS110 is to search pin hole lens of wired camera with naked eye through the red circular lens of DS110

※ When you search pin hole through the red circular lens of DS110, direct the blinking LED to the direct to search. Make your eye to approach to the lens in the back side of DS110 (at area of writing specification)

※ Observe the area where you have doubt that there may be wired camera, with naked eye through DS110 lens if there are wired camera, you can visually verify the red spot reflected from pin hole lens through DS110 lens,
1. Antenna: Antenna for receiving wireless signal. When using the device, pull out as much as possible.

2. DS110 connection terminal: DS110 connection terminal for detecting wired hidden camera.

3. State indication window: Indicating/warning lamps composed of 10 levels reflecting the distance to wireless tapping devices, hidden camera, etc., and each lamp between Level 1 to Level 10 is lighted on dependent on the distance to tapping device.

4.  {\text{Warning lamp lighted on when the device approached the position closest to tapping device on "SIGNAL" mode}}

5. SIGNAL: Wireless tapping device detection mode. Used for detecting wireless tapping device, wireless tapping device with VOX function, wireless camera, wire telephone tapping device, key-phone tapping device, tapping device of inside internet phone/IP phone, tapping device for vehicle, vehicle position finder, etc.


7. LED: LED lamp which is necessary for detecting wired camera.

8. Lens: Lens that is used for verifying camera lens with naked eye when you search wired camera lens.

9. Connection terminal: Connection terminal for connecting DS110 to DS100 main body when you want to detect wired camera.
1. Detecting wireless tapping device

Used for detecting wireless tapping device, wireless tapping device with VOX function, wire telephone tapping device, tapping device of inside internet phone/IP phone, tapping device for vehicle, vehicle position finder, in the case of detecting tapping device for vehicle or vehicle position finder, do it with the vehicle engine running.

When detecting a location using the GPS locator, do it after moving your car to a place where there is less interference of electric signals.

The time interval of the moment when electric signals are transmitted can be set differently for each device (1, 10 and 30 minutes). Accordingly, detecting is difficult and it takes a long time to detect because detection is to be done the moment electric signals are transmitted.

During the detection, turn off such devices that cause lot of electromagnetic waves or use electric wave like microwave oven, air cleaner, chandelier (using three wavelengths lamps), electrical heating floor, wireless phone, etc.

As a cell phone repeater generates strong waves, turn off the repeater.

1. Pull out antenna as much as possible.

2. Power on DS100

3. If DS110 is not connected to DS80, it shifts into the "Signal" mode automatically.

4. Searching tapping device

Search the area where you have doubt that there may be wireless tapping device with DS80 slowly by adjusting antenna direction.

Through checking the reception sensibility indication lamps, move toward to the direction of antenna when sensibility level becomes higher.

If sensibility level becomes above Level 9, *△△△△△△△△△△* is lighted on state indication window and if sensibility becomes Level 10, tapping device may be around that area. And then, therefore, you need to search that area with eye whether there is any doubtable electronic device.

In the case of wire telephone tapping device, key-phone tapping device, tapping device of inside internet phone/IP phone, some types are installed on cable but some are installed inside telephone. When detecting tapping device inside telephone, first hold on the handset of telephone and then search it by adjusting antenna direction to the telephone as shown in the figure in "4. Searching tapping device".
2. Detecting wireless camera

Used for detecting wireless camera.

During the detection, turn off such devices that cause lot of electromagnetic waves or use electric wave like microwave oven, air cleaner, chandelier (using three wavelengths lamps), electrical heating floor, wireless phone, etc.

1. Pull out antenna as much as possible.

2. Power ON

3. If DS110 is not connected to DS80, it shifts into the “Signal” mode automatically.

4. Refer to Item No. 4 of ‘1. Detecting wireless tapping device’.

5. In the case of visual search with naked eye, first check whether there is pinhole lens or not.

3. Detecting wired camera

Used for detecting wired camera.

During you use DS110, highly bright LED is blinking. Do not gaze at it.

1. Connect DS110 to „ „ of DS100 main body.

2. Power ON

3. If DS110 is not connected to DS80, it shifts into the “Camera” mode automatically.

4. Searching tapping device

   The basic method to use DS110 is to search pinhole lens of wired camera with naked eye through the red circular lens of DS110.

   When you search pinhole lens through the red circular lens of DS110, direct the blinking LED to the direct to search, means opposite direction to eye. Observe through the lens at the back side of DS110 (where product specification is printed) with your eye close to it. In the case that lens is contaminated with foreign material, clean with dry soft clothes.

   Observe the area where you have doubt that there may be wired camera, with naked eye through DS110 lens.

   If there is wired camera you can visually verify the red spot reflected from pinhole lens through DS110 lens.
Cautions

Please certainly read the “User Manual” before using the product.

The product is designed in due consideration for stability. However, improper use of the product can be lead to accident due to fire and electric shock, etc. Therefore, please read the “User Manual” sufficiently before using the product in order to prevent such accident beforehand. Also, when handling product box, user manual and parts, please be careful to avoid hand injury.

In the case of product trouble

1. If there is abnormal smell and/or smoke,:
   a. Remove battery immediately.
   b. Disconnect immediately if the product is connected to DS-110.
   c. Contact our Customer Service Center immediately.
2. Use only dedicated devices.
3. If the product does not operate properly, please refer to the "Checking point before asking A/S".

Storage and handling of product

1. Do not throw into fire or heat the product and do not use or store around heating devices like electric heater. If there is battery inside, it may be burst and cause fire, injury and disorder. Also when it was wetted by accident, do not dry with heating devices like stove, heater, dryer, microwave oven, etc. Such heavier may cause serious disorder on product.
2. Disassembly and alteration is strictly forbidden. Never disassemble, alter or repair by yourself arbitrarily.
3. Remove battery from the product and store separately if you do not use it for a long time.
4. Do not insert antenna or battery cover into mouth. It may cause injury.
5. Do not apply strong shock on product. It may cause damage on product or injury on you.
6. Do not keep in trousers pocket, may cause damage on product due to strong stress and lead to injury on you.
7. Be careful not squeeze your finger between battery cover and case, may cause injury.
8. Do not clean the product with organic solvents like thinner, benzene, alcohol, etc. In the case that main body and/or AC adaptor become dirty, just clean with dry clothes. If you clean with such organic solvents, it may cause damage on plastic and discoloration on front part.
9. Assurance to put in antenna when carrying or storing the product. If you carry the product in the bag with the antenna unfolding, may cause disorder. Do not bend or curve antenna by force.
10. Do not touch the body of the device when it lightens and thunders. It may cause electric shock by lightning.
11. Keep main body away from wetting by liquid and contamination with foreign material. Also be careful not to throw into water and to avoid touch with wet hands. If the inside of product is contaminated with water or foreign material, switch off, remove battery and then contact our Customer Service Department. If you continue to use during the product is wet and/or contaminated, may cause serious troubles like fire, electric shock, and/or disorder.

12. Store in the place away from children and petty animal to touch. If the device may drop to cause injury and/or children may be injured by the antenna on eye or ear by mistake during touching it.

**Specification**

**DS100**

- **Radio Frequency**
  - Gain: 20dB
  - Response: 10MHz ~ 8GHz

- **Main Power Supply**: 6LF22 Alkaline battery

**DS110**

- **Frequency**: 7.35Hz
- **ON-Time**: 89.24mS / **OFF-Time**: 46.9mS
- **Size**: 38×32×12mm
- **Input**: DC 9V with 500mA
- **Current Draw**: 96mA
Product warranty and A/S Guide

Product warranty

Dasol Engineering warrants that all DS100 products provided by Dasol Engineering and its dedicated distributors are free from defects in performance.

Dasol Engineering’s principle warranty is policy to replace defective product with new one, at Dasol Engineering’s discretion, subject to the term and condition below.

Warranty period may be changed dependent on the country where it was purchased, for more detail information regarding warranty period, please contact the distributor from whom you purchased the product.

Please be sure to keep the receipt of purchase during the warranty period in order to prove proper purchase of the product and warranty period.

If you want to receive any after service, please contact the official distributor from whom you purchased the product.

If after service for DS100 by the distributor is unavailable, send the product to Dasol Engineering via the distributor.

When you send the product to Dasol Engineering, it must be packed same condition as you purchase it.

The followings are scope of warranty provided by Dasol Engineering:

If you find the product defective within the warranty period (in general 12 months from purchase date), sent it to Dasol Engineering Service Center via the official distributor together with receipt of purchase that proves proper purchase of the product and warranty period.

If within the warranty period the product is determined to be defective (at the date of original purchase) due to the responsibility of Dasol Engineering at Dasol Engineering’s discretion, such as improper materials, workmanship or any other product defect itself, Dasol Engineering will, without any charge, replace the product or its defective parts subject to the terms and limitations below. Dasol Engineering may replace defective products or parts with new or refurbished products or parts at Dasol Engineering’s discretion.

Scope of warranty may be differ from purchase country and condition of returned product, and Dasol Engineering will confirm the scope of warranty to be applied for the product within two days after receiving the returned product, and will take required action, such as sending replaced product, within 4 days after confirming the scope warranty to be applied.

Terms
This warranty does not cover the following cases and actual cost may be applied for remedial action:
1. Serial no provided by manufacturer was changed or removed,
2. Product was not purchased from official distributor,
3. Product was damaged due to carelessness of user, accident, misuse, water damage, arbitrary disassembly or alteration
4. Product disorder due to not following user manual such as improper operation, maintenance, and any other responsibility of user
5. Product damage due to act of god and disaster by nature
6. There is evidence to receive A/S or maintenance service other than Dasol Engineering’s official distributors
7. Accessories apart from DS80 main body and DS110. The accessories need to be purchased separately.

Limitation
In no circumstance, Dasol Engineering’s obligation under this warranty will exceed to replace defective product with new one.

MANUFACTURER

Dasol Engineering Company

Address: 1011-15, Doksan 1-dong Geumcheon-gu, Seoul, Korea