

**WISENET**

# 2M Wi-Fi 홈카메라

제품 사용 설명서

HNB-E60

# 2M Wi-Fi 홈카메라

## 제품 사용 설명서

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## 경고

- 본 제품은 반드시 성인이 조립 및 설치해야 합니다.
- 사용하기 전에 본 설명서의 모든 지침을 숙독하고 본 설명서와 제품에 표시된 작동 지침 및 경고를 준수하세요.
- 전원 코드가 얽히지 않도록 유아 침대나 기타 유아용 가구 주변으로부터 멀리 두세요. 제품과 전원 코드를 어린이 손이 닿지 않는 곳에 설치하세요.
- 특히 전원 코드는 어린이의 손이 닿지 않는 곳에 주의깊게 설치해야 합니다.
- 제품을 욕조, 싱크대, 세탁기, 젖은 지하실 등 습기 많은 환경에서 사용하지 마세요.
- 본 제품은 실내용으로 설계되었습니다.
- 본 제품은 의류용으로 설계되지 않았으며 사용시 성인의 보호 감찰이 필요합니다.
- 제품의 과열을 방지하기 위해 제품을 직사일광에 노출하거나 난로, 라디에이터, 전기 레인지나 오븐같은 조리기구 및 오디오 증폭기, TV 등과 같은 기타 방열 기구 등의 주변에 설치하지 마세요.
- 제품을 사용하는 동안 환기가 잘 되도록 유지하세요.
- 제품 설치 시 건물 기둥이나 가구가 환기를 차단하지 않도록 주의하세요.
- 제공된 전원 어댑터를 사용하세요. 인증되지 않은 어댑터를 사용할 경우 제품이 손상될 수 있습니다. 전원 어댑터에는 가정용 정격 전원을 연결/사용해야 합니다.

- 어댑터 케이블 주위에 날카롭고 끝이 뾰족한 물건을 두지 마세요. 케이블이 손상될 수 있습니다.
- 어댑터를 벽면 콘센트에 꽂거나 뽑을 경우 케이블이 노출된 부분은 절대 잡지 마세요.
- 어댑터 전원 코드용 연장선을 사용하지 마세요. 케이블이 꼬일 수 있습니다.
- 한화테크윈의 공인된 서비스 직원만이 제품 서비스를 담당할 수 있습니다.
- 본 제품은 어린이를 보호 관찰할 경우 제품이 어린이 손에 닿지 않도록 주의하세요.
- 본 제품에는 호흡 장애 유발 가능성이 있는 부품이 일부 포함되어 있습니다.
- 제품의 주변 장치 및 소형 부품들은 어린이 손이 닿지 않는 곳에 보관하세요.
- 본 제품은 어린이에 대한 인간적 감독 의무를 대체하기 위한 것이 아닙니다.
- 본 제품은 어린이의 돌발적이고 갑작스러운 움직임을 어른에게 즉각 통지하는 기능을 동반하고 있지 않으며 정기적인 점검 및 직원에 의한 감독관리가 필요합니다.
- 본 제품의 무선 성능 사양을 충족하기 위해서 동일 장소에서 2대 이상 사용할 경우 서로 간 거리를 최소 1m 이상 띄워 주세요.
- 다른 용도로 사용하던 Micro SD 카드를 카메라에 장착하면 데이터가 삭제될 수 있으니 주의하세요.

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## 카메라 설정

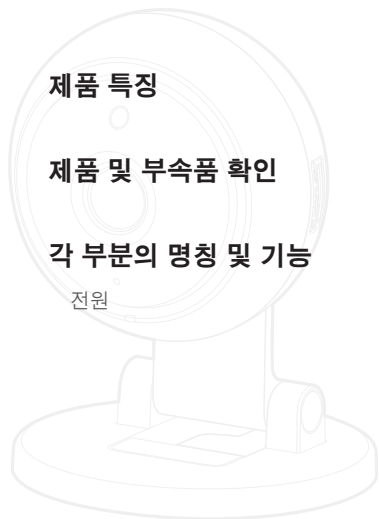
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# 시작하기

# 01



제품 특징

제품 및 부속품 확인

각 부분의 명칭 및 기능

전원

## 제품 특징

- **Wi-Fi 전용 제품**
  - Wi-Fi 연결을 통해 카메라를 등록합니다.
- **간편한 설치**
  - 구글 플레이스토어 또는 앱스토어에서 SmartCam Lite 앱을 다운받아 설치하세요.
  - 앱의 간단한 QR 스캔만으로 무선 공유기와 제품을 쉽게 연결할 수 있습니다.
- **실시간 원격 모니터링**
  - 언제 어디서건 인터넷만 가능하다면 언제라도 원격 모니터링이 가능합니다.
  - 스마트폰과 같은 모바일 기기로 모니터링을 할 수 있습니다.
- **실시간 알람**
  - 동작과 소리가 감지되면 스마트폰을 통해 실시간으로 알람이 울립니다.
- **SD카드 저장**
  - 이벤트 발생 시 또는 사용자가 직접 영상을 SD 카드에 저장할 수 있습니다.
- **양방향 대화**
  - 카메라에 내장된 스피커와 마이크로 앱을 통해 스마트폰과 양방향 대화가 가능합니다.

5

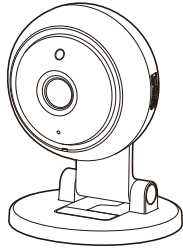
6

7

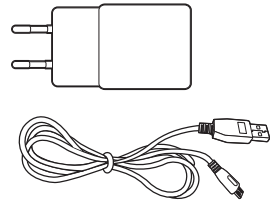
8

# 제품 및 부속품 확인

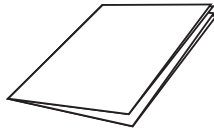
제품 구입 시 제품 패키지에 모든 구성품이 들어 있는지 확인하세요.



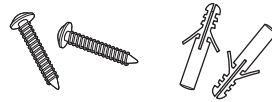
카메라



전원 어댑터&케이블

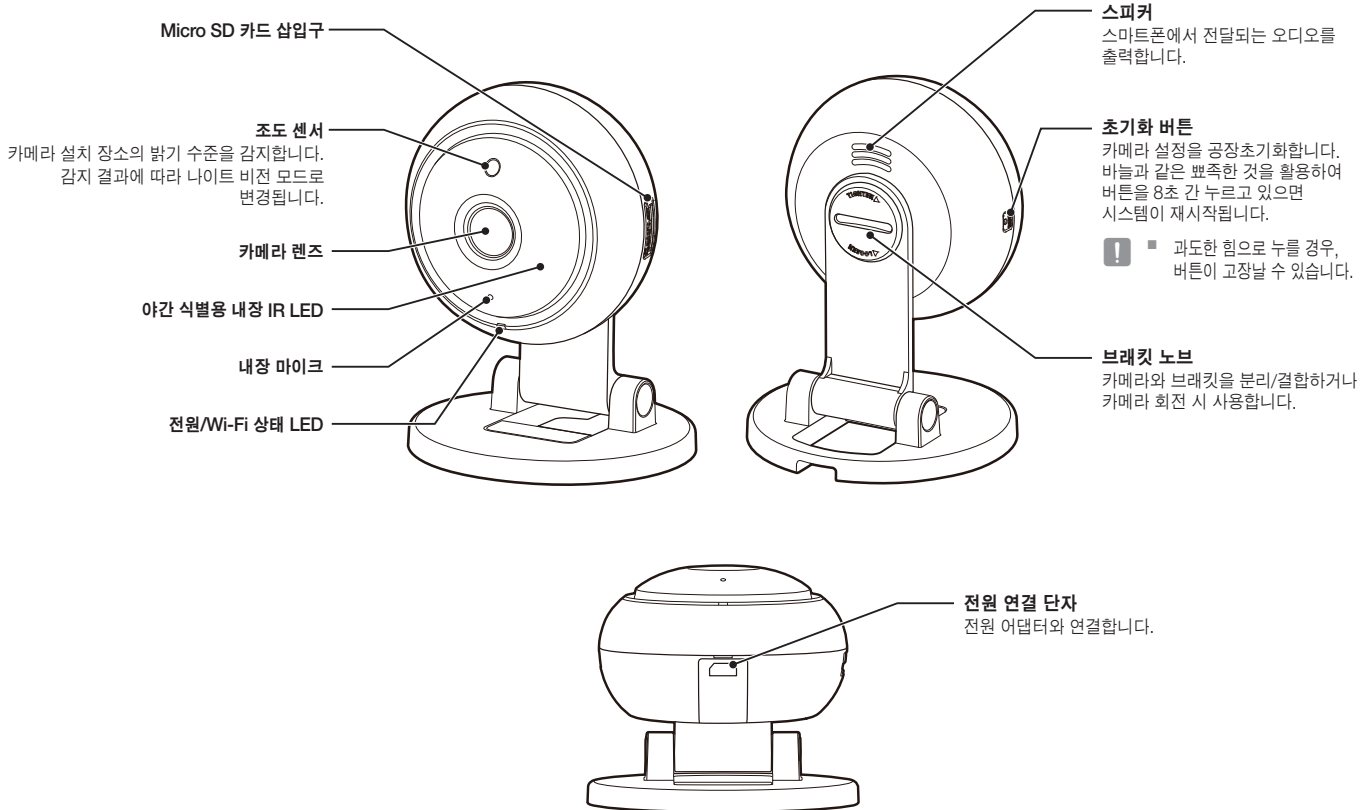


간편 설명서



설치 나사 /  
플라스틱 앵커

# 각 부분의 명칭 및 기능

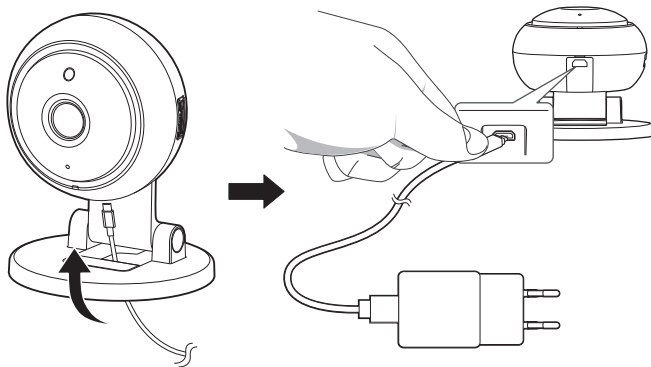


## 전원

카메라 전원 어댑터를 그림과 같이 브래킷에 케이블을 통과시킨 후 카메라의 전원 단자와 연결하세요.



- 제공된 전원 어댑터를 사용하세요. 제공된 전원 어댑터 이외의 어댑터 사용 시 제품이 제대로 작동하지 않을 수 있습니다.
- 카메라가 완전히 켜지는데 약 40초 정도 걸립니다.
- 카메라가 완전히 켜지면 LED 색상이 빨간색으로 깜박입니다.



## ❖ LED 상태

LED 색상은 동작 상태에 따라 달라집니다.

다음 표를 참고하세요.

색상	상태
빨간색	카메라 부팅 초기화 버튼을 3초 동안 길게 누름
빨간색 깜빡임	부팅 완료 네트워크 연결 대기
파란색 깜빡임	Wi-Fi 정보를 받아서 연결 시도
파란색	Wi-Fi 연결 설정 완료
초록색	모바일 앱에 접속되어 있음
노란색	무선 공유기 연결 실패
보라색	펌웨어 업그레이드
흰색	초기화 버튼을 8초 동안 길게 누름



# 설치 및 네트워크 연결

# 02

## 설치

### 주의 사항

1. Wi-Fi 신호가 잡히고 간섭이 없는 곳에 카메라를 설치하세요.
2. 가습기 주변과 같이 습한 곳을 피하세요.
3. 직사광선, 강한 빛이나 먼지가 없고 시야가 선명한 곳에 설치하세요.
4. 장애물이 많은 곳에 설치하지 마세요.
5. 항상 렌즈를 깨끗하게 유지하세요.  
먼지를 닦을 때에는 부드러운 천을 사용하세요.
6. 당사에서 권장하지 않는 방법으로 제품을 설치/분해하는 경우 제품의  
기능/성능을 보장할 수 없습니다.

### 설치

9

- 주의 사항

9

### 네트워크 연결 및 설정

10

- 주의 사항
- 나사를 이용한 벽면/천장 설치
- 카메라 각도 조정하기

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10

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# 네트워크 연결 및 설정

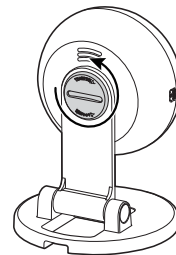
## 주의 사항

- 통신 환경에 의해 무선 네트워크 접속에 실패할 수도 있습니다.
- 네트워크 설정 및 비밀번호에 대해 자세한 내용을 보려면 네트워크 관리자나 서비스 제공업체에 문의하세요.
- 사용자 인증이 필요한 특정 인터넷 서비스의 경우 서비스가 제공되지 않을 수도 있습니다. 이 경우 서비스 제공업체에 문의하세요.
- 인증되지 않은 네트워크에 접근하지 마세요.
- 무선 공유기에서 멀어질수록 네트워크 연결 대기 시간이 길어집니다.
- 선택된 무선 네트워크 접근에 실패한 경우 다른 무선 네트워크에 접근해 보세요.
- 공유기 또는 무선 연결에 대해 자세한 내용을 보려면 공유기 설명서를 참조하거나 공유기 제조사에 문의하세요.
- 카메라가 복수의 무선 연결 네트워크 환경에 설치된 경우 네트워크 전송량 부하에 따라 일부 영상 패킷이 손실될 수 있습니다.
- 이상의 상황뿐만 아니라 네트워크 상황에 따라 네트워크 지연이나 중단이 발생할 수 있습니다.
- 일부 공유기에서 호환성 문제가 발생할 수 있습니다.

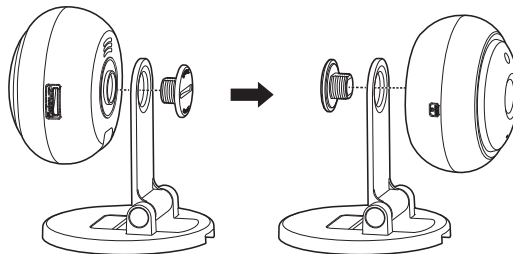
## 나사를 이용한 벽면/천장 설치

### ❖ 브래킷 방향 변경하기

1. 카메라 뒷면의 브래킷 노브를 시계 반대 방향(왼쪽)으로 돌려 분리하세요.

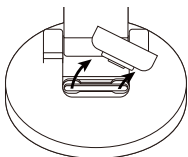


2. 아래 그림과 같이 브래킷 노브와 카메라의 위치를 바꾸고 브래킷 노브를 끼운 후 시계 방향(오른쪽)으로 돌려 고정하세요.



### ❖ 목재 벽면에 설치할 경우

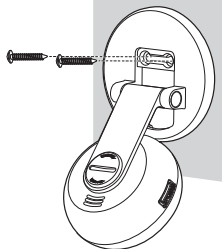
1. 카메라의 브래킷 스탠드에 있는 고무패킹을 제거하세요.



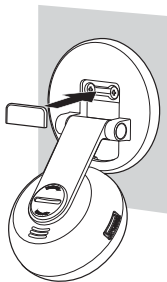
2. 설치하려는 벽면에 2개의 나사를 이용하여 제품을 벽에 고정시키세요.



카메라 설치 시 케이블이 눌리지 않도록 브래킷 스탠드의 배선 홈 사이로 케이블을 넣으세요.

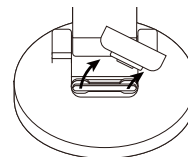


3. 고무패킹을 다시 원래 위치에 덮어주세요.

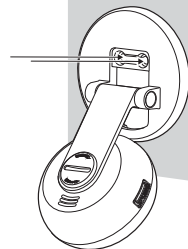


### ❖ 콘크리트 벽면에 설치할 경우

1. 카메라의 브래킷 스탠드에 있는 고무패킹을 제거하세요.



2. 먼저 설치하려는 벽면에 브래킷 스탠드를 대고 나사가 들어갈 위치를 표시하세요.

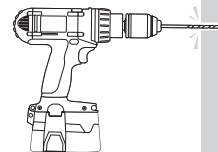


3. 표시된 위치에 직경 5mm 콘크리트용 드릴 비트와 드릴을 이용하여 약 3cm 깊이의 구멍을 뚫으세요.

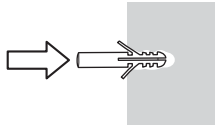
- 작업 후 구멍 안의 부스러기 등을 털어내세요.



드릴 작업시 부상당하지 않도록 주의하세요.



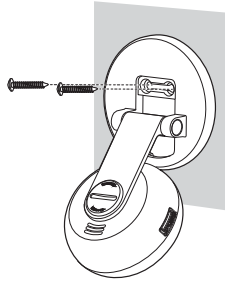
4. 뚫은 구멍에 앵커를 삽입한 후, 앵커의 뒷면을 망치 또는 고무 망치를 이용하여 가볍게 때려 끝까지 삽입하세요.



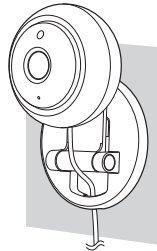
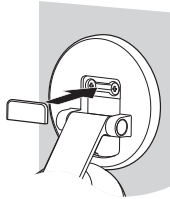
5. 앵커가 삽입된 구멍 2곳에 나사를 이용하여 제품을 벽에 고정시키세요.



- 카메라 설치 시 케이블이 눌리지 않도록 브래킷 스탠드의 배선 홈 사이로 케이블을 넣으세요.

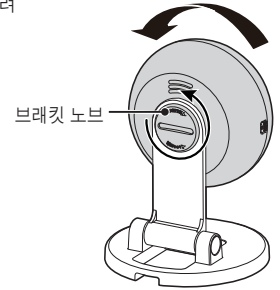


6. 고무패킹을 다시 원래 위치에 덮어주세요.



## 카메라 각도 조정하기

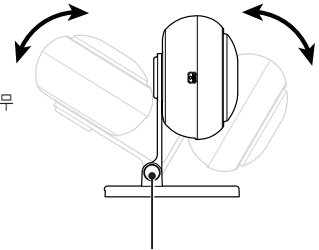
- 브래킷 노브를 시계 반대 방향으로 돌려 느슨하게 한 후 카메라를 원하는 방향으로 회전시키세요.
- 브래킷 노브를 시계 방향으로 돌려 조이세요.



- 브래킷을 앞, 뒤로 밀거나 당겨 카메라 촬영 각도를 적절히 조정하세요.



- 브래킷의 힌지가 헐거워지면 고무 커버를 제거하고 드라이버로 나사를 조여 카메라 방향을 조정하세요.



각도 조절 힌지

# 모니터링

# 03

## 등록

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## 등록

본 제품은 스마트폰을 통해서 카메라 등록 및 모니터링이 가능합니다

### 모바일 앱 OS 사양

iOS 10.0 이상  
Android OS 6.0 이상

### 스마트캠 시작하기

1. 구글 플레이스토어 또는 앱스토어를 실행하세요.
2. **SmartCam Lite** 앱을 설치한 후 실행하세요.

3. <회원가입>을 누른 후 회원가입 정보를 입력하세요.

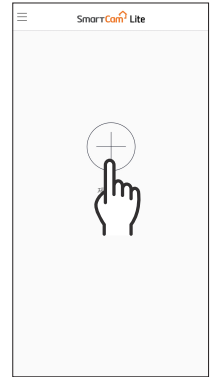
스마트캠 앱의 회원가입 화면입니다. 상단에는 '←' 버튼과 '회원가입' 타이틀이 있습니다. 폼에는 '이메일', '비밀번호', '비밀번호 확인' (영문자 8~13), '이메일 인증 코드' (코드전송 버튼) 입력 필드가 있습니다. 하단에는 '취소'와 '회원가입' 버튼이 있습니다.

- 이메일 : 사용 중인 이메일 주소를 **SmartCam Lite**의 로그인 계정으로 입력하세요.  
회원 가입에 필요한 인증 코드를 받거나, 비밀번호를 잊었을 때 새로운 비밀번호를 받기 위해 사용됩니다.
- 비밀번호 : 보안강화를 위하여 특수문자, 숫자, 영문 중 다양한 조합으로 비밀번호를 만드세요.

- !** ■ 비밀번호 길이 및 제한은 다음과 같습니다.
- 입력 유형에는 대문자, 소문자, 디지털 및 특수기호의 네 가지 유형이 있습니다.
  - 길이 제한 8~13
  - 비밀번호 길이가 8 또는 9 인 경우 최소 3 가지 유형을 포함해야 합니다.
  - 비밀번호 길이가 10보다 크거나 같은 경우 2 가지 이상의 유형을 포함해야 합니다.
  - 1234, abcd 와 같은 4 개의 연속 문자를 입력할 수 없습니다.  
1111, aaaa 와 같은 4 개의 반복 문자를 입력할 수 없습니다.
- 비밀번호 확인 : 비밀번호 확인을 위해 다시 입력합니다.
  - 코드전송 : 입력한 이메일 주소로 인증 코드를 보냅니다.
  - 이메일 인증 코드 : 이메일로 받은 인증 코드를 입력합니다.

카메라 등록하기

1. 화면 중앙에 있는 추가 (+) 버튼을 누르세요.
    - 스마트폰은 인터넷 접속이 가능한 Wi-Fi 네트워크에 연결되어 있어야 합니다.
    - 일부 작업은 앱의 권한이 필요합니다.
- !** ■ 카메라는 1개 계정에서만 등록이 가능하며, 최대 3명까지 동시 접속이 됩니다.

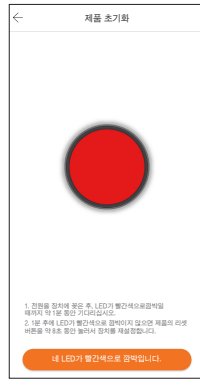


2. 카메라의 QR 코드를 스캔하세요.



### 3. 전원 어댑터를 카메라에 연결하세요.

- 전원이 연결되면 카메라의 LED 표시등이 빨간색으로 표시되고 약 1분 이내에 깜빡거리기 시작합니다.



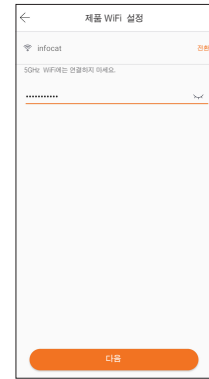
### 4. 스마트폰에 연결된 Wi-Fi 네트워크 정보가 표시되면 Wi-Fi 비밀번호를 입력하고 <다음>을 누르세요.



- Wi-Fi 공유기의 비밀번호 (알파벳 대문자 구분)가 정확하지 않으면 다음 진행 단계에서 등록이 되지 않으니 주의하세요.
- 공유기 비밀번호가 틀려 카메라 등록이 실패하면 카메라 LED는 파란색 점멸과 노란색 점등을 반복합니다. 이럴 경우 카메라 RESET 버튼을 8초간 눌러 초기화시킨 후에 재시도 바랍니다.
- 5 GHz 주파수 대역의 Wi-Fi는 지원하지 않습니다. 스마트폰을 반드시 2.4 GHz 주파수 대역의 Wi-Fi 네트워크에 연결하세요.
- WPA Enterprise 인증 방식은 지원하지 않습니다. 공유기 웹 페이지에 접속하거나, 가입한 통신사에 문의하면 공유기 인증 방식을 확인할 수 있습니다.

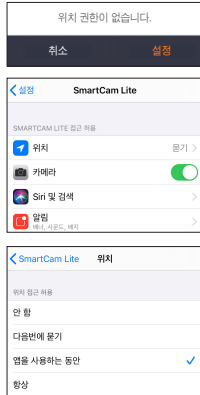


- 카메라 설치 장소가 바뀌어 새로운 Wi-Fi 네트워크 연결이 필요한 경우 카메라 전원을 연결하면 LED는 부팅 후 파란 색으로 깜빡이다가 노란 색이 됩니다. 카메라의 초기화 버튼을 3초 동안 눌러 LED가 빨간 색으로 변경되면 홈 목록에서 카메라를 삭제한 후에 카메라 등록 단계를 다시 진행해 주세요. Wi-Fi 설정을 제외한 모든 설정은 그대로 유지됩니다.



※ 일부 iOS 스마트폰은 Wi-Fi 정보를 얻기 위해 권한 승인이 필요합니다. 아래 안내에 따라 진행하세요.

- 1) <설정>을 누르고 iOS 애플리케이션 권한 설정으로 진입하세요.
- 2) <위치>를 누르세요.
- 3) <앱을 사용하는 동안>으로 권한을 설정하세요.



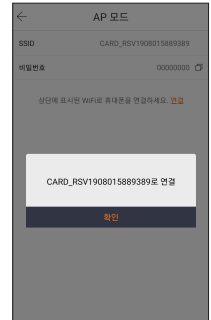
5. 화면의 QR 코드를 카메라의 렌즈와 평행하게 유지한 채로 15 ~ 30 cm 거리를 두고, 앞/뒤로 이동하거나 각도를 조금씩 변경하세요.

- 스마트폰 화면을 밝게 한 후, 생성된 QR 코드의 중앙부분에 맞춰 카메라의 렌즈에 향하게 합니다.
- QR 코드 스캔이 완료되면 카메라에서 비프음이 울리고, LED 표시등이 파란색으로 깜빡이면서 Wi-Fi 연결을 시도합니다.
- Wi-Fi 연결이 성공하면 LED 표시등이 깜빡임을 멈추고 파란색으로 계속 유지됩니다.
- 스마트폰 화면에서 <네, LED가 파란색으로 이미 바뀌었습니다.>를 누르고 7번 설명으로 넘어가세요.
- Wi-Fi 연결을 위한 스캔 설정이 실패하면 <아니오, LED가 아직 빨간색으로 깜빡이고 있습니다.>를 누르고 6번 설명으로 넘어가세요.

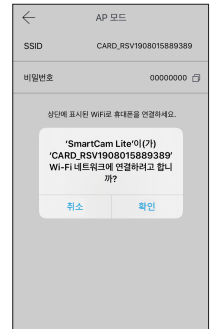


6. <확인>을 누르고 카메라 ID정보가 포함된 네트워크에 연결하세요.

(Android OS 기기 화면)

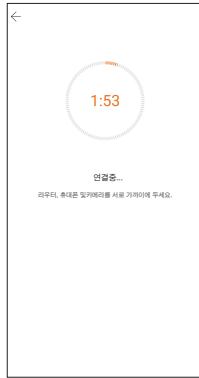


(iOS 기기 화면)

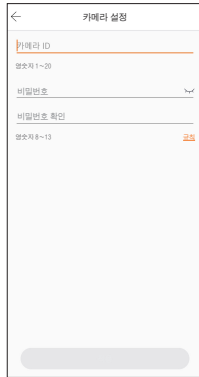




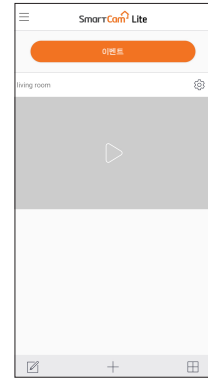
7. 스마트폰과 카메라가 연결될 때까지 기다리세요.



8. 카메라 이름, 비밀번호를 입력한 후 <적용>을 누르세요.



9. 축하합니다!  
카메라 등록이 완료되었으며 이제 SmartCam Lite의 실시간 모니터링을 할 수 있습니다.

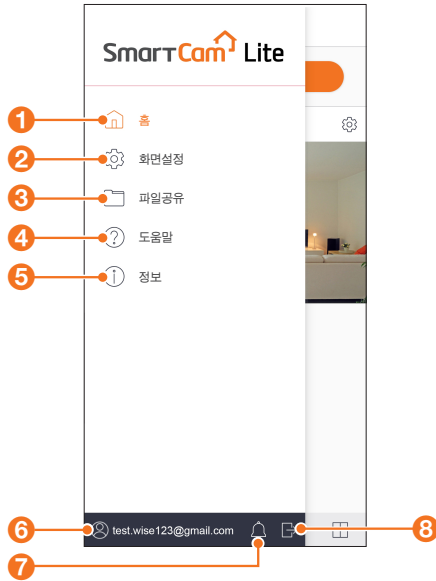


# 인터페이스 살펴보기

홈 화면



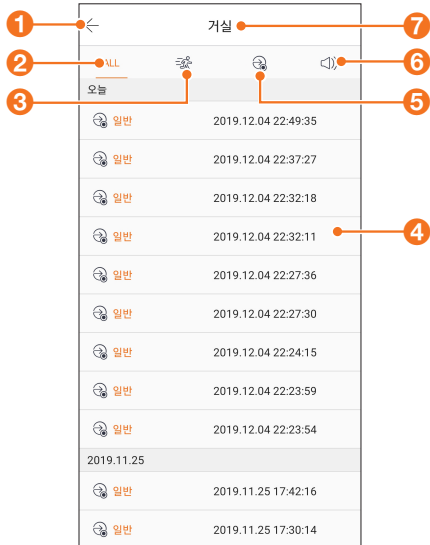
번호	명칭	설명
1	메뉴	홈, 화면설정, 파일공유, 도움말, 정보를 확인합니다.
2	이벤트	이벤트 영상을 확인합니다.
3	라이브	실시간 모니터링 화면으로 넘어갑니다.
4	카메라 삭제	등록된 카메라를 삭제합니다
5	카메라 등록	새로운 카메라를 추가 등록합니다.
6	카메라 정렬	등록된 카메라를 리스트나 그리드 형태로 정렬합니다.
7	카메라 설정	카메라 기능을 설정합니다.



번호	명칭	설명
1	홈	홈 화면으로 돌아갑니다.
2	화면설정	SmartCam Lite 앱 설정 화면으로 이동합니다.
3	파일공유	라이브 화면에서 직접 캡처한 이미지나 녹화한 동영상상을 보거나 공유할 수 있습니다.
4	도움말	도움말 페이지를 열어 자주 묻는 질문 등을 확인할 수 있습니다.
5	정보	앱 정보를 확인합니다.
6	계정편집	사용자 정보 변경 화면으로 이동하여 비밀번호를 변경하거나 회원 탈퇴를 할 수 있습니다.
7	이벤트 알림	앱의 알림 기능을 켜거나 끕니다.
8	나가기	현재 로그인된 계정을 로그아웃합니다.

## 이벤트

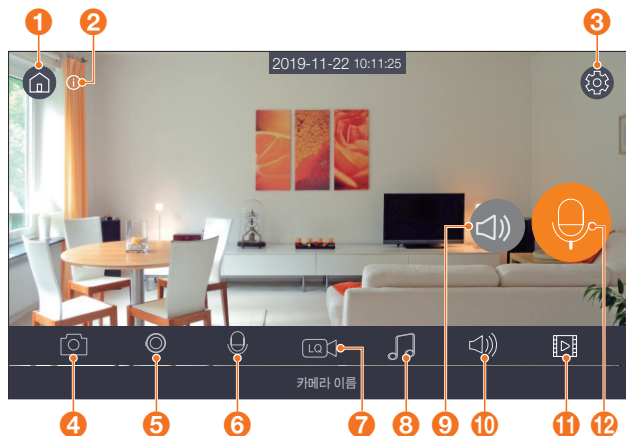
홈 화면에서 <이벤트>를 누르고 원하는 이벤트 타입을 선택하여 카메라의 SD카드에 저장된 이벤트 영상들을 확인할 수 있습니다.



번호	명칭	설명
1	이전	이전 화면으로 돌아가합니다.
2	All	카메라의 SD카드에 저장된 모든 녹화 목록을 보여줍니다.
3	움직임감지 이벤트	움직임 감지 이벤트로 발생한 녹화 목록을 보여줍니다.
4	이벤트 목록	선택된 이벤트 타입에 따라 목록이 나타나며, 이벤트 기록을 누르면 녹화된 영상의 재생화면으로 넘어갑니다.
5	일반 녹화	스케줄 저장 설정에 따라 녹화된 일반 목록 (연속 녹화)을 보여줍니다.
6	오디오 감지 이벤트	오디오 감지 이벤트로 발생한 녹화 목록을 보여줍니다.
7	카메라 이름	현재 연결된 카메라의 이름을 표시합니다.

# 화면 모니터링하기

## 실시간 모니터링 화면

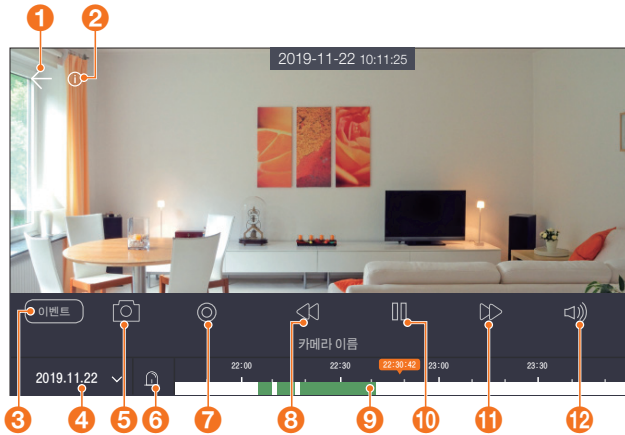


번호	표시	명칭	설명
1		홈	실시간 모니터링을 종료하고 홈 화면으로 돌아갑니다.
2		정보	아이콘 기능에 대한 설명을 제공합니다.
3		카메라 설정	카메라 기능을 설정합니다.
4		캡처	현재 영상을 캡처하여 저장하거나 공유할 수 있습니다.

5		저장	실시간 모니터링 영상을 녹화하여 스마트폰에 저장합니다.
6		말하기	카메라와 스마트폰 간의 양방향 대화를 위한 마이크가 활성화 됩니다.
7		해상도	현재 연결된 영상의 화질을 나타냅니다. 다른 화질로 변경하려면 누르세요.
8		알람 사운드	카메라의 알람 종류를 선택하세요. (경찰차 사이렌, 알람 사이렌, 개 짖는 소리 제공)
9		스피커/마이크 조절	카메라의 마이크 및 스피커 음량을 조정합니다. *말하기 기능 사용 시 표시됩니다.
10		소리	모니터링 중인 영상 주변의 소리를 켜거나 끕니다.
11		재생	재생 화면으로 전환합니다.
12		마이크	아이콘을 누른 상태에서 이야기하면 카메라의 스피커로 출력됩니다. *말하기 기능 사용 시 표시됩니다.

## 재생 화면

실시간 모니터링 화면에서 <재생 ▶> 버튼을 누르면 재생화면으로 이동합니다.



번호	표시	명칭	설명
1	←	이전	실시간 모니터링 화면으로 이동합니다.
2	i	정보	재생 화면의 각 기능에 대한 정보를 확인할 수 있습니다.
3	이벤트	이벤트	이벤트 목록을 텍스트나 썸네일로 볼 수 있습니다.
4	2019.11.22 ∨	녹화일 검색	캘린더를 열어 날짜 별로 영상을 검색합니다. - 녹화영상이 있는 날은 날짜 아래 빨간색 점이 표시됩니다.
5	📷	캡처	현재 재생 중인 영상을 캡처하여 스마트폰에 저장합니다.
6	🔒	이벤트 선택	이벤트 타입 별로 영상을 검색합니다.
7	📌	저장	현재 재생 중인 영상을 녹화하여 스마트폰에 저장합니다.
8	🔊	느린 재생	재생 속도를 1/2, 1/4, 1/8, 1/16 속도로 느리게 재생합니다.
9	📊	타임라인	원하는 재생 지점으로 드래그하여 영상을 빠르게 검색합니다.
10	⏸	재생/일시정지	영상을 재생하거나 일시정지시킵니다.
11	⏩	빠른 재생	재생 속도를 2배, 4배, 8배, 16배 속도로 빠르게 재생합니다.
12	🔇	소리	재생 중인 영상의 소리를 켜거나 끕니다.

# 카메라 설정

# 04

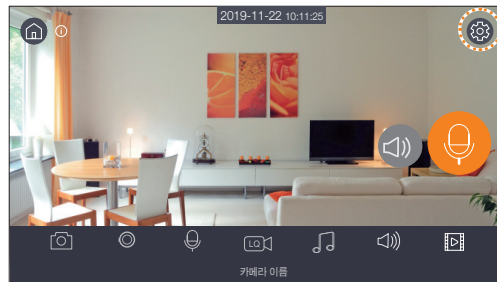
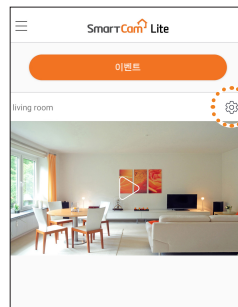
## 카메라 설정하기

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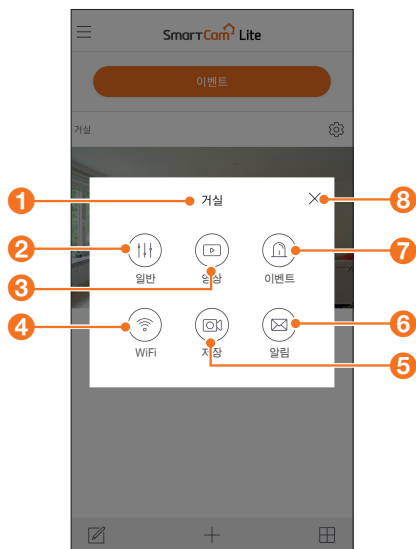
## 23

## 카메라 설정하기

홈 화면 또는 실시간 모니터링 화면에서 <카메라 설정> 버튼을 누르면 현재 연결된 카메라에 관련된 다양한 설정을 할 수 있습니다.



## 카메라 설정 메뉴



번호	명칭	설명
1	카메라 이름	현재 연결된 카메라의 이름을 표시합니다.
2	일반	카메라 이름 수정, 비밀번호 변경, 시간대 설정, 썸머 타임 설정, LED 상태 설정, 카메라 초기화, 등록된 카메라 삭제 등을 실행할 수 있습니다. 현재 펌웨어와 신규 펌웨어 버전을 비교해 업데이트합니다.
3	영상	영상 화면과 음량 상태, 나이트 비전(야간조명) 모드를 설정합니다.
4	WiFi	카메라가 연결된 Wi-Fi네트워크를 변경합니다.
5	저장	카메라에 삽입한 SD 카드 상태와 스케줄 저장을 설정합니다.
6	알림	스마트폰 알림 및 이메일 알림, 알림 스케줄을 설정합니다.
7	이벤트	움직임 감지와 오디오 감지 모드를 설정합니다.
8	닫기	카메라 설정 메뉴를 닫습니다. (팝업 창 밖의 다른 부분을 눌러도 메뉴를 닫을 수 있습니다.)



## 일반 설정

홈 화면 또는 실시간 모니터링 화면에서 <카메라 설정 > 버튼을 눌러 팝업 메뉴가 나타나면 <일반>을 누르세요.



번호	명칭	설명
1	이전	이전 메뉴로 되돌아갑니다.
2	카메라 이름	카메라의 이름을 변경합니다.

3	비밀번호 변경	카메라 연결에 필요한 비밀번호를 변경합니다.
4	시간	카메라에 설정된 현재 시간을 표시합니다.
5	시간대	현재 지역에 맞는 시간대를 설정합니다.
6	썸머타임	썸머타임 적용 여부를 선택합니다.
7	LED 상태	LED 표시등을 켜거나 끕니다.
8	펌웨어 버전	카메라 펌웨어의 현재 버전을 표시합니다. - 신규 버전 (빨간색 점 표시)이 있으면 펌웨어를 업데이트할 수 있습니다. ※ 카메라가 Wi-Fi 공유기와 멀거나 Wi-Fi 신호 세기가 약할 경우 펌웨어 다운로드를 완료하지 못할 수 있으며, (보라색 점등 상태) 이후 카메라는 6분 후에 현재 펌웨어로 부팅되어 정상 동작됩니다. 이럴 경우 카메라를 공유기 근처로 옮겨 와서 펌웨어 업데이트를 실행해 주세요.
9	카메라 초기화	네트워크 설정을 제외한 카메라의 모든 설정을 초기화합니다.
10	카메라 삭제	현재 등록된 카메라를 삭제합니다. - 등록된 카메라를 삭제할 경우 5분 (서버 처리 시간) 이후에 등록이 가능합니다.
11	적용	변경된 설정 값을 저장합니다. 변경된 설정이 없을 경우 버튼이 비활성화 됩니다.



- 카메라 설치 장소가 바뀌어 새로운 Wi-Fi 네트워크 연결이 필요한 경우 카메라 전원을 연결하면 LED는 부팅 후 파란 색으로 깜박이다가 노란 색이 됩니다. 카메라의 초기화 버튼을 3초 동안 눌러 LED가 빨간 색으로 변경되면 홈 목록에서 카메라를 삭제한 후에 카메라 등록 단계를 다시 진행해 주세요. Wi-Fi 설정을 제외한 모든 설정은 그대로 유지됩니다.

## 영상 설정

홈 화면 또는 실시간 모니터링 화면에서 <카메라 설정 > 버튼을 눌러 팝업 메뉴가 나타나면 <영상>을 누르세요.



번호	명칭	설명
1	이전	이전 메뉴로 되돌아갑니다.
2	OSD 시간	기본 설정은 활성화되어 있으며 현재 시간을 영상 화면 상단에 표시합니다.
3	나이트 비전 켜기/끄기	기본 설정은 활성화되어 있으며 어두운 환경에서 흑백으로 전환되며 자동으로 IR 조명이 동작합니다. 비활성화 시 나이트 비전 모드로 전환되지 않으며 컬러로만 동작합니다.
4	밝기	현재 영상의 밝기를 조절합니다.
5	영상 회전	영상 이미지를 상하/좌우로 변경할 수 있습니다.
6	음량	카메라의 내장 마이크 및 스피커의 볼륨을 조절합니다. 이 설정은 모바일 기기 자체의 출력을 조절하지는 않습니다. 단, 음량을 높이더라도 모바일 기기의 소리 출력이 0으로 되어 있다면 소리가 들리지 않습니다.
7	WDR	이 기능을 실행하면 어두운 곳은 밝게, 밝은 곳은 어둡게 역광을 보정합니다.

## 이벤트 설정

홈 화면 또는 실시간 모니터링 화면에서 <카메라 설정 > 버튼을 눌러 팝업 메뉴가 나타나면 <이벤트>를 누르세요.



번호	명칭	설명
1	이전	이전 메뉴로 되돌아갑니다.
2	움직임 감지	움직임 감지 기능 사용 여부를 선택합니다. 토글 스위치를 활성화하면 움직임 감도를 조절하거나 원하는 영역 내에서만 알람을 발생하는 움직임 감지 영역 설정이 가능합니다.
3	움직임 감도	감도는 5단계로 설정이 가능합니다. 감도가 높을수록 미세한 움직임까지 감지합니다. 불필요한 움직임 감지 이벤트 발생을 줄이려면 감도를 낮추세요.
4	움직임 감지 영역	실시간 모니터링 화면에서 관심 영역을 드래그하여 박스 형태로 드래그하여 감지 영역을 설정합니다. 자세한 내용은 '움직임 감지 영역 설정'을 참조하세요.
5	오디오 감지	오디오 감지 기능 사용 여부를 선택합니다. 토글 스위치를 활성화하면 오디오 감도 조절이 가능합니다.
6	오디오 감도	감도는 4단계로 설정이 가능합니다. 감도가 높을수록 미세한 소리까지 감지합니다. 과다한 오디오 감지 이벤트 발생을 줄이려면 감도를 낮추세요.
7	적용	변경된 설정 값을 저장합니다. - 변경된 설정이 없을 경우 버튼이 비활성화 됩니다.

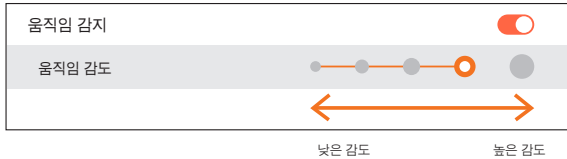


- 이벤트 설정은 기능 적용 여부만 설정이 가능합니다.  
이벤트 발생 시 녹화를 하거나 스마트폰 또는 이메일로 알림 메시지를 받으려면 <카메라 설정 > → <저장 > 및 <카메라 설정 > → <알림 >에서 설정하세요.

## 움직임 감지

움직임이 감지되면 스케줄 저장 설정에 따라 영상을 녹화하거나 알림 설정에 따라 알림 메시지를 보냅니다.

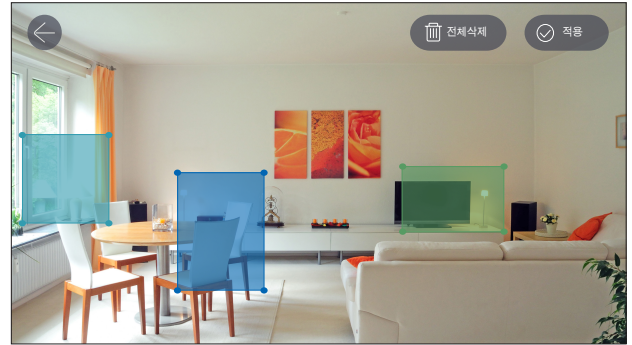
1. <카메라 설정 > > <이벤트 > 를 누르세요.
2. 토글 스위치를 눌러 움직임 감지 기능을 활성화 하세요.
3. 움직임 감도를 조절하세요.



- 감도가 높을수록 미세한 움직임까지 감지합니다.
- 불필요한 움직임 감지 이벤트 발생을 줄이려면 감도를 낮추세요.

## ❖ 움직임 감지 영역 설정

1. <카메라 설정 > > <이벤트 > 를 누르세요.
2. 토글 스위치를 눌러 움직임 감지 기능을 활성화 하세요.
3. <움직임 감지 영역>을 누르세요.
4. <전체삭제>를 눌러 영역 설정을 초기화 하세요.
5. 실시간 모니터링 화면에서 관심 영역을 드래그하여 박스를 그려주세요.
  - 최대 3개까지 움직임 영역 설정이 가능합니다.
6. <적용>을 누르세요.

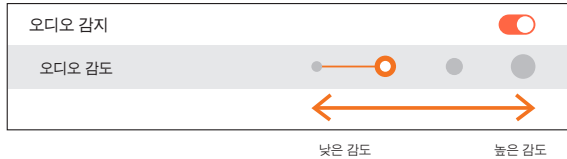


- 최초 실행 시 전체 화면이 움직임 감지 영역으로 설정되어 있습니다.
- 원하는 위치에 움직임 감지 영역 (최대 3개)을 설정하시고 사용해 주세요.

## 오디오 감지

오디오가 감지되면 스케줄 저장 설정에 따라 영상을 녹화하거나 알림 설정에 따라 알람 메시지를 보냅니다.

1. <카메라 설정 > > <이벤트 > 를 누르세요.
2. 토글 스위치를 눌러 오디오 감지 기능을 활성화 하세요.
3. 오디오 감도를 조절하세요.
4. 설정을 저장하려면 <적용> 을 누르세요.



- 감도가 높을수록 미세한 소리까지 감지합니다.
- 과도한 오디오 감지 이벤트 발생을 줄이려면 감도를 낮추세요.

## Wi-Fi 설정

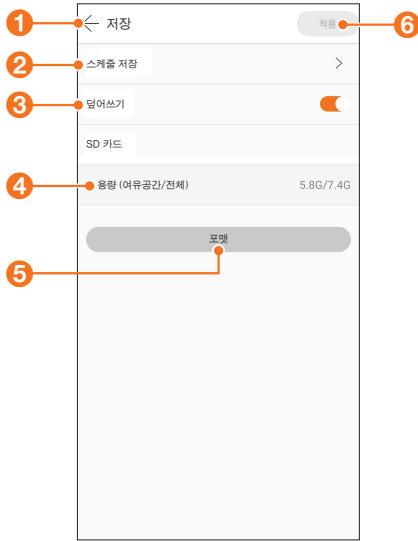
홈 화면 또는 실시간 모니터링 화면에서 <카메라 설정 > 버튼을 눌러 팝업 메뉴가 나타나면 <WiFi> 를 누르세요.



번호	명칭	설명
1	이전	이전 메뉴로 되돌아갑니다.
2	새로고침	카메라 주변의 Wi-Fi 네트워크를 다시 검색합니다.
3	현재 연결된 Wi-Fi 네트워크	현재 카메라가 연결된 Wi-Fi 네트워크 이름 앞에는 빨간색 점이 표시됩니다.
4	연결 가능한 Wi-Fi 네트워크 목록	현재 연결 가능한 Wi-Fi 네트워크를 목록으로 보여줍니다. 다른 Wi-Fi 네트워크로 변경할 때 Wi-Fi 네트워크의 비밀번호를 틀리게 입력하면 카메라의 리셋 버튼을 눌러 초기화해야만 재연결이 가능합니다.

## 저장

기본 화면 또는 실시간 모니터링 화면에서 <카메라 설정 > 버튼을 눌러 팝업 메뉴가 나타나면 <저장>을 누르세요.



번호	명칭	설명
1	이전	이전 메뉴로 되돌아갑니다.
2	스케줄 저장	각 이벤트 별 녹화 스케줄을 요일별로 설정할 수 있습니다.
3	덮어쓰기	이 기능은 기본 설정으로 활성화되어 있습니다. SD 카드의 용량이 부족하면 가장 오래된 영상부터 자동으로 덮어쓰기 합니다. 덮어쓰기 기능을 해제한 상태에서 SD 카드 여유 공간이 10% 미만이 되면 스마트 폰으로 푸시 알림을 보냅니다.
4	용량 (여유공간/전체)	SD 카드의 사용 가능한 용량 / 총용량을 표시합니다. SD 카드를 장착하고 여유공간이 0M/14.7G (예)로 표시되면 포맷하고 사용바랍니다. 메모리의 일부가 시스템에 할당되므로 포맷을 하면 총용량보다 사용 가능한 용량이 더 작게 표시됩니다. SD 카드를 포맷하면 file0, file1,,, 형태로 용량을 분할해 저장할 공간을 만듭니다.
5	포맷	SD 카드를 포맷합니다. SD 카드 용량이 비정상 상태로 표시되거나 이벤트 저장이 되지 않으면 SD카드 영상을 다른 저장매체로 백업한 후에 포맷하고 사용 바랍니다.
6	적용	변경된 설정 값을 저장합니다. - 변경된 설정이 없을 경우 버튼이 비활성화 됩니다.

- ! SD 카드는 영상이 손상되거나 SD 카드가 고장이 날 수 있으니 카메라 전원을 끈 상태에서 탈착해주시기 바랍니다.  
또한, 다른 IT 기기에서 사용하던 SD 카드를 카메라에 장착하면 데이터가 삭제될 수 있으니 주의하시기 바라며 SD 카드는 앱에서 포맷하고 사용하시기 바랍니다.

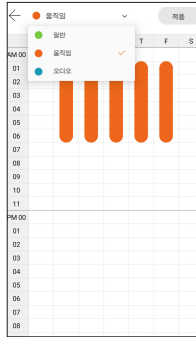
※ 권장 SD카드

제조사: Sandisk, Transcend

사 양: 최소 Class 6 이상, MLC 방식 이상, 최대 128GB 지원,  
FAT32 파일시스템 지원

## ❖ 스케줄 저장

1. <카메라 설정 > → <저장 > → <스케줄 저장>을 누르세요.
2. 이벤트 타입을 눌러 설정하려는 타입을 선택하세요.
  - 예를 들어, 이벤트 타입을 <움직임>으로 선택하면 움직임 감지 설정 값들이 표시됩니다.
3. 원하는 요일의 시간대를 누르거나 위 아래로 드래그 하여 스케줄을 설정하세요.
4. <적용>을 누른 후 성공 메시지가 나타나면 <확인>을 누르세요.

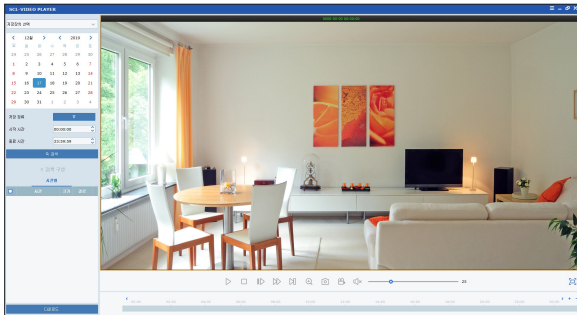


## ❖ SD 카드에 저장된 영상 확인하기

SD카드에 저장된 영상을 PC에서 보려면 당사 홈페이지 (wisenetlife.com)에서 제공하는 SCL-VIDEO Player (전용 뷰어)를 사용해야 합니다.

파일 이름 index0 에서 [열기]를 누르면 저장 영상이 있는 날짜가 표시됩니다.

원하는 영상을 선택해 다운로드하면 PC에 mp4 파일 형태로 저장됩니다.



## 알림

홈 화면 또는 실시간 모니터링 화면에서 <카메라 설정 > 버튼을 눌러 팝업 메뉴가 나타나면 <알림>을 누르세요.



번호	명칭	설명
1	이전	이전 메뉴로 되돌아갑니다.
2	스마트폰 알림	스마트폰 알림 기능 사용 여부를 선택합니다. 알림 스케줄이 설정된 시간에 이벤트가 발생하면 스마트폰으로 알림 메시지를 보냅니다. 이 기능을 사용하려면 모바일 기기가 구글 푸시(Google Push)를 지원해야 합니다.
3	이메일 알림	이벤트가 발생하면 알림 메시지를 보내고 받을 수 있는 이메일 주소를 설정합니다.
4	알림 스케줄	스마트폰 알림 및 이메일 알림 기능이 작동할 스케줄을 설정합니다.

## ❖ 스마트폰 알림

구글 푸시(Google Push)를 지원하는 스마트폰인 경우 카메라에서 이벤트가 발생하면 스마트폰으로 알림 메시지를 보냅니다.

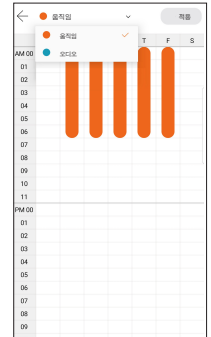
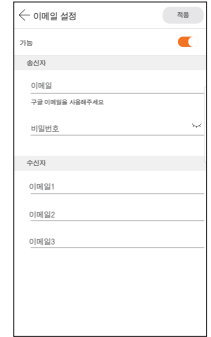
1. <카메라 설정> ➡ <알림>을 누르세요.
2. 토글 스위치를 눌러 스마트폰 알림 기능을 활성화 하세요.
  - 구글 푸시(Google Push)를 지원하는 기기만 이 기능을 사용할 수 있습니다.
3. <알림 스케줄>을 누르세요.
4. 이벤트 타입을 눌러 설정하려는 타입을 선택하세요.
  - 예를 들어, 이벤트 타입을 <움직임>으로 선택하면 움직임 감지 설정 값들이 표시됩니다.
5. 원하는 요일의 시간대를 누르거나 위 아래로 드래그 하여 스케줄을 설정하세요.
6. <적용>을 누른 후 성공 메시지가 나타나면 <확인>을 누르세요.



## ❖ 이메일 알림

이벤트 발생 시 알림 메시지를 받을 수 있는 이메일을 설정합니다.

1. <카메라 설정> ➡ <알림> ➡ <이메일 알림>을 누르세요.
2. 토글 스위치를 눌러 이메일 설정이 가능하도록 활성화 하세요.
3. 알림 메시지를 보낼 수신자의 이메일을 등록하세요.
  - 구글 메일(GMail)만 메일 보내기가 가능합니다.
4. 알림 메시지를 받을 이메일을 등록하세요.
  - 수신자 이메일은 최대 3개까지 등록할 수 있습니다.
5. <적용>을 누른 후 성공 메시지가 나타나면 <확인>을 누르세요.
6. <알림 스케줄>을 누르세요.
7. 이벤트 타입을 눌러 설정하려는 타입을 선택하세요.
  - 예를 들어, 이벤트 타입을 <움직임>으로 선택하면 움직임 감지 설정 값들이 표시됩니다.
8. 원하는 요일의 시간대를 누르거나 위 아래로 드래그 하여 스케줄을 설정하세요.
9. <적용>을 누른 후 성공 메시지가 나타나면 <확인>을 누르세요.





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# 제품 사양

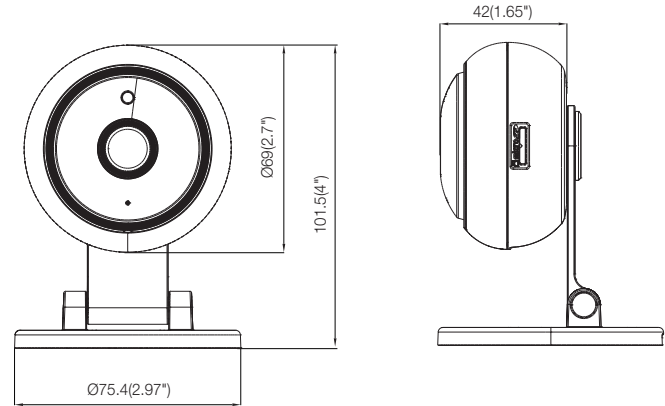
### 사양

명칭	설명
운영체제	Linux
해상도	1920x1080, 640x480
최대 프레임레이트	1920x1080 30FPS
비디오 압축 방식	H.264
동시 전송 능력	멀티 스트림 전송
화각 (대각/수직/수평)	110° / 48.8° / 90.8°
저조도	0.3 Lux (컬러), 0 Lux (흑백)
WDR	DWDR
Day & Night	True D/N (Auto)
나이트 비전	IR LED, 8M
디지털줌	4x(Mobile)
영상 회전	지원
움직임 감지	지원
오디오 감지	지원
오디오 I/O	내장 마이크와 스피커
오디오 압축 방식	AAC

명칭	설명
오디오 통신	2-Way Audio (Built-in Microphone & Speaker), Half Duplex
메모리 슬롯	SDXC 메모리 슬롯 (최대 128GB)
저장 및 재생	이벤트 녹화, 수동 녹화, 연속 녹화, 원격 재생
무선	Wi-Fi 802.11 b/g/n (Single-band)
보안	HTTPS(SSL) 인증 방식 다이제스트 인증 방식
최대 사용자 수	3명 (유니캐스트 모드)
동작 온/습도	DC 5V, 0°C ~ 40°C (+32°F ~ +104°F) / 90% RH 이하
IP 등급	-
사용전원/소비전류	5 V/1 A
소비 전력	최대 3.7 W
상태 표시	1 LED (전원, 상태, 링크)
색상	흰색
외형 치수 (ØxH)	Ø 75.4 x 101.5 mm
무게	205 g

### 제품 외관 (카메라)

단위: mm (인치)



# 문제해결

시스템에 문제가 발생할 경우 아래 표를 참고하여 최대한 신속하게 문제를 해결하세요. 아래 지침에 따르세요.

문제	조치
계정 비밀번호를 잊어버렸습니다.	<ul style="list-style-type: none"> <li>- 로그인 화면에서 &lt;비밀번호 찾기&gt;를 누른 후 등록된 이메일 주소를 입력하면 새로운 비밀번호를 이메일 주소로 보내드립니다. 이메일 서버 설정에 따라 스팸 메일로 처리될 수도 있습니다. 로그인하면 제공된 임시 비밀번호를 변경할 것을 권장합니다.</li> </ul>
카메라와 무선 공유기가 연결되지 않습니다.	<ul style="list-style-type: none"> <li>- 카메라의 LED 표시등이 자주 변경되는 경우 카메라 설치 장소의 Wi-Fi 신호가 양호하지 않을 수 있으니, 무선 공유기에 카메라를 더 가깝게 배치한 후 연결을 다시 시도합니다.</li> <li>- 카메라 등록 시 입력한 Wi-Fi 비밀번호를 확인 후 다시 시도합니다.</li> </ul>
로그인한 후에 카메라를 등록할 수 없습니다.	<ul style="list-style-type: none"> <li>- 앱의 홈 화면을 아래로 내려 등록하려는 카메라가 있는지 확인합니다. 원하는 카메라가 없을 경우 '카메라 등록하기'를 참조하세요. (12쪽)</li> <li>- 만약 위와 같은 조치에도 불구하고 카메라가 등록 되지 않으면 카메라를 공장 초기화하여 처음부터 다시 시작합니다. (공장 초기화를 하려면 카메라에 있는 초기화 버튼을 8초 동안 눌러주세요. 출하 시 설정으로 초기화되면 카메라가 다시 시작됩니다.)</li> </ul>
라이브 연결이 안되거나 불안정합니다.	<ul style="list-style-type: none"> <li>- 카메라와 공유기 사이에 장애물 (금속, 벽 등)이 있을 경우, 무선 특성 상 카메라가 받는 신호 강도가 떨어집니다. 이럴 경우 Wi-Fi 증폭기 (Extender)를 연결해 사용 거리를 넓혀 주세요.</li> <li>- 주변의 WiFi 공유기로 인해 신호 간섭을 받을 경우에도 카메라의 신호 강도가 떨어집니다. 이럴 경우 연결할 공유기의 WiFi 채널을 간섭이 없는 채널로 변경해야 합니다.</li> <li>- 고객 서비스 센터에 문의바랍니다.</li> </ul>

문제	조치
카메라의 영상이 일시적으로 사라집니다.	<ul style="list-style-type: none"> <li>- 네트워크 지연으로 인해 카메라 영상이 지연될 수도 있습니다. 카메라를 Wi-Fi 신호가 양호한 곳에 설치했는지 확인하세요.</li> </ul>
동영상에서 소리가 나지 않습니다.	<ul style="list-style-type: none"> <li>- 영상 재생 화면에서 소리 아이콘을 클릭하거나 스마트폰 앱에서 볼륨이 켜져 있는지 확인하세요.</li> </ul>
카메라 비밀번호를 잊어버렸습니다.	<ul style="list-style-type: none"> <li>- 새로운 카메라 비밀번호를 생성해야 합니다.</li> <li>- 카메라의 초기화 버튼을 8초 이상 눌러 공장초기화 합니다.</li> <li>- 공장 초기화 후 카메라를 등록하여 카메라 비밀번호를 재설정 할 수 있습니다.</li> </ul>
계정 비밀번호를 변경하고 싶습니다.	<ul style="list-style-type: none"> <li>- 홈화면의 메뉴에 있는 &lt;계정편집&gt;이나 &lt;카메라 설정 &gt; → &lt;일반&gt; 메뉴에서 신규 비밀번호를 설정할 수 있습니다.</li> </ul>
알림 이메일이 수신되지 않습니다.	<ul style="list-style-type: none"> <li>- 구글 정책상 이메일 수신이 안될 경우 구글 웹페이지 계정 - 보안 메뉴에서 "보안 수준이 낮은 앱의 액세스" 기능을 허용해 주세요. 카메라 감지 이벤트를 이메일로 받을 때만 해당되며, 카메라 자체 보안 기능과는 무관합니다.</li> </ul>

# OPEN SOURCE ANNOUNCEMENT

Some software components of this product incorporate source code covered under the BSD license as follows.

Component Name	License	License URL
lighttpd 1.4.25	BSD 2.0	<a href="http://www.opensource.org/licenses/bsd-license.html">http://www.opensource.org/licenses/bsd-license.html</a>
librtmp 1.20	BSD 1.0	
net-snmp-5.4	BSD	<a href="http://www.net-snmp.org/about/license.html">http://www.net-snmp.org/about/license.html</a>

lighttpd is a secure, fast, compliant, and very flexible web-server that has been optimized for high-performance environments. It has a very low memory footprint compared to other web servers and takes care of cpu-load. Its advanced feature-set (FastCGI, CGI, Auth, Output-Compression, URL-Rewriting and many more) make lighttpd the perfect webserver-software for every server that suffers load problems.

Simple Network Management Protocol (SNMP) is an Internet standard protocol for managing devices on IP networks. It is used mostly in network management systems to monitor the devices attached to the network for conditions that need administrative attention. Net-SNMP is a suite of applications used to implement SNMP v1, SNMP v2c and SNMP v3 using both IPv4 and IPv6.

For more additional information, send email to [help.cctv@samsung.com](mailto:help.cctv@samsung.com).

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