

네트워크 컨트롤러

제품 사용 설명서

SPC-7000

A급 기기(업무용 방송통신기자재)

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네트워크 컨트롤러

제품 사용 설명서

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개요

안전을 위한 주의사항

사용자의 안전을 보호하고 재산상의 손해 등을 막기 위한 내용입니다.
반드시 읽고 올바르게 사용해 주세요.

 경고	사람이 사망하거나 중상을 입을 가능성이 있는 내용입니다.	 주의	사람이 부상을 입거나 물질 손해 발생이 예상되는 내용입니다.
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 경고			
설치하기 전에 반드시 본 기기의 전원을 off하시고, 전원 플러그를 동시에 여러개 꽂아 사용하지 마세요. 이상 발열 및 화재, 감전의 위험이 있습니다.	제품 위에 물, 커피, 음료수 등과 같은 액체가 담긴 그릇을 올려 놓지 마세요. 액체가 쏟아져 제품 내부로 들어가면 고장 및 화재의 원인이 됩니다.	전원 케이블을 무리하게 구부리거나 무거운 물건에 눌러 파손되지 않도록 하세요. 화재의 원인이 됩니다.	
본 기기를 설치하는 도중이나 설치한 이후에는 기기가 위치하는 장소를 항상 깨끗하게 하여 먼지가 없도록 유지하고, 특히 기기를 청소할 때에는 반드시 마른 수건으로 닦아 주고, 물이나 신나, 유기용제를 사용하지 마세요. 기기의 표면을 상하게 할 우려가 있고, 고장 및 감전의 위험이 있습니다.	습기, 먼지나 그늘음 등이 많은 곳에는 설치하지 마세요. 감전, 화재의 원인이 됩니다.	전원 케이블 부분을 무리하게 잡아당겨 빼거나 젖은 손으로 전원 플러그를 꽂거나 빼지 마시고, 전원 플러그 구멍이 헐거울 경우 전원 플러그를 꽂지 마세요. 화재 및 감전의 위험이 있습니다.	
기기가 정상적으로 동작이 안될 경우 구입처나 서비스 센터로 연락하시고, 절대로 기기를 분해, 수리, 개조 하지마세요. 사용자의 임의 분해 및 수리로 인한 문제에 대해서는 책임지지 않습니다.	습기찬 바닥, 접지되지 않은 전원 확장 케이블, 낡은 전원 코드 안전 접지의 결여 등 작업 공간에서 있을 수 있는 위험을 주의 깊게 살피고, 문제가 발생할 경우 구입처나 전문가에게 문의하세요. 화재 및 감전의 위험이 있습니다.	밀폐되지 않은 평평한 바닥에 설치하고, 수직으로 세우거나 비스듬히 놓고 사용하지 마세요. 기기가 넘어지거나 떨어질 경우 상해의 위험이 있습니다.	
본 기기의 작동을 위한 입력 전압은 전압 변동범위가 규정 전압의 10% 이내여야 하며, 전원 콘센트는 반드시 접지가 되어 있어야 합니다. 또한, 전원 커넥터를 연결하는 콘센트에는 헤어 드라이기, 다리미, 냉장고 등의 전열 기구를 같이 사용하지 마세요. 이상 발열 및 화재, 감전의 원인이 됩니다.	이상한 소리가 나거나 냄새가 날 때에는 즉시 전원 플러그를 뽑고 구입처나 서비스 센터로 문의하세요. 화재, 감전의 위험이 있습니다.	어댑터는 반드시 제품 구입시 당사에서 제공하는 어댑터를 사용하십시오. 당사에서 제공하지 않는 어댑터를 사용시 화재, 감전, 고장의 원인이 됩니다.	

 주의		
강한 자성이나 전파가 있는 곳, 충격이 있는 곳, 라디오나 TV 등의 무선 기기에 근접한 곳에는 설치를 피하여 주십시오. 자석류나 전파, 심한 진동이 없는 곳에 설치하세요.	주위 온도와 습도는 적절한 곳이 좋습니다. 온도가 너무 높은 곳(40°C 이상)이나 낮은 곳(0°C 이하), 습기가 많은 곳은 피하세요.	네트워크 컨트롤러 위에 도전성 물질 (드라이버, 동전, 쇠붙이 등) 및 물이 차있는 용기 등을 놓지 마세요. 화재, 감전, 낙하로 인한 상해의 원인이 됩니다.
제품 위에 무거운 물건을 올려 놓지 마세요. 고장의 원인이 됩니다.	설치된 제품을 이동하고자 할 땐 반드시 전원을 끄고 옮기거나 재설치 하세요.	천동, 번개가 칠 때는 전원 플러그를 빼주세요. 화재 및 고장의 원인이 됩니다.
강한 충격이나 진동은 기기 고장의 원인이 되므로 사용시 주의하도록 합니다. 심한 진동이 없는 곳에 설치하세요.	전원 콘센트는 반드시 접지가 되어 있는 것을 사용하세요.	직사광선이나 열기구를 피해 설치하세요.
사용자의 부주의로 인한 고장에 대해서는 당사가 책임지지 않습니다.	본 기기를 설치하는 도중이나 설치한 이후에도 기기가 위치하는 장소를 항상 깨끗하게 하여 먼지가 없도록 유지하고, 특히 기기 표면은 깨끗하고 부드러운 마른 천으로 오염 부위를 닦거나 부드러운 마른 천으로 물을 적셔 물이 흐르지 않도록 꼭 끈 후에 오염 부분을 닦으세요. 알코올, 솔벤트가 함유되거나, 계면활성제가 함유된 세제, 화장품류, 기름 성분등은 기기의 파손 및 변형을 유발할 수 있으니 사용하지 마세요.	

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Q & A

GPL/LGPL Software License

제품의 주요 기능

SPC-7000 네트워크 컨트롤러는 네트워크를 이용하여 네트워크/아날로그 카메라, DVR, SSM 프로그램을 제어할 수 있는 컨트롤러입니다.

사용자에게 친숙한 On-스크린 메뉴와 터치 스크린, 조이스틱을 적용하여 조작이 편리합니다.

- 장거리 원격 제어 가능
- 통합 시스템 조정 가능
- 카메라 (Receiver Unit), DVR, SSM 프로그램을 본 컨트롤러 1대로 제어가 가능합니다.
- SSM을 통해 네트워크 카메라 및 NVR을 제어할 수 있습니다.
- 복수의 컨트롤러 연결 사용 가능
- 각각 다른 곳에서 시스템을 제어할 수 있으며 최대 16대를 동시에 연결하여 사용 할 수 있습니다.
- 사용자 편의를 고려하여 조이스틱, 조그셔틀 모듈 좌우 위치 교환이 가능합니다.
- 조작의 편의성
LCD 모니터를 통해 컨트롤러의 각 동작 상태를 표시 해주며, 터치 스크린으로 간편하게 메뉴를 선택하고, 조이스틱으로 편리하게 조작할 수 있습니다.

※ 제어 가능한 제품 및 프로그램 List

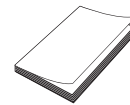
- 카메라
- SSM
- DVR

구성품 확인하기

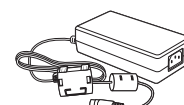
제품을 구입하신 다음 포장을 벗긴 후 평평한 바닥이나 사용할 장소에 본 기기를 내려 놓으세요.
다음과 같은 내용물이 모두 들어있는지 확인하세요.



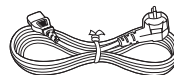
본체



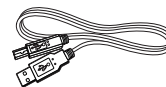
사용 설명서



전원 어댑터



파워케이블



USB 케이블



터치펜



터미널 블록



- 조그셔틀과 조이스틱은 본체에 조립해서 사용하세요.

개요

각 부분의 명칭 및 기능

앞면

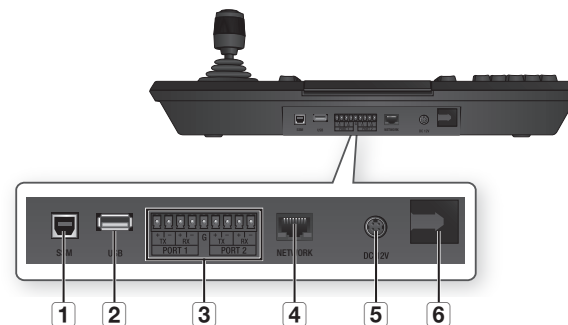


명칭		기능 설명
1	조이스틱	상/하/좌/우 PTZ 모드에서 Pan, Tilt 제어를 할 수 있습니다. Screen 모드에서 상/하/좌/우 타일 선택 변경이 가능합니다. Mouse 모드에서 마우스 커서 이동이 가능합니다.
	회전	PTZ 모드에서 WIDE 방향으로 회전 시 줌 인, TELE 방향으로 회전 시 줌 아웃을 실행합니다.
2	PTZ 제어	[FOCUS N/F] + Focus Near/Far 동작을 실행합니다. - [FOCUS N/F] + : Focus Near - [FOCUS N/F] + : Focus Far ▪ [FOCUS N/F] 키는 ON/OFF 토크키로 동작합니다.
		[IRIS C/O] + IRIS Open/Close 동작을 실행합니다. - [IRIS C/O] + : IRIS Open - [IRIS C/O] + : IRIS Close
		[IRIS C/O] + ▪ 아날로그 카메라, SSM, DVR 제어 모드에서만 동작합니다. ▪ [IRIS C/O] 키는 ON/OFF 토크키로 동작합니다.

명칭		기능 설명
2	PTZ 제어	[PRESET] [PRESET]+숫자+[PRESET] 버튼을 클릭하면 각 버튼 번호에 맞는 프리셋을 실행합니다.
		[GROUP] [GROUP]+숫자+[GROUP] 버튼을 클릭하면 각 버튼 번호에 맞는 그룹/스캔을 실행합니다.
		[TOUR] [SHIFT] + [GROUP/TOUR] + [SHIFT] + [GROUP/TOUR] 버튼을 클릭하면 투어를 실행합니다.
		[TRACE] [TRACE]+숫자+[TRACE] 버튼을 클릭하면 각 버튼 번호에 맞는 패턴/트레이스를 실행합니다.
		[ZOOM] + 줌 인 동작을 실행합니다.
		[ZOOM] + 줌 아웃 동작을 실행합니다. ▪ [ZOOM] 키는 ON/OFF 토크키로 동작합니다.
3	Mouse 제어	[L(T. LOCK)]/[R(TRACK)] Mouse 모드에서 마우스 L/R 버튼으로 사용합니다.
4	Screen 제어	[MON.(CON.)] Screen 모드에서 숫자+[MON.(CON.)] 버튼을 클릭하면 멀티 모니터 선택 변경이 가능합니다. (모니터 번호에 따른 이전/다음)
		[LAYOUT(SEQ.)] Screen 모드에서 숫자+[LAYOUT(SEQ.)] 버튼을 클릭하면 각 버튼 번호에 맞는 레이아웃을 실행합니다.
		[CAM] 숫자+[CAM] 버튼을 클릭하면 각 버튼 번호에 맞는 카메라를 실행합니다.
		[ENTER] 한 번 클릭하면 라이브 뷰어에서 한 화면 보기를 실행합니다. 한 번 더 클릭하면 원래 화면으로 돌아옵니다.
		숫자 + [TILE(VM)] 숫자의 타일로 이동합니다.

명칭		기능 설명
5	모드 변경	[PTZ(MENU)] PTZ 모드 변환을 실행합니다. PTZ 모드에서 [PTZ(MENU)] 버튼을 클릭하면 Screen 모드 변환을 실행합니다.
		[SHIFT] + [MENU(Mouse)] Mouse 모드 변환을 실행합니다. Mouse 모드에서 [SHIFT] + [MENU(Mouse)] 버튼을 클릭하면 Screen 모드 변환을 실행합니다.
		[SHIFT] + [Mon.(Con.)] Console 모드 변환을 실행합니다.
		[SHIFT] + [TILE(VM)] VM 컨트롤을 실행합니다.
6	재생 화면 제어	[SEARCH] 현재 타일의 영상을 라이브/검색으로 출력합니다.
		 영상이 정지됩니다.
		 영상의 재생 및 일시정지를 실행합니다.
		 영상의 수동 녹화를 실행/종료합니다.
		Shuttle wheel 시계 방향으로 회전 시 정방향 배속 재생, 시계 반대 방향으로 회전 시 역방향 배속 재생을 실행합니다.
		Jog wheel 프레임 탐색을 실행합니다.
7	0 ~ 9	숫자 입력 버튼입니다.
	[ESC(SETUP)]	이전 페이지로 되돌아갑니다.

뒷면



명칭		기능 설명
1	SSM	PC에 연결하여 SSM을 제어하는 단자입니다.
2	USB	컨트롤러의 설정 백업/복원, 소프트웨어 업데이트를 위한 USB 연결 단자입니다.
3	RS-485	PORT 1 RS-485 통신용으로 카메라, DVR 등의 제어 기기와 연결합니다.
		PORT 2 다른 SPC-7000 컨트롤러와 연결합니다.
4	NETWORK	NETWORK 연결 단자입니다.
5	DC 12V	DC 12V 전원 입력 단자입니다. (— —(+))
6	케이블 고정 고리	전원 코드가 이탈되지 않도록 케이블을 걸어 고정시킵니다.  ■ 설치 및 사용 시 고리를 꼭 사용하세요.

설치 환경 점검하기

- 실내에서만 사용하세요.
- 물이나 액체가 제품의 접속부에 닿지 않게 하세요.
- 무리한 충격이나 힘을 가하지 마세요.
- 전원 코드를 무리하게 잡아 당기지 마세요.
- 임의로 제품을 분해하지 마세요.
- 정격 입력력 범위에서만 사용하세요.
- 승인된 전원 코드만 사용하세요.
- 입력 그라운드가 있는 제품에 대해서는 반드시 그라운드가 있는 전원 플러그와 함께 사용하세요.
- 컨트롤러는 평평한 테이블 위에 설치하세요.
- 본체의 위치와 배선실의 구성은 시스템을 올바르게 운영하는데 매우 중요합니다.
- 장비가 너무 가까이에 놓여 있거나, 통풍 장치가 미비한 환경에서는 시스템이 제대로 작동하지 않을 수 있으며, 시스템에 접근하기 어려운 환경에서는 시스템의 유지보수를 어렵게 할 수도 있습니다.
- 시스템의 고장을 막고 주변 환경 요소에 의해 시스템이 셧다운 되는 경우를 줄이려면 시스템 운영실의 공기를 적절히 순환시키고 본체의 덮개를 단단히 고정 시키세요.
- 컨트롤러의 내부에는 고전압 부위가 있으므로 임의로 분해하지 마세요.

- 동작 온도: 0°C ~ 40°C
- 보존 온도: -20°C ~ 60°C
- 동작 습도: 20%~85% RH
- 동작 전원: DC 12V, 최대 6.4W (—(●)—+)
- 제공된 전용 전원 어댑터를 사용하세요.

설치 시 주의 할 점

- 설치하기 전에 반드시 제품의 전원을 끄세요.
- 강한 충격이나 진동은 제품 고장의 원인이 되므로 사용시 주의하세요.
- 강한 자성이나 전파가 있는 곳, 라디오나 TV 등의 무선기기에 근접한 곳에는 설치를 피하여 주세요.
- 장비를 설치하는 도중이나 설치한 이후에는 본체가 위치하는 장소를 항상 깨끗하게 하여 먼지가 없도록 유지하세요.
- 밀폐되지 않은 평평한 바닥에 설치하고 적정 온도를 유지하세요.
그리고 벽에서 15cm 이상 거리를 유지하세요.
- 통풍을 위해 뚫린 홈에 도전성 물체가 빠지지 않도록 주의하세요.
- 시스템을 직사광선이 비치지 않는 서늘한 장소에 두고 장비나 도구를 사람들이 왕래하는 장소에서 멀리 떨어지게 두어 다치지 않도록 하세요.
- 연기가 냄새가 나는 이상 상태를 그대로 두고 사용하면 화재나 감전이 일어날 수 있습니다.
이런 경우에는 전원 스위치를 즉시 차단하고 구입처로 문의하여 전문 기술자의 상담을 받으세요.
- 습기 많은 바닥, 접지되지 않은 전원 확장 케이블, 닳은 전원 코드, 안전 접지의 결여 등 작업 공간에서 있을 수 있는 위험을 주의 깊게 살펴야 합니다.



- 이 기기를 청소할 때에는 반드시 마른 수건으로 닦아주세요. 심하게 더러워진 경우에는 중성세제 용액을 묻힌 천으로 닦은 후 마른 수건으로 닦아주세요.
알콜, 벤젠, 신나 등의 휘발성이 있는 것은 표면을 상하게 할 우려가 있으므로 사용하지 마세요.
- LCD 모니터의 수명을 위해서 고온에서 사용하지 마세요.

조그셔틀/조이스틱 조립하기

조그셔틀과 조이스틱 조립 시 딸깍 소리가 날 때까지 눌러서 조립하세요.



LCD 화면 각도 조절하기

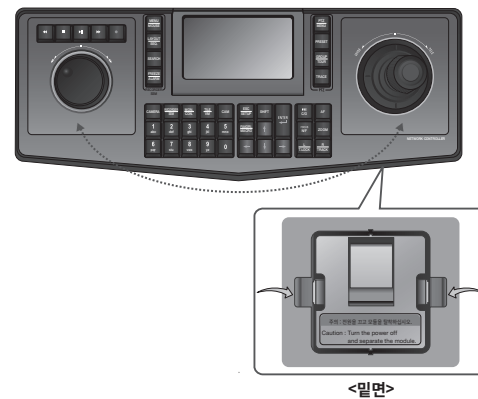
LCD 화면을 들어올려 화면이 잘 보이도록 각도를 조정할 수 있습니다.



조이스틱과 조그셔틀 교환하기

조이스틱과 조그셔틀 모듈의 좌우 위치를 교환하여 사용할 수 있습니다.

- 모듈의 좌우 위치를 변경하려면 먼저 전원을 끄거나, 컨트롤러 설정화면에서 <모듈 변경> 버튼을 누른 후 위치를 변경하세요. (17쪽)



- 컨트롤러의 본체 바닥에 있는 후크를 양손으로 누르면 모듈이 본체에서 분리됩니다.
- 조이스틱과 조그셔틀 모듈을 모두 분리시켜 좌우의 원하는 위치를 선택하고 딸깍 소리가 나도록 장착하세요.



다른 기기와 연결하기

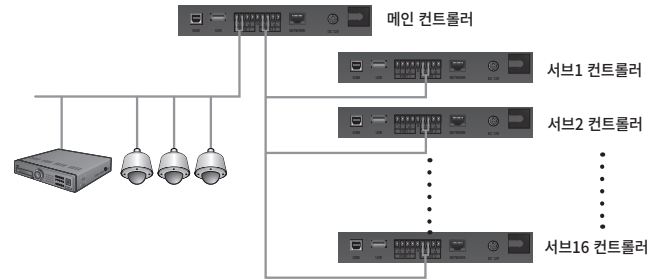
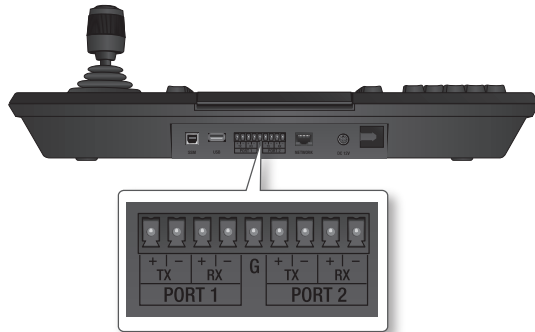
SPC-7000 네트워크 컨트롤러는 카메라, DVR 및 다른 외부 기기들과 연결하여 사용할 수 있습니다.

RS-485/422 장치 연결하기

컨트롤러를 통해 RS-485/422 통신을 지원하는 PTZ 카메라, DVR을 제어할 수 있습니다.

1. 후면의 PORT 1 단자와 PTZ 카메라 또는 DVR의 RS-485 단자를 연결하세요.
2. 연결된 기기의 특성에 따라 RS-485 (Half Duplex) 또는 RS-422 (Full Duplex) 방식으로 연결할 수 있습니다.

- Half Duplex 방식으로 연결할 경우에는 TX +, - 부분에 연결하세요.
- RS-485/422를 연결 할 때에는 +, - 극성표시가 있으므로 극성이 바뀌지 않도록 주의하세요.
- RS-485 통신 노이즈를 개선하기 위해서 연결되는 카메라 또는 DVR 장비의 G단자와 SPC-7000의 G단자를 연결하세요.
- 연결 시에는 반드시 장치의 전원을 끈 상태에서 연결하세요.
- 제품 구성품에 포함된 터미널 블록을 장착하여 사용하세요.
- RS-485/422 장치가 SPC-7000에서 지원 가능한 제품인지를 먼저 확인하세요.



PTZ 카메라 연결하기

PTZ 카메라 후면의 RS-485 단자와 SPC-7000의 PORT 1 단자를 연결하여 PTZ 카메라를 제어할 수 있습니다.

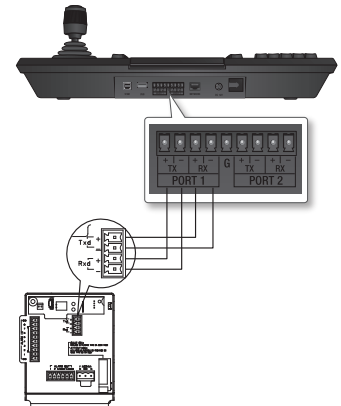
- 카메라의 종류에 따라서 연결 극성이 다를 수 있습니다. 자세한 사항은 해당 PTZ 카메라의 설명서를 참조하세요.

Half Duplex로 연결할 경우 (RS-485)

- PTZ 카메라 RS-485 단자의 RX (+)를 SPC-7000의 PORT 1 단자 TX (+)와 연결하세요.
- PTZ 카메라 RS-485 단자의 RX (-)를 SPC-7000의 PORT 1 단자 TX (-)와 연결하세요.

Full Duplex로 연결할 경우 (RS-422)

- PTZ 카메라 RS-485 단자의 RX (+)를 SPC-7000의 PORT 1 단자 TX (+)와 연결하세요.
- PTZ 카메라 RS-485 단자의 RX (-)를 SPC-7000의 PORT 1 단자 TX (-)와 연결하세요.
- PTZ 카메라 RS-485 단자의 TX (+)를 SPC-7000의 PORT 1 단자 RX (+)와 연결하세요.
- PTZ 카메라 RS-485 단자의 TX (-)를 SPC-7000의 PORT 1 단자 RX (-)와 연결하세요.



SRD-16XX/8XX 계열 DVR 연결하기

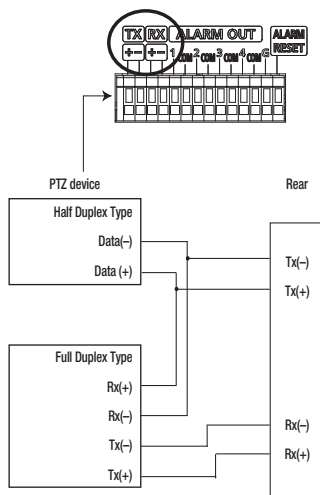
DVR 뒷면의 RS-485 단자를 통하여 SPC-7000과 연결하세요.

Half Duplex로 연결할 경우 (RS-485)

- DVR의 RS-485 단자의 TX (+)를 SPC-7000의 PORT 1 단자 TX (+)와 연결하세요.
- DVR의 RS-485 단자의 TX (-)를 SPC-7000의 PORT 1 단자 TX (-)와 연결하세요.

Full Duplex로 연결할 경우 (RS-422)

- DVR의 RS-485 단자의 TX (+)를 SPC-7000의 PORT 1 단자 RX (+)와 연결하세요.
- DVR의 RS-485 단자의 TX (-)를 SPC-7000의 PORT 1 단자 RX (-)와 연결하세요.
- DVR의 RS-485 단자의 RX (+)를 SPC-7000의 PORT 1 단자 TX (+)와 연결하세요.
- DVR의 RS-485 단자의 RX (-)를 SPC-7000의 PORT 1 단자 TX (-)와 연결하세요.

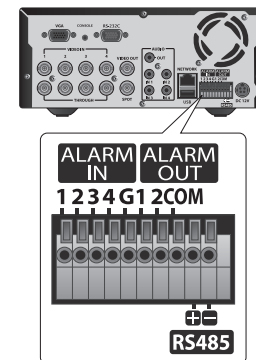


SRD-4XX 계열 DVR 연결하기

SRD-4XX 뒷면의 RS-485 단자를 SPC-7000과 연결하세요.

※ Half Duplex로 연결할 경우 (RS-485)

- SRD-4XX 단자의 TX (+)를 SPC-7000의 PORT 1 단자 TX (+)와 연결하세요.
- SRD-4XX 단자의 TX (-)를 SPC-7000의 PORT 1 단자 TX (-)와 연결하세요.



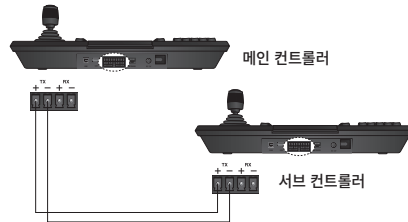
다른 기기와 연결하기

다른 컨트롤러와 연결하기

- 최대 16대의 컨트롤러를 동시에 연결하여 사용할 수 있습니다.
- 컨트롤러 통신 설정방법은 “메뉴 설정하기”의 “컨트롤러 ID 설정”을 참조하세요. (▶ 16쪽)

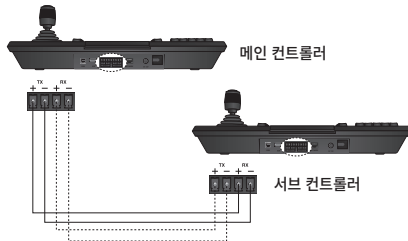
Half Duplex로 연결할 경우 (RS-485)

- SPC-7000의 PORT 2 단자 TX (+)를 다른 SPC-7000의 PORT 2 단자 TX (+)와 연결하세요.
- SPC-7000의 PORT 2 단자 TX (-)를 다른 SPC-7000의 PORT 2 단자 TX (-)와 연결하세요.



Full Duplex로 연결할 경우 (RS-422)

- 메인 컨트롤러 SPC-7000의 PORT 2 단자 TX (+)를 서브 컨트롤러 SPC-7000의 PORT 2 단자 RX (+)와 연결하세요.
- 메인 컨트롤러 SPC-7000의 PORT 2 단자 TX (-)를 서브 컨트롤러 SPC-7000의 PORT 2 단자 RX (-)와 연결하세요.
- 메인 컨트롤러 SPC-7000의 PORT 2 단자 RX (+)를 서브 컨트롤러 SPC-7000의 PORT 2 단자 TX (+)와 연결하세요.
- 메인 컨트롤러 SPC-7000의 PORT 2 단자 TX (-)를 서브 컨트롤러 SPC-7000의 PORT 2 단자 RX (-)와 연결하세요.

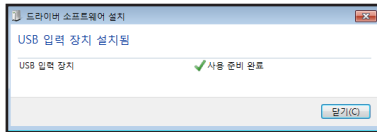


- 다른 컨트롤러를 연결할 때는 PORT 2를 사용해야 합니다.

설치하기

설치하기

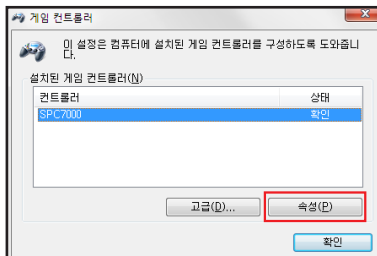
1. 컴퓨터가 켜진 상태에서 컨트롤러의 SSM 단자를 컴퓨터의 USB 포트에 연결하세요.
2. 새로운 장치가 검색되었다는 창이 뜹니다.
3. 자동으로 컴퓨터가 장치를 인식합니다.
 - 필요 시 팝업된 설치 화면의 지시에 따라 장치를 설치하세요.
4. 장치가 인식되면 윈도우 제어판의 게임 컨트롤러 리스트에 설치된 컨트롤러가 나열됩니다.
[시작] > [장치 및 프린터] > [게임 컨트롤러]



컨트롤러를 보정하려면

- 컨트롤러를 올바르게 사용하기 위해서는 축보정이 필요합니다.

1. [시작] > [장치 및 프린터] > [게임 컨트롤러] 설치된 컨트롤러 아이콘을 선택하고 오른쪽 마우스 버튼을 클릭해 [속성(P)]을 누르세요.



2. 설정창에서 [보정(C)...] 버튼을 클릭하여 '장치 보정 마법사'를 실행하세요.
3. 화면의 지시에 따라 축 보정을 진행하세요.

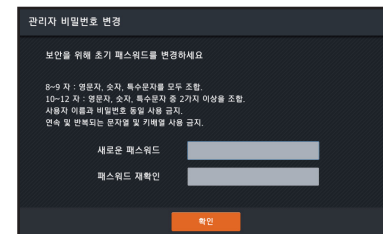


시작하기

1. 모든 시스템 구성기기의 전원을 켜세요.
2. 컨트롤러의 뒷면에 전원 어댑터를 연결하여 전원이 켜지면, 로그인 화면이 나타납니다.
3. 숫자키 또는 스크린 터치 화면의 키보드를 이용하여 비밀번호를 입력하고 <Login> 버튼을 클릭하세요.
 - 초기 비밀번호는 "4321"입니다.



4. 최초 로그인 시 비밀번호 설정창이 나타납니다. 사용할 패스워드를 설정한 뒤 <확인> 버튼을 누르세요.
 - 새로운 패스워드 : 비밀번호 설정 규칙에 맞게 신규 비밀번호를 입력합니다.
 - 패스워드 재확인 : 설정한 비밀번호를 재입력합니다.



메뉴 설정하기

설정 시스템 화면이 나타나면 원하는 설정 메뉴를 선택하세요.

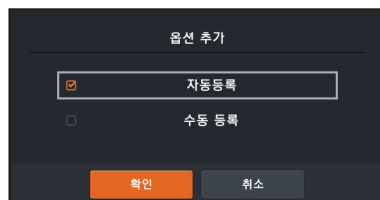


장치

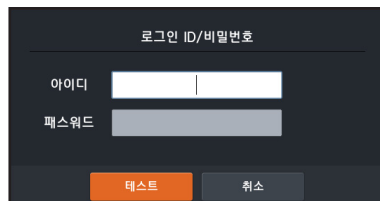
장치를 자동으로 등록하려면

로컬망에 연결된 네트워크 카메라를 자동으로 검색하여 등록할 수 있습니다.

1. <자동등록>를 체크하고 <확인> 버튼을 선택하세요.



2. 검색된 카메라 리스트에서 등록하고 싶은 카메라를 선택한 후 <테스트> 버튼을 누르세요.



3. <아이디>와 <패스워드>를 입력한 후 <테스트> 버튼을 눌러 카메라와 접속을 실행하세요.

4. <확인> 버튼을 누르면 선택된 카메라가 등록됩니다.

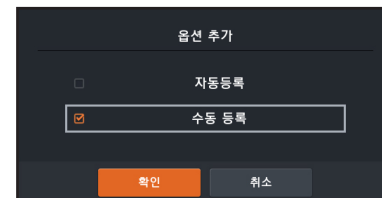
- 모델 : 카메라 모델명을 보여줍니다.
- IP 주소 : 네트워크 카메라의 IP 주소를 보여줍니다.
- 상태 정보 : 성공이나 에러코드 가이드 정보를 보여줍니다.



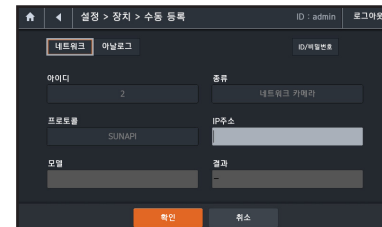
장치를 수동으로 등록하려면

- 네트워크 장치 등록하기

1. <수동 등록>을 체크하고 <확인> 키를 선택하세요.



2. IP 주소 정보를 입력하세요.

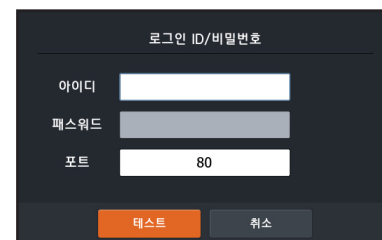


3. <ID/비밀번호> 버튼을 눌러 아이디, 패스워드, 포트 번호를 입력하세요.

4. <테스트> 버튼을 눌러 카메라와 접속을 실행하세요.

5. 테스트 결과를 확인하세요.

6. <확인> 버튼을 눌러 등록을 완료하세요.



- 아날로그 장치 등록하기

1. <수동 등록>를 체크하고 <확인> 키를 선택하세요.
2. 장치 타입을 <아날로그>로 선택하세요.
3. 각 항목을 선택하여 아이디, 종류, 프로토콜, 전송속도를 입력하세요.
 - 종류에서 <아날로그 카메라>를 선택하면 프로토콜을 선택할 수 있습니다.
4. <확인> 버튼을 눌러 등록을 완료하세요.

장치 정보 수정하기

등록된 장치의 정보를 수정할 수 있습니다.

1. 정보를 변경할 장치를 선택하세요.
2. 화면 하단에 표시되는 장치 정보에서 내용을 수정하세요.
 - 선택한 장치 종류에 따라 수정할 정보가 다르게 나타납니다.
3. 수정을 완료하면 <확인> 버튼을 누르세요.

장치 삭제하기

1. 삭제하려는 장치를 선택하고 <삭제> 버튼을 누르세요.
2. 초기화 확인 팝업창이 나타납니다.
 - <초기화> 버튼을 누르면 선택한 장치가 삭제됩니다.
3. <전체삭제> 버튼을 누르고 확인 팝업창에서 <모두 초기화> 버튼을 누르면 등록된 장치가 모두 삭제됩니다.

제어

언어 설정

화면에 표시되는 언어를 설정할 수 있습니다.

1. <언어> 메뉴를 선택하세요.
2. 언어 선택 화면이 나타나면 방향 버튼이나 조이스틱으로 원하는 언어로 이동 후 선택하세요.
 - 선택된 언어로 바로 변경됩니다.
3. 언어 설정 화면에서 나가려면 <취소> 버튼을 누르세요.

설정하기

사용자&비밀번호

관리자의 비밀번호 변경 및 장치 ID를 부여할 수 있습니다.

사용자를 추가하려면

1. <사용자&비밀번호> 메뉴를 선택하세요.
2. <추가> 버튼을 클릭하세요.
3. 해당 사용자에게 할당시킬 장치를 선택하세요.
4. 비밀번호 사용 여부를 선택하세요.
5. 비밀번호를 사용하려면 <ON>을 선택하고 사용할 비밀번호를 설정하세요.
6. 설정을 완료하면 <확인> 버튼을 클릭하세요.

▶		◀ 사용자&비밀번호		ID : admin		로그아웃					
		추가		수정		삭제		전체삭제		세부사항	
번호		사용자		디바이스 ID		01/01					
01		admin		A.Cam : 1, N.Cam : 1, DVR : 0, SSM : 1		▶					
02		user1		A.Cam : 0, N.Cam : 1, DVR : 0, SSM : 0		▲					
03		-		-		▼					
04		-		-		⌵					
05		-		-							
06		-		-							

■ 비밀번호 설정 시 기본 사양을 충족하지 않는 경우 만족한 조건으로 비밀번호를 다시 입력해야 합니다.

사용자 정보를 수정하려면

사용자 정보의 비밀번호를 변경할 수 있습니다.

1. 정보를 수정하려는 사용자를 선택하고 <수정> 버튼을 누르세요.
2. 수정할 상세 내용을 다시 설정하세요.
 - “admin” 관리자만 비밀번호를 수정할 수 있습니다.
3. 설정을 완료하면 <확인> 버튼을 클릭하세요.

설정 > 제어 > 사용자&비밀번호 > 수정				ID : admin	로그아웃
사용자 user1		장치선택 Device 1			
비밀번호 사용		ON OFF			
패스워드					
패스워드 재확인					
				확인 취소	

사용자를 삭제하려면

등록된 사용자를 선택하여 삭제할 수 있습니다.

1. 삭제할 사용자를 선택하고 <삭제> 버튼을 누르면 삭제 확인 팝업창이 나타납니다.
2. <확인> 버튼을 누르면 선택한 사용자가 삭제됩니다.
3. <전체삭제> 버튼을 누르고 확인 팝업창에서 <확인> 버튼을 누르면 등록된 사용자가 모두 삭제됩니다.
 - “admin”은 관리자이므로 삭제할 수 없습니다.

조이스틱 버튼 설정

조이스틱 버튼의 기능으로 사용할 항목을 선택하고 <확인> 버튼을 누르세요. 조이스틱이 선택한 해당 기능으로 동작합니다.

조이스틱				ID : admin	로그아웃
조이스틱 설정					
자동 조정 조정		목표물 고정		엔터 입력	
				확인 취소	

컨트롤러 ID 설정

컨트롤러간 연결 시 메인 또는 서브로 할지 설정하며, 사용될 컨트롤러의 ID 및 프로토콜을 설정할 수 있습니다.

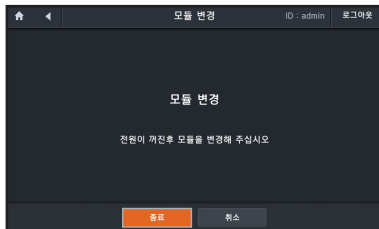
1. <컨트롤러 ID> 메뉴를 선택하세요.
2. 사용할 컨트롤러 ID를 입력하세요.
3. RS-485 또는 RS-422중 컨트롤러의 통신 방법을 설정하세요.
4. 메인 또는 서브 컨트롤러를 선택하고 상세 설정하세요.
 - 여러 대의 컨트롤러를 연결하여 사용할 경우 서브리스트를 설정해야 합니다.
5. 설정을 완료하면 <확인> 버튼을 클릭하세요.

컨트롤러 ID				ID : admin	로그아웃
컨트롤러 ID를 설정하기 위해 아래의 상세정보를 입력하세요					
컨트롤러 ID		5			
프로토콜		RS485			
포트 2		Master	38400	SUB리스트	
				확인 취소	

모듈 변경

컨트롤러 좌우측의 조그셔틀과 조이스틱의 위치를 바꿀 수 있습니다.

1. <모듈 변경> 메뉴를 선택하세요.
2. <종료> 버튼을 눌러 전원이 꺼짐을 확인하고 좌우측의 조그셔틀과 조이스틱의 위치를 바꿀 수 있습니다.
3. 교체 화면에서 나가려면 <취소> 버튼을 누르세요.



네트워크

네트워크 접속방식과 접속환경을 설정합니다.

- IP 종류 : 네트워크 접속형태를 선택합니다.
- IP 주소, 서브넷, 게이트웨이, DNS <고정>의 경우 : IP 주소, 서브넷, 게이트웨이, DNS를 직접 입력할 수 있습니다. <DHCP>의 경우 : IP 주소, 서브넷, 게이트웨이 값이 자동으로 설정됩니다.

- 
 ■ DNS 모드를 수동으로 설정하면 DNS IP 정보를 직접 입력할 수 있습니다.



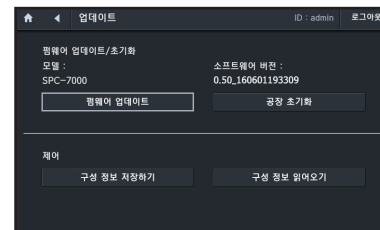
시스템환경

USB 메모리 장치에 저장된 펌웨어 파일을 이용해 업데이트를 실행할 수 있습니다.

컨트롤러 펌웨어 업데이트

다운받은 펌웨어로 펌웨어 업데이트를 실행할 수 있습니다.

1. 신규 펌웨어가 저장된 USB 메모리 장치를 네트워크 컨트롤러에 연결하세요.
2. 메뉴 설정화면에서 <시스템환경> 버튼을 누르세요.
3. <펌웨어 업데이트> 버튼을 누르세요.
4. 업데이트 확인창에서 <확인> 버튼을 누르세요.
5. 업데이트 완료 후 프로그램이 다시 시작할 때까지 기다리세요.

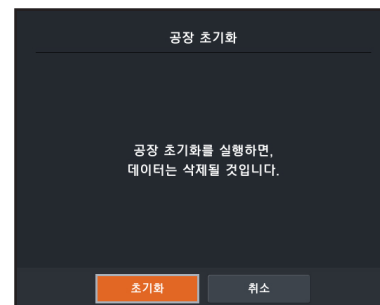


- 
 ■ 재기동하기 전에 USB 메모리 장치 또는 전원의 연결을 해제하면 업데이트가 실패하거나 동작하지 않을 수 있습니다.

공장초기화

현재 설정된 상태를 공장 출고 상태로 초기화할 수 있습니다.

1. <공장초기화> 버튼을 누르세요.
2. <초기화> 버튼을 누르세요. 공장초기 상태로 설정된 데이터가 초기화됩니다.
3. 공장초기화 화면에서 나가려면 <취소> 버튼을 누르세요.



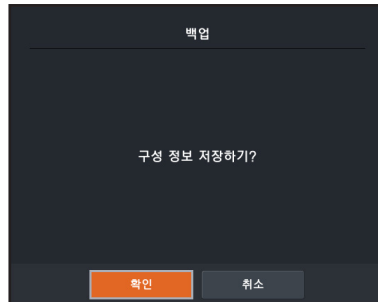
설정하기

컨트롤러 설정 백업

설정 데이터를 다운 받아서 컨트롤러를 수정, 교체할 경우 교체한 카메라에 이미 설정한 설정 값을 그대로 업로드하기 위한 기능입니다.

1. 메뉴 설정화면에서 <시스템환경> 버튼을 누르세요.
2. <구성 정보 저장하기> 버튼을 누르세요.
3. <확인> 버튼을 누르세요.
백업을 시작합니다.

■ 컨트롤러 설정 백업을 완료하기 전에 USB 메모리 장치 또는 전원의 연결을 해제하면 컨트롤러 설정 백업을 실패할 수 있습니다.

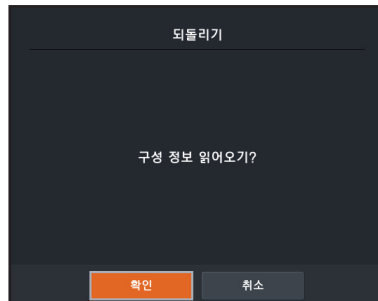


컨트롤러 설정 복원

컨트롤러 설정을 잘못하거나 초기화 됐을 경우 또는 다른 컨트롤러에 기존의 설정을 업로드할 수 있습니다.

1. 메뉴 설정화면에서 <시스템환경> 버튼을 누르세요.
2. <구성 정보 읽어오기> 버튼을 누르세요.
3. <확인> 버튼을 누르세요.
설정 복원을 시작합니다.

■ 컨트롤러 설정 복원을 완료하기 전에 USB 메모리 장치 또는 전원의 연결을 해제하면 컨트롤러 설정 복원을 실패할 수 있습니다.



제어하기

카메라 제어하기

카메라, 저장장치, 설정 메뉴를 설정할 수 있습니다.

- 등록된 네트워크 카메라의 SUNAPI 버전이 낮으면 특정 기능이 동작하지 않을 수도 있습니다.

카메라 제어 모드 진입

메인 화면의 <카메라>를 선택하세요.

카메라 선택

방향키를 이용해 등록된 카메라 리스트에서 원하는 카메라로 이동 후 [ENTER] 키를 누르세요.
방향키를 이용하여 <확인> 버튼으로 이동 후 [ENTER] 키를 누르세요.

- 숫자+[CAM] 키를 클릭해도 각 버튼 번호에 맞는 카메라를 실행할 수 있습니다.



PAN/TILT 제어

PTZ 모드에서 컨트롤러의 조이스틱을 상하좌우로 움직여서 카메라의 Pan과 Tilt를 조절할 수 있습니다.
조이스틱의 중심에서 멀리 움직일수록 카메라의 이동속도가 빨라집니다.

ZOOM

PTZ 모드에서 컨트롤러를 사용하여 카메라의 줌 인/아웃 동작을 조절할 수 있습니다.

FOCUS

컨트롤러를 사용하여 Focus Near/Far 동작을 조절할 수 있습니다.

IRIS

컨트롤러를 사용하여 카메라 영상의 밝기를 조절할 수 있습니다.

- 네트워크 카메라는 지원되지 않습니다.

A/F

컨트롤러의 [AF] 키를 눌러 카메라 오토 포커스를 실행할 수 있습니다.

- 카메라 제어에 관한 자세한 내용은 "각 부분의 명칭 및 기능"을 참고하세요. (6~7쪽)

프리셋

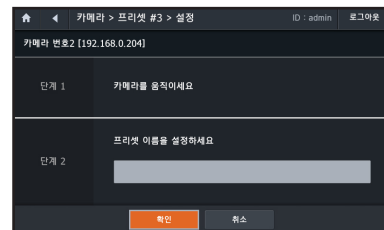
하나의 지정된 단일 지점을 설정하고, 지정된 위치로 카메라를 이동시킬 수 있습니다.

- 총 255개의 프리셋을 지정할 수 있습니다.
- [PRESET]+숫자+[PRESET] 버튼을 클릭해도 각 버튼 번호에 맞는 프리셋을 실행할 수 있습니다.



프리셋 설정

1. 조작할 카메라를 선택하세요.
2. 조이스틱을 이용하여 적절한 위치로 카메라를 움직이세요.
3. 프리셋 이름을 설정하세요.
4. <확인> 버튼을 눌러 저장하세요.



프리셋 실행

1. 카메라를 선택하세요.
2. [PRESET] 버튼을 누르세요.
3. 숫자키로 실행할 숫자를 누르고 [PRESET] 버튼을 누르세요.
4. 프리셋 기능이 실행됩니다.



제어하기

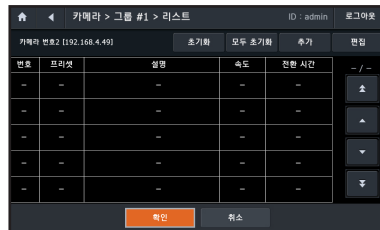
그룹

사용자가 이미 지정한 여러개의 프리셋을 그룹화하여 연속적으로 호출할 수 있습니다.

- 총 6개의 그룹을 지정할 수 있습니다.
- 그룹 하나당 포함되는 프리셋 개수는 128개 입니다.

그룹 설정

1. <그룹> 메뉴를 선택하세요.
2. 그룹 리스트 중 개별 리스트 선택 후 <설정> 버튼을 선택하면 설정 페이지로 이동합니다.
3. <추가> 버튼을 누르세요.
4. 프리셋 리스트에서 그룹에 추가할 프리셋을 선택하세요.
5. 이동 속도와 체류 시간을 입력하세요.
6. <확인> 버튼을 눌러 저장하세요.



그룹 실행

1. <그룹> 메뉴를 선택하세요.
2. 그룹 리스트 중 하나를 선택하세요.
3. 그룹 번호를 선택 후 시작을 누르세요.
4. 그룹 기능이 실행됩니다.

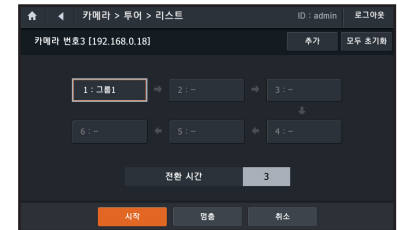


투어

1개 이상의 그룹을 투어로 지정하여 연속 그룹 동작을 실행할 수 있습니다.

투어 설정

1. <투어> 메뉴를 선택하세요.
2. <추가> 버튼을 눌러 그룹 선택 페이지로 이동하세요.
 - 최대 6개의 그룹을 추가할 수 있습니다.
3. 그룹 리스트 중 하나를 선택하세요.
4. 체류 시간을 입력하세요.
5. <확인> 버튼을 눌러 저장하세요.



투어 실행

1. <투어> 메뉴를 선택하세요.
2. 그룹 번호를 선택 후 시작을 누르세요.
3. 투어 기능이 실행됩니다.



초기화

<모두 초기화> 버튼을 선택하면 전체 투어의 설정이 초기화 됩니다.

스윙

카메라 메뉴에서 설정된 2개의 프리셋 구간을 왕복하면서 이동 경로를 감시할 수 있습니다.

스윙 설정

1. <스윙> 메뉴를 선택하세요.
2. 펜, 펜 / 틸트, 틸트 중 설정할 스윙 종류의 [Preset] 버튼을 선택하세요.
3. 시작 프리셋과 종료 프리셋을 설정하세요.
4. 속도와 전환 시간을 설정하세요.
5. <확인> 버튼을 눌러 저장하세요.



스윙 실행

1. <스윙> 메뉴를 선택하세요.
2. 펜, 펜 / 틸트, 틸트 중 실행할 스윙의 <시작> 버튼을 누르세요.
3. 스윙 기능이 실행됩니다.

트레이스

조이스틱 또는 카메라 조작 버튼 등을 통한 카메라의 움직임을 일정 시간동안 기억하여 기억된 움직임을 반복하도록 할 수 있습니다.

트레이스 설정

1. <트레이스> 메뉴를 선택하세요.
2. 트레이스 리스트에서 개별 항목을 선택한 후, <설정> 버튼을 클릭하세요.
3. 조이스틱 또는 카메라 조작 버튼을 통해 기억시키고자 하는 카메라의 움직임을 조작하세요.
4. <멈춤> 버튼을 누르면 설정이 완료됩니다.



트레이스 실행

1. <트레이스> 메뉴를 선택하세요.
2. 실행할 트레이스 번호를 선택하세요.
3. <시작> 버튼을 누르세요.
4. 트레이스 기능이 실행됩니다.

제어하기

오토 트래킹

오토 트래킹 기능이 지원되는 카메라에 대해 해당 기능을 켜고 끌지를 선택할 수 있습니다.



알람 출력

강제 알람 출력을 ON/OFF할 수 있습니다.

- 사용자 권한이 없는 경우 카메라와 동기가 맞지 않을 수 있습니다.

PTZ 제어

조이스틱으로 PTZ 제어를 원할 경우 <켜기> 상태, 메뉴 이동을 원할 경우 <끄기> 상태로 설정합니다.

카메라 부가기능 제어

<AUX> 버튼을 누르면 카메라에서 부가기능 제공 시 이를 제어할 수 있습니다.

카메라 화면 캡처

<스크린샷> 버튼을 누르면 USB 메모리 스틱에 카메라 화면 캡처 이미지가 저장됩니다.

카메라 상세 정보

<정보> 버튼을 누르면 카메라 상세정보가 팝업으로 표시됩니다.

저장장치 제어하기

각 기기에 따라 기능이 다르므로, 해당 기기의 설명서를 참조하세요.

SSM

SSM을 선택해서 SSM에 등록된 저장장치를 컨트롤할 수 있습니다.

- SSM을 선택하면 기본적으로 SSM 모드로 동작합니다.



모드 선택하기

SSM 모드

<SSM 모드>를 선택하세요.

SSM 및 SSM에 등록된 장치를 제어할 수 있습니다.

- GUI 제어와 관계없이 SSM을 제어합니다.
- 상세한 SSM 프로그램 사용 방법은 SSM 사용설명서를 참조하세요.

조이스틱	
상/하/좌/우	PTZ 모드에서 Pan, Tilt 제어를 할 수 있습니다. Screen 모드에서 상/하/좌/우 타일 선택 변경이 가능합니다. Mouse 모드에서 마우스 커서 이동이 가능합니다.
회전	PTZ 모드에서 WIDE 방향으로 회전 시 줌 인, TELE 방향으로 회전 시 줌 아웃을 실행합니다.

PTZ 제어	
[FOCUS N/F] + 	Focus Near/Far 동작을 실행합니다. - [FOCUS N/F] +  ← : Focus Near
[FOCUS N/F] + 	- [FOCUS N/F] + →  : Focus Far
[IRIS C/O] + 	IRIS Open/Close 동작을 실행합니다. - [IRIS C/O] + →  : IRIS Open
[IRIS C/O] + 	- [IRIS C/O] + ←  : IRIS Close
[PRESET]	숫자+[PRESET] 버튼을 클릭하면 각 버튼 번호에 맞는 프리셋을 실행합니다.
[GROUP]	숫자+[GROUP] 버튼을 클릭하면 각 버튼 번호에 맞는 그룹/스캔을 실행합니다.
[TRACE]	숫자+[TRACE] 버튼을 클릭하면 각 버튼 번호에 맞는 패턴/트레이스를 실행합니다.
[ZOOM] + 	줌 인 동작을 실행합니다.
[ZOOM] + 	줌 아웃 동작을 실행합니다.
Mouse 제어	
[L(T. LOCK)]/[R(TRACK)]	Mouse 모드에서 마우스 L/R 버튼으로 사용합니다.

Screen 제어	
[MON.(CON.)]	Screen 모드에서 숫자+[MON.(CON.)] 버튼을 클릭하면 멀티 모니터 선택 변경이 가능합니다. (모니터 번호에 따른 이전/다음)
[LAYOUT(SEQ.)]	Screen 모드에서 숫자+[LAYOUT(SEQ.)] 버튼을 클릭하면 각 버튼 번호에 맞는 레이아웃을 실행합니다.
[CAM]	숫자+[CAM] 버튼을 클릭하면 각 버튼 번호에 맞는 카메라를 실행합니다.
[ENTER]	한 번 클릭하면 라이브 뷰어에서 한 화면 보기를 실행합니다. 한 번 더 클릭하면 원래 화면으로 돌아옵니다.
	라이브 뷰어에서 숫자+[ENTER] 버튼을 클릭하면 정분할에 대해서 입력된 숫자 만큼의 분할 화면을 출력합니다.
LCD SnapShot 버튼	현재 타일의 영상을 캡처합니다.
LCD UI Alarm Off 버튼	이벤트를 초기화합니다.
숫자 + [TILE(VM)]	숫자의 타일로 이동합니다.
모드 변경	
[PTZ(MENU)]	PTZ 모드 변환을 실행합니다. PTZ 모드에서 [PTZ(MENU)] 버튼을 클릭하면 Screen 모드 변환을 실행합니다.
[SHIFT] + [MENU(Mouse)]	Mouse 모드 변환을 실행합니다. Mouse 모드에서 [SHIFT] + [MENU(Mouse)] 버튼을 클릭하면 Screen 모드 변환을 실행합니다.
[SHIFT] + [Mon.(Con.)]	Console 모드 변환을 실행합니다.
[SHIFT] + [TILE(VM)]	VMD 컨트롤을 실행합니다.

제어하기

재생 화면 제어	
[SEARCH]	현재 타일의 영상을 라이브/검색으로 출력합니다.
	영상이 정지됩니다.
	영상의 재생 및 일시정지를 실행합니다.
	영상의 수동 녹화를 실행/종료합니다.
Shuttle wheel	시계 방향으로 회전 시 정방향 배속 재생, 시계 반대 방향으로 회전 시 역방향 배속 재생을 실행합니다.
Jog wheel	프레임 탐색을 실행합니다.
0 ~ 9	숫자 입력 버튼입니다.
[ESC(SETUP)]	입력한 숫자를 초기화합니다. SSM 모드에서만 초기화 기능으로 동작합니다.

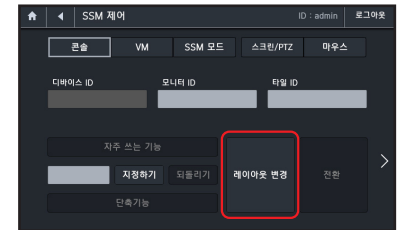
GUI 제어모드

- [SHIFT], [RECORDER/SSM] 키를 순서대로 누르세요.
- <콘솔>, <VM> 모드를 선택하세요.
콘솔 / VM 모드 중 하나를 선택하면, 설정 가능한 하위 기능이 활성화됩니다.
 - 디바이스 ID : SSM을 제어할 경우 비활성화 됩니다.
 - 모니터 ID : 숫자 + [MON.CON.] 키를 입력하세요.
 - 타일 ID : 숫자 + [TILE/VM] 키를 입력하세요.
- <스크린/PTZ>, <마우스> 모드 중 사용할 기기 모드를 선택하세요.

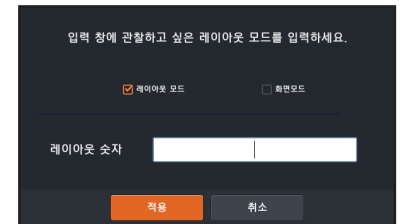


레이아웃 변경하기

- <레이아웃 변경> 버튼을 누르세요.
 - SSM을 제어할 경우 화면 모드는 비활성화 됩니다.



- 변경하려는 레이아웃 번호를 입력하세요.
- <적용> 버튼을 선택하면 설정한 레이아웃으로 변경됩니다.



녹화

레코딩을 시작하거나 중단합니다.

검색

재생 영상을 보여줍니다.

스냅샷

캡처 이미지를 저장합니다.

- SSM이 설치된 PC에 이미지가 저장됩니다.

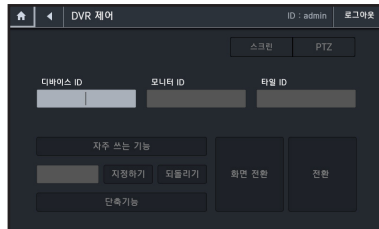
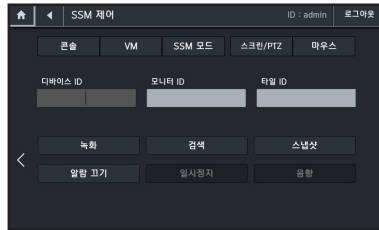
알람 끄기

이벤트 알람을 끕니다.

DVR

DVR을 연결해서 컨트롤할 수 있습니다.

1. <DVR>을 선택하세요.
설정 가능한 하위 기능이 활성화됩니다.
 - SRD 프로토콜에서는 연결된 DVR에 따라 설정 가능한 메뉴만 화면에 표시됩니다.
 - 디바이스 ID : DVR ID를 입력하세요.
 - 모니터 ID : DVR을 제어할 경우 비활성화 됩니다.
 - 타일 ID : 숫자 + [TILE/VM] 키를 입력하세요.
2. <스크린>, <PTZ> 모드 중 사용할 기기 모드를 선택하세요.



레이아웃 변경하기

1. <화면 전환> 버튼을 누르세요.
2. 변경하려는 레이아웃 번호를 입력하세요.
3. <적용> 버튼을 선택하면 설정한 레이아웃으로 변경됩니다.

녹화

레코딩을 시작하거나 중단합니다.

검색

재생 영상을 보여줍니다.

알람 끄기

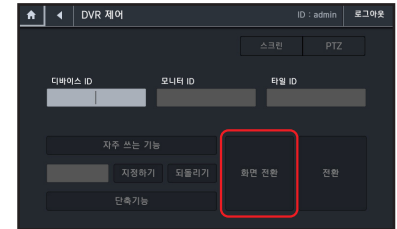
이벤트 알람을 끕니다.

일시정지

재생 영상을 일시 정지합니다.

음향

재생 영상 음향을 조절합니다.



부록

제품사양

항목	내용
통신방식	SSM RJ-45(Ethernet) RS-485 / 422
제어규모	최대 255대
지원장비	네트워크/아날로그 카메라, SSM, DVR
프로토콜(네트워크 카메라)	SUNAPI
프로토콜(아날로그 카메라)	Samsung-T, Samsung-E, PELCO-D, PELCO-P, Panasonic, Honeywell, ELMO, Vicon, GE, AD, Bosch
프로토콜(DVR)	SRD
다국어 지원	영문, 스페인, 프랑스, 이탈리아, 독일, 폴란드, 터키, 러시아, 한글, 중문, 일본
LCD 디스플레이	5인치 TFT LCD + 터치 LCD
USB 포트	설정 백업/복원, 소프트웨어 업데이트 용
조이스틱	PTZ 제어 (3축 Twist Zoom)
조그셔틀	SSM, DVR 재생 제어
동작전원	DC 12V, 최대 6.4W
동작온도	0°C ~ 40°C
동작습도	20%~85%
크기	459.1(W) x 59.1(H) x 177.9(D) mm
중량	1.5kg (아답터 제외)

Q & A

문제	해결
컨트롤러 통신이 되지 않습니다.	- RS-485 통신선이 정상적으로 연결되어 있는지 확인하세요. - SPC-7000과 PC간 USB 케이블 연결을 확인하세요. - 네트워크 컨트롤러의 IP 주소가 정확하게 설정되어 있는지 확인하세요.
USB 메모리가 인식되지 않아요.	USB 메모리가 정상인지 확인하세요.

GPL/LGPL SOFTWARE LICENSE

The software included in this product contains copyrighted software that is licensed under the GPL/LGPL. You may obtain the complete Corresponding Source code from us for a period of three years after our last shipment of this product by sending email to help.cctv@hanhua.com

If you want to obtain the complete Corresponding Source code in the physical medium such as CD-ROM, the cost of physically performing source distribution might be charged.

- GPL Software : Linux Kernel 3.0.8, uboot, busybox 1.16.1, udhcp 0.9.8
- LGPL Software : QT 4.7.2
- OpenSSL License : OpenSSL 0.9.8
- Boost Software License : boost 1.57.0
- UNDER THE ZLIB : tinymd 2.6.2
- Curl License : curl 7.21.0

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Preamble

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- 사용환경에 따른 신호 점검, 전원 점검, 네트워크 환경 문제 등의 서비스 요청시
- 제품과 관련된 타기기의 설치, 설명 요청시

[3] 단순 분해조립, 간단조정, S/W 업그레이드 등으로 서비스 요청한 경우

- 제품 안에 이물이 투입되어 문제가 발생하여 서비스를 요청시
- 제품 간단조정이나 분해하지 않고 처리하는 경우
- 제품고장 요인이 아닌 S/W 업그레이드 요청시

[4] 그 밖의 경우

- 제품에서 사용되는 소모품(기록매체 등)의 관리 소홀로 인한 고장이나 사용설명 서비스 요청시
(소모품 문제에 대한 사용설명 및 서비스 요청은 해당업체에 문의하여 주십시오)
- 품질이 좋지 않은 기록매체 사용에 따른 고장이나 사용설명 서비스 요청시
- 제품이 비정상적인 환경에서 사용하거나 설치되어 문제가 발생한 경우

※ 상기와 같은 유형의 서비스를 받으실 경우에는 소정의 수수료가 부과될 수 있으므로, 서비스 신청전 전문상담원 (☎1588-5772)을 통하여 보다 양질의 서비스를 받으시길 권장 드립니다.

품 질 보 증 서

제 품 명	네트워크 컨트롤러	보 증 기 간
모 델 명	SPC-7000	구 입 후 5 년
구 입 일 자	년 월 일	
보 증 기 간	년 월 일 까지	

고객주소	성 명	
	연락처	
판매점주소(상호)	성 명	
	연락처	

※ 제품 판매시 공란의 내용을 팔히 기입하여 주십시오.

※ 단, 소모품 중 HDD와 어댑터의 보증 기간은 2년입니다.

◀ 서비스를 받으실 때 ▶

사용설명서를 한번 더 읽어주십시오.

고장이라 생각되면 서비스를 요청하기 전에 반드시 사용설명서를 한번 더 읽어 주십시오.
사용미숙 등으로 인한 고장현상이 있으므로 사용설명서의 취급법과 주의사항 등을 보시면
고객여러분의 손으로도 간단히 해결되는 경우가 있습니다.

서비스를 요청하시는 방법은?

요청하실 때는 고장상태를 정확히 알려 주십시오.

이때 보증서를 함께 제시하시면 보증서에 기재된 내용에 따라 유상, 무상수리의 구분이 됩니다.

한화비전(주)

경기도 성남시 분당구 판교로 319번길 6 (삼평동 701)

영 업TEL 070-7147-8771~9 A/S 및 기술 문의 1588-5772

부산영업소TEL 051-796-3216

대구영업소TEL 053-742-3098

광주영업소TEL 062-941-9559

대전영업소TEL 042-489-9840

아래 사항에 따른 고장은 유상 처리됩니다.

- 1) 설치자 과실, 사용자 취급 부주의에 의한 고장
- 2) 정격 전원 외의 전원 연결 시
- 3) 사용자 임의로 분해, 수리한 경우
- 4) 자연재해에 의한 고장 (낙뢰, 지진, 화재, 홍수, 해일 등)
- 5) 소모품 교체 및 추가 시(HDD/SSD, SD카드, 아답터, FAN 등)

