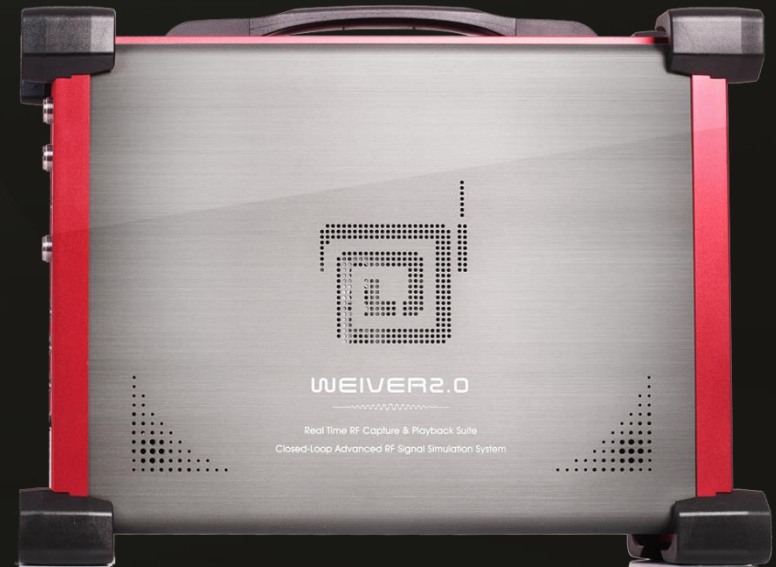


2020

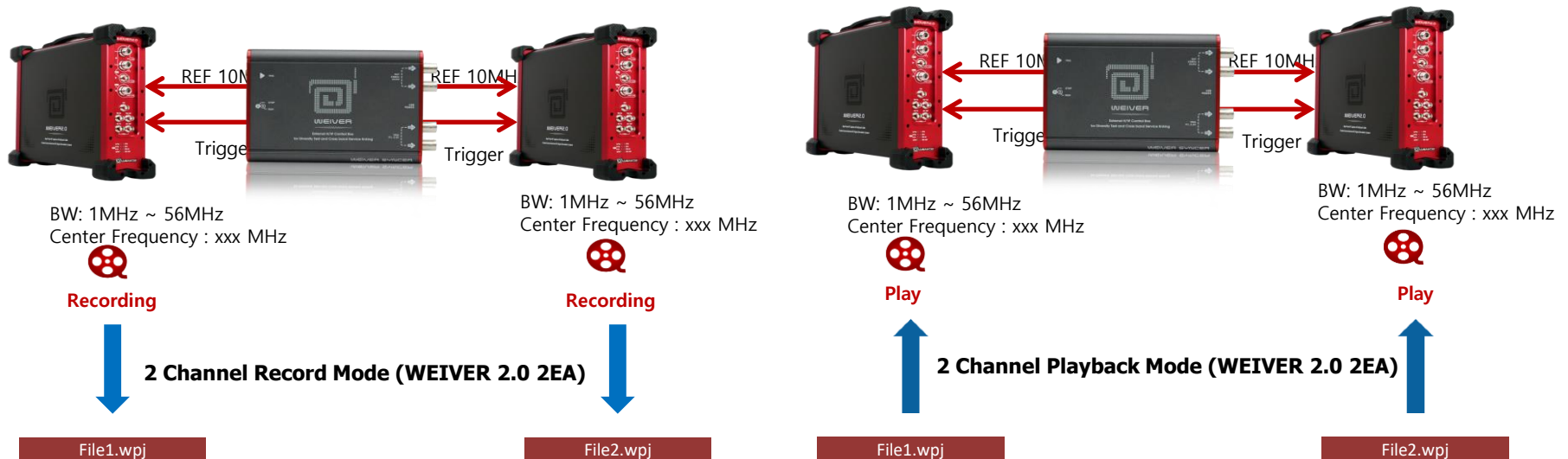
WEIVER 2.0 :RF Signal Recorder & Playback System Multi-CH



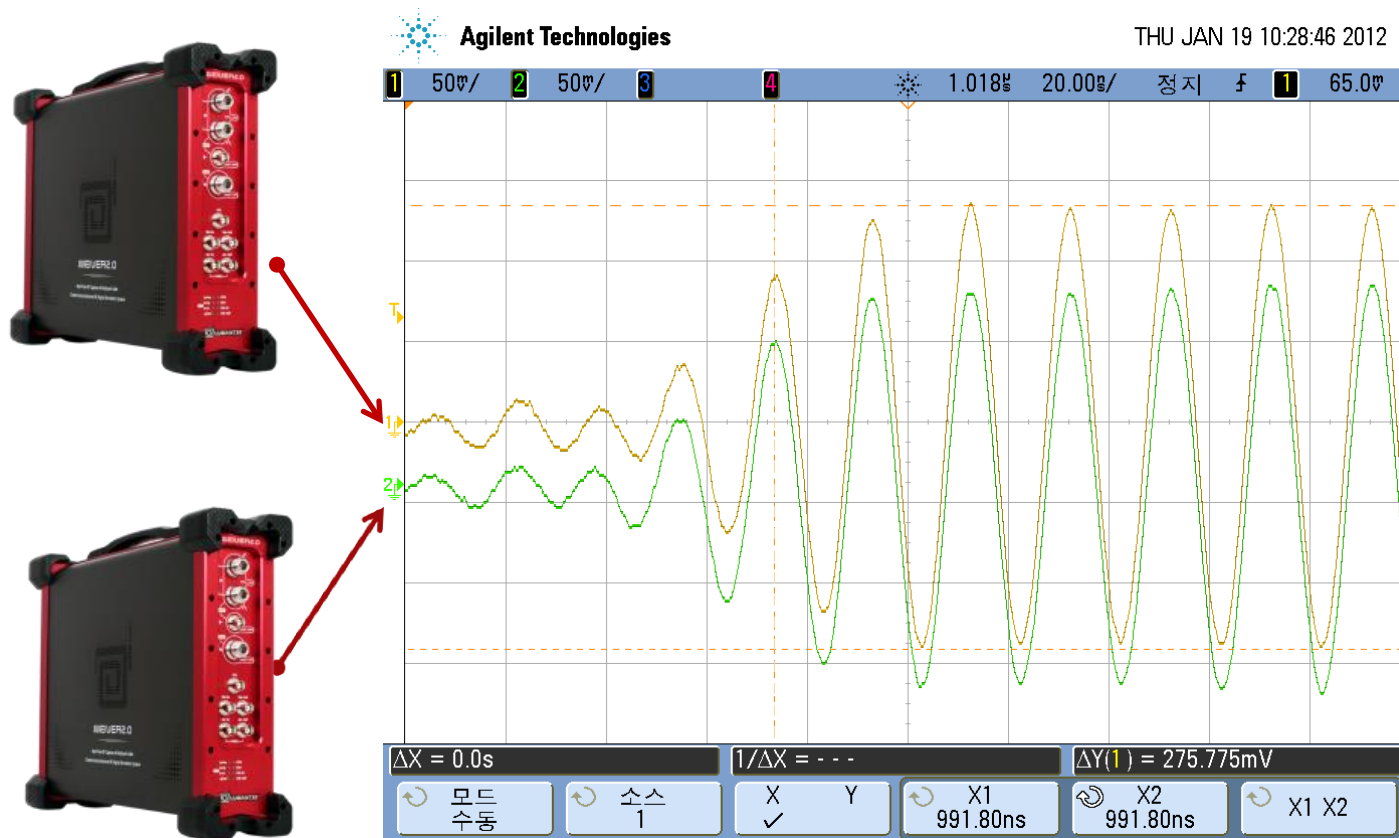
This document is confidential and is intended solely for the use and information of the client to whom it is addressed.



- WEIVER 2.0 시스템 2대 이상을 동시에 운영 할 경우에는 Syncer를 이용하여 Record & Playback 해야 함 (MAX : 4EA)
- CASE 1 : 노트북을 이용하는 경우에는 Syncer, network sw hub가 필요
- CASE 2 : WEIVER 2.0 시스템에 모니터 연결하는 경우에는 Syncer만 필요



2 Channel Play Mode – Test Result

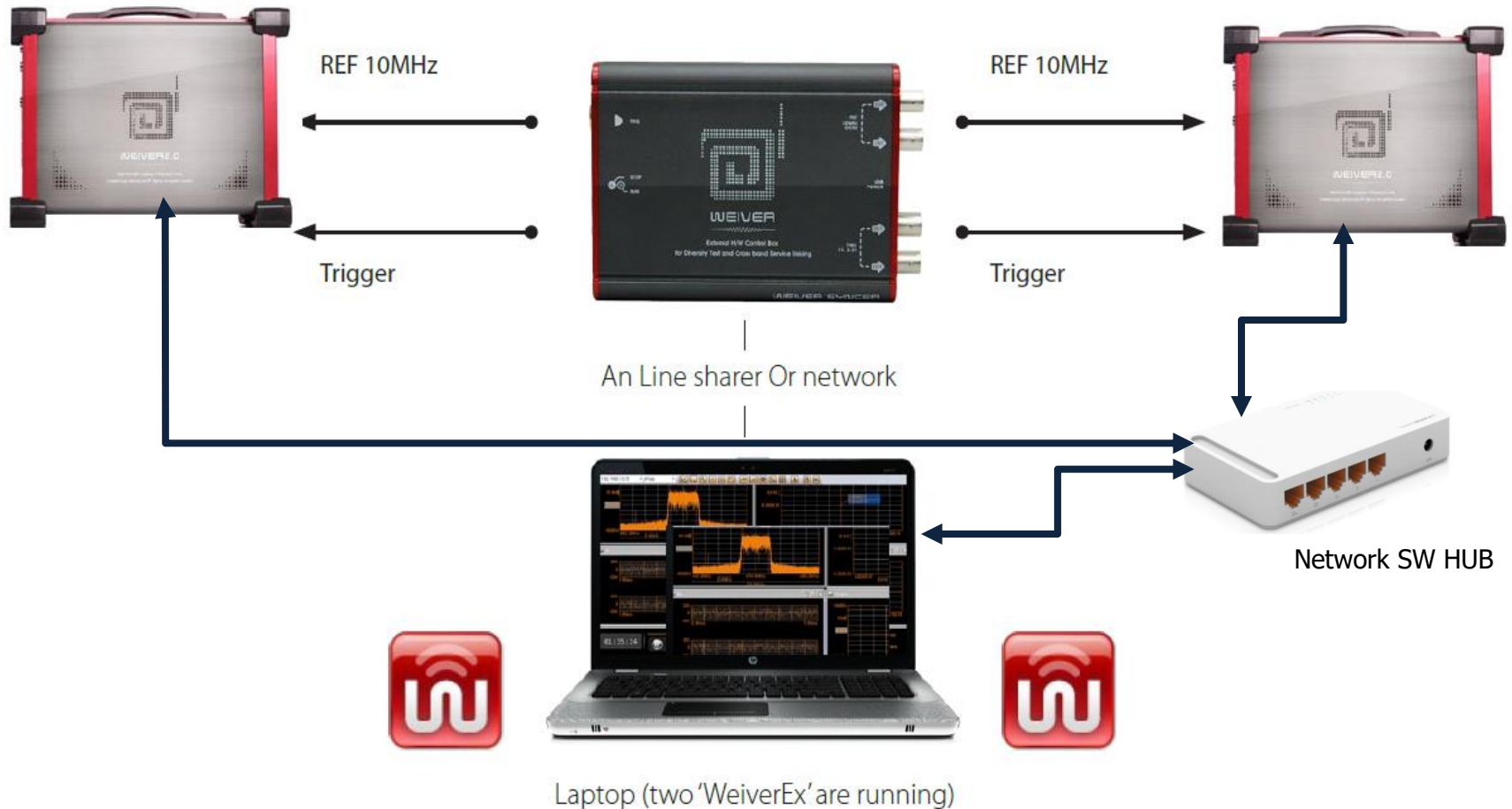


WEIVER 2.0을 이용한 2 channel Record & Playback

CASE 1 : WEIVER 2.0 시스템을 노트북 연결로 사용하는 경우 구성

→ 노트북을 이용하는 경우는 차량을 이용하여 외부 녹취하는 경우로 노트북 1대에 Network SW HUB를 이용

→ WEIVER 2.0 시스템 , 노트북 모두 자동IP (DHCP)로 설정 한 후 WEIVEREX Program 실행



WEIVER 2.0을 이용한 2 channel Record & Playback

CASE 2 : WEIVER 2.0 시스템을 각각 모니터 연결로 사용하는 경우 구성

→ CH 수 만큼 모니터, 키보드, 마우스 필요

→ WEIVER 2.0 시스템 각각에 모니터,키보드,마우스 연결 후 WEIVEREX 프로그램 실행



Connecting with display and Keyboard
(WeiverEx is running at the WEIVER)

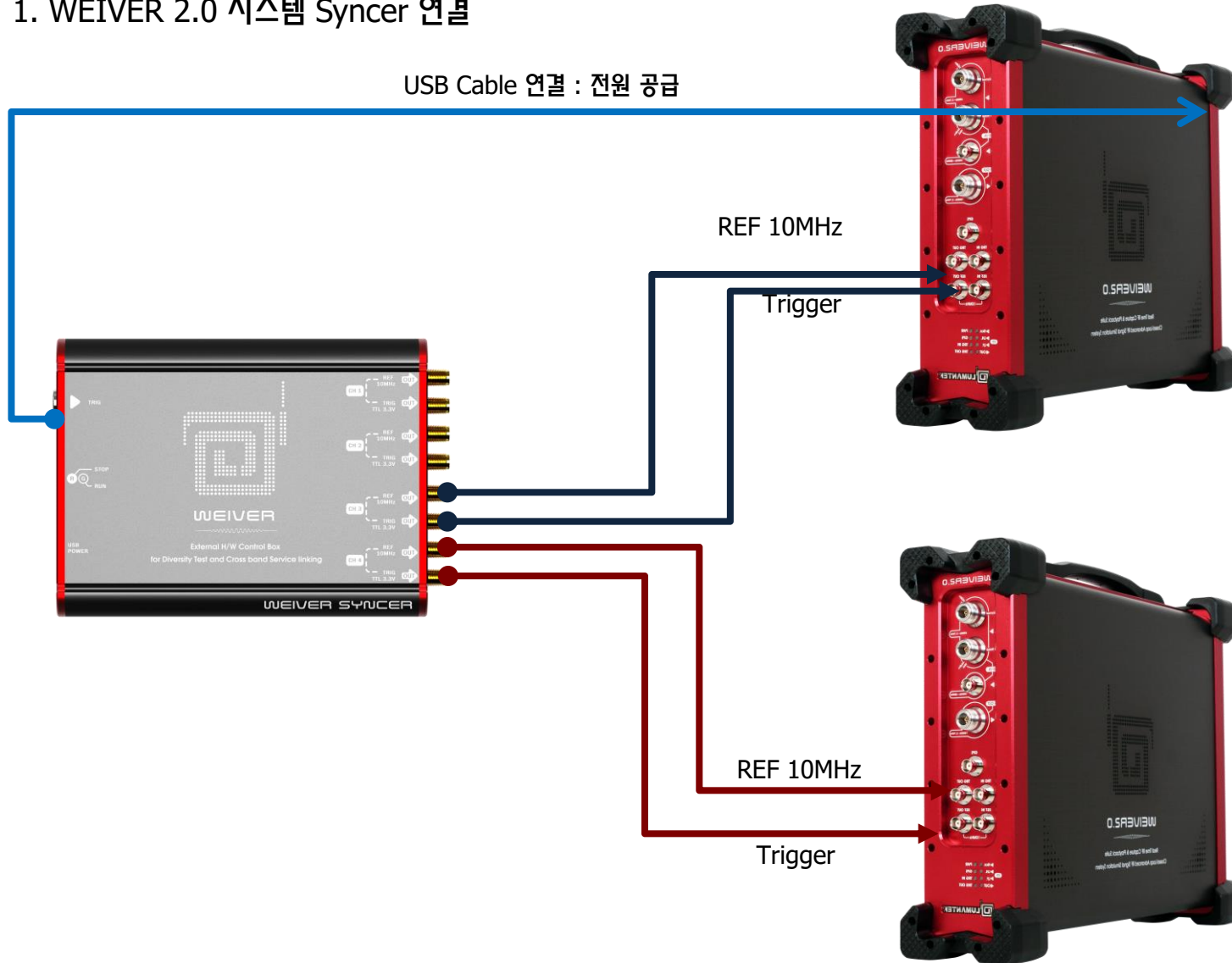


Connecting with display and Keyboard
(WeiverEx is running at the WEIVER)

WEIVER 2.0을 이용한 2 channel Record & Playback

1. WEIVER 2.0 시스템 Syncer 연결

USB Cable 연결 : 전원 공급



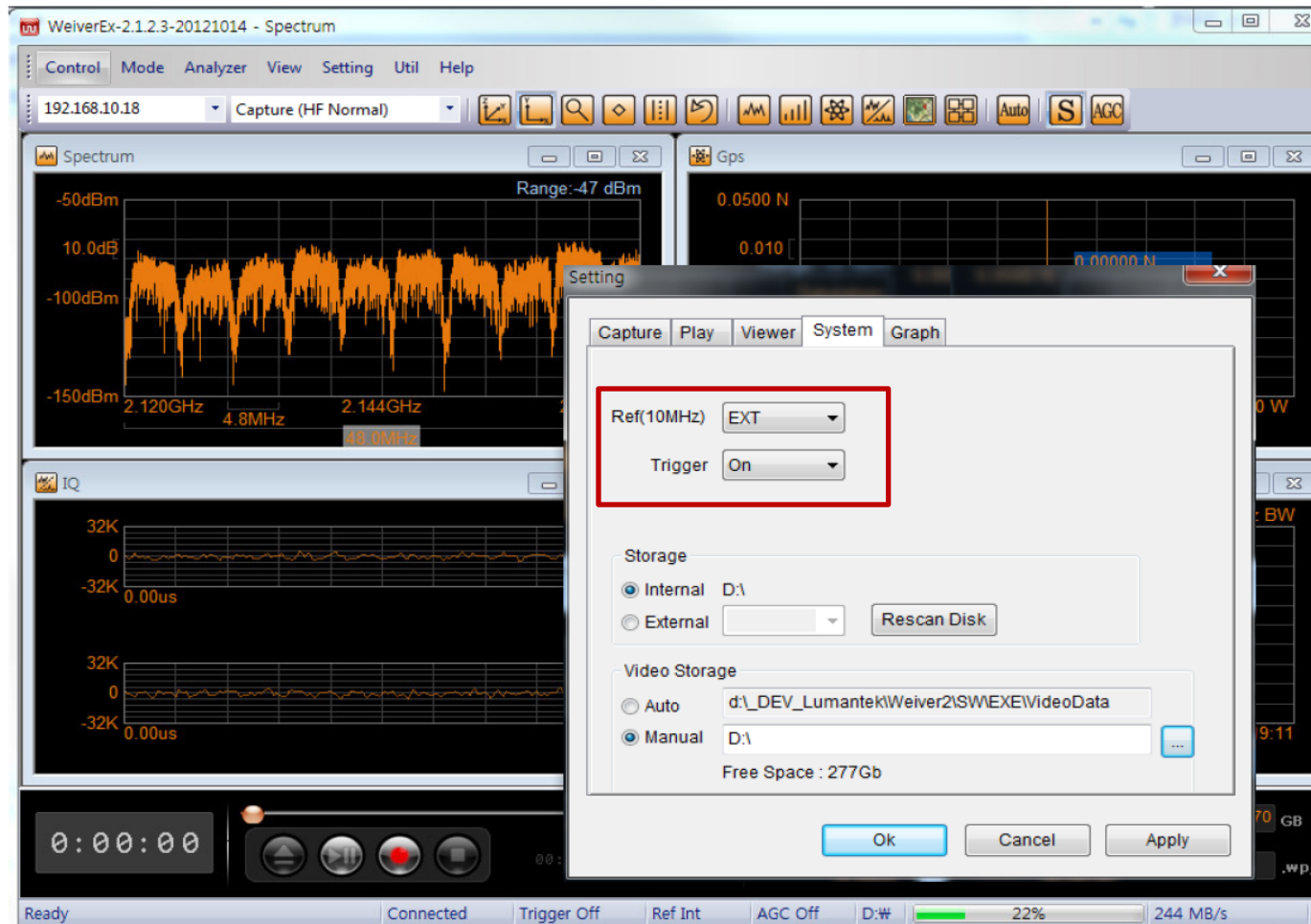
WEIVER 2.0을 이용한 2 channel Record & Playback

2. WEIVER 2.0 시스템 Syncer 연결 완료하면 WEIVEREX Program 설정으로 이동

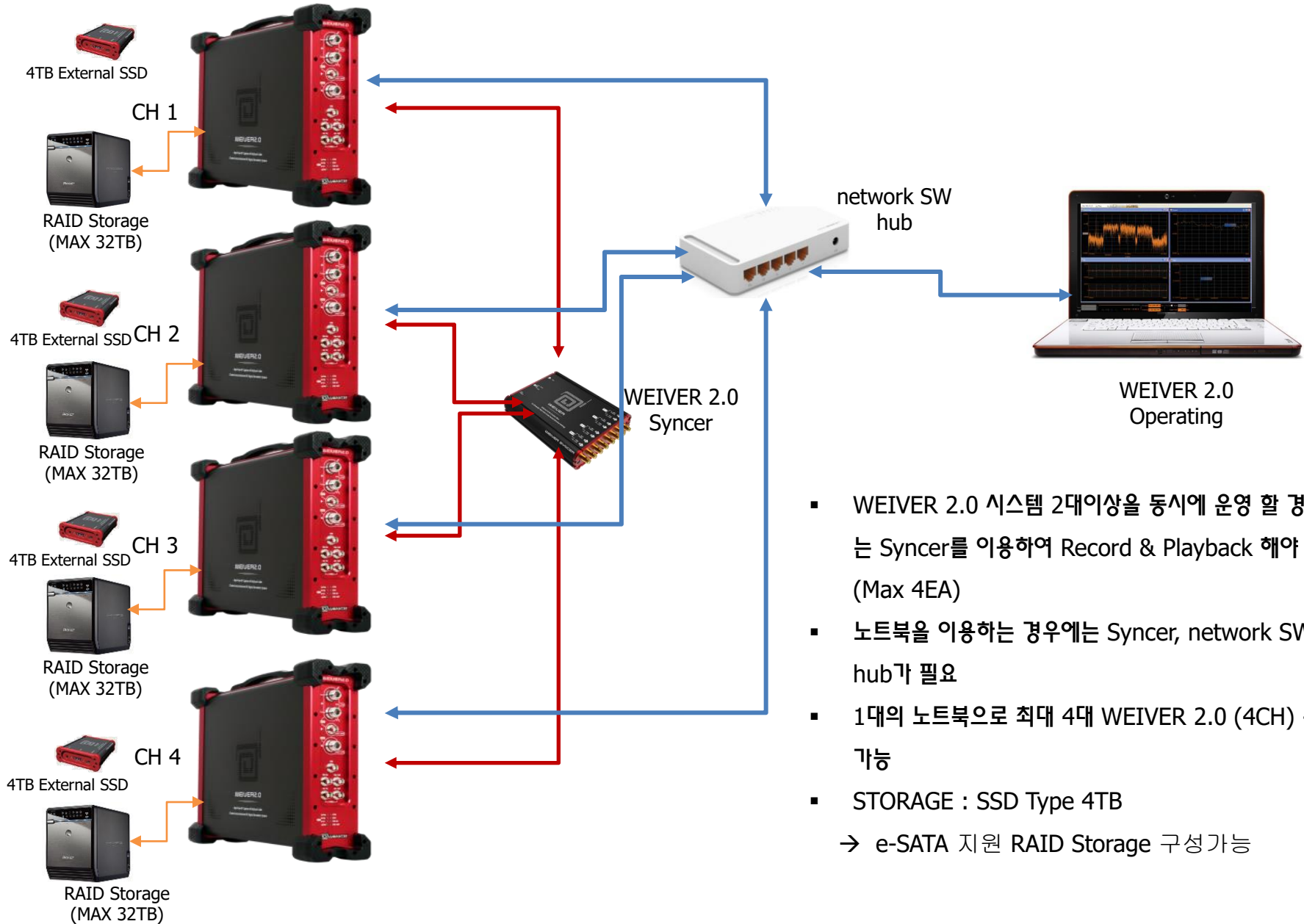
→ 상단의 메뉴에서 Setting으로 이동

→ Ref (10MHz) EXT로 변경. (Default : INT)

→ Trigger On으로 변경 (Default : Off)



WEIVER 2.0 시스템 : Multi-CH 구성



- WEIVER 2.0 시스템 2대 이상을 동시에 운영 할 경우에는 Syncer를 이용하여 Record & Playback 해야 함 (Max 4EA)
- 노트북을 이용하는 경우에는 Syncer, network SW hub가 필요
- 1대의 노트북으로 최대 4대 WEIVER 2.0 (4CH) 운영 가능
- STORAGE : SSD Type 4TB
→ e-SATA 지원 RAID Storage 구성가능

Specifications Capture mode

Frequency

- **Frequency band** **0.1MHz ~ 2.7 GHz**
- **Real-time bandwidth** **24MHz, 48 MHz, 56 MHz**
(1~56 MHz Adjustable by 1Hz step)
- Frequency resolution 1Hz
- Resolution bandwidth 3 KHz, 5 KHz, 10 KHz, 20 KHz
(Arbitrary BW in 1 Hz step- Patent Protect)
- Temperature stability ± 20 ppb
- Aging (annually) ± 50 ppb

Spectral Purity (HF)

- Phase Noise @1KHz offset, 1 GHz ≤ -95 dBc/Hz
- Phase Noise @1KHz offset, 2.7GHz ≤ -90 dBc/Hz
- Phase Noise @10KHz offset, 1GHz ≤ -100 dBc/Hz
- Phase Noise @10KHz offset, 2.7Ghz ≤ -95 dBc/Hz

Noise Figure (1GHz)

- HF < 7 dB (Gain 50 dB)
- HF_Low Noise < 3 dB (Gain 50 dB)
- LF < 7 dB (Gain 50 dB)

Amplitude

- Input level accuracy ± 1 dB
- **Input dynamic range (CW tone)** **-130dBm ~ 0 dBm**
- **Gain range** **-15dB ~ +50dB**
- Input level resolution 0.01dB
- Max. DC input ± 25 VDC

RF In

- ▶ 50ohm, N-type female, DC-coupled

IF Band

- ▶ **Resolution** **16-Bit**
- ▶ Sampling rate 2.5 MS/S~140MS/S (Adjustable)
- ▶ ADC Sample Clock 200 MHz
- ▶ Frequency 150MHz

Storage

- ▶ Internal (def.) 4 TB SSD
- ▶ Storage time (depending on BW)
 - BW 24M 60 minutes/ 512 GB
- ▶ External (opt.) 4 TB SSD,
e-SATA 지원 RAID Storage 구성가능

Calibration

- ▶ 1 year

Environment

- ▶ Operating temperature $0 \sim +50^{\circ}\text{C}$
- ▶ Relative humidity 90%
- ▶ Storage temperature $-20 \sim +70^{\circ}\text{C}$



Specifications Playback mode

Frequency

•Frequency band	0.1MHz ~ 2.7 GHz
•Real-time bandwidth	24M, 48M, 56 M (1-56 MHz Adjustable)
•Frequency resolution	1Hz
•Resolution bandwidth	
– 3 KHz, 5 KHz, 10 KHz, 20 KHz	
•Temperature stability	±20ppb
•Aging (annually)	±50ppb

Spectral Purity

•Phase Noise @1KHz offset, 1GHz	≤ -95dBc/Hz
•Phase Noise @10KHz offset, 1GHz	≤ -100dBc/Hz

Spurious Responses

•2 nd Harmonic	≤ -50dBc
•3 rd Harmonic	≤ -60dBc

RF Output Characteristics

- ▶ Gain Range*
(Input level basis)
- ▶ Amplitude resolution
- ▶ Amplitude accuracy

-30 ~ +30dB

0.1dB step
±1dB

RF Out

- ▶ 50ohm, N-type female, DC-coupled

Overload Protection on RF Output

- ▶ Max. reverse RF power
- ▶ DC input

1 W (max.)
±25 VDC (max.)

Calibration

- ▶ 1 year

Environment

- ▶ Operating temperature
- ▶ Relative humidity
- ▶ Storage temperature

0 ~ +50°C
90%
-20 ~ +70°C



기본 제공



- WEIVER 2.0 시스템 HW : RF Record & Playback Mode 지원
→ 내장 HDD : 4 TB SSD Type
→ 차량용 cigar jack, 네트워크 케이블, GPS ANT, 캐리어
- WEIVER 2.0 시스템 SW : WEIVERCOM, WEIVEREX



Option



WEIVER 2.0
Syncer



4TB External SSD



RAID
Storage
(MAX 32TB)



QR Barcode

THANK YOU