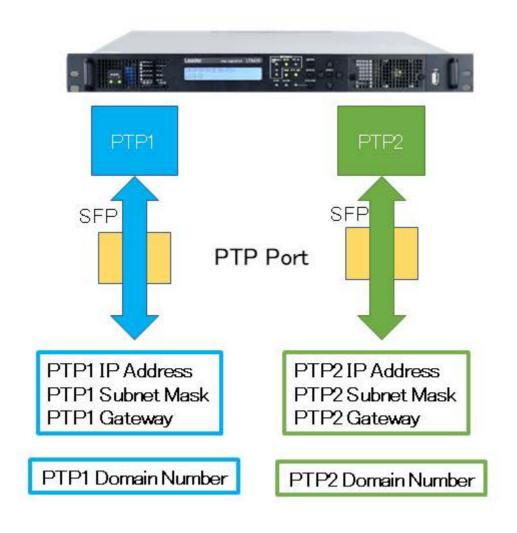
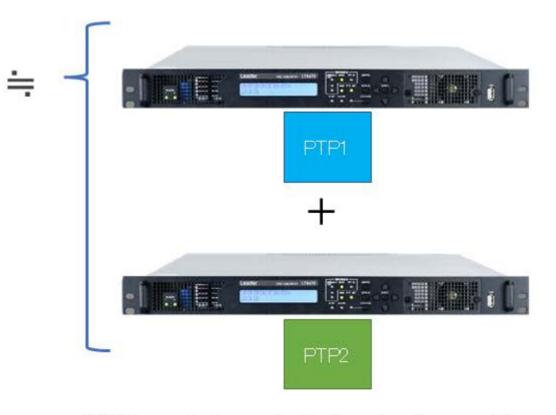
Independent PTP Network

Leader





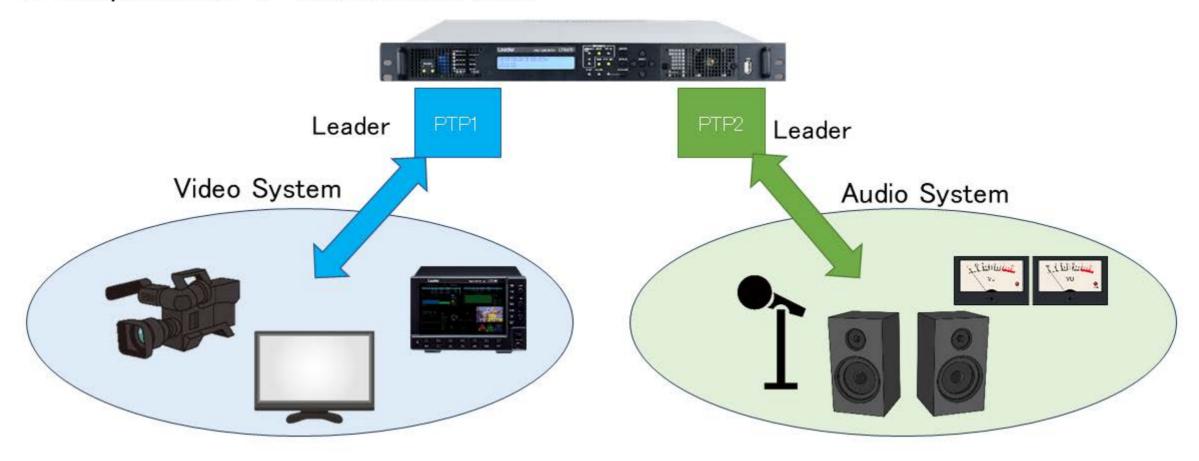
- PTPs are independent of each other, so they can be used as independent grand masters.
- PTP systems can be built as independent grand masters.
- On the PTP, it is the same as having two LT4670s.

Redundancy cannot be built with a single unit since there is only one standard for GNSS, etc.

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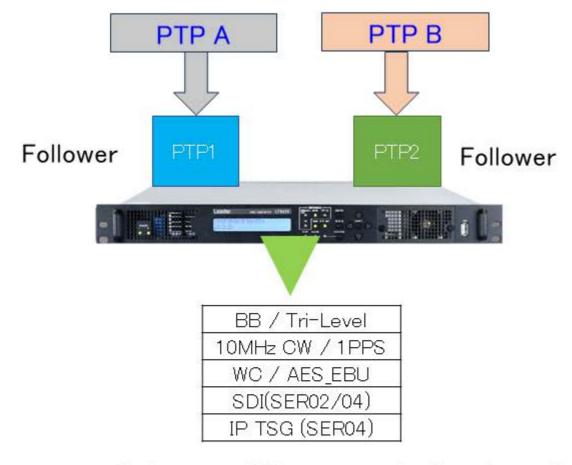
Independent PTP network use case



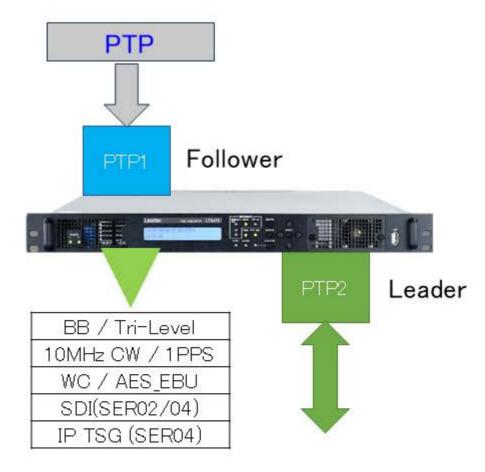
Set 2 systems as followers

Leader and Follower settings





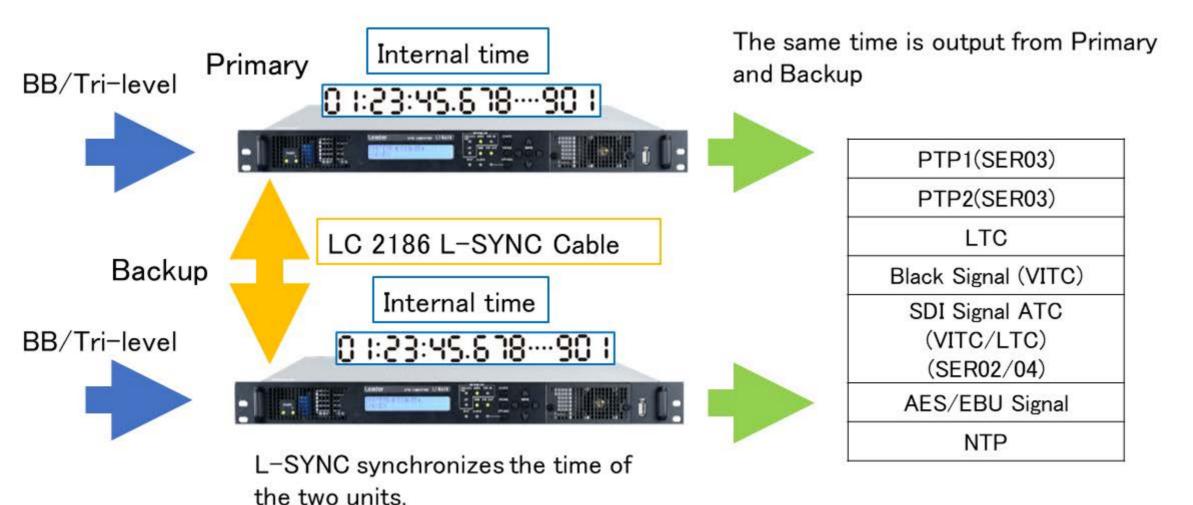
Followers will be automatically selected.



PTP and other outputs synchronized to followers can be used.

Synchronous control between devices (L-SYNC)





Stay-in-Sync and slow lock functions

Leader

Reference Signal







BB / Tri-Level
10MHz CW / 1PPS
WC / AES_EBU
SDI(SER02/04)
IP TSG (SER04)
PTP1/2(SER03)

Stay-in sync maintains synchronization even when the reference signal is lost. The stay-in-sync maintains

synchronization even when the reference signal is lost.



Signal Break



3 Slow lock in progress with

signal return



The reference signal is restored, but aftera time. After some time passed, the synchronization is out of sync.





Genlock becomes the same the reference signal.



Slow lock allows time Synchronizes with the referen signal without shock.



Time output based on reference signal and time source

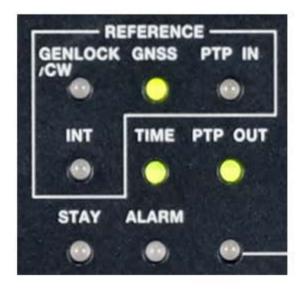


		500 400 101 10						
		Time Output						
REFERENCE SOURCE	TIME SOURCE	LTC	Black Signal (VITC)	SDI Signal ATC(VITC/LTC) (SER02/04)	AES/EBU Signal	NTP	PTP1 (SER03)	PTP2 (SER03)
Internal / 10MHz CW	Internal	0	0	0	0	0	0	0
	LTC	0	0	0	0	0	0	0
	LTC ST309	0	0	0	0	0	0	0
	NTP	0	0	0	0	0	0	0
	GNSS(SER01)	0	0	0	0	0	0	0
	PTP1(SER03)	0	0	0	0	0	924	0
	PTP2(SER03)	0	0	0	0	0	0	<u>-</u>
BB / Tri- Level	Internal	0		0	0	0	0	0
	LTC	0	0	0	0	0	0	0
	VITC	0	0	0	0	0	0	0
	LTC ST309	0	0	0	0	0	0	0
	VITC ST309	0	0	0	0	0	0	0
	NTP	0	0	0	0	0	0	0
	GNSS(SER01)	0	0	0	0	0	0	0
	PTP1(SER03)	0	0	0	0	0	\$ - \$	0
	PTP2(SER03)	0	0	0	0	0	0	o €
GNSS(SER01	GNSS(SER01)	0	0	0	0	0	0	0
PTP1(SER03)	PTP1(SER03)	0	0	0	0	0	38 -3 8	0
	PTP2(SER03)	0	0	0	0	0	0	S30

When the TIME SOURCE is PTP1/PTP2, the corresponding port becomes a follower. It is used as a follower and does not become a leader.

LED Indication Function





① GENLOCK/CW

Lights green when the reference signal is locked in GENLOCK or CW. Flashes orange until locked and lights orange during stay-in-sync.

② GNSS (SER01)

Lights green when the reference signal is locked by GNSS. Flashes orange until locked and lights orange during stay-in-sync.

③ PTP IN (SER03)

Lights green when the reference signal is locked at PTP. Flashes orange until locked and lights orange during stay-in-sync.

4 INT

Lights up green when the reference signal is INTERNAL.

5 TIME

Lights up green when the time is successfully obtained from the selected TIME SOURCE. Lights up orange when the time is not obtained or when the TIME SOURCE is changed.

The light turns orange when the time is not obtained or when the TIME SOURCE is changed.

® PTP OUT

Lights up green when the PTP output is operating properly.

(7) STAY

Lights up in orange during stay-in-sink.

® ALARM

Lights up red during an alarm.

Lights up green during key lock.