

## Live On Primary Introduction Manual

### Operational Environment

#### ■PC Environment

	Operational Environment	Recommendation Environment
OS	Win98/ME/2000/XP	Win2000/XP
CPU	Celeron 700MHz or over	Pentium4 2GHz or over
Memory	128MB or over	256MB
HDD Volume	20MB or over	100MB or over
Browser	Microsoft Internet Explorer Ver6.0 or over	
Sound Card	Sound Blaster (Recommendation of Portable)	
Pertained Equipment	PC Camera (USB)、Speaker, Microphone and Head Set (Prefix of being with Noise Canceller or Echo Canceller.)	

#### ■Communication Circuit Environment

		Camera Resolution : 160×120		Camera Resolution : 320×240	
		Up	Down	Up	Down
Members	1 to 1	136Kbps	136Kbps	376Kbps	376Kbps
	1 to 3		408Kbps		1.13Mbps
	1 to 5		680Kbps		1.88Mbps

Recommendation execution speed: **Upload 3Mbps, Download 16Mbps** for 3 to 3  
in one chatroom, 8 group (24 students each side)

Operational execution speed: **Upload 2Mbps, Download 10Mbps** for 3 to 3, 8 group  
in one chatroom, 8 group (24 students each side)

#### ■Good balance of PC's CPU and the number of members.

CPU	Members
1GHz~1.5GHz	4 or less
1.5GHz~2GHz	8 or less
2GHz~2.6GHz	12 or less
2.6GHz~	20 or less

■Although CPU spec above is just one of the measure to use Live On comfortably, it is not one of the factor of decision to use Live On or not.

#### ■Using Port

Use TCP no.22000~no.22006 (In the case of tunneling connection, use TCP443 or TCP80.)

#### ■Operational Environment Test

You can check your PC's environment when you access the following URL.

<http://www.liveon.ne.jp/lcheck/index-e.html>