

Analog Wireless Intercom System

Antenna power 1mW or less, for surface movement business
Wireless Intercom System



The wireless intercom system of Tamura is a contact/connection system in which an operator can exchange information and issue an emergency order freely and without fail by radio communication from a work site at any time.

Because the system employs an antenna dispersed system, it is possible to eliminate a non-sensitive zone of radio waves even in a hidden service area by comprising a system with its smallest influence.

1 : 4 Simultaneous Communication System

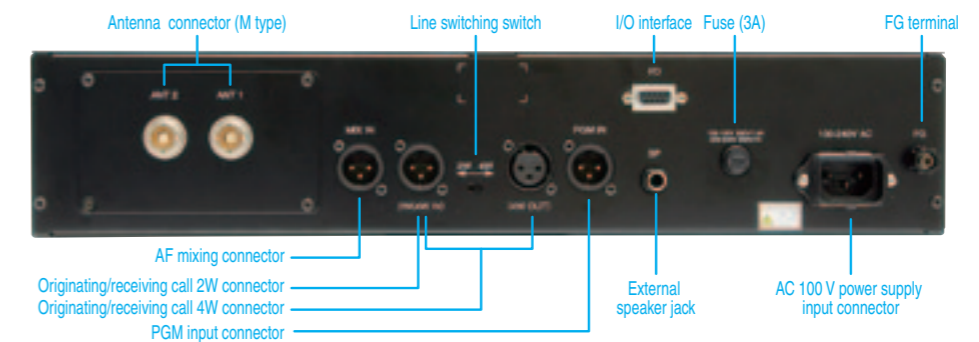
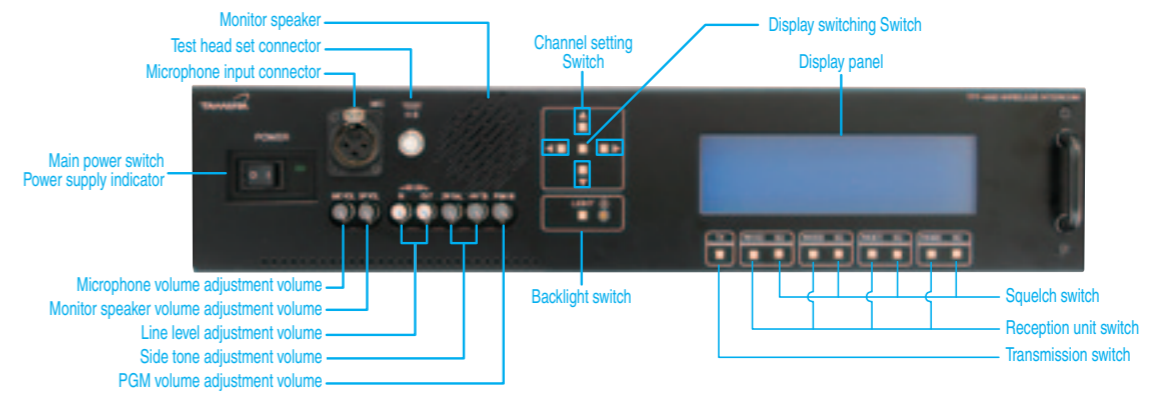
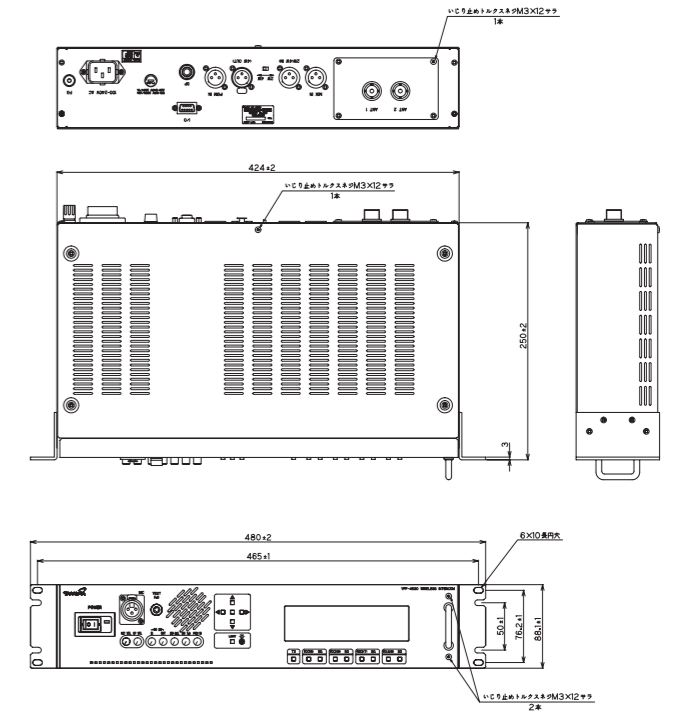
Land mobile station

Base Station YFF- 4530

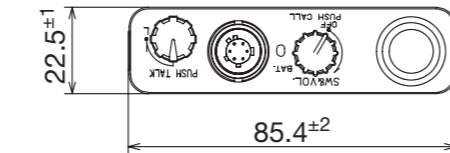


Specifications

- Structure: Rack mounting type
- Power supply: AC 100 V
- Number of calls: 1:8 simultaneous calls
- Circuit configuration: Unit structure
- Number of antennas: 2 (transmission/reception shared)
- Channel setting: Station selection is easy with quartz control PLL synthesizer system
- Standards: Technical standard performance has been certificated
- Environment: -10~+50°C
- Weight: Approx. 7.0 kg

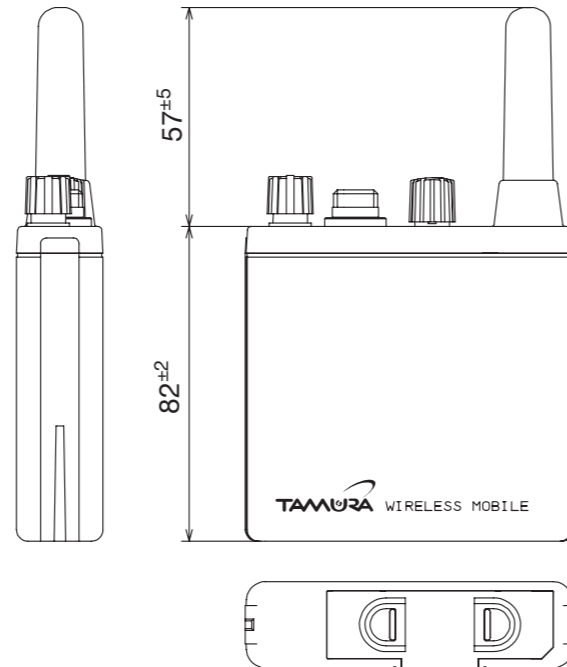


Personal Station YMT- 4120

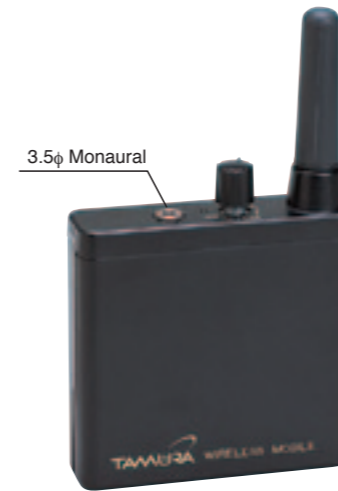


Specifications

Structure: Compact, light, and drip-proof
 Power supply: AA alkali cell×2 Continuous use time is 20 hours
 Call: Interactive simultaneous call
 Antenna: Helical antenna or whip antenna for transmission/reception
 Channel setting: Station selection is easy by quartz control PLL synthesizer system
 Environment: 10~+50°C
 Weight: Approx. 220g (battery pack YBA-4120 included)



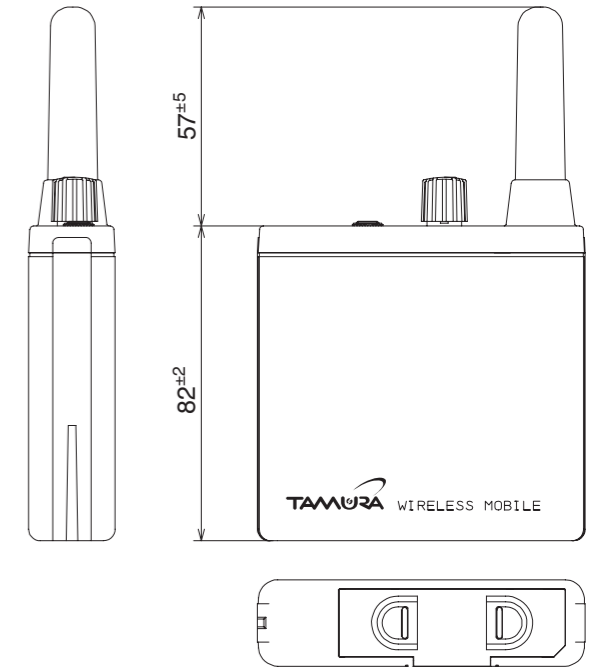
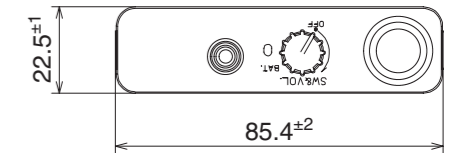
Command receiving device YRT- 4120



3.5φ Monaural

Specifications

Structure: Compact, light, and drip-proof
 Power supply: AA alkali cell×2 Continuous use time is 23 hours
 Call: Interactive simultaneous call
 Antenna: Helical antenna or whip antenna for transmission/reception
 Channel setting: Station selection is easy by quartz control PLL synthesizer system
 Standards: Technical standard conformance has been certified
 Environment: -10~+50°C
 Weight: Approx. 210g (battery pack YBA-4120 included)



Battery pack

YBA-4120

AA alkali cell×2
 * Batteries are not included



PBA-4120

Production on order

Nickel-hydrogen battery (2.4 V)

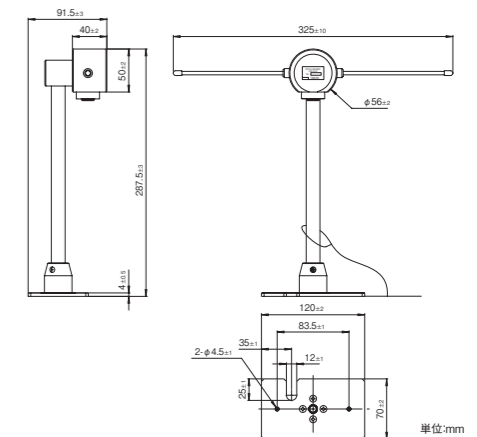


Antenna CAW-4510



Specifications

Type: Dipole type
 Applied frequency: 413~454MHz
 Type: λ/2 half wavelength type
 Junction type: M type
 Impedance: 75Ω
 Weight: Approx. 800g (attachment base included)



Electrical characteristics

		Base Station YFF-4530	Personal Station YMT-4120	Command receiving device YRT-4120	
Frequency common	Radio wave type	F3E/F2D (however, use is inhibited only with F2D)		—	
	Antenna type	Half wavelength dipole antenna	Helical antenna or whip antenna		
	Antenna impedance	75Ω	50Ω		
	Frequency band	Transmission: 454MHz band, Reception: 413MHz band	Transmission: 413MHz band, Reception: 454MHz band	Reception: 454MHz band	
	Number of frequencies	Downward (master unit transmission): 24 waves, upward (slave unit) 72 waves			
	Separation	12.5 kHz (Interleave 6.25 kHz)			
	Oscillation system	Quartz control PLL synthesizer system			
	Frequency stability	With in ±4ppm			
	Companer characteristic	Transmission compressor 2: 1, Reception expander 1: 2			
Transmission	Antenna power	With in 1mW (+20 -50%) Total of antenna terminal		—	
	Strength intensity of spurious radiation	2.5 μW or less		—	
	Modulation scheme	Direct frequency modulation		—	
	Voice frequency	3 kHz or less(300Hz~3kHz)		—	
	Neighboring channel leak power	60 dB more than carrier wave power		—	
	Occupied frequency Bandwidth	With in 8.5 kHz		—	
	Frequency deviation	±2.5kHz less than when carrier frequency without modulation		—	
Reception	Reception system	Double superheterodyne			
	Reception sensitivity	0 dB μV or less at SINAD 12 dB			
	Squelch sensitivity	Tone SQ: 0 dBμV or less, Noise SQ: 0 dBμV or less			
	Cabinet radiation	4nW or less			
Common	Audio frequency characteristic	Within 300 Hz~3kHz			
	Line input/output	0 dBm, balanced 600Ω (4W) -20 dBu, unbalanced 220Ω (2W)	—		
	Microphone input	-60 dBm, balanced 600Ω	-60 dBm, unbalanced 600Ω	—	
	Speaker output	Inside: 1W(8Ω), Outside: 1W(8Ω)	15 mW or more (at 8Ω)		
	Program input	-20~+10 dBm unbalanced 600Ω	—		
	Power supply use range	AC100V ± 15%: 1.5A	At 3.0 V: 150 mA or less	At 3.0 V: 120 mA or less	
			Warning lamp flashes at 2.3 V or less		
Use environment	Temperature: -10~+50°C, Humidity: with in 35~90%				

Frequency within license

BS Downward transmission frequency				PS Upward transmission frequency				PS Upward transmission frequency				PS Upward transmission frequency			
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	454.05000	2	454.05625	1	413.70000	2	413.70625	25	413.85000	26	413.85625	49	414.00000	50	414.00625
3	454.06250	4	454.06875	3	413.71250	4	413.71875	27	413.86250	28	413.86875	51	414.01250	52	414.01875
5	454.07500	6	454.08123	5	413.72500	6	413.73125	29	413.87500	30	413.88125	53	414.02500	54	414.03125
7	454.08750	8	454.09375	7	413.73750	8	413.74375	31	413.88750	32	413.89375	55	414.03750	56	414.04375
9	454.10000	10	454.10625	9	413.75000	10	413.75625	33	413.90000	34	413.90625	57	414.05000	58	414.05625
11	454.11250	12	454.11875	11	413.76250	12	413.76875	35	413.91250	36	413.91875	59	414.06250	60	414.06875
13	454.12500	14	454.13125	13	413.77500	14	413.78125	37	413.92500	38	413.93125	61	414.07500	62	414.08125
15	454.13750	16	454.14375	15	413.78750	16	413.79375	39	413.93750	40	413.94375	63	414.08750	64	414.09375
17	454.15000	18	454.15625	17	413.80000	18	413.80625	41	413.95000	42	413.95625	65	414.10000	66	414.10625
19	454.16250	20	454.16875	19	413.81250	20	413.81875	43	413.96250	44	413.96875	67	414.11250	68	414.11875
21	454.17500	22	454.18125	21	413.82500	22	413.83125	45	413.97500	46	413.98125	69	414.12500	70	414.13125
23	454.18750	24	454.19375	23	413.83750	24	413.84375	47	413.98750	48	413.99375	71	414.13750	72	414.14375