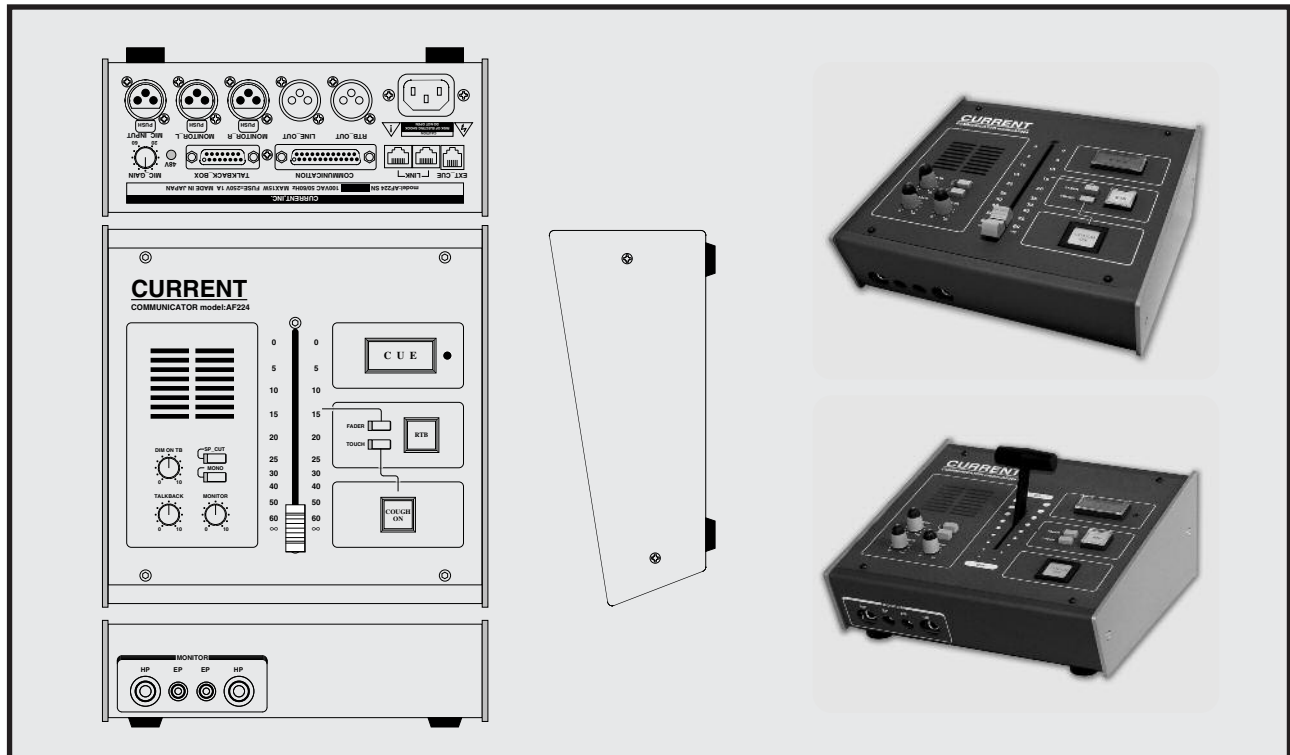


CURRENT PRODUCTS model:AF224/T COMMUNICATOR



Complete standalone working (AC working), Touch switch, fader, T-bar, RTB (return talkback), CUE lamp, Monitor speaker, XLR connector, 48V microphone power, TB level DIM level, Plural stand links, Stereo headphone, mono earphone

AF224 is the cough box which had built-in microphone preamplifier and can operate it in a touch switch, fader or T-bar. It has built-in 48V phantom power supply in a microphone amplifier circuit, and the monitor is possible with headphone, an earphone and the speaker. The XLR connector used for main input-output does the setup in the field to Easy. Furthermore, the communication system is completion only in AF224 by being the complete all-in-one that the TB box can be directly connected to.

"Microphone amplifier"

The microphone amplifier of AF224 of high quality has a gain trim of the +20 to +60dB and can supply the +48V phantom power supply, too. The line output is controlled in a touch switch, fader or T-bar.

"CUE lamp"

When CUE button is pushed in a TB box, CUE lamp of AF224 turns on. In addition, it can connect external CUE lamp AF205A (Sold separately) in one-touch.

"Cuff control"

The cough output controlled in a touch switch, fader is output to a line out. Using logics such as a cough state or the RTB output by 'COMMUNICATION' connector, it can be connected to the external control port of a VCA unit and the console directly. A touch switch, fader or the T-bar is selectable on a panel.

"Talkback"

It can be directly connected to TB box TB961 in AF224. The TB microphone amplifier which had built-in compressor is enabling the communication that the clarity is high. In addition, forced cough ON is possible when it uses 'TB963-224' of 3 button specifications. It can input the TB signal in line level by the change over of the internal switch from external.

"RTB"

Return talkback is possible with an RTB button. In addition, the control signal to use for consoles is output. The built-in speaker is cut on RTB. It is usual in the RTB output, and a signal just after the microphone preamplifier is spent. It is not necessary to prepare for an RTB microphone separately when it changes it to a mode inputting a TB signal in line level from the ext because the signal of the built-in microphone is sent.

"Link"

It can let TB of two AF224, CUE link in one TB box when they link with RJ45 connector of the rear panel. In addition, it only connects it to only either one and finishes it because monitor input L or R and the RTB output are linked to.

"Others"

AF224T of the T-bar type available.

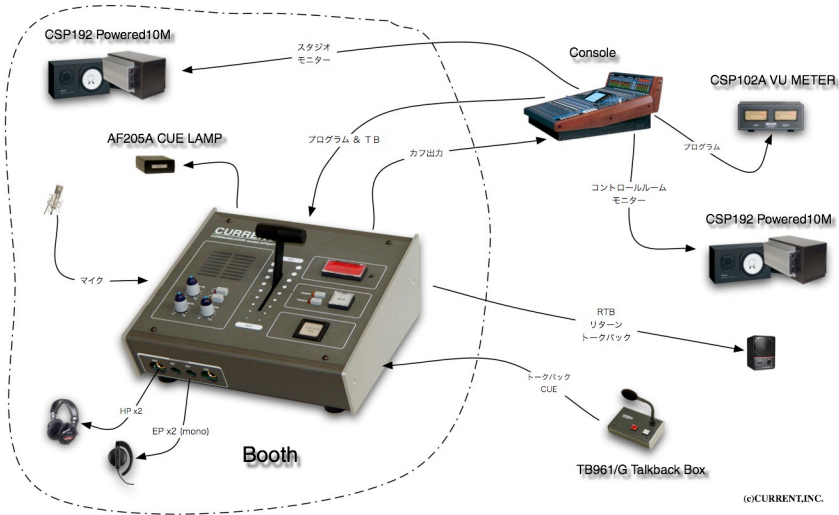
SPECIFICATIONS

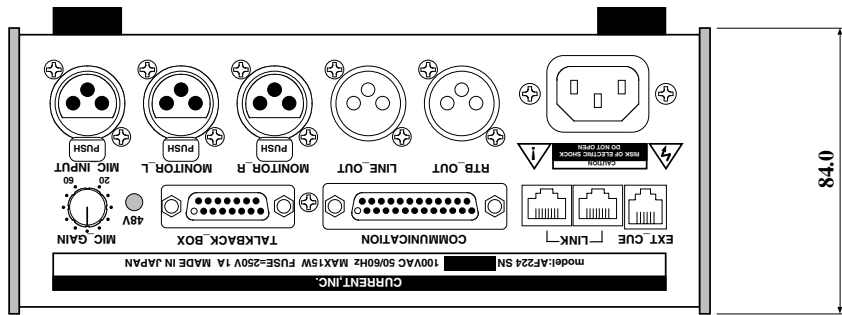
MIC INPUT: BALANCED, 1.8kΩ, XLR3-F **MIC GAIN:** +20~+60dB, +48V
MIC POWER: **MONITOR INPUT:** +4dBu, STEREO BALANCED, 36kΩ, XLR3-F
LINE OUTPUT: BALANCED, 50Ω, XLR3-M
RTB OUTPUT: BALANCED, 600Ω, XLR3-M
COMMUNICATION: Dsub-25F (#4-40) **CONTROL:** Touch Switch(green), MONITOR LEVEL/CUT, RTB **DISPLAY:** CUE LAMP (red)
EXT CUE LAMP: RJ11-2P **LINK:** RJ45
TB-BOX: D15-F(#4-40) **SPEAKER:** MAX=0.1W
HEADPHONES: 1/4" STEREO, x2 >50Ω, MAX=0.1W
EARPHONES: MONO x2 **POWER:** 100VAC 50/60Hz, max 15W
DIMENSIONS: 206Wx84Hx204D 2kg

Fader style	AF224	¥298,000
T-bar style	AF224T	¥398,000
TB box	TB961	¥64,000
CUE Lamp	AF205A	¥32,000
accessory : AC cable		

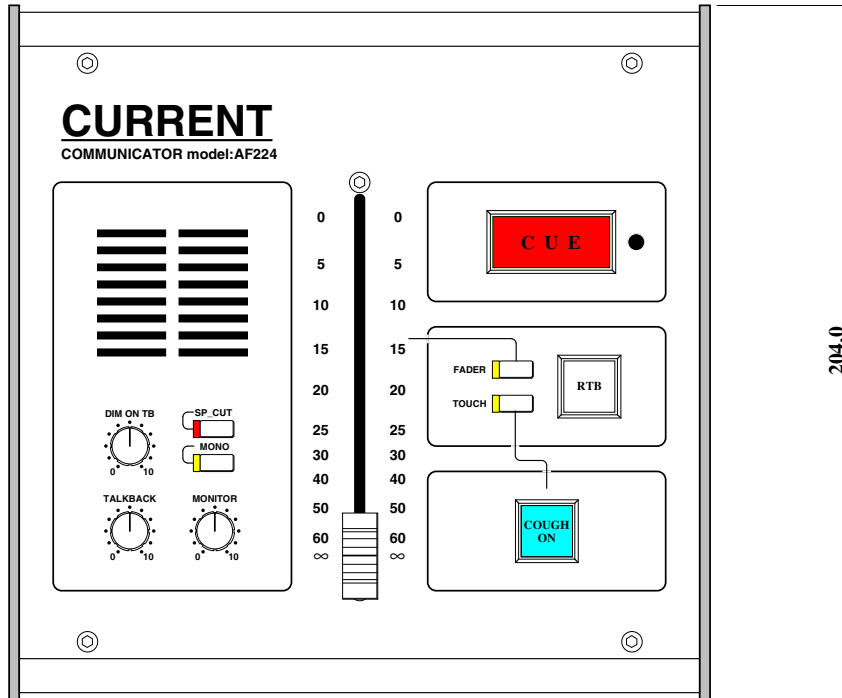
The specifications are subject to change without notice.
2-26-11 AKATSUTSUMI, SETAGAYA-KU, TOKYO, 156-0044 JAPAN

AF224/T Communication System

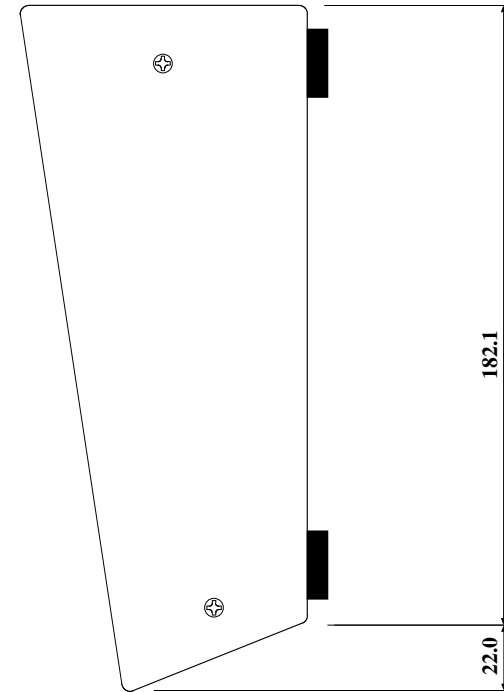




84.0

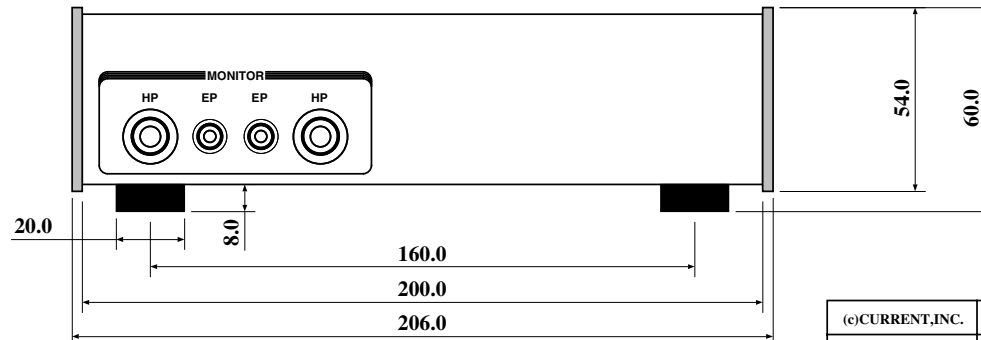


204.0



182.1

22.0



54.0

60.0

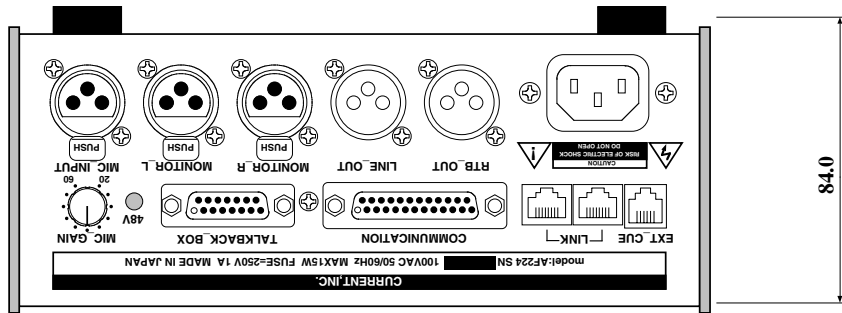
TALKBACK BOX Dsub15-F(#4-40)

- 01 LP COM +15V
- 02 TB SW
- 03 CUE SW
- 04 FU SW
- 05 FU SW
- 06
- 07 MIC +5V
- 08 MIC signal
- 09 SW COM
- 10
- 11
- 12
- 13 FU LP
- 14
- 15 MIC GND

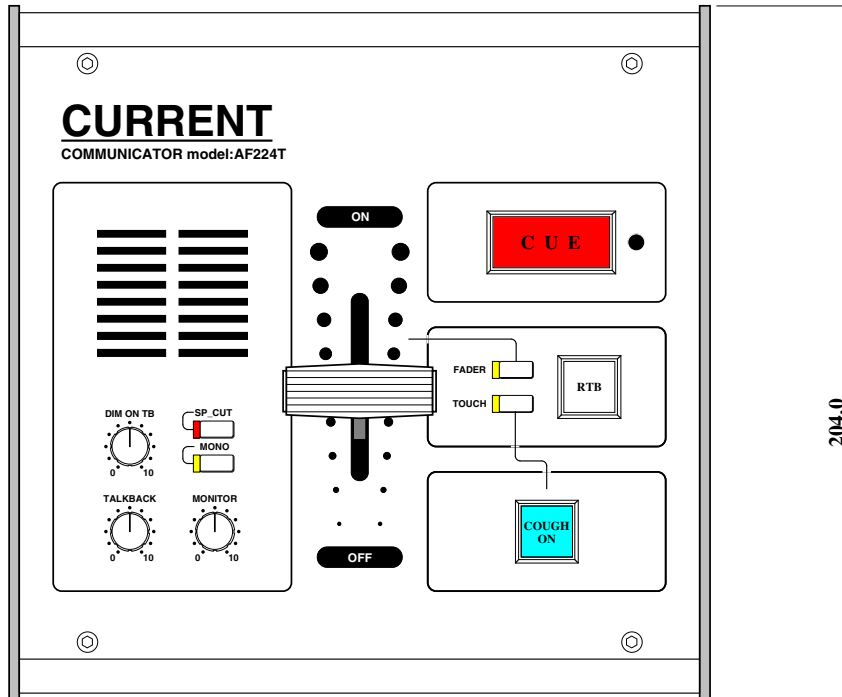
"COMMUNICATION" Dsub25-F(#4-40)

- 01 FU COMMAND +
- 02 CUE LAMP
- 03 FU LINE OUT +
- 04 RTB LAMP
- 05 RTB OUTPUT +
- 06 MONITOR IN L+
- 07 MONITOR IN R+
- 08 +15V
- 09 0V
- 10 -15V
- 11 FORCE FU SWITCH
- 12 EXT TB IN +
- 13
- 14 FU COMMAND -
- 15 CUE SWITCH
- 16 FU LINE OUT -
- 17 RTB SWITCH -
- 18 RTB OUTPUT -
- 19 MONITOR IN L-
- 20 MONITOR IN R-
- 21 +15V
- 22 0V
- 23 -15V
- 24 EXT TB SWITCH
- 25 EXT TB IN -

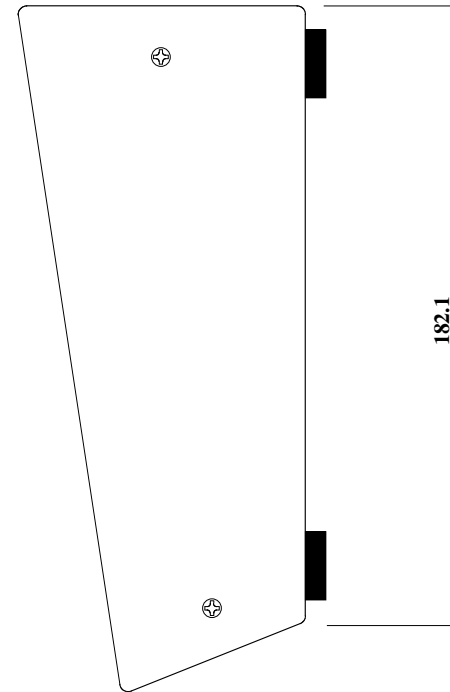
(c)CURRENT,INC.	COMMUNICATOR AF224	Dec.2011
H.ICHIHASHI	PANEL DIAGRAM	AF224-D2011



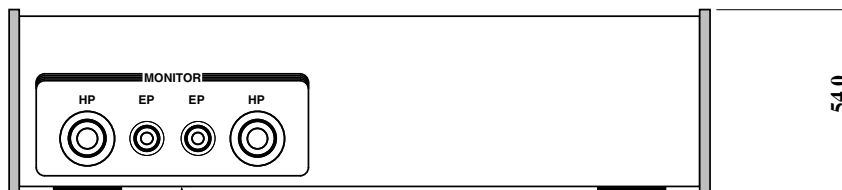
84.0



204.0



182.1



54.0

20.0

28.0

160.0

200.0

206.0

TALKBACK BOX Dsub15-F(#4-40)

- | | |
|----------------|------------|
| 01 | 09 |
| 02 LP COM +15V | 10 SW COM |
| 03 TB SW | 11 |
| 04 CUE SW | 12 |
| 05 FU SW | 13 FU LP |
| 06 | 14 |
| 07 MIC +5V | 15 MIC GND |
| 08 MIC signal | |

"COMMUNICATION" Dsub25-F(#4-40)

- | | |
|--------------------|------------------|
| 01 FU COMMAND + | 14 FU COMMAND - |
| 02 CUE LAMP | 15 CUE SWITCH |
| 03 FU LINE OUT + | 16 FU LINE OUT - |
| 04 RTB LAMP | 17 RTB SWITCH |
| 05 RTB OUTPUT + | 18 RTB OUTPUT - |
| 06 MONITOR IN L+ | 19 MONITOR IN L- |
| 07 MONITOR IN R+ | 20 MONITOR IN R- |
| 08 +15V | 21 +15V |
| 09 0V | 22 0V |
| 10 -15V | 23 -15V |
| 11 FORCE FU SWITCH | 24 EXT TB SWITCH |
| 12 EXT TB IN + | 25 EXT TB IN - |
| 13 | |

(c)CURRENT,INC.	COMMUNICATOR AF224T	Jan.2018
H.ICHIHASHI	PANEL DIAGRAM	AF224T-D2018

COMMUNICATOR AF224/T

LINK

RJ45 link port for TB, CUE, monitor L or R and RTB.

COMMUNICATION

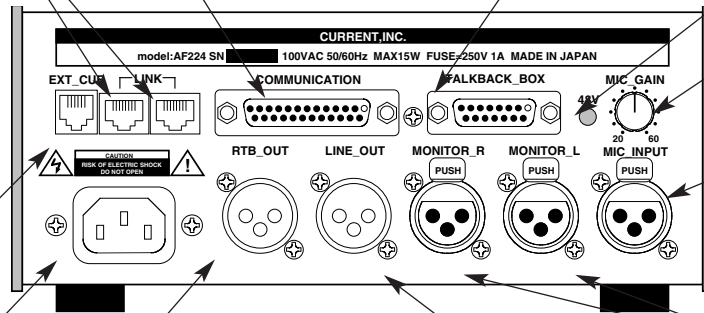
AF124 like control port. Audio I/O and some control signal connect by multi cable.

TALKBACK BOX

Connect TB961-224 or TB963-224.

PHANTOM

Feed +48V for microphone.



Mic gain

+20dB to +60dB variable continuously.

Mic input

Input impedance is 1.8kΩ, XLR3-F connector

Stereo monitor inputs

Monitor source for headphone and speaker. Reference level is +4dBu, >50kΩ impedance. XLR3-F connector

EXTERNAL CUE LAMP
RJ11 AF205A CUE LAMP port

AC100V INPUT

EIA 3pin, 100V 50/60Hz

RTB OUTPUT

600Ω balanced cough output. XLR3-M connector

LINE OUTPUT

50Ω balanced cough output. XLR3-M connector

MONITOR SPEAKER

L+R mono monitor. DIM on TB, CUT on cough on

SPEAKER CUT

Cut speaker manually

MONO

Headphone monitor to mono

DIM LEVEL

Program dimmer on TB 0dB to -20dB

TB LEVEL

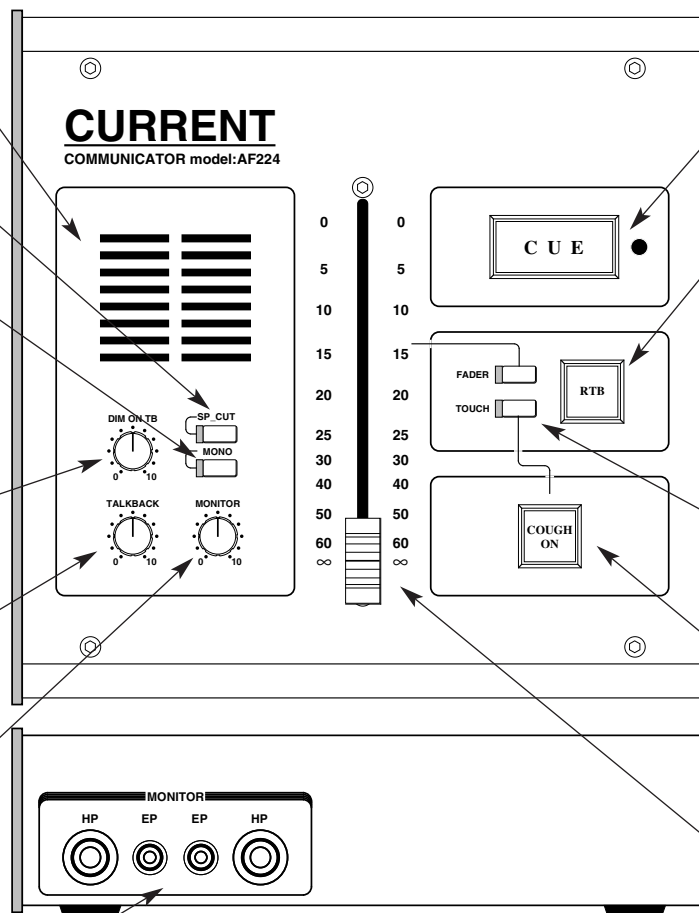
TB monitor level

MONITOR LEVEL

Headphone and speaker level

HP and EP

Stereo headphone and mono earphone. Use impedance > 50Ω



CUE LAMP

RED illuminate

RTB

Mic signal feed to RTB output. Monitor speaker cut on RTB.

TB signal exchange to COMMUNICATION port by internal mode switch. On this mode, activate internal RTB mic left of RTB button.

FADER or TOUCH

Enable fader or touch

TOUCH SWITCH

Cough on/off switch Green illuminate on cough on.

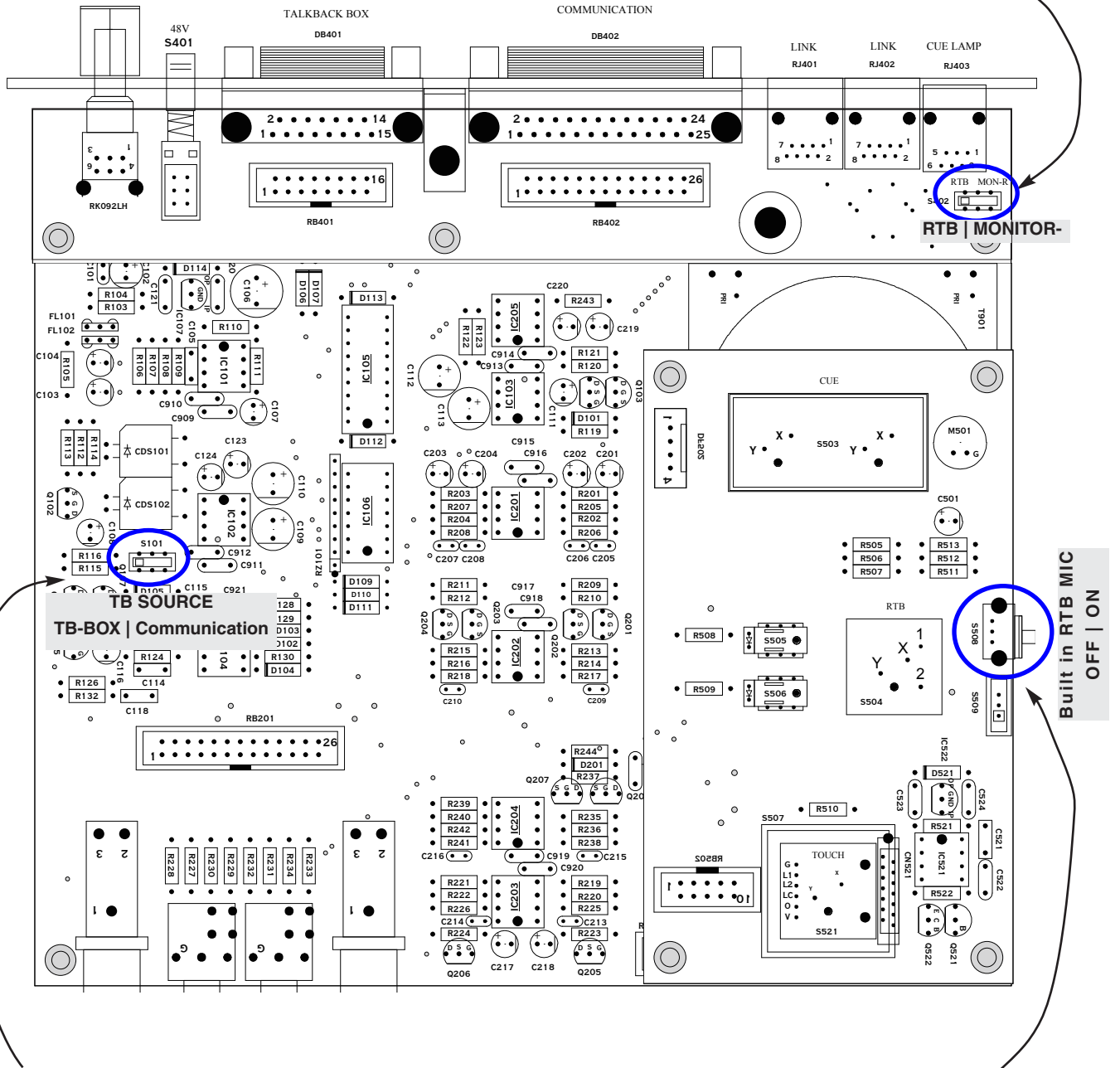
FADER OR T-BAR

Controlled with hysteresis

COMMUNICATOR AF224/T

Link port setting

Set RTB or monitor Rch. The default is RTB.



TB source setting

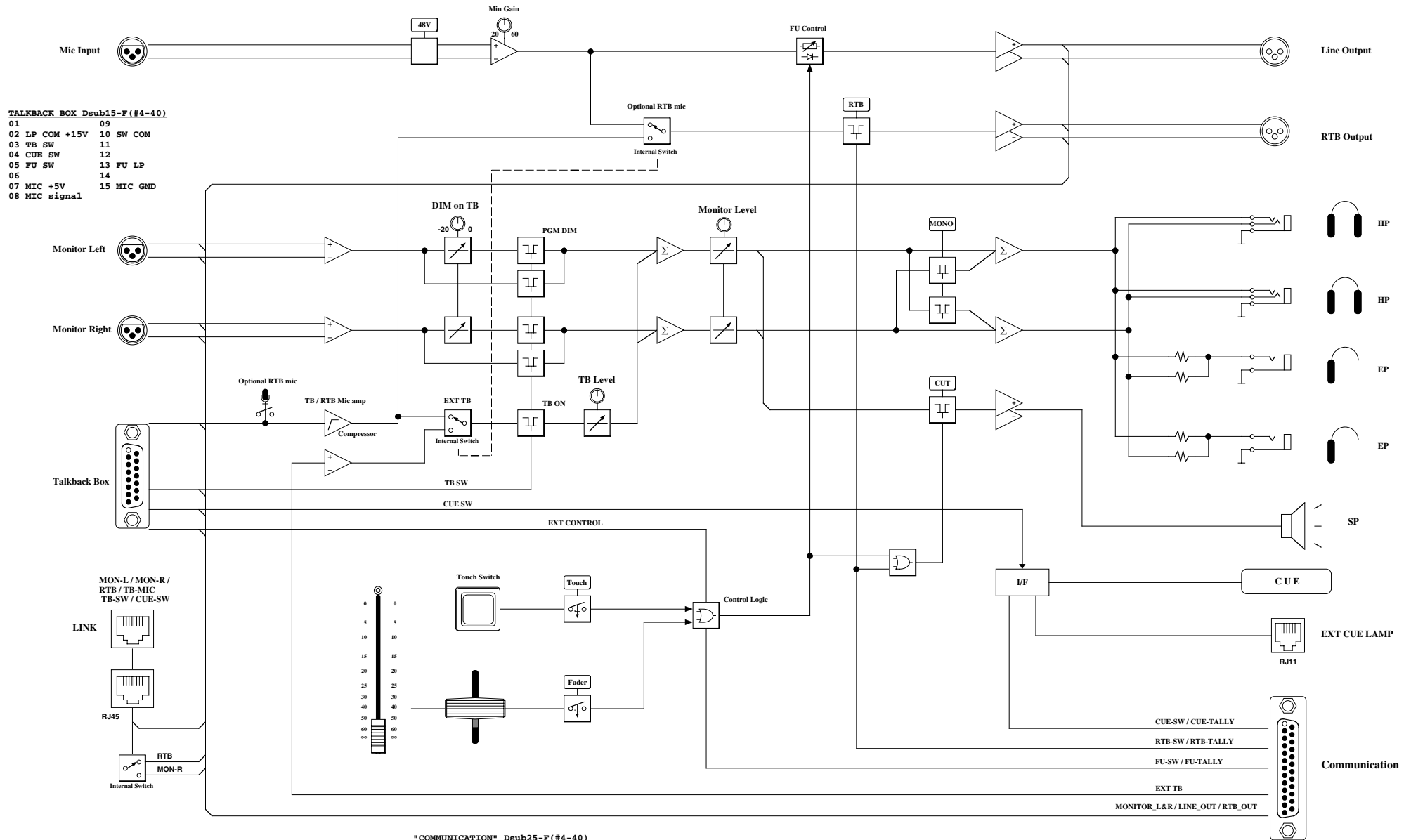
Select TALKBACK_BOX port or COMMUNICATION port on the rear panel. The default is the TALKBACK_BOX port. An ECM (electret condenser microphone) can be connected to the TALKBACK_BOX port. The COMMUNICATION port can be connected to + 4dBu line level.

When the TB source is switched to the COMMUNICATION port, do not use the ECM input of the TALKBACK_BOX port.

Built-in RTB microphone setting

Set to ON to enable the built-in RTB microphone when the TB source is switched to the COMMUNICATION port. The default is OFF.

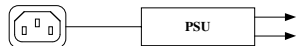
The built-in RTB microphone and the EMC connection terminal of the TALKBACK_BOX port are connected in parallel.



TALKBACK BOX Dsub15-F(#4-40)
 01 09
 02 LP COM +15V 10 SW COM
 03 TB SW 11
 04 CUE SW 12
 05 FU SW 13 FU LP
 06 14
 07 MIC +5V 15 MIC GND
 08 MIC signal

"COMMUNICATION" Dsub25-F(#4-40)
 01 FU COMMAND + 14 FU COMMAND -
 02 CUE LAMP 15 CUE SWITCH
 03 FU LINE OUT + 16 FU LINE OUT -
 04 RTB LAM 17 RTB SWITCH
 05 RTB OUTPUT + 18 RTB OUTPUT -
 06 MONITOR IN L+ 19 MONITOR IN L-
 07 MONITOR IN R+ 20 MONITOR IN R-
 08 +15V 21 +15V
 09 0V 22 0V
 10 -15V 23 -15V
 11 FORCE FU SWITCH 24 EXT TB SWITCH
 12 EXT TB IN + 25 EXT TB IN -
 13

100VAC 50/60Hz



(c)CURRENT,INC.	COMMUNICATOR AF224/T	Jan.2017 Aug.2005
H.ICHIIHASHI	SYSTEM DIAGRAM	Apr.2002
		AF224-B2005

RJ6 EXT CUE

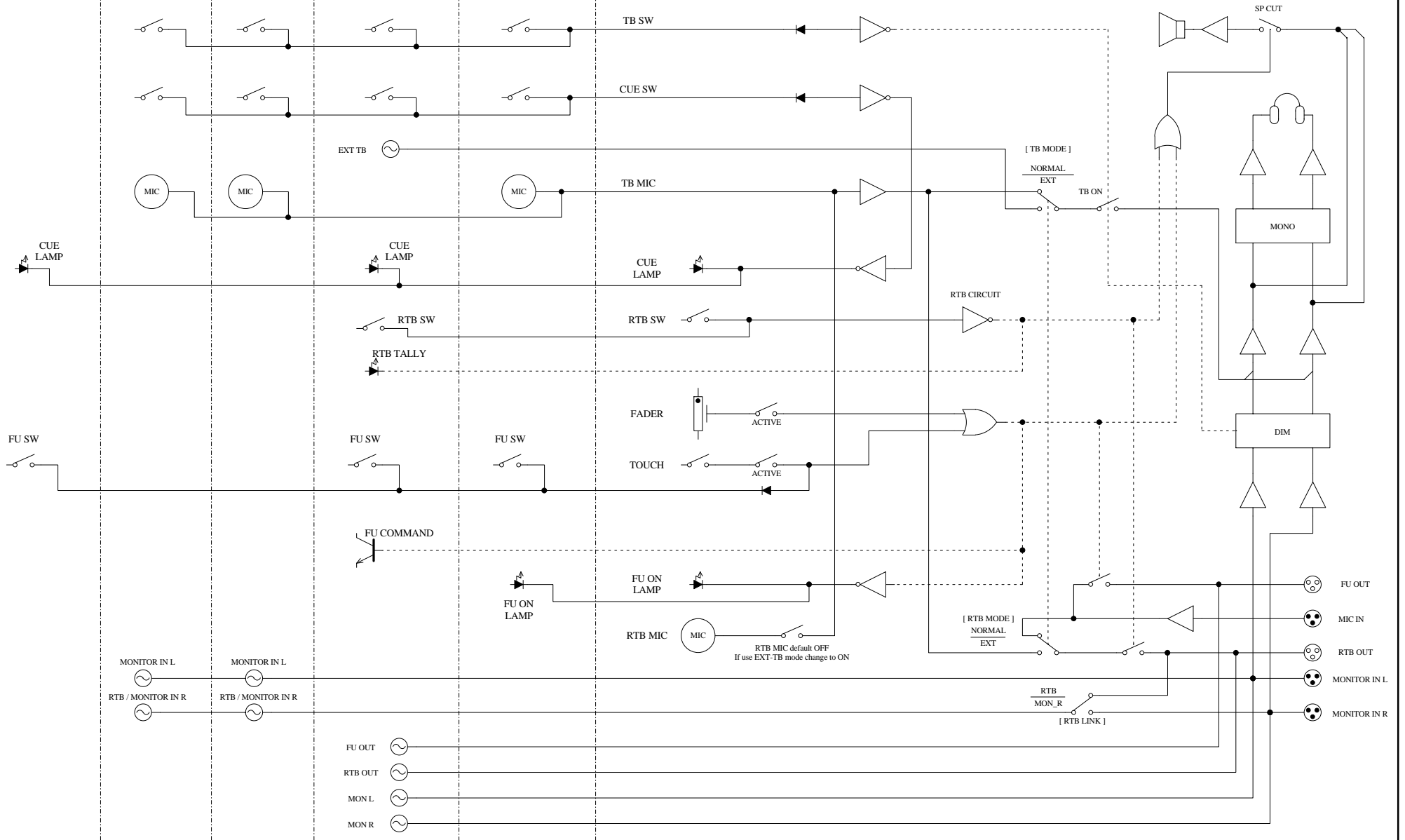
RJ8 LINK1

RJ8 LINK2

COMMUNICATION

TALKBACK BOX

AF224/T



> rev.4

(c)CURRENT,INC.	AF224/T COMMUNICATOR	MAY.2017
H.ICHIHASHI	ORVERALL CONNECTION	1 OF 1

AF224

Signal	HD	RB
Y-FU	1	1
Y-FU ₋	14	2
Y-CUE ₋	2	3
S-CUE ₋	15	4
L-FU+	3	5
L-FU ₋	16	6
Y-RTB ₋	4	7
S-RTB ₋	17	8
L-RTB+	5	9
L-RTB ₋	18	10
L-MONL+	6	11
L-MONL ₋	19	12
L-MONR+	7	13
L-MONR ₋	20	14
+15V	8	15
+15V	21	16
0V	9	17
0V	22	18
-15V	10	19
-15V	23	20
S-FU ₋	11	21
S-TB ₋	24	22
L-TB+	12	23
L-TB ₋	25	24
	13	25

DSUB25-M

DSXX
1M4148**AF224**

Signal	HD	RB
Y-FU	1	1
Y-FU ₋	14	2
Y-CUE ₋	2	3
S-CUE ₋	15	4
L-FU+	3	5
L-FU ₋	16	6
Y-RTB ₋	4	7
S-RTB ₋	17	8
L-RTB+	5	9
L-RTB ₋	18	10
L-MONL+	6	11
L-MONL ₋	19	12
L-MONR+	7	13
L-MONR ₋	20	14
+15V	8	15
+15V	21	16
0V	9	17
0V	22	18
-15V	10	19
-15V	23	20
S-FU ₋	11	21
S-TB ₋	24	22
L-TB+	12	23
L-TB ₋	25	24
	13	25

DSUB25-M

DSXX
1M4148**AF224**

Signal	HD	RB
Y-FU	1	1
Y-FU ₋	14	2
Y-CUE ₋	2	3
S-CUE ₋	15	4
L-FU+	3	5
L-FU ₋	16	6
Y-RTB ₋	4	7
S-RTB ₋	17	8
L-RTB+	5	9
L-RTB ₋	18	10
L-MONL+	6	11
L-MONL ₋	19	12
L-MONR+	7	13
L-MONR ₋	20	14
+15V	8	15
+15V	21	16
0V	9	17
0V	22	18
-15V	10	19
-15V	23	20
S-FU ₋	11	21
S-TB ₋	24	22
L-TB+	12	23
L-TB ₋	25	24
	13	25

DSUB25-M

DSXX
1M4148**AF201A**

FADER UNIT

Signal	HD	RB
MON L+	1	1
MON L ₋	14	2
MON R+	2	3
MON R ₋	15	4
S-CUE	3	5
S-RTB	16	6
Y-FU1	4	7
Y-FU2	17	8
L-MIC1+	5	9
L-MIC1 ₋	18	10
L-MIC2+	6	11
L-MIC2 ₋	19	12
+15V	7	13
GND	20	14
-15V	8	15
	21	16
	9	17
	22	18
	10	19
	23	20
	11	21
	24	22
	12	23
	25	24
	13	25

DSUB25-F

TB128-1

DB

Signal	HD	RB
	1	1
	14	2
LP COM +5V	2	3
SW COM 0V	15	4
TB SW	3	5
	16	6
CUE SW	4	7
	17	8
	5	9
	18	10
	6	11
	19	12
MIC +5V	7	13
MIC SIG	20	14
MIC GND	8	15
	21	16
FU SW 1	9	17
FU LP 1	22	18
FU SW 2	10	19
FU LP 2	23	20
FU SW 3	11	21
FU LP 3	24	22
	12	23
	25	24
	13	25

DSUB25-F

AF201A

TALKBACK BOX

Signal	HD	RB
+15V	1	1
-15V	14	2
LP COM +5V	2	3
SW COM 0V	15	4
TB SW	3	5
	16	6
CUE SW	4	7
	17	8
MINI SW	5	9
	18	10
	6	11
	19	12
MIC +5V	7	13
MIC SIG	20	14
MIC GND	8	15
	21	16
	9	17
	22	18
	10	19
	23	20
	11	21
	24	22
	12	23
	25	24
	13	25

DSUB25-M

CSP949-1

AF224/T "COMMUNICATION" (D25-F #4-40)

Ribbon	Hard	Signal name	Designation	Active
1	1	Y-FU	FU COMMAND OUTPUT +	O.C.
2	14	Y-FU_	FU COMMAND OUTPUT -	O.C.
3	2	Y-CUE	CUE LAMP	O.C.
4	15	S-CUE	CUE SWITCH	LO
5	3	L-FU+	FU OUTPUT +	AUDIO
6	16	L-FU-	FU OUTPUT -	AUDIO
7	4	Y-RTB	RTB LAMP	O.C.
8	17	S-RTB	RTB SWITCH	LO
9	5	L-RTB+	RTB OUTUT +	AUDIO
10	18	L-RTB-	RTB OUTPUT -	AUDIO
11	6	L-MONL+	MONITOR INPUT LEFT +	AUDIO
12	19	L-MONL-	MONITOR INPUT LEFT -	AUDIO
13	7	L-MONR+	MONITOR INPUT RIGHT +	AUDIO
14	20	L-MONR-	MONITOR INPUT RIGHT -	AUDIO
15	8	+15V	+15V SUPPLY (MAX=100mA)	+15V
16	21	+15V	+15V SUPPLY (MAX=100mA)	+15V
17	9	0V	GND	0V
18	22	0V	GND	0V
19	10	-15V	-15V SUPPLY (MAX=100mA)	-15V
20	23	-15V	-15V SUPPLY (MAX=100mA)	-15V
21	11	S-FU_	FORCE FU SWITCH	0V
22	24	S-TB_	EXT TB SWITCH	Lo
23	12	L-TB+	EXT TB SIGNAL INPUT+	AUDIO
24	25	L-TB-	EXT TB SIGNAL INPUT-	AUDIO
25	13			

注意！ Dサブコネクタの接続はHARDピン番号で接続してください。取付は#4-40インチビスです。

CAUTION! D-Connector for wiring refer toHard pin number Description. Mounting screw for D-connector use #4-40 size.

AF224/T "TalkbackBox" (Dsub15-F #4-40)

Ribbon	Hard	Signal name	Designation	Active
1	1			
2	9			
3	2	LP COM	LAMPS COMMON	+15V
4	10	SW COM	SWITCHES COMMON	0V
5	3	TB SW	TB SWITCH	0V
6	11			
7	4	CUE SW	CUE SWITCH	0V
8	12			
9	5	FU SW	FORCE FU SW	0V
10	13	FU LP	FU LAMP	0V
11	6			
12	14			
13	7	+5V	+5V MIC POWER	+5V
14	15	TB MIC	TALKBACK MIC SIGNAL	
15	8	GND	MIC GND	0V

注意！ Dサブコネクタの接続はHARDピン番号で接続してください。取付は#4-40インチビスです。

CAUTION! D-Connector for wiring refer toHard pin number Description. Mounting screw for D-connector use #4-40 size.

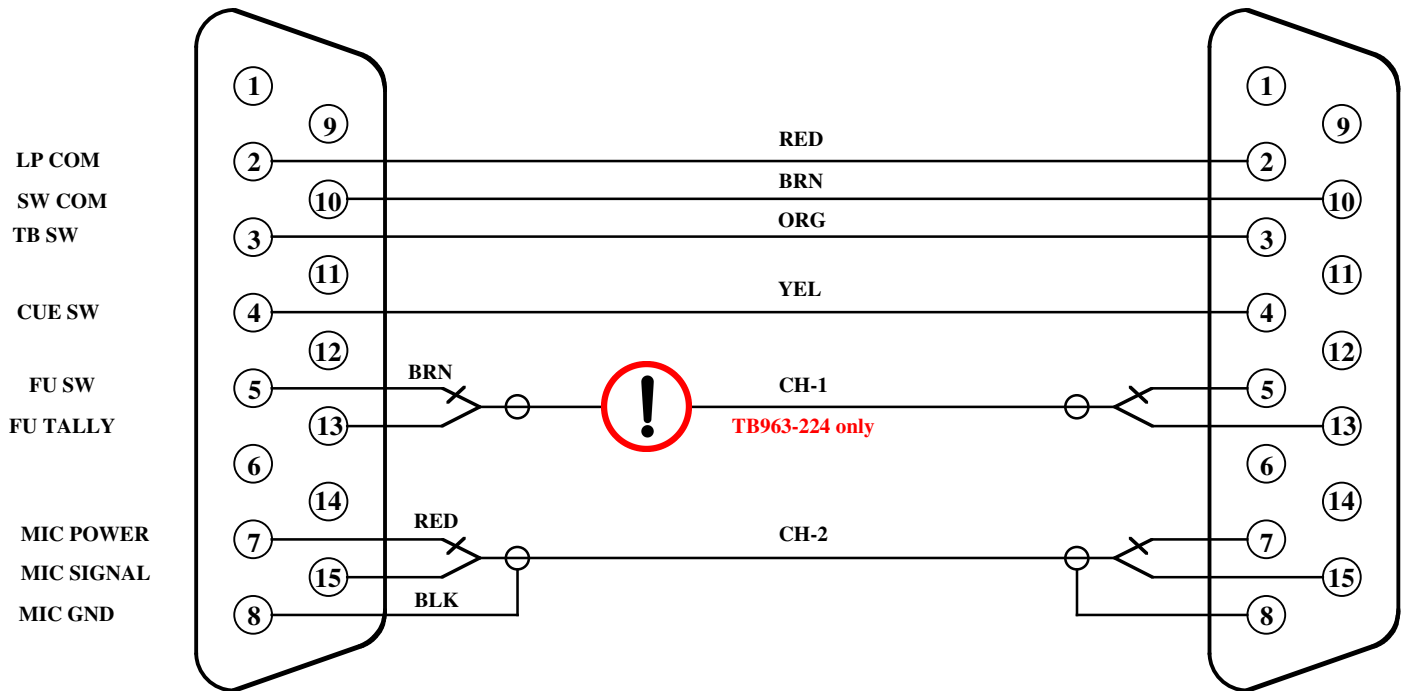
AF224/T TB961/963 CABLE

AF224/T TB-BOX port

Dsub15-M #4-40 screw

TB961-224/TB963-224

Dsub15-F #4-40 screw



CABLE : MOGAMI 2997

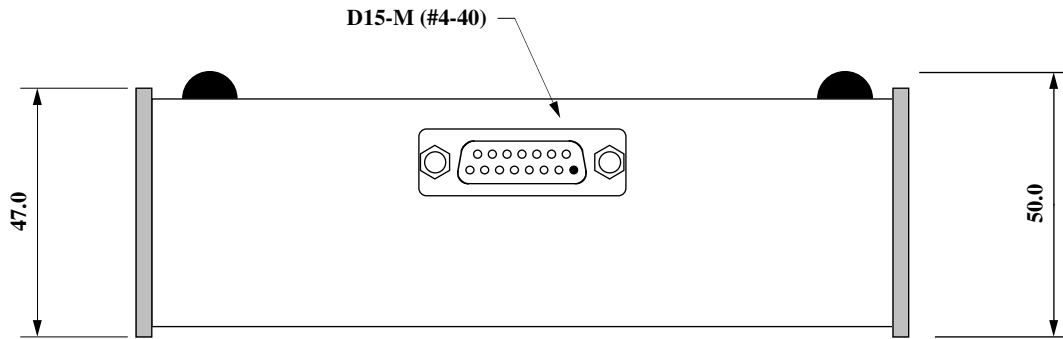
5m

<u>model</u>	<u>TB-BOX</u>	<u>Length</u>
AF224-W05	TB961-224	5m
AF224-W10	TB961-224	10m
AF224-W15	TB961-224	15m
AF224-W20	TB961-224	20m
AF224-W305	TB963-224	5m
AF224-W310	TB963-224	10m
AF224-W315	TB963-224	15m
AF224-W320	TB963-224	20m

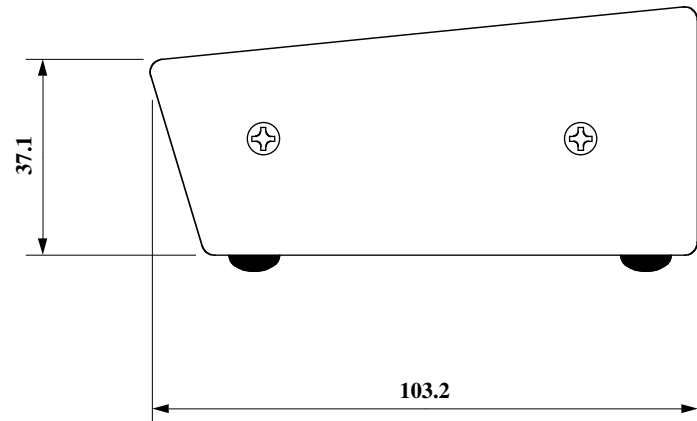
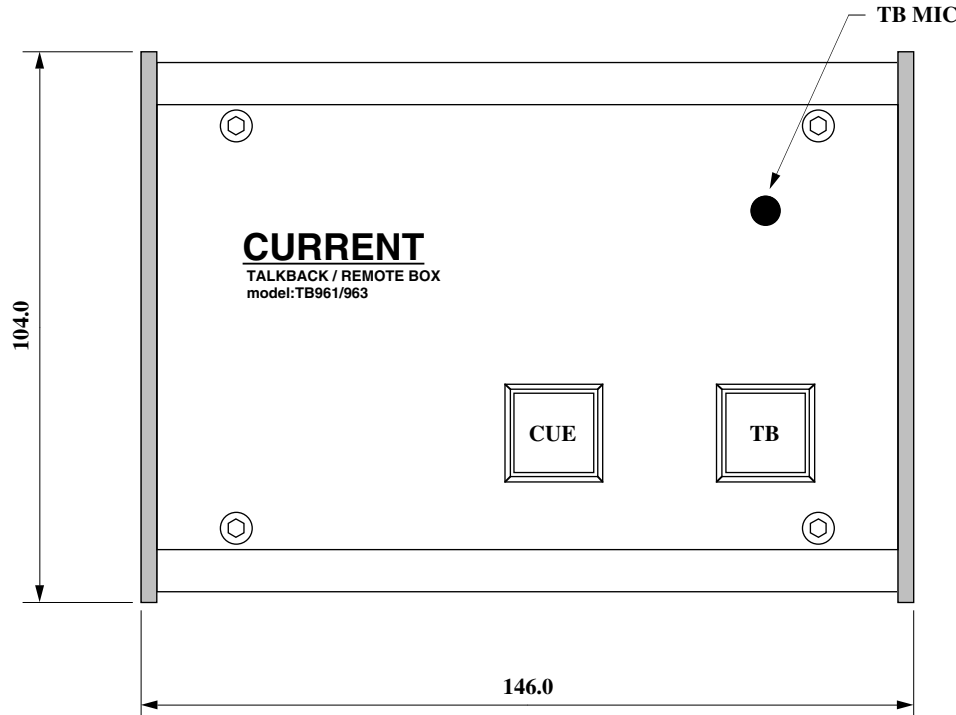
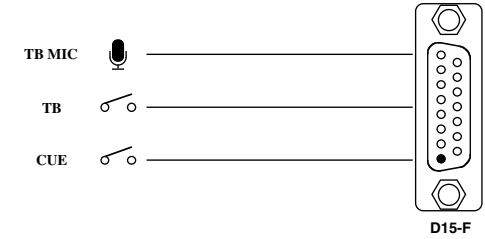
Mar.2017

(c)CURRENT,INC.	AF224/T	Oct.2005
H.ICHIHASHI	TB-BOX CABLE	TB961 cable

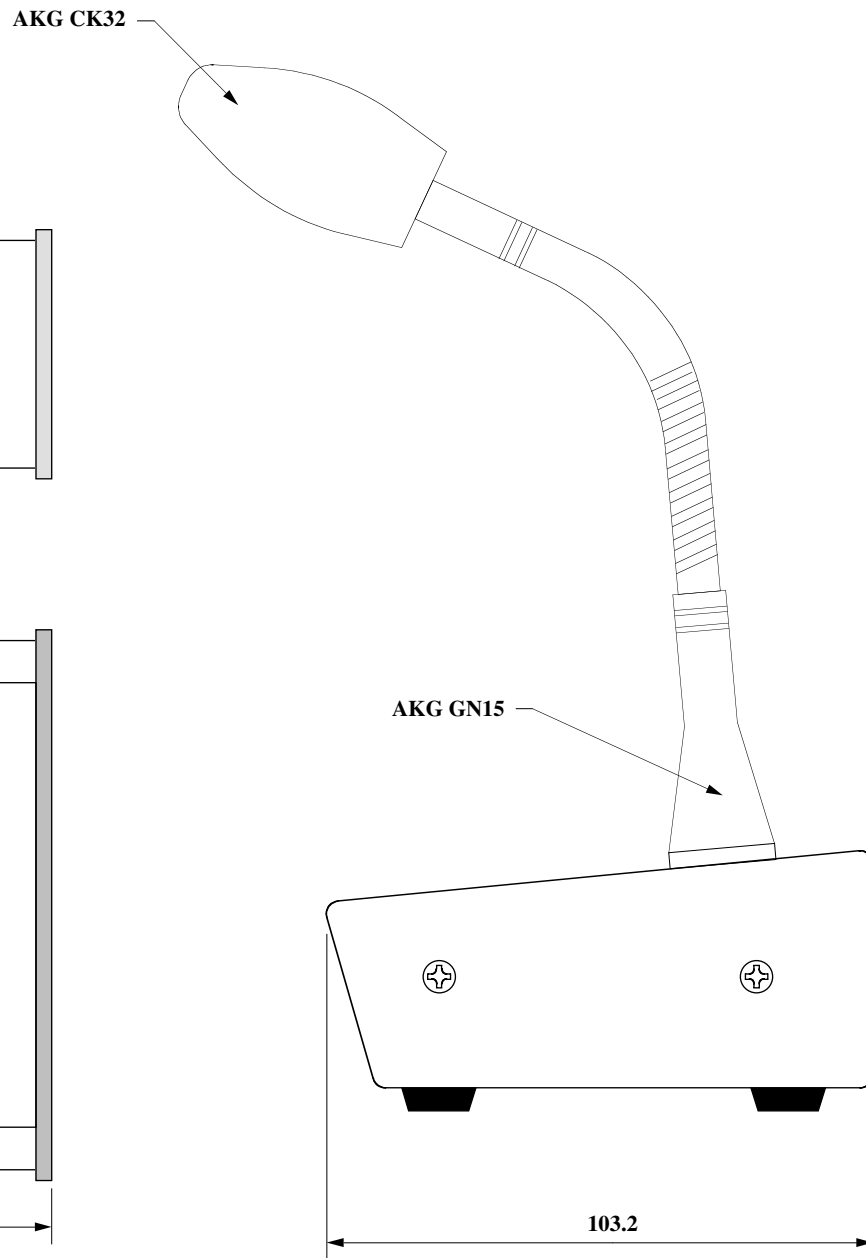
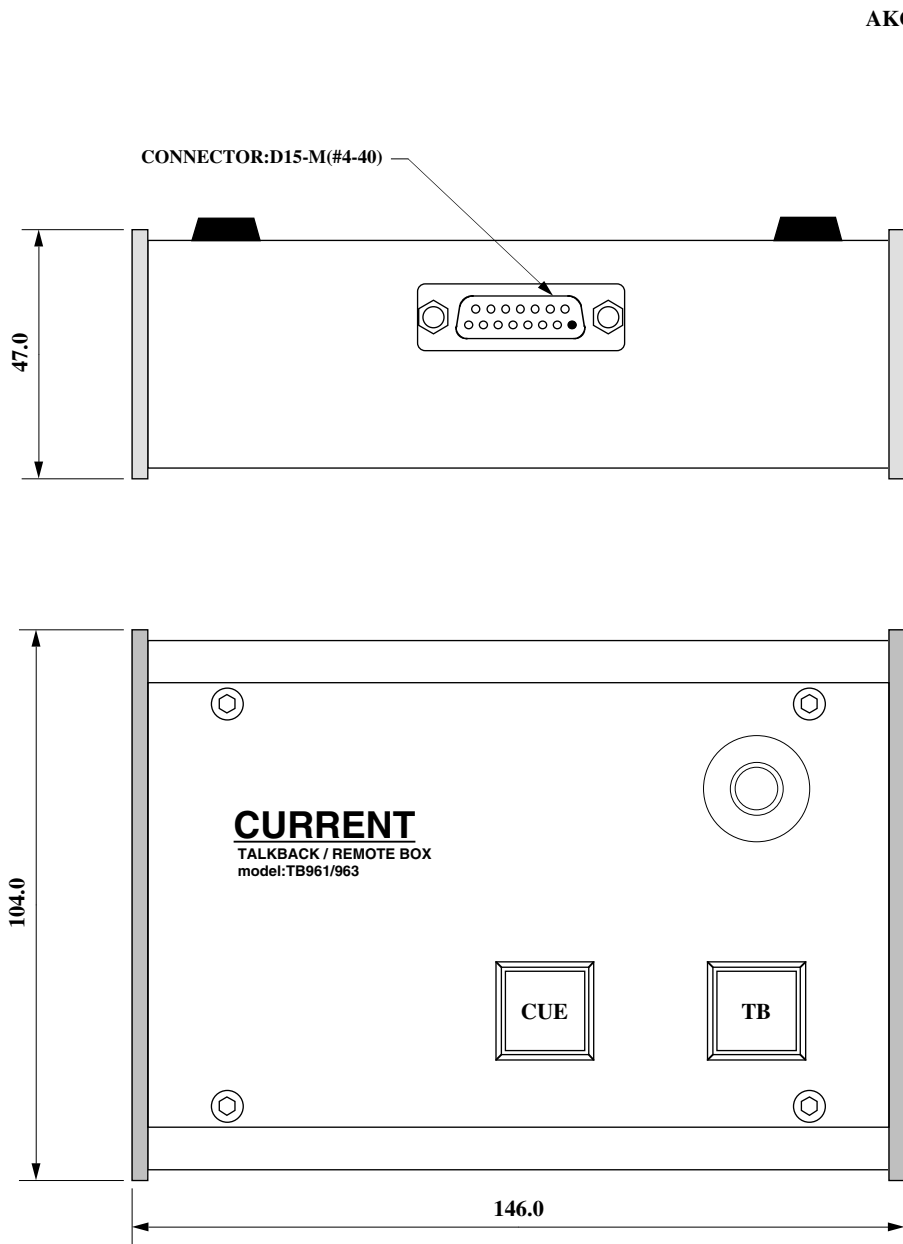
powered by ClarisCad

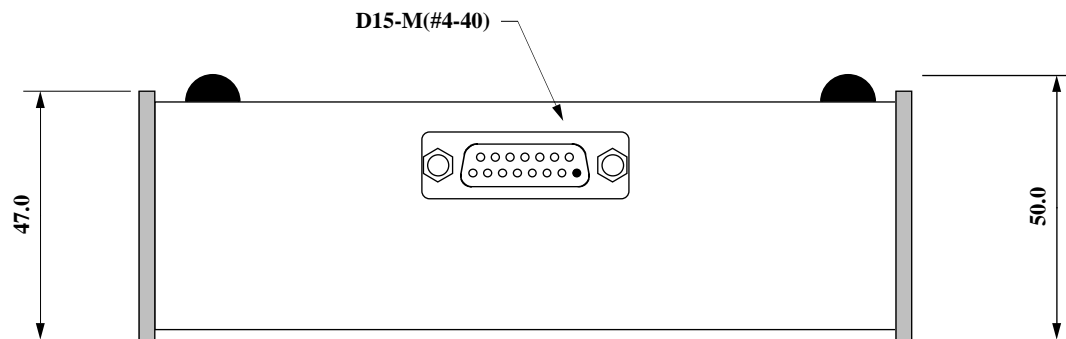


- Dsub15-M #4-40
- | | |
|----------------------|----------------------|
| 01 | 09 |
| 02 LP COM +5 to +24V | 10 SW COM 0V |
| 03 TB SW | 11 |
| 04 CUE SW | 12 |
| 05 | 13 |
| 06 | 14 |
| 07 MIC +5V (hot) | 15 MIC signal (cold) |
| 08 MIC GND | |

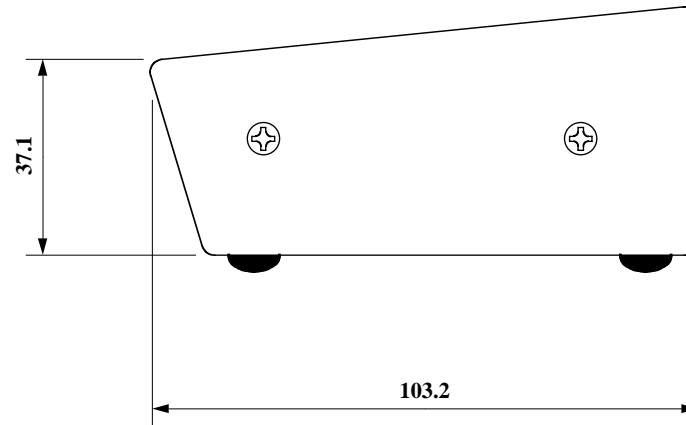
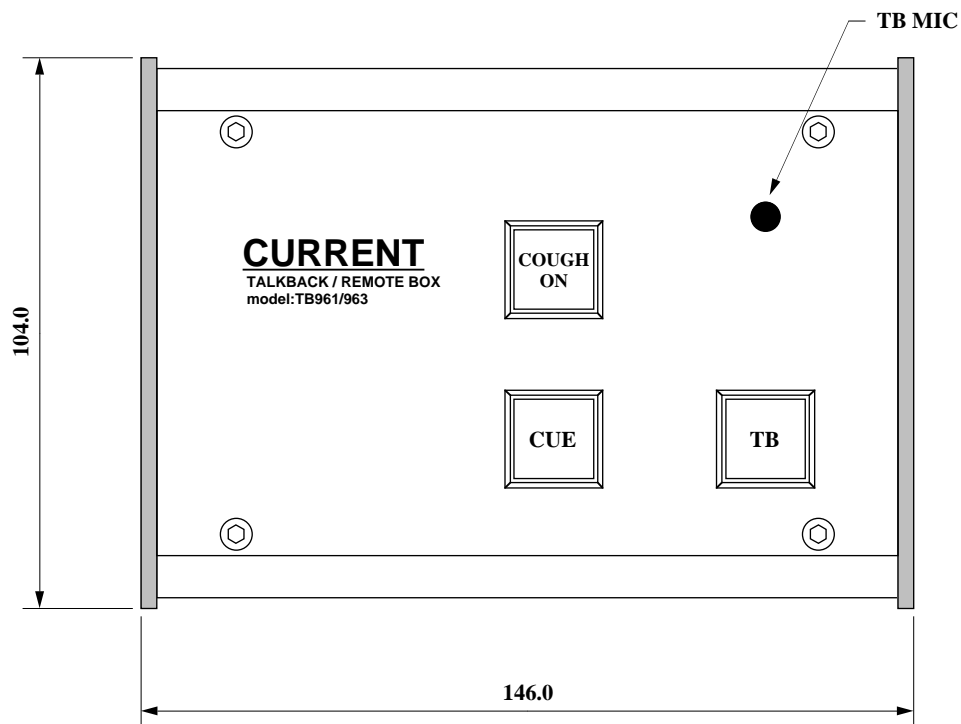


(c)CURRENT,INC.	TALKBACK BOX TB961-224	Dec.2016 Apr.2003
H.ICHIHASHI	PANEL DIAGRAM	Jul.1995 TB961-D2007





- Dsub15-M #4-40
- | | |
|----------------|------------|
| 01 | 09 |
| 02 LP COM +15V | 10 SW COM |
| 03 TB SW | 11 |
| 04 CUE SW | 12 |
| 05 FU SW | 13 FU LP |
| 06 | 14 |
| 07 MIC +5V | 15 MIC GND |
| 08 MIC signal | |



T B ボックスで強制的にカフをONにするためのスイッチを実装しています。

(c)CURRENT,INC.	TALKBACK BOX TB963-224	Jun.2007
H.ICHIHASHI	PANEL DIAGRAM	TB963-224-D