

PROTECH

Intercom Station

**FD-800S**

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Operating Instructions

*Vamos Corporation*

# Names and Functions of Parts

## Rear Panel

Internal switch is set to 2WIRE  
 2WIRE INCOM  
 Canon 3pin male connector to connect to Sony  
 CCU-M5/M7, etc.

Pin No.	Signal
1	SG
2	X(600ohm)
3	Y(600ohm)

Internal switch is set to 4WIRE  
 4WIRE INCOM output:  
 Canon 3pin male connector

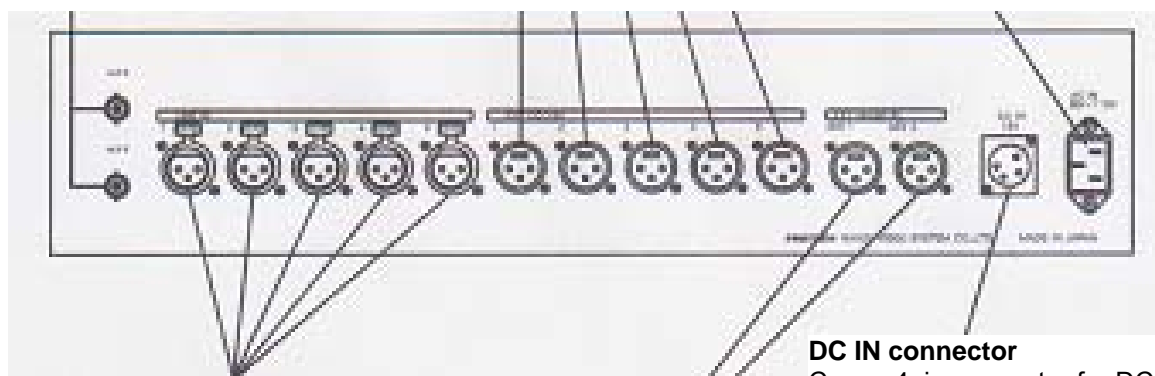
Pin No.	Signal
1	SG
2	OUTX(600ohm)
3	OUTY(600ohm)

Connect to the input of 4WIRE INCOM.

**AUX 2,3 connector**  
 BNC connector to  
 Connect to FD-300A  
 (Power cannot be  
 supplied)

**CCU input connector (1 - 5)**

**AC IN connector**



**LINE input connector (1 – 5)**

Internal switch is set to 2WIRE (factory setting)  
 (Power supply is possible)

Pin No.	Signal
1	SG
2	LINE
3	+12V

Internal switch is set to 4WIRE  
 4WIRE INCOM input:  
 Canon 3pin female connector

Pin No.	Signal
1	SG
2	INX (600ohm)
3	INY (600ohm)

Connect to the output of 4WIRE INCOM

**MIX input connector**

Input connector for  
 LINE audio Inputs  
 (+4dBm)

Pin No.	Signal
1	SG
2	HOT
3	COLD

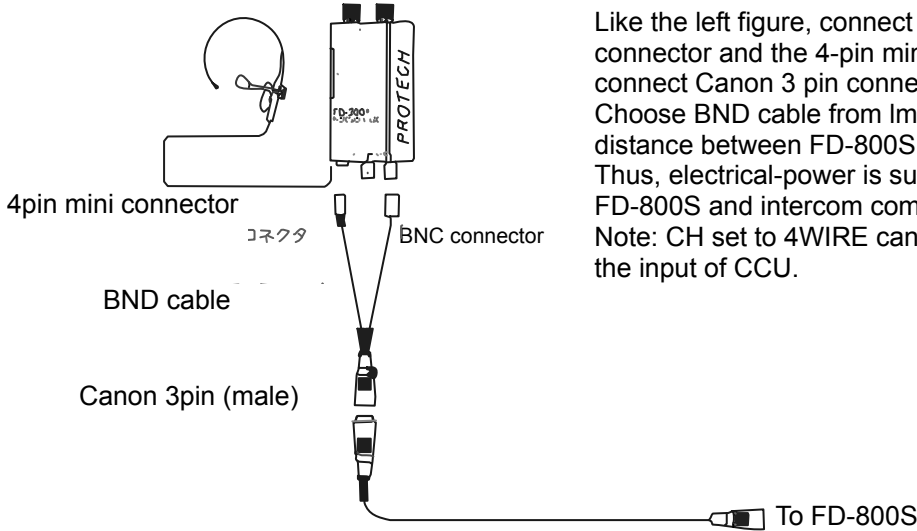
(Hi-impedance input)

**DC IN connector**

Canon 4pin connector for DC 12V input

## 2WIRE setting

### 1. LINE1 – 5 connecting method (CH set to 2WIRE)



Like the left figure, connect the BND cable to the BNC connector and the 4-pin mini connector of FD-300A and connect Canon 3 pin connector to FD-800S. Choose BND cable from 1m to 100 m depending on the distance between FD-800S of FD and FD-300A. Thus, electrical-power is supplied to FD-300A from FD-800S and intercom communication becomes possible. Note: CH set to 4WIRE can not be used for FD-300A but for the input of CCU.

### 2. CCU1 – 5 connecting method (CH set to 2WIRE)

(Ex. CCU-M5 Terminal)

Like the figure 2, connect the cable to 2WIREINCOM terminals of Sony CU-M5/M7etc. Thus, communication becomes possible between FD-800S and CCU INCOM.



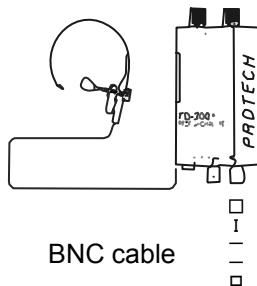
Canon 3pin (female)

Canon	Signal
1	SG
2	X(600ohm)
3	Y(600ohm)

### 3. MIX IN connecting method

Connect to MIX IN of FD-800S with Canon 3pin (female) connector cable. (The reference level is +4dB.)

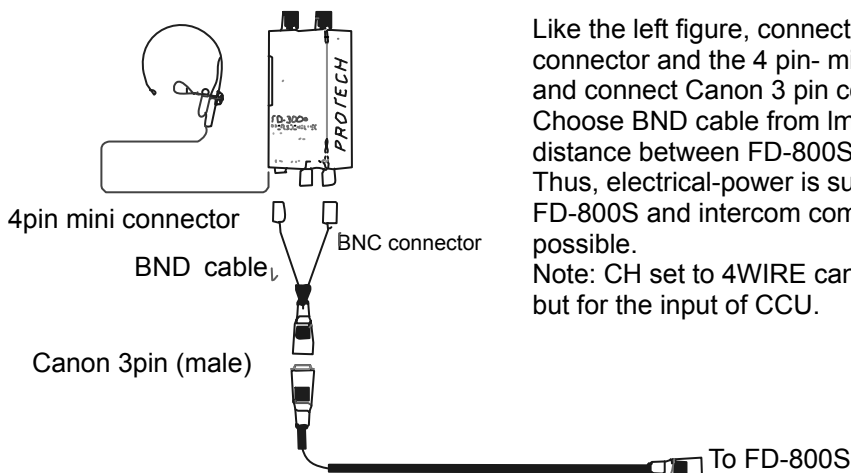
### 4. AUXI – 3 connecting method



Connect AUX 1 – 3 BNC terminal to BNC terminal of FD-300A with BNC cable. Thus, intercom communication becomes possible between FD-800S and FD-300A.

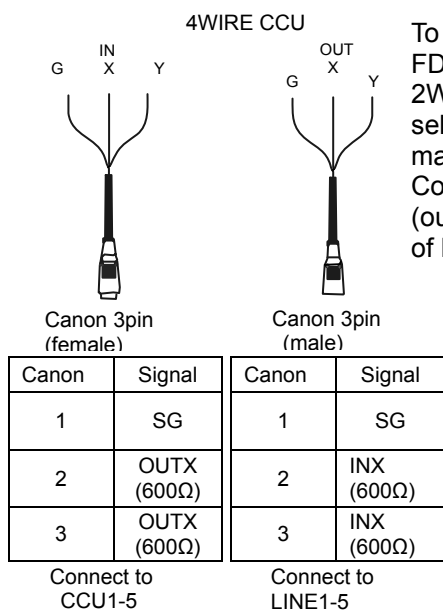
## 4WIRE setting

### 1. LINE1 -5 connecting method (CH set to 2WIRE)



Like the left figure, connect the BND cable to the BNC connector and the 4 pin- mini connector of FD-300A and connect Canon 3 pin connector to FD-800S. Choose BND cable from 1m to 100 m depending on the distance between FD-800S and FD-300A. Thus, electrical-power is supplied to FD-300A from FD-800S and intercom communication becomes possible.  
 Note: CH set to 4WIRE can not be used for FD-300A but for the input of CCU.

### 2. LINE1 - 5 CCU1 – 5 connecting method (CH set to 4WIRE)



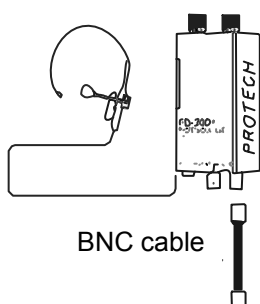
To connect to 4WIRE INCOM, open the cover of FD-800S removing the screw of the cover and set the 2WIRE/4WIRE select switch to 4WIRE position. (The select switch is located on the main board inside the main unit.)  
 Connect the input of CCU to the connector of CCU1-5 (output) and connect the output of CCU to the connector of LINE1-5 (input).

Note: CH set to 4WIRE from 2WIRE can not be used with FD-300A because LINE input switches over to the input of CCU.

### 3. MIXIN connecting method

Connect to MIX IN of FD-800S with Canon 3pin (female) connector cable. (The reference level is +4dB.)

### 4. AUX 1 – 3 connecting method

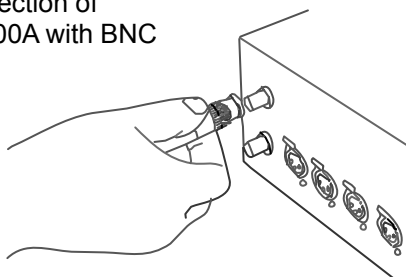


Connect AUX 1 – 3 BNC terminal to the BNC terminal of FD-300A with BNC cable. Thus, intercom communication becomes possible between FD-800S and FD-300A.

# How to use

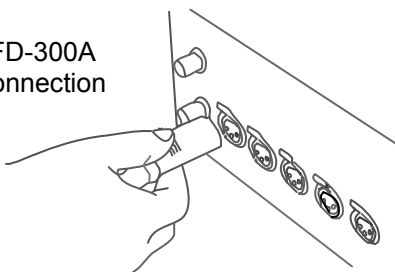
1. You can connect the INCOM system (maximum eight FD-300A / maximum five 2WIRE system such as CCU-M5)
2. Turn on the POWER switch of the main unit of FD-800S.  
At this time, the power is supplied to FD-300A connected to the LINEIN .  
As the power isn't supplied to FD-300A connected to the AUXIN, put a dry battery inside of the body of FD-300A to use .

Connection of  
FD-300A with BNC

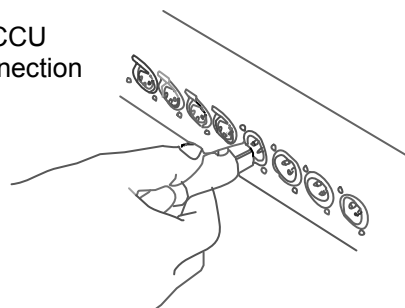


3. FD-300A connected to FD-800S always becomes condition of two-way communication  
The two-way communication of all CCU INCOM becomes possible when the CCU select switch is turned on. When CCU select switch is turned off, only CCU chosen by the CCU direct selection switch becomes possible.

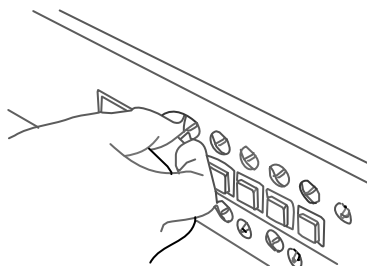
FD-300A  
connection



CCU  
connection

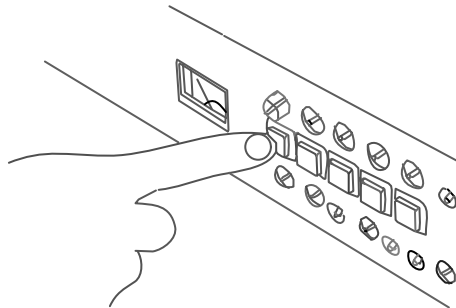


4. The adjustment of the connected income sound  
In the CCU income system, adjust the volume with the CCU level volume (pop-up by pressing) of the main unit of FD-800S.  
In the case of FD-300A, adjust the volume of each main unit of FD-300A to the volume easy to hear seeing VU meter.  
(Turn the volume low for the CCU INCOM not to use to prevent from the howling.)

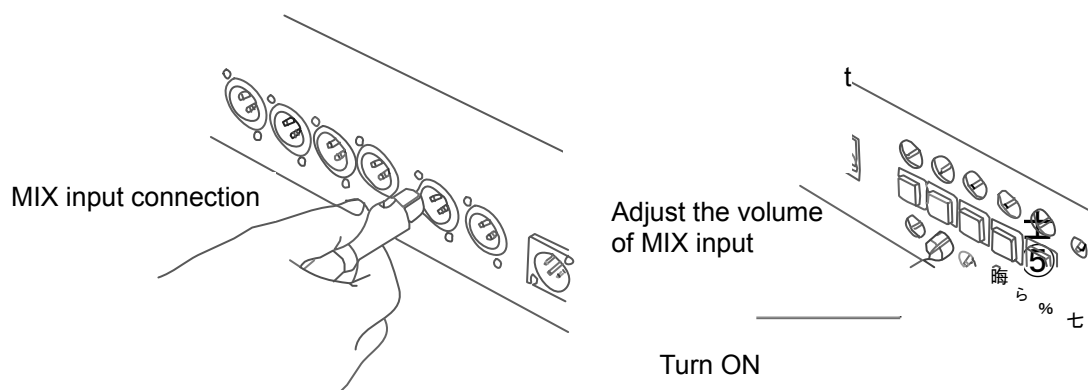


# How to use

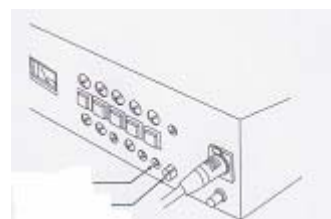
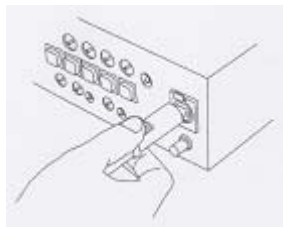
5. To output the sound of FD-800S to a CCU, push the push button switch of the CH and make the lamp lighted up.



6. When the signal of LINE LEVEL (14 dBm) is input to MIX1, 2 and the switch is turned on the signal can be mixed to the INCOM line.  
 The sound level can be adjusted with the MIX level volume.  
 MIX on/off switch enables the on/off of the connection.



7. To connect an external microphone to the INCOM line, connect a dynamic microphone to the EXT MIC input of the front panel and turn MIC switch on and adjust the volume with the MIC level adjustment volume.  
 (Optional flexible microphone is available.)



Turn ON

Adjust the volume of MIC input

# Optional Accessories



Wired Intercom  
FD-300A

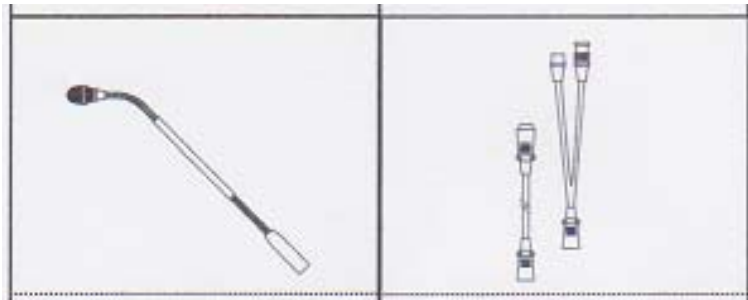
CCU connecting cable  
CU-50

CCU connecting cable  
CU-3

Wired Intercom with  
Headset  
Dray cell battery type

Connecting cable  
to connect FD-800S  
to CCU (1m/4W)

Connecting cable  
to connect FD-800S  
to CCU (1m/2W)



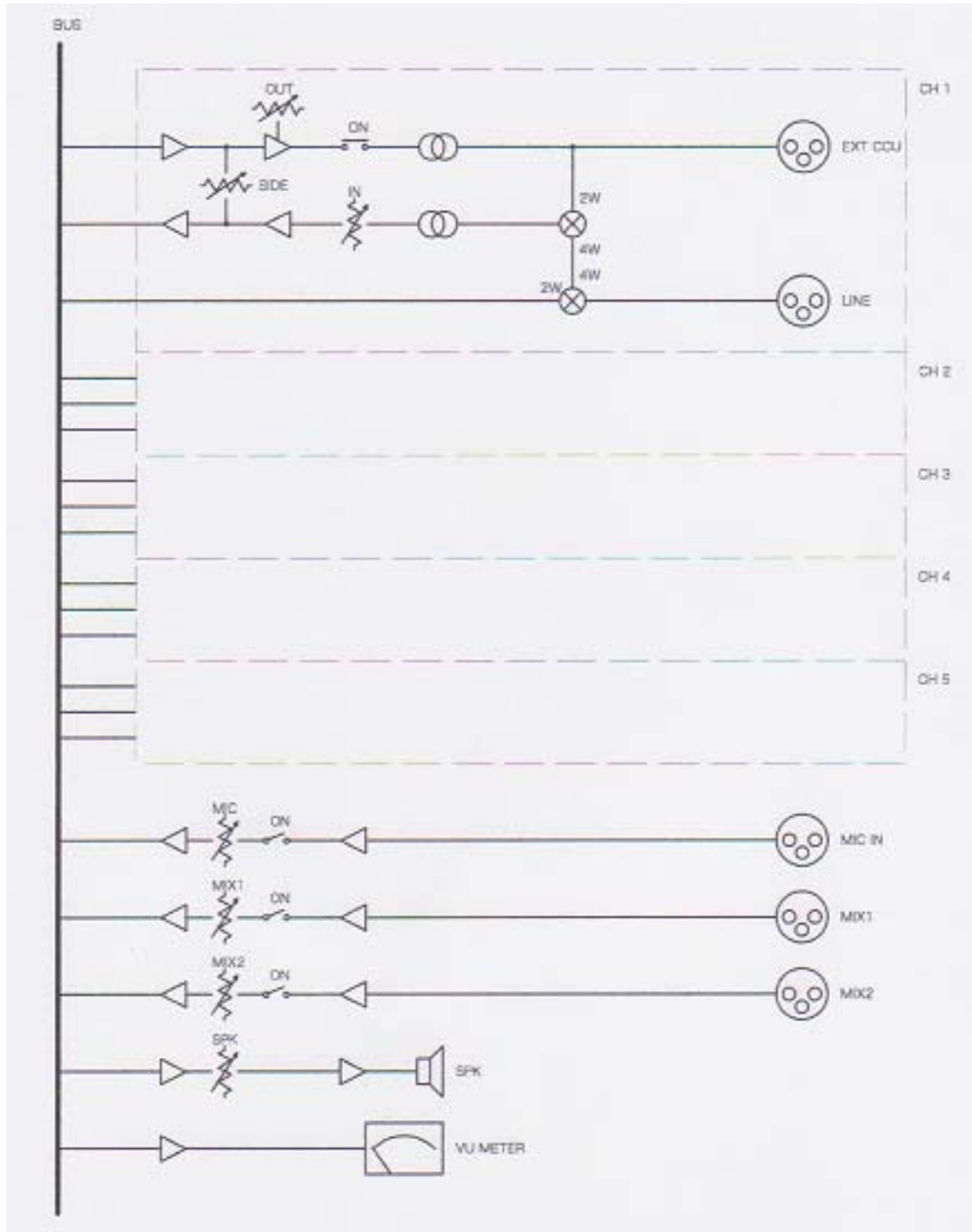
Flexible microphone  
MC-808

Connecting cable  
between FD-800S and FD-300A

Flexible microphone  
connected to FO-800S  
to communicate with  
other CCU

BND-1M (1m)  
BND-10M (10m)  
BND-20M (20m)  
BND-30M (30m)

# Block Diagram





# Specifications

Inputs/outputs		Appendix	
CCU connection	XLR-3 pin (male) x5	Panel output	Speaker for INCOM audio x1
For FD-300A connection	XLR-3 pin (female) x5 (Power can be supplied)	VU meter	Meter for INCOM audio confirmation x1
		Power requirements	
AUX input	BNC x3 (Power can not be supplied to FD-300A)	External AC input	220V about 20W
		DC 12V	XLR-4 pin
MIX input	XLR-3pin (male)x2	General	
EXT MIC input	XLR-3pin (female) x1 (Input impedance 3Kohm)	Operating Temperature	0°C~40°C
		Storage Temperature	-20°C~50°C
Supplied accessories		Mass	Approx. 4Kg
Operation Manual / Rack-mount Hardware		Dimensions	430×88×250mm(W x H x D)