

RMP-6004M
RMP-6008M

**POLYGRAPH AMPLIFIER
CONSOLE**

**RMP-6004M
RMP-6008M**

GENERAL HANDLING PRECAUTIONS

This device is intended for use only by qualified medical personnel.

Please read these precautions thoroughly before attempting to operate the instrument.

1. To safely and effectively use the instrument, its operation must be fully understood.

2. When installing or storing the instrument, take the following precautions:

- (1) Avoid moisture or contact with water, extreme atmospheric pressure, excessive humidity and temperatures, poorly ventilated areas, and dusty saline or sulphuric air.
- (2) The instrument should be placed on an even, level floor. Vibration and mechanical shock should be avoided even during moving.
- (3) Avoid placing in an area where chemicals are stored or where there is danger of gas leakage.
- (4) The power line source to be applied to the instrument should correspond in frequency and voltage to specifications, and have allowable current capacity.
- (5) Choose a room where a proper grounding facility is available.

3. Before Operation

- (1) Check that the instrument is in perfect operating order.
- (2) Check that the instrument is grounded properly.
- (3) Check that all cords are connected properly.
- (4) Pay extra attention when the instrument is in combination with other instruments to avoid misdiagnosis or other problems.

(5) All circuitry used for direct patient connection must be doubly checked.

(6) Check that battery voltage and battery condition are perfect when using battery-operated models.

4. During Operation

- (1) Both the instrument and the patient must receive constant, careful attention.
- (2) Turn power off or remove electrodes and/or transducers when necessary to assure the patient's safety.
- (3) Avoid direct contact between the instrument and the patient.

5. To Shutdown After Use

- (1) Turn power off with all controls returned to their original positions.
- (2) Remove the cords gently; do not use force to remove them.
- (3) Clean the instrument together with all accessories to keep them ready for their next use.

6. The instrument must receive expert, professional attention for maintenance and repairs. When the instrument is not functioning properly, it should be clearly marked to avoid operation while it is out of order.

7. The instrument must not be altered or modified in any way.

8. Maintenance and Inspection:

- (1) The instrument and parts should undergo regular maintenance inspection at least every 6 months.
- (2) If stored for extended periods without being used, make sure prior to operation that the instrument is in perfect operating condition.
- (3) Technical information such as circuit diagrams, parts list, descriptions, calibration instructions or other information will be available for suitably qualified user technical personnel upon request from your Nihon Kohden distributor.

9. When the instrument is used with an electro-surgical instrument, careful attention should be paid to the application and/or location of electrodes and/or transducers to avoid possible burn to the patient.

10. When the instrument is used with a defibrillator, make sure that the instrument is protected against defibrillator discharge. If not, remove patient cables and/or transducers from the instrument to avoid possible damage.

WARRANTY POLICY

Nihon Kohden Corporation (NKC) shall warrant its products against all defects in materials and workmanship for one year from the date of delivery. However, consumable materials such as recording paper, ink, stylus and battery are excluded from the warranty.

NKC or its authorized agents will repair or replace any products which prove to be defective during the warranty period, provided these products are used as prescribed by the operating instructions given in the operator's and service manuals.

No other party is authorized to make any warranty or assume liability for NKC's products. NKC will not recognize any other warranty, either implied or in writing. In addition, service performed by someone other than NKC or its authorized agents or technical modification or change of products without prior consent of NKC may be cause for voiding this warranty.

Defective products or parts must be returned to NKC or its authorized agents, along with an explanation of the failure. Shipping costs must be pre-paid.

In the USA and Canada other warranty policies may apply.

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INTRODUCTION

The Polygraph Amplifier Consoles, model RMP-6004M and model RMP-6008M, are designed to accommodate plug-in units and to supply power to them. They accommodate not only the plug-in units of the RM-6000 Series Polygraph.

They are provided with a connection board (Program board) which makes inter-plug-in-unit output-to-input connection easier and eliminates patch cord connections around the front panel.

They are also provided with a double-isolation transformer which limits chassis leakage current within 100 μ A.

The Polygraph Amplifier Console can be used as a single unit, independently out of the Rack, or can be used as a Polygraph system component.

Please read this manual thoroughly prior to operation.

Also please refer to the instruction manual of each plug-in unit which would be used together with the console.

FEATURES

1. Many types of plug-in unit are available.

All types of the 6000 Series plug-in units such as Signal conditioning units, Signal processing units, Coupler units, can be accommodated in the console.

2. Adoption of the Signal Connection Board (Program Board).

The Program Board permits connections of not only the biophysical signals (for signal processing, etc.) but also the control signals and the calibration signals between the signal conditioning units and the signal processing units, etc.

3. Centralized CAL and INST controls are employed to actuate calibration signal circuits in the different types of plug-in units

simultaneously, as well as the INST circuit (instant trace stabilizer) over all channels with the touch of a pushbutton switch.

4. Patient safety.

A double isolated power transformer is used which limits the chassis leakage current within 100 μ A.

In combination with the isolated input amplifier, the console provides maximum patient safety.

5. Built-in calibration signal.

A square-wave generator of 0 to +1V signal which is a standard output voltage of each plug-in unit is built into the Signal Connection Board (Program Board). The signal can be used also as a calibration signal for the oscilloscope and the recorder.

6. Several input terminals are provided on the rear panel.

7. The console can be used as a single unit independently out of the Rack or can be used as a component of the Polygraph System.

COMPOSITION

◇ Composition of the instruments

Two types of the Polygraph Amplifier Console are available.

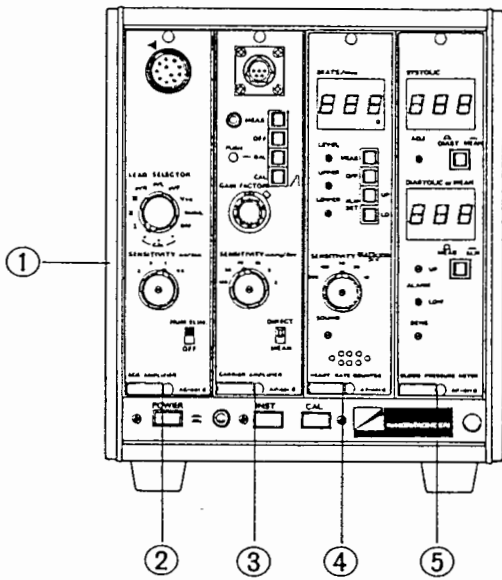
Model RMP-6004M for 4 channels

Model RMP-6008M for 8 channels

The above two models have a power supply, calibration signal, INST circuit, and a Signal Connection Board (Program Board).

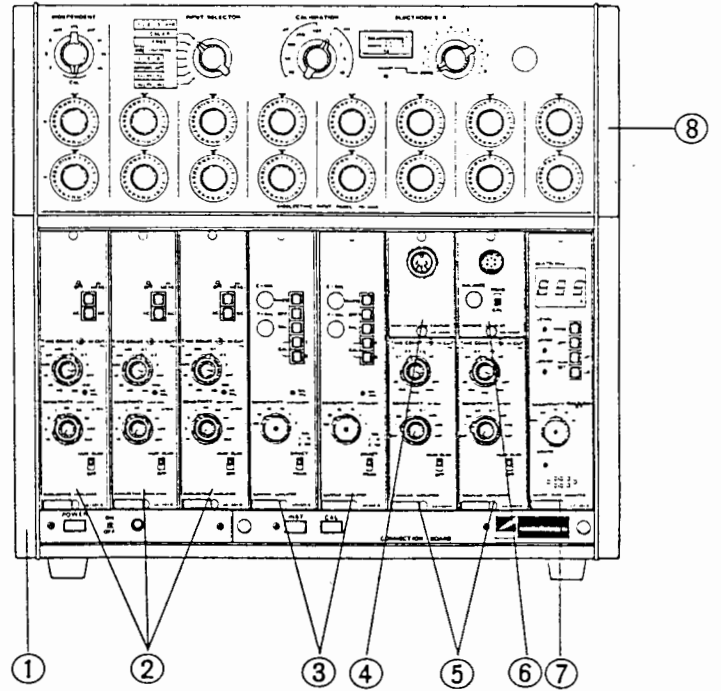
◇ Example of the composition

RMP-6004M (4 channels for ECG and blood pressure measurement)



- ① Polygraph Amplifier Console RMP-6004M
 - ② ECG Amplifier AC-601G
 - ③ Carrier Amplifier AP-601G
 - ④ Heart Rate Counter AT-601G
 - ⑤ Blood Pressure Meter AP-611G
- Electrodes and Transducers

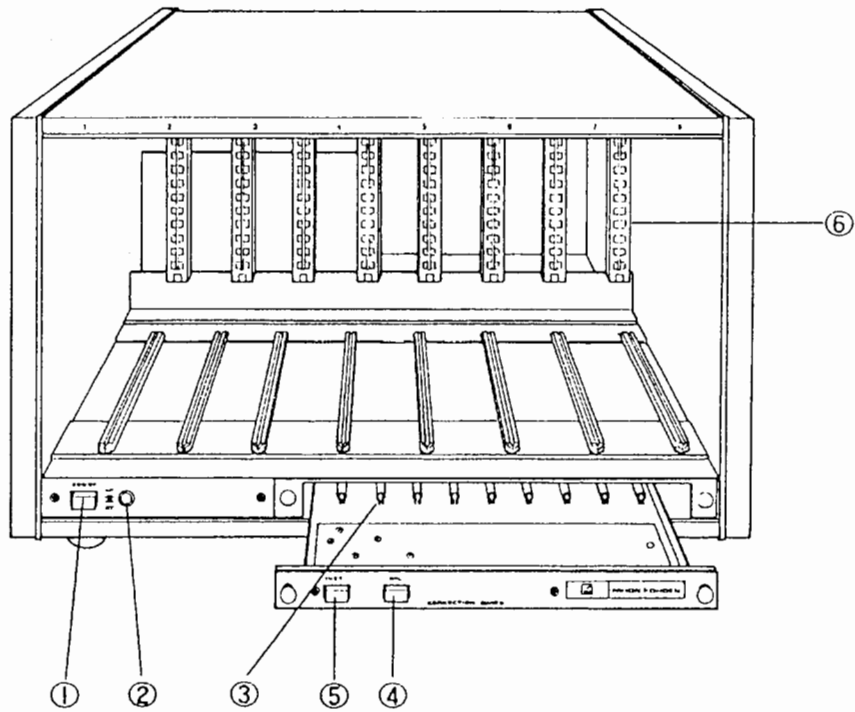
RMP-6008M (8 channels for use in the field of pharmacology)



- ① Polygraph Amplifier Console RMP-6008M
- ② Bioelectric Amplifier AB-621G
- ③ Carrier Amplifier AP-621G
- ④ Resp/Plethysmo Coupler AR-650H
- ⑤ Coupler Amplifier AA-601H
- ⑥ Isotonic Coupler EG-650H
- ⑦ Heart Rate Counter AT-601G
- ⑧ Bioelectric Input Panel PB-680G

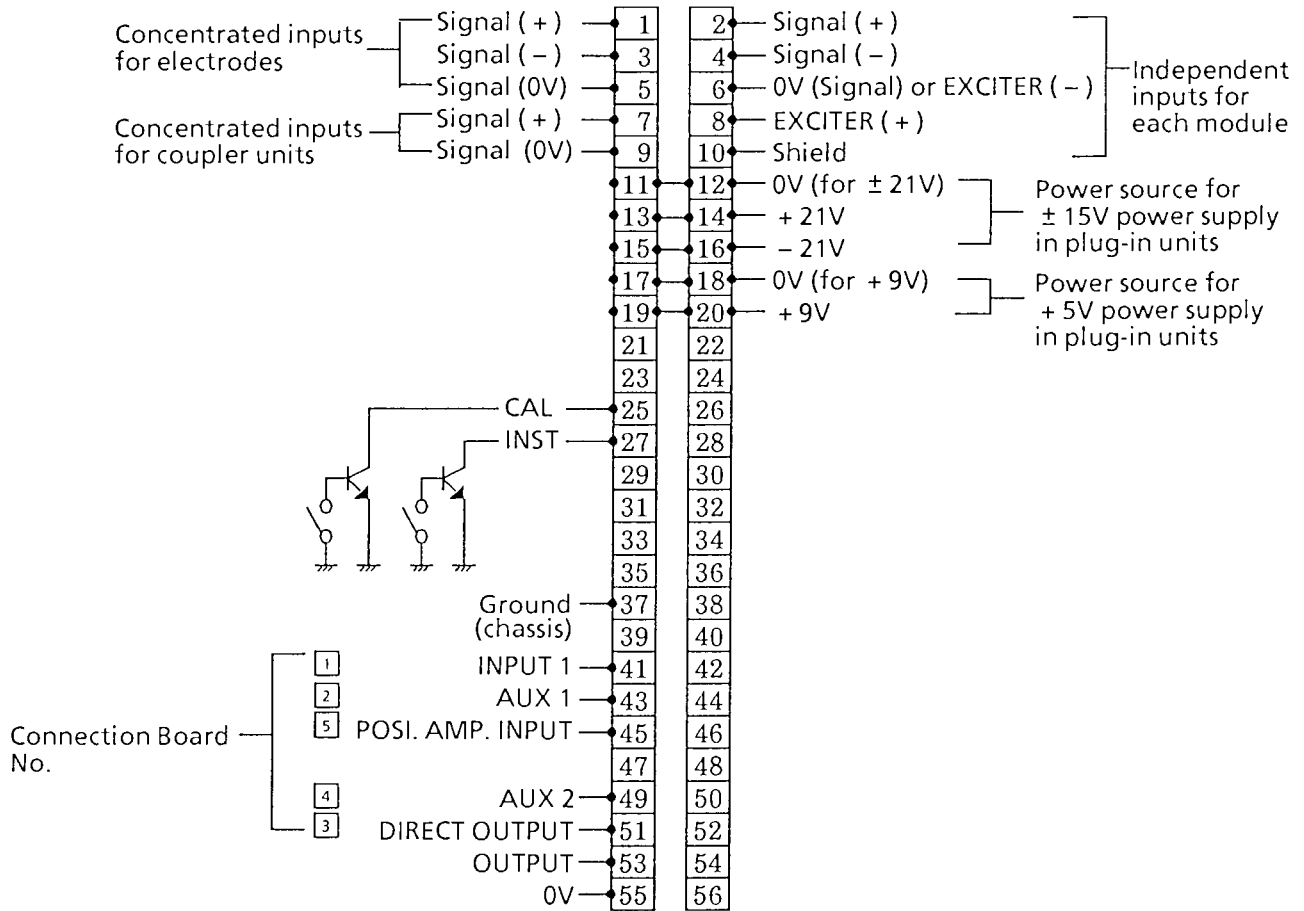
CONTROLS AND SWITCHES

◇ Front Panel



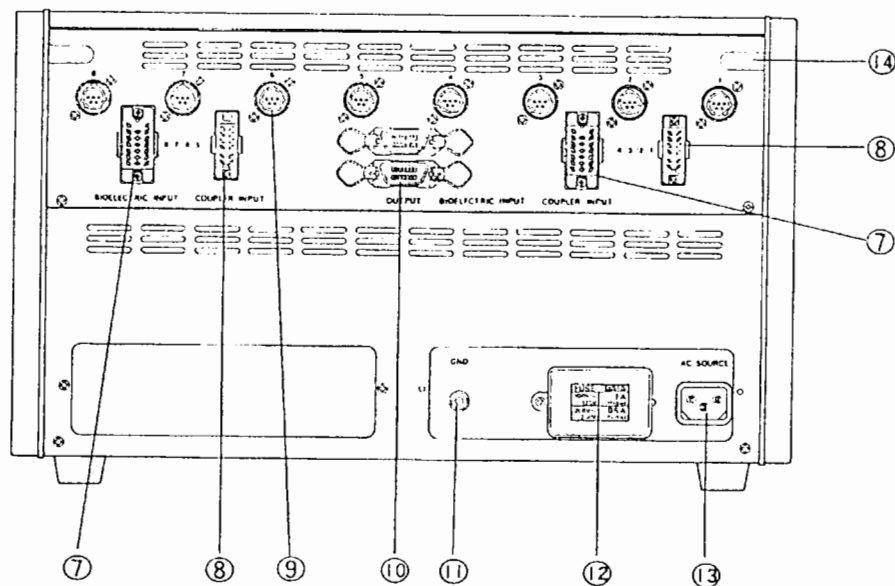
Items	Description
① POWER	Turning on the Power switch ① (■) lights the Power Indication lamp ② and supplies power to the instrument. Pressing the Power switch again (□) turns the power off.
② Power Lamp	Lights when the power is on.
③ Signal Connection Board (Program Board)	A board for signal connection between the input and output (etc) of each plug-in unit. Refer to the paragraph "How to connect signals on the Connection Board" for details.
④ CAL	When this switch is pressed, a calibration signal is applied to all plug-in units simultaneously.
⑤ INST	Pressing the INST switch stabilizes the base lines of the recorder and oscilloscope of all channels simultaneously. This switch is effectively used when a large signal applied to the input fluctuates the base lines of the recorder and the oscilloscope. The INST function does not operate in some units.

Items	Description
⑥ Plug-in Unit Connector	A connector for receiving and applying signals to the plug-in units. The signal connection of the terminals is as follows:

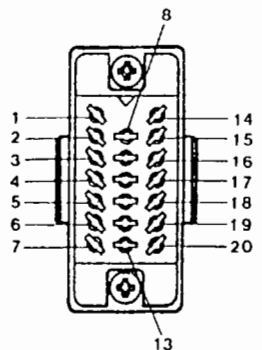


Plug-in unit connector: 56P female
 Type: 1150-056-019
 Code number: 5420064

◇ Rear Panel



Items	Description
<p>⑦ BIOELECTRIC INPUT (Concentrated type)</p>	<p>A connector used for connecting biophysical signals. Two connectors are provided: One is for 1 to 4 channels. Another is for 5 to 8 channels. The modular unit that can be connected to this connector is the Bioelectric Input Panel (PB-680G), the Bioelectric Input Box (JB-640G), and the connection cord (for electrode: code number, 5512081). Signal connections of the pin terminals are as follows:</p>



Pin No.	Signals	Pin No.	Signals
1	0V	11	ch.4 or 8 signal (-)
2	ch.1 or 5 signal (+)	12	0V (for ±21V)
3	ch.2 or 6 signal (+)	13	+21V
4	ch.3 or 7 signal (+)	14	Shield
5	ch.4 or 8 signal (+)	15	Not connected
6	Not connected	16	Not connected
7	Not connected	17	Not connected
8	ch.1 or 5 signal (-)	18	CAL
9	ch.2 or 6 signal (-)	19	INST
10	ch.3 or 7 signal (-)	20	-21V

Concentrated type bioelectric input connector: 20P female
 Type: S-1320-SB
 Code Number: 5411207

The connector which can be connected to the above female connector is:
 20P male
 Type: P-1320-CEA
 Code number: 5411706

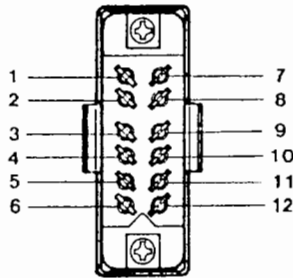
⑧ COUPLER INPUT

A connector to supply signals to the coupler units, which are accommodated in the console. Two connectors are provided. One is for ch.1 to ch.4 and the other is for ch.5 to ch.8.

The modules that can be connected to this connector are the Coupler Selector Panel (PJ-640H), Coupler Housings (4ch: JH-640H, 2ch: JH-620H) and the Input Extension Cord (for coupler: code number 5512099).


Signal connections of the pin terminals are as follows:

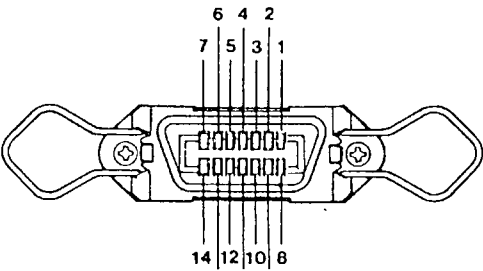
	Pin No.	Signals
	1	ch.1 or ch.5 signal
	2	ch.2 or ch.6 signal
	3	0V (signal)
	4	CAL
	5	0V ($\pm 21V$)
	6	+ 21V
	7	ch.3 or ch.7 signal
	8	ch.4 or ch.8 signal
	9	Shield
	10	INST
	11	Not connected
	12	- 21V

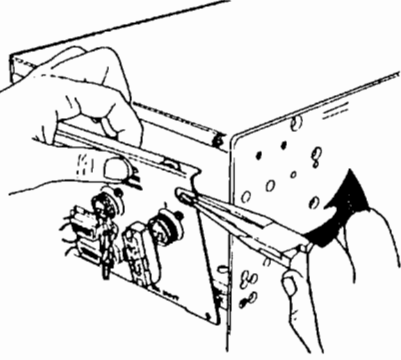


Coupler input connector: 12P female
 Type: S-1312-SB
 Code Number: 5411038

The connector to be mated with above connector is:
 12P, male
 Type: P-1312-CEA
 Code number: 5411047

Items	Description												
<p>⑨ INDEPENDENT INPUT</p>	<p>A signal input connector which supplies signals to each module in each channel.</p> <p>Each connector corresponds to each channel. The input cord (5511991), the Signal Extension Cord (5512107) and the transducers can be connected to this connector.</p> <p>When the Polygraph Amplifier Console (RMP-6004M/6008M) is mounted on the Rack, the input signals cannot be connected to these terminals directly.</p> <p>In such a case, the Input Panel (PI-680G) should be used. In this case the signals are supplied to the connectors mounted on the front panel of the Input Panel (PI-680G).</p> <p>Signal connections of the pin terminals are as follows:</p> <div style="display: flex; align-items: center; justify-content: center;">  <table style="margin-left: 20px;"> <thead> <tr> <th>Pin No.</th> <th>Signals</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Shield</td> </tr> <tr> <td>2</td> <td>Signal (+)</td> </tr> <tr> <td>3</td> <td>Exciter (+)</td> </tr> <tr> <td>4</td> <td>0V or Exciter (-)</td> </tr> <tr> <td>5</td> <td>Signal (-)</td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Independent input connector: 5P female Type: JRC13R-5S Code Number: 5355125</p> </div> <p>The connector to be mated with the above connector is: 5P, male Type: JRC139-5P Code number: 5310067</p>	Pin No.	Signals	1	Shield	2	Signal (+)	3	Exciter (+)	4	0V or Exciter (-)	5	Signal (-)
Pin No.	Signals												
1	Shield												
2	Signal (+)												
3	Exciter (+)												
4	0V or Exciter (-)												
5	Signal (-)												

Items	Description																														
<p>⑩ OUTPUT</p>	<p>Output signals from each modular unit are supplied to this connector. Two connectors are provided. Since the same signals are obtained in parallel at the two connectors, the signals can be supplied to the oscilloscope and to the recorder simultaneously. The Output Panel (model PA-680G) which provides the output signal of each channel amplifier is also available. The OUTPUT connector ⑩ and the Output Panel (PA-680G) can be connected with a connection cord.</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  </div> <div style="margin-top: 20px;"> <table border="0"> <thead> <tr> <th style="text-align: left;">Pin No.</th> <th style="text-align: left;">Signals</th> </tr> </thead> <tbody> <tr><td>1</td><td>Signal of ch.1</td></tr> <tr><td>2</td><td>Signal of ch.2</td></tr> <tr><td>3</td><td>Signal of ch.3</td></tr> <tr><td>4</td><td>Signal of ch.4</td></tr> <tr><td>5</td><td>0V</td></tr> <tr><td>6</td><td>Shield</td></tr> <tr><td>7</td><td>INST</td></tr> <tr><td>8</td><td>Signal of ch.5</td></tr> <tr><td>9</td><td>Signal of ch.6</td></tr> <tr><td>10</td><td>Signal of ch.7</td></tr> <tr><td>11</td><td>Signal of ch.8</td></tr> <tr><td>12</td><td>0V</td></tr> <tr><td>13</td><td>Shield</td></tr> <tr><td>14</td><td>CAL</td></tr> </tbody> </table> </div> </div> <p style="margin-top: 20px;">In case of the RMP-6004M (4 ch.) the signals are not connected in these terminals.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; width: fit-content;"> <p>Output connector: 14P female Type: 57-40140 Code Number: 5410119</p> </div> <p style="margin-top: 20px;">The connector to be mated with the above connector is: 14P, male Type: 57-30140 Code number: 5410003</p>	Pin No.	Signals	1	Signal of ch.1	2	Signal of ch.2	3	Signal of ch.3	4	Signal of ch.4	5	0V	6	Shield	7	INST	8	Signal of ch.5	9	Signal of ch.6	10	Signal of ch.7	11	Signal of ch.8	12	0V	13	Shield	14	CAL
Pin No.	Signals																														
1	Signal of ch.1																														
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4	Signal of ch.4																														
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11	Signal of ch.8																														
12	0V																														
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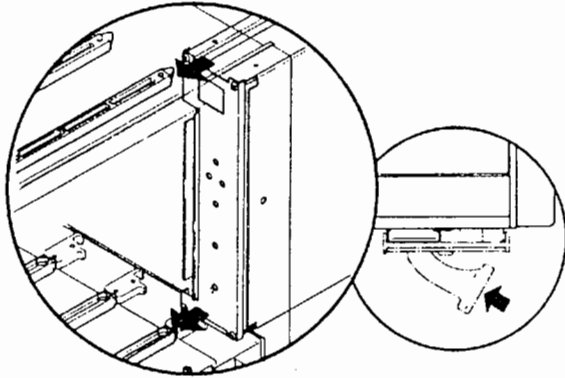
Items	Description
⑪ GND terminal	For grounding the instrument. Ground the instrument using the Ground lead (D: 5540023) prior to operation.
⑫ Fuse Cover	Two slow blow fuses are kept in this Fuse Cover. When a fuse is blown, replace the fuse with the fuse kept in the cover.
⑬ AC SOURCE	AC power is supplied to the instrument through this connector.
⑭ Outlet for Auxiliary Cord	<p>The outlet through which the signals inside the instrument are taken out to drive the external equipment or to display the signals on the external signals, etc.</p> <p>To make a hole, remove the rear panel by taking out two screws on the panel and remove the portion of the panel using pliers as shown in the figure below.</p> 

PREPARATION FOR MEASUREMENT

1. Plug the necessary units into the Console.

Plug the unit in so that it runs on the rail of the Console.

After inserting the unit into the Console, fix the unit to the Console by pressing the Module Lock Lever.



2. Ground the instrument to a ground terminal using a ground lead supplied as accessory.

Avoid using a water pipe as a ground terminal, since the water pipe is sometimes not connected to the ground electrically.

When the console is mounted on the Polygraph Rack, ground the Rack safely.

3. Connect the Power cord.

4. Extract the connection Board (Program Board) from the Console and check whether the terminals are connected properly to accord the measurement purpose.

Please refer to the paragraph "How to connect signals on the Connection Board (Program Board)" for the connection of the signals.

5. Check to see that the inputs and outputs of the units are connected properly.

6. Turn the Power switch ① on.

After confirming that the Power Lamp ② is lit, start measurement.

Please refer to the instruction manual of each plug-in unit (module) for the operation of the modular unit.

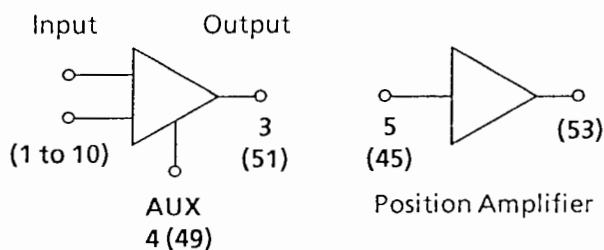
HOW TO CONNECT SIGNALS ON THE CONNECTION BOARD (PROGRAM BOARD)

The use of the Connection Board system eliminates confusing patch cord connections between inputs and outputs of the amplifiers on the front panels. Since the inputs and outputs of all channels are concentrated on the connection board, they can be connected on the board easily, using connection leads supplied as a standard accessory. By simply replacing the prewired connection board, the Polygraph can be used for different experiments. This also means that by using the same prewired connection board, the Polygraph can be used for re-experiment without re-wiring between the plug-in unit.

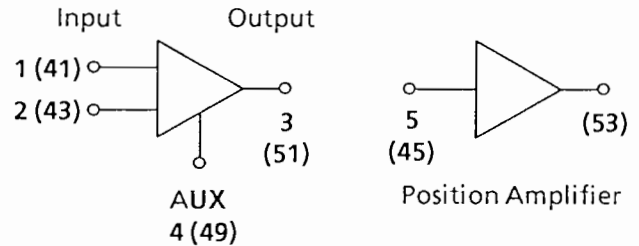
◇ Relation between the Connection Board and the Plug-in Modules

As shown in the following figures, the signal amplifier (preamplifier) and the position amplifier (last amplifier) are not connected internally. The receptacle numbers of the connection board and the connectors of the plug-in units correspond to each other as shown in the following figures, according to the types of the plug-in units.

◦ SIGNAL AMPLIFIER



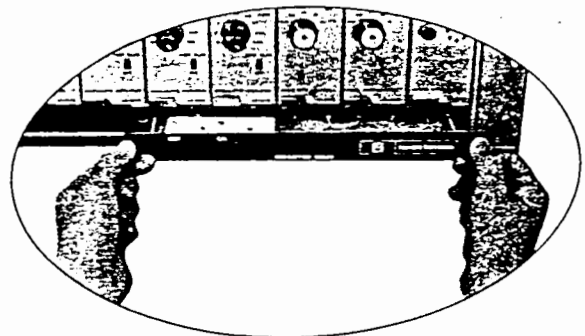
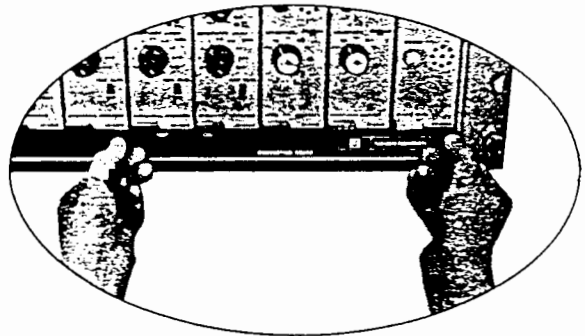
◦ SIGNAL PROCESSING AMPLIFIER



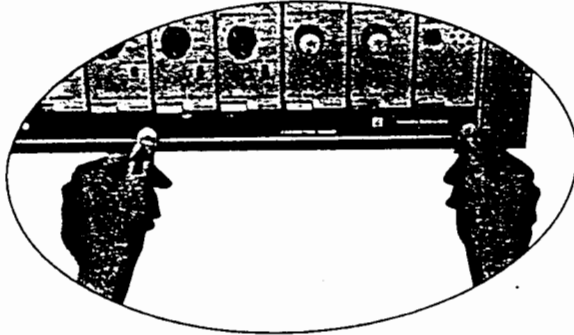
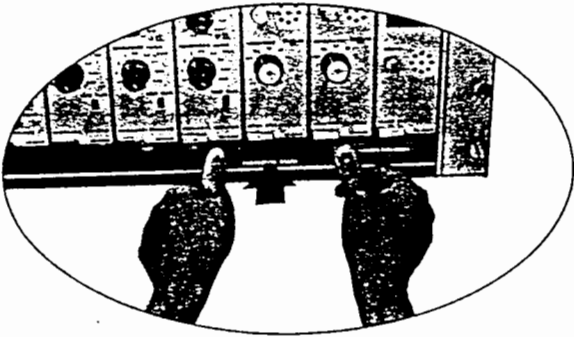
- * The numbers from 1 to 5 indicate the numbers of the receptacles on the connection board.
- * The numbers in the parenthesis () indicate the pin numbers of the Plug-in Unit Connector ⑥.

◇ How to Mount and Remove the Connection Board (Program Board)

- To remove the connection board, pull the two plastic buttons mounted on the front panel of the board.



- To mount the connection board onto the console, insert the board into the console and press the two plastic buttons to fix it.



◇ Connection of the Signals

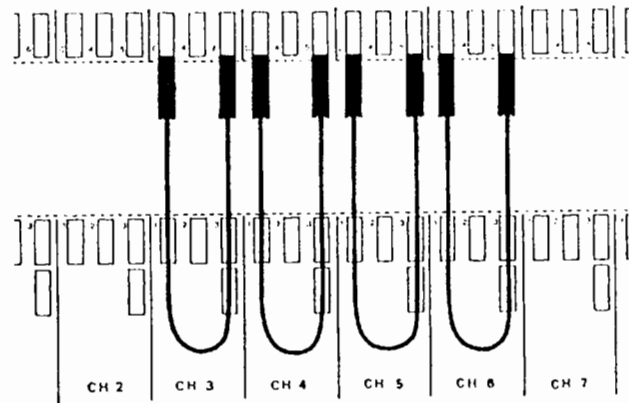
Four examples of the signal connections are described here.

[Example-1]

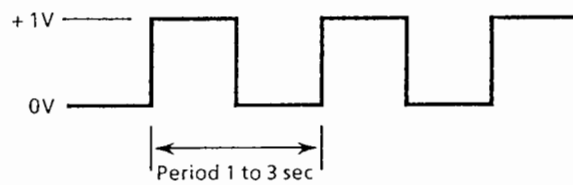
To calibrate other devices

A calibrated 1 volt square wave signal, generated by a generator in the connection board, appears at terminal C.

When terminal C is connected to terminal 5, the calibrated signal is applied to the position amplifier (last amp) and thus the amplitude is calibrated.



Waveform at terminal C

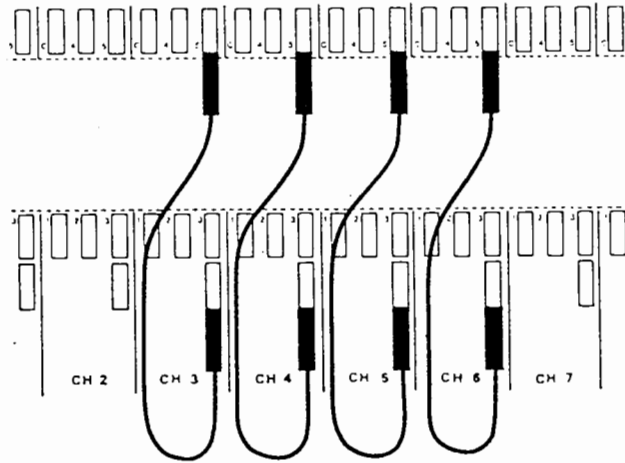


[Example-2]

To connect the input signal to the position amplifier

In the plug-in modules (units) of the RM-6000 Series Polygraph, the preamplifier and the position amplifier (last amplifier) are not connected. Therefore, it is necessary to connect the preamplifier and the position amplifier to amplify and record the signal on the Polygraph recorder or to display it on the oscilloscope.

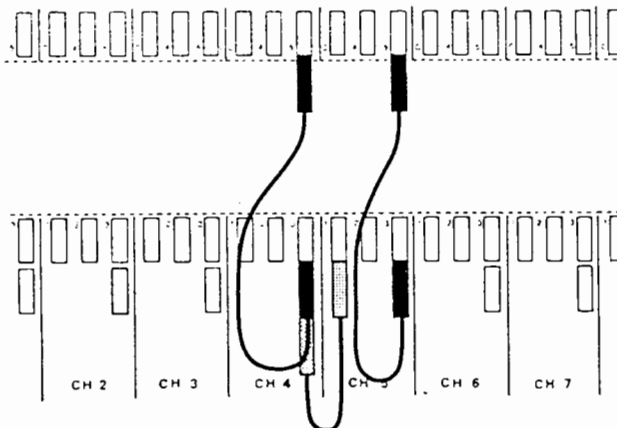
Connect the terminals as shown below.



[Example-3]

To connect the biophysical signals to the Heart Rate Counter AT-600G

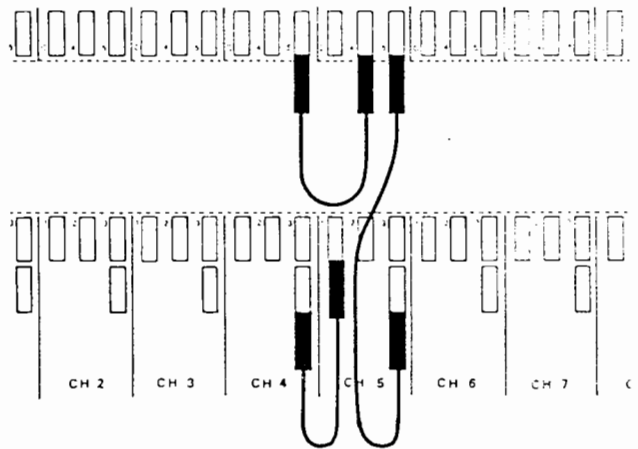
- | | |
|---------------------------------|---------------------------------------|
| Bioelectric Amplifier (AB-601G) | } to the Heart Rate Counter (AT-601G) |
| (AB-621G) | |
| ECG Amplifier (AC-601G) | |
| Carrier Amplifier (AP-601G) | |
| (AP-621G) | |
| DC Amplifier (AD-601G) | |
| Coupler Amplifier (AA-601H) | |
| PCG Amplifier (AS-601H) | |
| (AS-611H) | |



[Example-4]

To process biophysical signals with the processing units

- | | | |
|------------------------------------|---------------------------------------|--------------------------|
| Bioelectric Amplifier (AB-601G) | } to the Heart Rate Counter (AT-601G) | |
| (AB-621G) | | |
| ECG Amplifier (AC-601G) | | |
| Carrier Amplifier (AP-601G) | | |
| (AP-621G) | | |
| DC Amplifier (AD-601G) | | |
| Coupler Amplifier (AA-601H) | | |
| Impedance Plethysmograph (AI-601G) | | |
| | | Differentiator (ED-601G) |
| | | Integrator (EI-601G) |
| | Pressure Processor (EQ-601G) | |
| | Analog Multiplier (EO-601G) | |



◇ How to Use the Connection Card

The connection card is used to memorize the connection of the leads on the Connection Board.

This connection card is useful when connecting the leads again for the same experiment, after disconnecting the leads, or connecting the leads for another experiment.

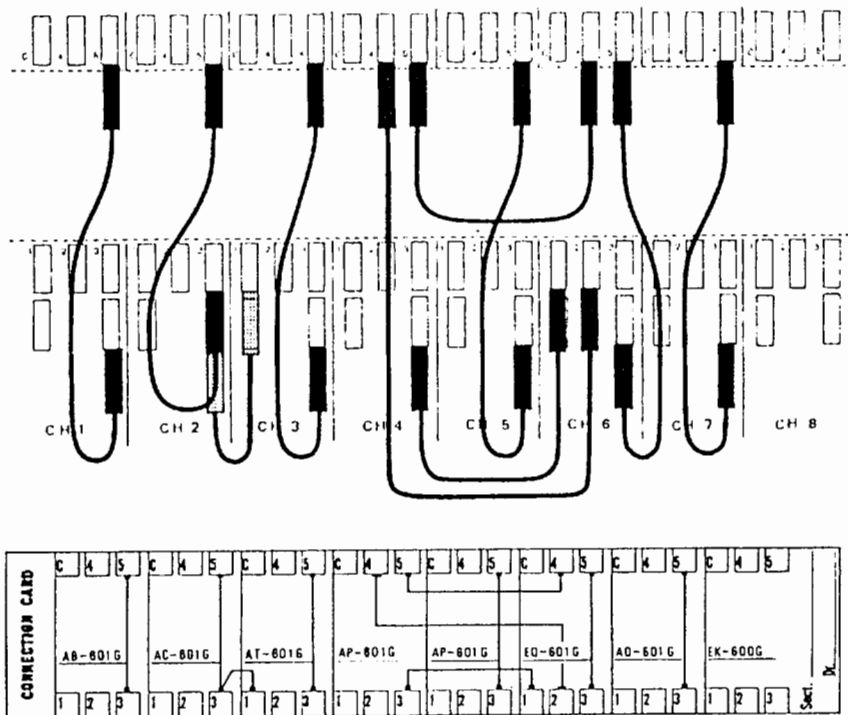
Please use the card attached in this manual.

Examples of the use of the connection card are shown in the following examples:

[Example-1] Composition for cardiac catheter measurement

CH.1	Bioelectric Amplifier (isolated)	AB-601G
CH.2	ECG Amplifier (isolated)	AC-601G
CH.3	Heart Rate Counter	AT-601G
CH.4	Carrier Amplifier (isolated)	AP-601G
CH.5	Carrier Amplifier (isolated)	AP-601G
CH.6	Pressure Processor	EQ-601G
CH.7	DC Amplifier	AD-601G
CH.8	Blank Panel	EK-600G

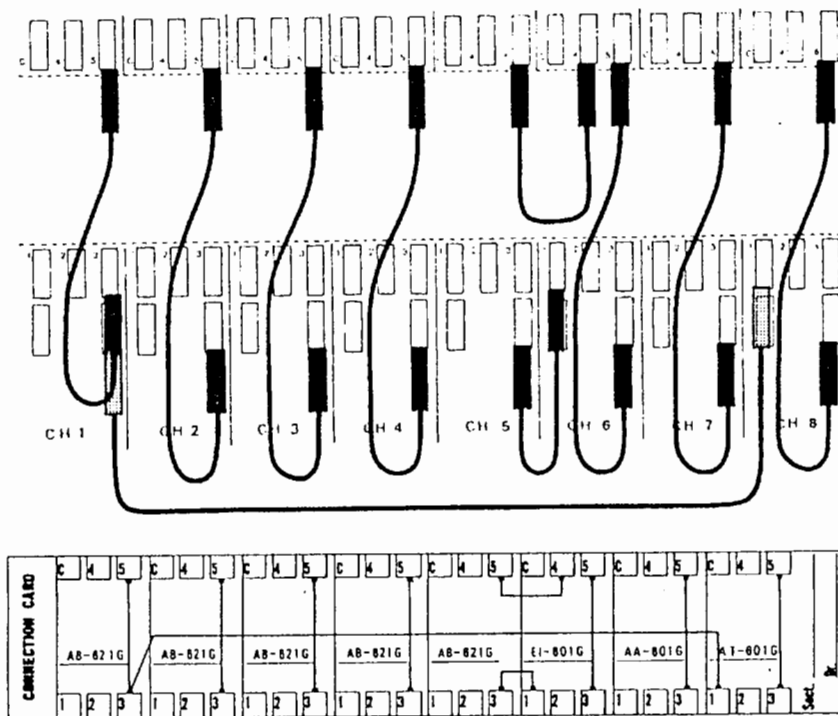
The lead connection on the Connection Board and the description on the connection card are shown in the following figure:



[Example-2] Composition for educational use

- CH.1 Bioelectric Amplifier (isolated) AB-621G (ECG)
- CH.2 Bioelectric Amplifier (isolated) AB-621G (EEG)
- CH.3 Bioelectric Amplifier (isolated) AB-621G (EEG)
- CH.4 Bioelectric Amplifier (isolated) AB-621G (EEG)
- CH.5 Bioelectric Amplifier (isolated) AB-621G (EMG)
- CH.6 Integrator EI-601G Integration of EMG
- CH.7 Coupler Amplifier AA-601H Respiration of pulse
- CH.8 Heart Rate Counter AT-601G Heart rate

The signal connection on the board and the description of the lead connection on the connection card:



SPECIFICATIONS

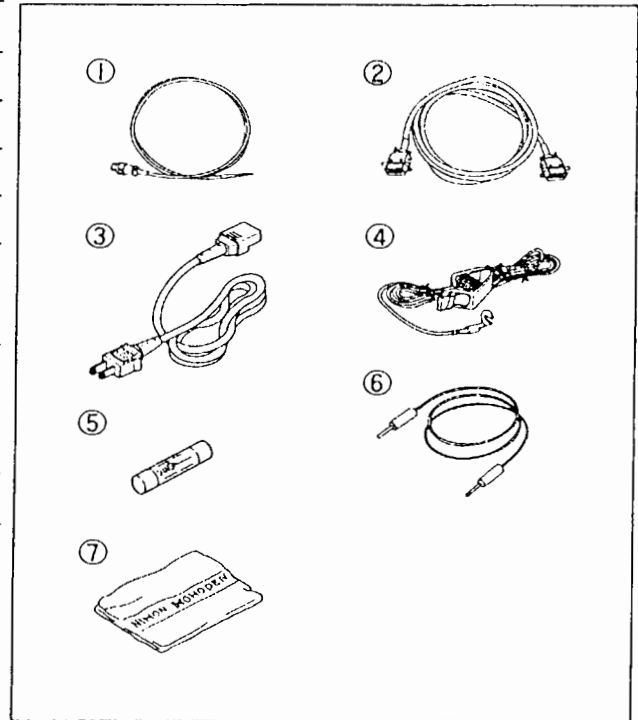
Power Requirements:	100, 110, 117, 125, 220, 240V AC, 50 or 60Hz, 120VA, max.	
Leakage Current:	< 100 μ A at 60Hz 250 volts	
Withstand Voltage:	4kV AC rms (60Hz, one minute) between the primary winding of the power transformer and the chassis	
Insulation:	> 100M Ω between the primary winding of the power transformer and chassis	
Output voltages:		
For ± 15 volts		
Unregulated voltage;	± 17.5 to ± 24.5 volts (at max. load)	
Output current;	< 800mA	
For +5 volts		
Unregulated voltage;	+7.5 to +11.0 volts (at max. load)	
Output current;	< 4.0A	
All Channel Control:	CAL and INST	
When a plug-in amplifier is inserted		
ON voltage;	< +0.5V	
OFF voltage;	> +14V	
Calibration Signal:		
Square wave		
Synchronization;	1 to 3 sec.	
Voltage;	Min. 0V Max. 1V $\pm 1\%$	
Dimensions and Net Weight:		
Dimensions;	RMP-6004M	236 (W) \times 260 (H) \times 440 (D) mm
	RMP-6008M	435 (W) \times 260 (H) \times 440 (D) mm
Net weight;	RMP-6004M	Approx. 14 kg
	RMP-6008M	Approx. 18 kg

STANDARD ACCESSORIES

The Q'ty described in parentheses () are applied to the RMP-6004M.

(1) When the console is used as a single unit

No.	Description	Q'ty	Cord No.
①	Input cord	2 (2)	5511991
②	Connection cord	2 (2)	5512009
③	Power cord	1	
④	Ground lead	1	
⑤	Spare power fuse (Time lag) 0.5A (220-240V AC) or 1.0A (100-125V AC)	2 2	5620017 5620026
⑥	Connection lead (Yellow, 13cm) (Red, 13cm) (Blue, 25cm)	5 (3) 5 (3) 4 (0)	5520357 5520366 5520375
⑦	Dust cover	1	



(2) When the console is used in the rack

No.	Description	Q'ty	Cord No.
①	Input cord	2 (2)	5511991
⑤	Spare power fuse (Time lag) 0.5A (220-240V AC) or 1.0A (100-125V AC)	2 2	5620017 5620026
⑥	Connection lead (Yellow, 13cm) (Red, 13cm) (Blue, 25cm)	5 (3) 5 (3) 4 (0)	5520357 5520366 5520375

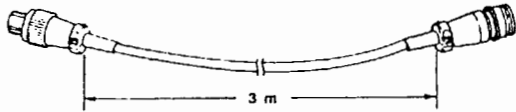
Other accessories are accommodated in the rack and console.

OPTIONAL ACCESSORIES

Input Cord

1) Code number 5512125

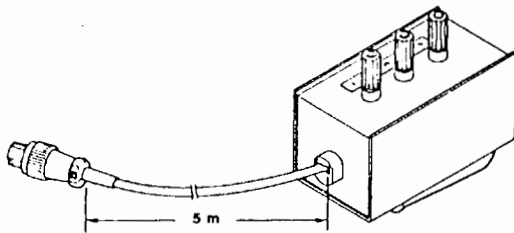
Used for the connection between the RMP-6008M (8 ch) or the RMP-6004M (4 ch) Polygraph Amplifier Console and PI-600G Auxiliary Input Panel for connection to the coupler or to the rear panel of the Rack.



2) 1-ch Input Box Code number 5512107

Used to supply input signals to the AB-621G Bioelectric Amplifier or to the AD-600G DC Amplifier.

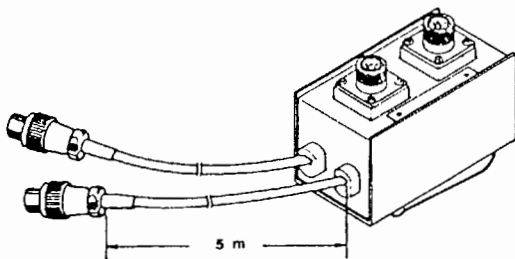
Connect the connector of the Input Box to the connector mounted on the rear panel of the RMP-6004M/6008M to supply input signals to the above amplifiers.



3) 2-ch Input Box Code number 5512161

Used to supply input signals to the AC-601G ECG Amplifier and the AB-601G Bioelectric Amplifier.

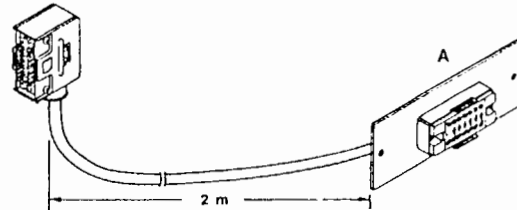
Connect the connectors of the Input Box to the connectors mounted on the rear panel of the RMP-6004M/6008M.



4) Code number 5512081

This cord is used when the console is mounted on the Rack.

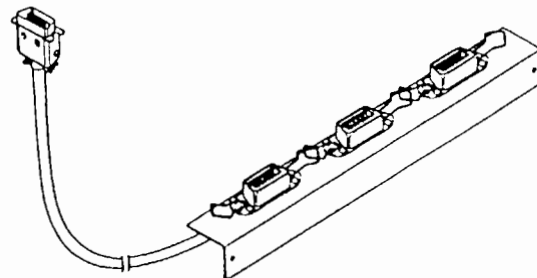
Used for the connection between the RMP-6008M (8 ch) or the RMP-6004M (4 ch) Console and the PI-600G Auxiliary Input Panel or between the RMP-6008M/6004M and the rear panel of the main chassis (Rack) of the Polygraph.



Output Cord

5) Output Extension Cord Code number 5512134

Used for the extension of the output signals. This cord is used when the Console (RMP-6004M/6008M) is mounted on the Rack. The terminals can be mounted on the rear panel of the Rack.

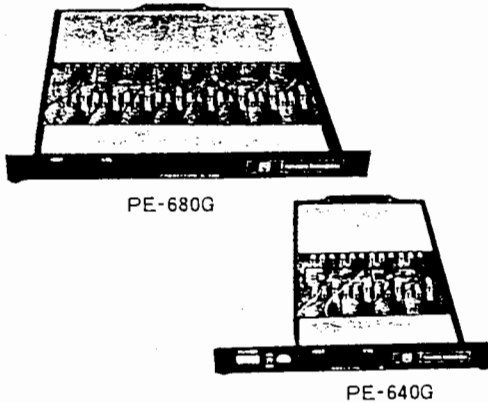


Main Unit

6) Connection Board PE-680G and PE-640G

The connection board is attached to the console as a standard composition. (The PE-680G on the RMP-6008M. The PE-640G on the RMP-6004M).

However, the connection boards are also available optionally.

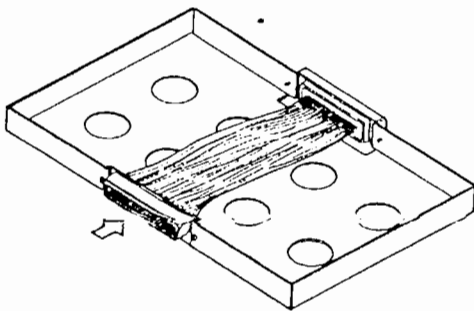


Note: Connection leads are not included in the connection board.

7) Connection Board Extension (Program Board Extension)

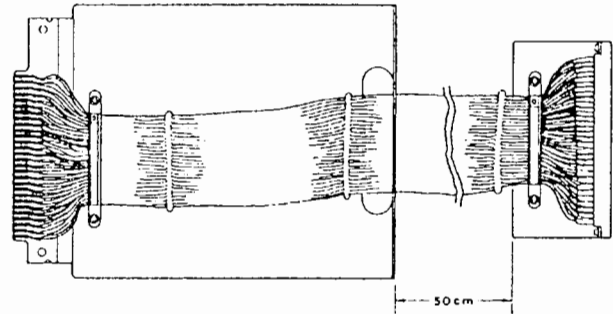
Code number 5512152 (for PE-680G Board in RMP-6008M)

Code number 5512143 (for PE-640G Board in RMP-6004M)



8) Plug-in Unit Extension Code number 5560091

For use to check, adjust and repair the plug-in unit during system operation.



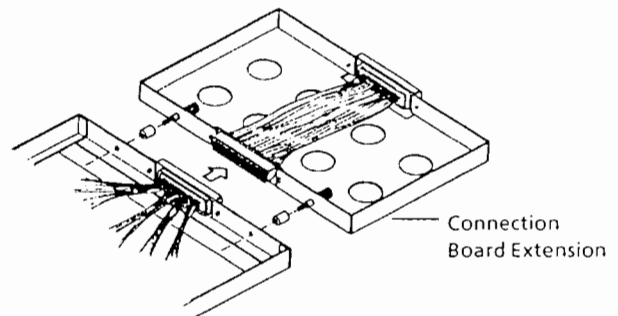
How to Use the Connection Board Extension

When the Connection Board is extracted from the Console (RMP-6004M, RMP-6008M), all the signal passes are off.

(Even in this condition, the position control of the plug-in unit functions).

If the Connection Board Extension is used, the signal connection can be checked during the system operation.

Connect the Connection Board Extension as follows:



- (1) Fix the Connection Board Extension to the Connection Board using screws supplied as accessories.
- (2) Insert the Extension and the Board into the Console.