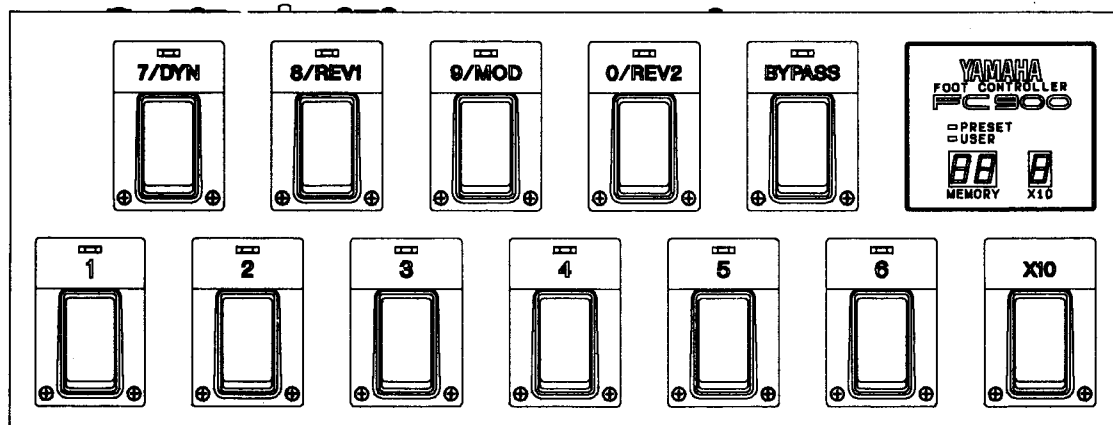# YAMAHA

Foot Controller
Commande au pied
Foot Controller

FC900

Operating Manual
Manuel d'utilisation
Bedienungsanleitung

Thank you for purchasing the Yamaha FC900 Foot Controller. The FC900 is a special foot controller designed for use with the Yamaha FX900 Simul-effect Processor. In order to take full advantage of the FC900 and enjoy long and trouble-free use, please read this manual carefully before use.

1. Precautions

■ **Location**
Using the FC900 in the following types of location may result in malfunction.
• Locations of unusually high or low temperature.
• Locations of excessive humidity or dust.
• Locations where heavy vibration is present.

■ **Handle with care**
Do not apply excessive force to the switches or terminals.

■ **Power supply**
• If electrical storms (lightning) are expected, immediately unplug the power cable of the FX900.
• Do not connect or disconnect cables while the FX900 power is on.

■ **MIDI cables**
• Use cables intended specifically for MIDI.
• Do not use cables longer than 15 meters. Cables longer than this may cause data errors.

■ **Transportation**
To avoid short circuits or broken cables, unplug all cables before transporting your equipment.

■ **Connections**
Before making connections, turn off the power of all equipment.

■ **Do not open the case**
If you attempt to open the case or modify the FC900, you risk damaging the unit as well as electrical shock.

■ **Cleaning the exterior**
Do not use benzine, thinner, or solvents on the case, or use aerosol sprays nearby the FC900. If necessary, wipe the FC900 clean using a soft dry cloth.

■ **Interference with other electrical devices**
The FC900 uses digital circuitry, and may cause interference in nearby radios or televisions. If this occurs, relocate the units further apart.

■ **Keep this manual**
After reading this operating manual, keep it in a safe place together with the warranty card.

2. Specifications

Transmitted data
 PGM mode ....PGM 1—99, bypass on/off
 EFFECT mode ...PGM 11—16, 21—26, 31—36, 41—46, 51—56, 61—66, bypass on/off, DYN group on/off, REV1 group on/off, MOD group on/off, REV2 group on/off
Display ....PRESET/USER indicator, FX900 memory no. display (7-segment 2-digit LED), program no. tens place display (7-segment 1-digit LED), LEDs in each key
Terminals ....REMOTE, FOOT CONTROL 1/2, MIDI MERGE IN
Power supply ....supplied from FX900 via remote cable
Dimensions (W x H x D) ..562 mm x 61.8 mm x 218.5 mm
Weight ....3.0 kg
Included items ....remote cable (10 m)

* Specifications and external appearance are liable to change without notice for product improvement.

3. Error messages

If an unexpected condition occurs in the FC900 or FX900, the FC900 display will show an error message of E0—E3.
If an error message appears, turn off the FX900 power switch, make sure that the remote cable is connected correctly, and turn the power switch on again.
If an error message is still displayed after this procedure, contact your dealer, and tell him the error number that appeared.

4. Front and rear panel
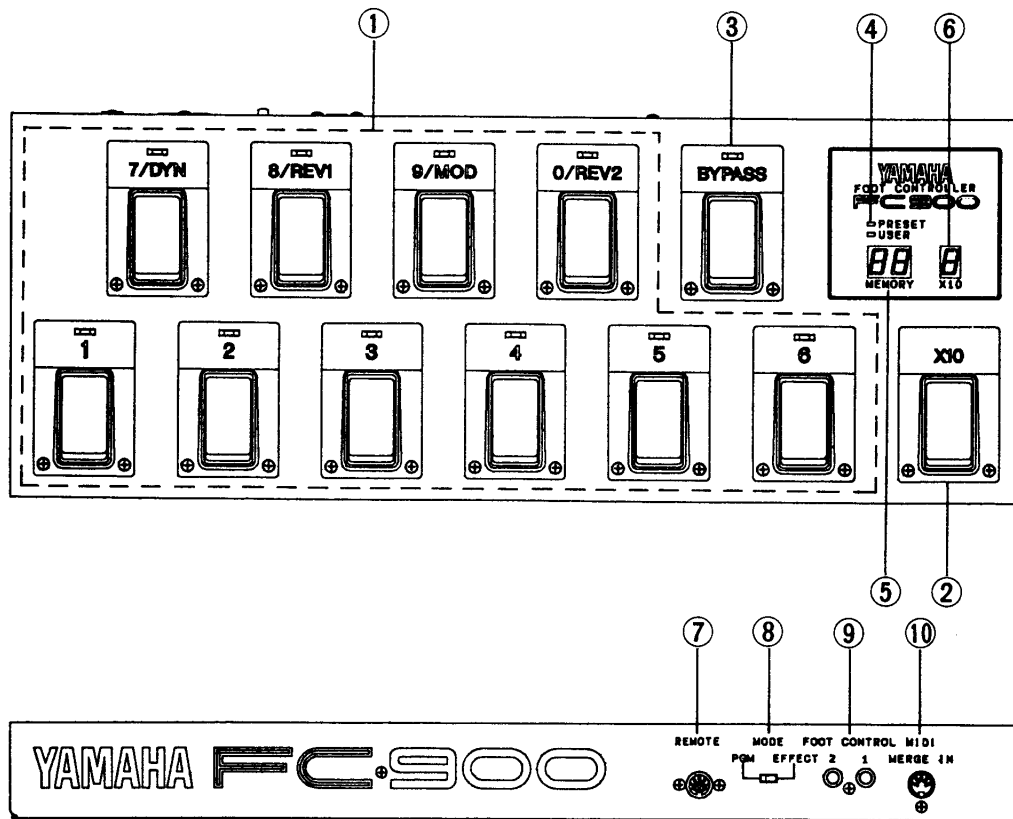
① 1—6, 7/DYN—0/REV2 switches
When in PGM mode, you can use switches 1—0 to specify 99 different program change messages.
When in EFFECT mode, you can use switches 1—6 to specify 36 different program change messages, and use switches 7/DYN—0/REV2 to turn each effect group on or off independently.

② x10 switch
To change the tens place of a number, first press this switch.

③ BYPASS switch
This switch turns bypass on/off.
When bypass is on the LED will light, and none of the effect groups will affect the sound.

④ PRESET/USER indicator
This indicator tells you whether the effect program selected on the FX900 is a preset program or a user program.

⑤ MEMORY No. display
This displays the memory number of the effect program selected on the FX900.

⑥ x10 display
This displays the tens place of the program change message.

⑦ REMOTE jack
Use the included remote cable to connect this jack to the FX900 REMOTE jack, allowing the FC900 to communicate with the FX900. Power is also supplied to the FC900 through this cable.

⑧ MODE select switch
This switch selects the operating mode of the FC900. Depending on whether this is set to PGM or to EFFECT, the function of the switches will differ as explained in " ① 1—6, 7/DYN—0/REV2 switches".

⑨ FOOT CONTROL jacks
By connecting optional FC7 foot controllers to these jacks, you can control the values of parameters selected on the FX900.
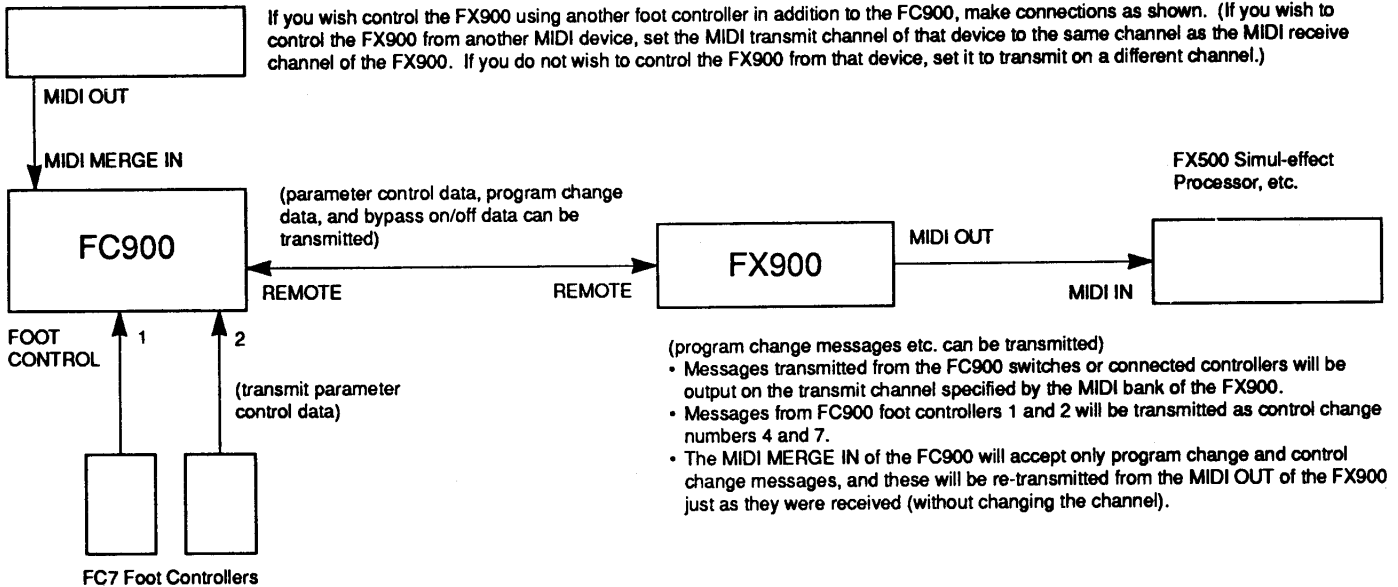
⑩ MIDI MERGE IN jack
By connecting another MIDI device to this jack, program change messages and control change messages transmitted by that device can select programs and modify parameters on the FX900. (Only program change and control change messages will be received at this jack.)
MIDI messages received here will be re-transmitted from the MIDI OUT of the FX900.

2

5. Setup

1) Connections

Use the remote cable included with the FC900 to connect the REMOTE jacks of the FC900 and FX900. If necessary, connect FC7 foot controllers as well. (Connections for instruments, audio equipment such as amps and speakers, and AC power are omitted from this explanation.)

MFC05 MIDI Foot
Controller or other MIDI
device

If you wish control the FX900 using another foot controller in addition to the FC900, make connections as shown. (If you wish to control the FX900 from another MIDI device, set the MIDI transmit channel of that device to the same channel as the MIDI receive channel of the FX900. If you do not wish to control the FX900 from that device, set it to transmit on a different channel.)

MIDI OUT

MIDI MERGE IN

FX500 Simul-effect
Processor, etc.

FC900

(parameter control data, program change data, and bypass on/off data can be transmitted)

REMOTE   REMOTE

FX900

MIDI OUT

MIDI IN

FOOT
CONTROL   1   2

(transmit parameter control data)

FC7 Foot Controllers

(program change messages etc. can be transmitted)
- Messages transmitted from the FC900 switches or connected controllers will be output on the transmit channel specified by the MIDI bank of the FX900.
- Messages from FC900 foot controllers 1 and 2 will be transmitted as control change numbers 4 and 7.
- The MIDI MERGE IN of the FC900 will accept only program change and control change messages, and these will be re-transmitted from the MIDI OUT of the FX900 just as they were received (without changing the channel).

2) Turn the power on

Press the POWER switch of the FX900 to turn it on. Then turn on the other connected equipment such as the FX500. When the FX900 is turned on, power will also be supplied to the FC900.

6. Operation

The FC900 operates in one of two modes; PGM mode or EFFECT mode. Use the MODE switch located on the rear panel to select whichever mode is most suitable for your needs.

Functions common to both modes

- UTILITY mode of the FX900 allows you to specify the memory number (MEM) that will be selected in response to each incoming program number (PGM). (For details refer to the FX900 operating manual.)
- If you press the x10 switch by mistake, press the x10 switch once again to return to the previous condition. (The x10 switch will also return to the previous display.)
- The PRESET/USER indicator and the MEMORY No. display will display the memory number of the program currently selected on the FX900.

□PRESET
■USER

88
MEMORY

- By pressing the BYPASS switch you can turn bypass on/off. (When bypass is on, the input sound will be output without being processed.) When bypass is on, the LED will light.

BYPASS
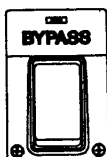
PGM mode

In PGM mode, you can press switches 1 — 0 to select ten different programs (nine different programs if the tens place is 0). By changing the tens place, you can select different ranges of programs, with ten programs in each range (a total of 99 programs); PGM 01 — 09, 10 — 19, ... 90 — 99.
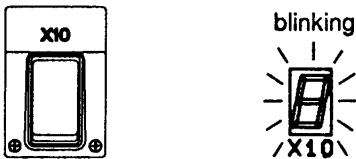
① Set the mode switch to PGM
Set the MODE select switch located on the rear panel to PGM.

MODE
PGM   EFFECT

② Press the x10 switch
Press the x10 switch to make the x10 display blink.

X10

blinking
/X10\

③ Specify the tens place
Press a switch 1 — 0 to specify the tens place of the program number. (When you have specified the number, the blinking x10 display will change from blinking to a steady display.)
For example if you press the 9/MOD switch, the tens place will be set to 9, and in the following step ④ you will be able to select programs 90 — 99.

1   0/REV2   lit
9
X10
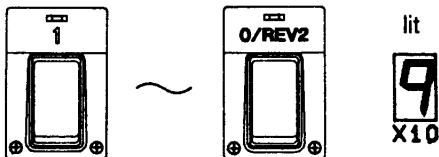
④ Transmit the program number
Press a switch 1 — 0 to specify the ones place. A program change message will be transmitted, and the FX900 will switch to the program of the corresponding memory number. For example if in step ③ you selected 9 as the tens place, and then pressed switch 3, program change 93 would be transmitted.
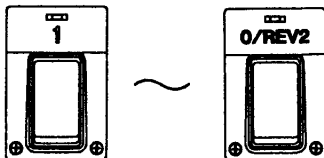
1   0/REV2

EFFECT mode

In EFFECT mode, you can press the four switches 7/DYN — 0/REV2 to independently turn each effect group on/off. You can also press switches 1 — 6 to select six different programs. By changing the tens place, you can select different ranges of programs, with six programs in each range (a total of 36 programs); PGM 11 — 16, 20 — 26, ... 61 — 66.
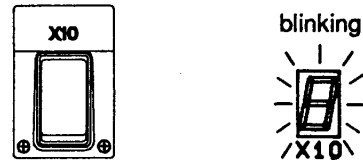
① Set the mode switch to EFFECT
Set the MODE select switch located on the rear panel to EFFECT.

MODE
PGM   EFFECT

② Press the x10 switch
Press the x10 switch to make the x10 display blink.

X10

blinking
/X10\

③ Specify the tens place
Press a switch 1 — 6 to specify the tens place of the program number. (When you have specified the number, the blinking x10 display will change from blinking to a steady display.)
For example if you press the 6 switch, the tens place will be set to 6, and in the following step ④ you will be able to select programs 61 — 66.

1   6   lit
6
X10
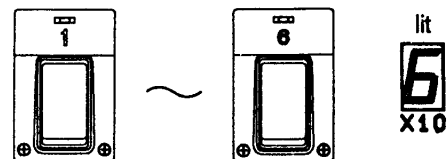
④ Transmit the program number
Press a switch 1 — 6 to specify the ones place. A program change message will be transmitted, and the FX900 will switch to the program of the corresponding memory number. For example if in step ③ you selected 6 as the tens place, and then pressed switch 3, program change 63 would be transmitted.

1   6
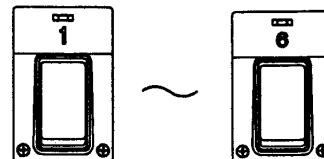
⑤ By pressing switches 7/DYN — 0/REV you can turn each effect group on/off independently. When an effect is on, its LED will be lit.

7/DYN   0/REV2
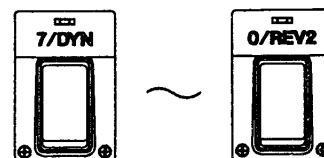
Function ...	Transmitted	Recognized	Remarks
:Basic Default	x	1 - 16, off	
:Channel Changed	x	x	
:Mode Default	x	OMNIoff/OMNIon	
: Messages	x	x	
: Altered	*************	x	
:Note	x	x	
:Number : True voice	*************	x	
:Velocity Note ON	x	x	
: Note OFF	x	x	
:After Key's	x	x	
:Touch Ch's	x	x	
:Pitch Bender	x	x	
: 1 - 31	x	o	
:Control 32 - 63	x	o	*1
: 64 - 95	x	o	
:Change 96 - 120	x	o	*1
:Prog	x	o 0 - 127	
:Change : True #	*************		
:System Exclusive	x	x	
:System : Song Pos	x	x	
: : Song Sel	x	x	
:Common : Tune	x	x	
:System :Clock	x	x	
:Real Time :Commands	x	x	
:Aux :Local ON/OFF	x	x	
: :All Notes OFF	x	x	
:Mes- :Active Sense	x	x	
:sages :Reset	x	x	

:Notes: *1 FX900 does not recognize them .

Mode 1 : OMNI ON, POLY   Mode 2 : OMNI ON, MONO   o : Yes
Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF, MONO   x : No

YAMAHA

SERVICE

This product is supported by Yamaha's worldwide network of factory trained and qualified dealer service personnel.
In the event of a problem, contact your nearest Yamaha dealer.

SERVICE APRES-VENTE

Le FC900 est couvert par le réseau mondial de service après-vente Yamaha. En cas de problème, contactez le concessionnaire Yamaha le plus proche.

KUNDENDIENST

Dem FC900 steht das weltweite Yamaha Kundendienstnetz mit qualifizierten Technikern zur Verfügung. Im Falle einer Störung sofort den Fachhandel in Ihrer Nähe benachrichtigen.