

OPERATION MANUAL

FA-95RU

Remote Control Unit

FA-95PS

FA-95DACBL

FA-95CO

FA-95D-D/DE-E

FA-95AIO

FA-95ALA

8th Edition

Software Ver. 6.00 – higher

Edition Revision History

Edit.	Rev.	Date	Description	Where
1	-	2011/05/20	First Edition (V 1.00) Corresponding with FA-9500 Operation Manual 3 rd or later.	
2		2011/08/19	Added FA-95CO option	
2	1	2011/10/18	Revised AVO Scene Cut Detection frame delay, and Forced Field frame delay settings	7-5-2-1 7-10-1
3		2011/12/07	Closed captioning CEA608, S334-1, CEA708 compatible	7-10-13~7-14, 7-16~7-21, 13
4		2011/12/16	Added FA-95D-D and FA-95DE-E options Enhanced Audio processing feature Added PAL-M support	7-15, 8-1-2, 8-2-3, 8-3-5, 8-9, 8-10-3, etc.
5		2012/02/16	Added FA-95AIO option	7-6-2, 7-7-1, 7-8-5, 7-10-3, 7-15, 7-17, 7-17-3, 7-17-5
5	1	2012/03/06	Deleted NTSC SETUP exceptional condition Text corrections	7-10-14, 8-5-1, etc.
6		2012/03/26	Added Logo feature	7-9-1
7		2012/06/	Enhanced FA-95DE-E option. Added AFD support. (S2016/VI/WSS) CONV2 modified to Up/Down/Cross converter.	4-2-5, 7-3, 7-4, 7-10-14~7-10-19, 7-14, 7-16, 7-18, etc.
7	1	2013/01/28	- (Software upgraded to ver. 5.01)	The below software version list
8		2013/06/06	Added FA-95ALA option and FA-9520 support.	

Software Version and Supported Options

Version *1	Supported Feature/Option	Note
FPGA:1.00 SOFT:1.00	FA-95PS FA-95DACBL	First edition FA-95RU is compatible with FA-9500 Software version 2.0 or higher.
FPGA1:1.00 or higher SOFT: 1.10 or higher	FA-95CO	Supports FA-95CO option FA-9500 with FA-95CO support is: FPGA1: 1.50 or higher FPGA2: 1.29 or higher FPGA3: 1.01 or higher SOFT: 2.10 or higher
FPGA1: 1.00 or higher SOFT: 1.20 or higher	AVO Scene Cut Dection	Modified frame delay settings for Forced Field function Corrected a bug on AUTO LOAD Compatible with FA-9500 software version: FPGA1: 1.55 or higher FPGA2: 1.30 or higher FPGA3:1.01 or higher SOFT: 2.22 or higher
FPGA1: 1.00 or higher SOFT: 1.30 or higher		Closed captioning CEA608, S334-1, CEA708 compatible Revised menu display upon switching VIDEO/AUDIO menus.
FPGA1: 1.00 or higher SOFT: 2.00 or higher	FA-95D-D FA-95DE-E	Supports FA-95D-D and FA-95DE-E options Supports PAL-M Compatible with FA-9500 software version: FPGA1: 2.08 or higher FPGA2: 3.00 or higher FPGA3:1.01 or higher SOFT: 3.00 or higher
FPGA1:1.00 or higher SOFT: 3.00 or higher	FA-95AIO	Supports FA-95AIO option Compatible with FA-9500 software version: FPGA1:2.28or higher FPGA2: 4.10 or higher FPGA3: 1.01 or higher SOFT: 4.00 or higher
FPGA1:1.00 or higher SOFT: 4.00 or higher	Logo Generator	Supports Logo Generator Compatible with FA-9500 software version: FPGA1:2.30 or higher FPGA2: 4.10 or higher FPGA3: 1.02 or higher

Version *1	Supported Feature/Option	Note
		SOFT: 5.00 or higher
FPGA1:1.00 or higher SOFT: 5.00 or higher	Added performance features	Supports S2016/VI/WSS AFD, CONV2 to Up/Down/Cross converter, and FA-95DE-E option enhanced encoding function. Compatible with FA-9500 software version: FPGA1: 3.14 or higher FPGA2: 5.02 or higher FPGA3: 1.02 or higher SOFT: 6.00 or higher
FPGA1:1.00 or higher SOFT: 5.01 or higher	-	Corrected improper AUDIO DELAY displayed after CONV DELAY ADJ is turned on. Compatible with FA-9500 software version: FPGA1: 3.14 or higher FPGA2: 5.02 or higher FPGA3: 1.02 or higher SOFT: 6.00 or higher
FPGA1:1.00 or higher SOFT: 6.00 or higher	FA-9520 FA-95ALA	Enabled control function for both FA-9520 and FA-9500. Compatible with FA-9500 software versions: FPGA1: 3.20 or higher FPGA2: 5.20 or higher FPGA3: 1.02 or higher SOFT: 8.00 or higher Compatible with FA-9520 software versions: FPGA1: 1.10 or higher FPGA2: 1.10 or higher FPGA3: 1.00 or higher SOFT: 2.00 or higher (in FA-9520 mode) SOFT: 8.00 or higher (in FA-9500 mode)




*1 Version information can be seen in the FA-95RU INFO menu (See section 6-1-2).

Refer to the Operation Manual of the connected FA-9500/FA-9520 for the software version verification procedure.




Precautions

Important Safety Warnings




[Power]

 Caution	Operate unit only on the specified supply voltage.
	Disconnect power cord by connector only. Do not pull on cable portion.
 Stop	Do not place or drop heavy or sharp-edged objects on power cord. A damaged cord can cause fire or electrical shock hazards. Regularly check power cord for excessive wear or damage to avoid possible fire / electrical hazards.


[Grounding]

 Caution	Ensure unit is properly grounded at all times to prevent electrical shock hazard.
 Hazard	Do not ground the unit to gas lines, units, or fixtures of an explosive or dangerous nature.
 Caution	Ensure power cord is firmly plugged into AC outlet.




[Operation]

 Hazard	Do not operate unit in hazardous or potentially explosive atmospheres. Doing so could result in fire, explosion, or other dangerous results.
 Hazard	Do not allow liquids, metal pieces, or other foreign materials to enter the unit. Doing so could result in fire, other hazards, or unit malfunction.
	If foreign material does enter the unit, turn power off and disconnect power cord immediately . Remove material and contact authorized service representative if damage has occurred.


[Transportation]

 Caution	Handle with care to avoid shocks in transit. Shocks may cause malfunction. When you need to transport the unit, use the original packing materials or alternate adequate packing.
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[Circuitry Access]

 A black circle with a white border containing a white lightning bolt and a white plug symbol.	<p>Do not remove covers, panels, casing, or access circuitry with power applied to the unit! Turn power off and disconnect power cord prior to removal. Internal servicing / adjustment of unit should only be performed by qualified personnel.</p>
 A black circle with a white border containing a white hand with a diagonal slash through it. Stop	<p>Do not touch any parts / circuitry with a high heat factor. Capacitors can retain enough electric charge to cause mild to serious shock, even after power is disconnected. Capacitors associated with the power supply are especially hazardous. Avoid contact with any capacitors.</p>
 A black triangle with a white border containing a white flame. Hazard	<p>Unit should not be operated or stored with cover, panels, and / or casing removed. Operating unit with circuitry exposed could result in electric shock / fire hazards or unit malfunction.</p>


[Potential Hazards]

 A black triangle with a white border containing a white lightning bolt. Caution	<p>If abnormal smells or noises are noticed coming from the unit, turn power off immediately and disconnect power cord to avoid potentially hazardous conditions. If problems similar to above occur, contact authorized service representative before attempting to again operate unit.</p>
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[Rack Mount Brackets, Ground Terminal, and Rubber Feet]

 A black circle with a white border containing a white exclamation mark. Caution	<p>To rack mount or ground the unit, or to install rubber feet, do not use screws or materials other than those supplied. Otherwise, it may cause damage to the internal circuits or components of the unit. If you remove the rubber feet attached on the unit, do not reinsert the screws securing the rubber feet.</p>
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[Consumables]

 A black triangle with a white border containing a white exclamation mark. Caution	<p>The consumables used in unit must be replaced periodically. For further details on which parts are consumables and when they should be replaced, refer to the specifications at the end of the Operation Manual. Since the service life of the consumables varies greatly depending on the environment in which they are used, they should be replaced at an early date. For details on replacing the consumables, contact your dealer.</p>
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Upon Receipt

Unpacking

FA-95RU units and their accessories are fully inspected and adjusted prior to shipment. Operation can be performed immediately upon completing all required connections and operational settings.

IMPORTANT
Verify the software version of your FA-9500/FA-9520 that can be seen in the "Software Version and Supported Options" on the inside front cover before starting the FA-95RU. If the software version of your FA-9500/FA-9520 is different from that shown as compatible with the FA-95RU, please contact your service agent or FOR-A representative. The FA-9500/FA-9520 version information can be seen in the UNIT Ver. menu of respective units.
This Operation Manual mainly describes the specific operation of the FA-95RU. Refer to the FA-9500/FA-9520 Operation Manual for VIDEO and AUDIO menus that appear differently according to the connected unit or unit mode.

Check your received items against the packing lists below.

ITEM	QTY	REMARKS
FA-95RU	1	
Rack Mount Brackets	1 set	EIA standard type (Including 4 screws.)
AC Cord	1 set	(Incl. ladder strap/retaining clip assembly)
Operation Manual	1	

Check

Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

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Rack Mounting

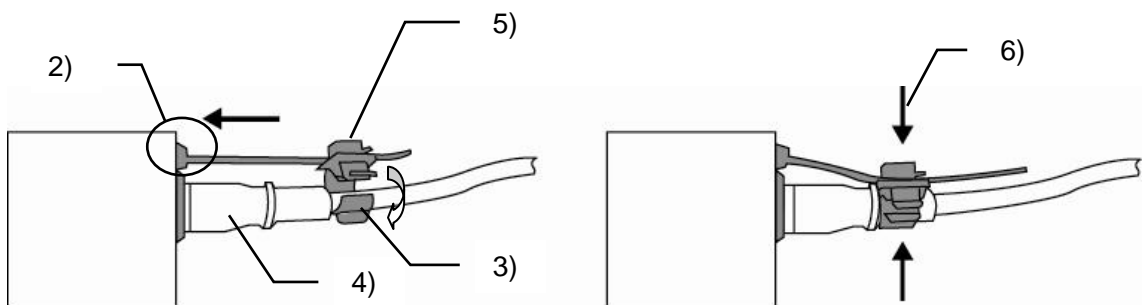
FA-95RU can be mounted to EIA standard rack units. When rack mounting a unit, remove the rubber feet and use the accessory rack mount brackets (rack ears).

Installing the AC Cord Retaining Clip

Secure the AC cord with the supplied ladder strap/retaining clip assembly to prevent accidental removal from the FA-9500.

◆ Installing the clip

- 1) Wrap the retaining clip around the AC cord. (with the anchor of the ladder strap toward the unit.)
- 2) Insert the anchor into the hole next to the AC IN socket.
- 3) Lightly fasten the clip around the AC cord.
- 4) Plug in the power cord.
- 5) Slide the clip on the ladder strap toward the plug.
- 6) Fasten the clip tightly.
- 7) Gently pull on the AC cord to ensure it is secured.



◆ Unplugging the AC cord

- 1) Push the tab on the retaining clip up to unfasten the clip.
- 2) Push the tab on the ladder strap up and slide the clip back.
- 3) Unplug the AC cord.

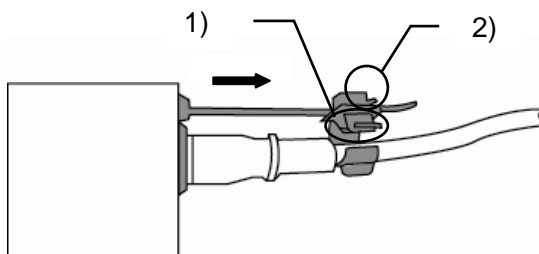


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1. Prior to Starting

1-1. Welcome

Congratulations! By purchasing FA-95RU Remote Control Unit you have entered the world of FOR-A and its many innovative products. Thank you for your patronage and we hope you will turn to FOR-A products again and again to satisfy your video and audio needs.

FOR-A provides a wide range of products, from basic support units to complex system controllers, which have been increasingly joined by products for computer video based systems. Whatever your needs, talk to your FOR-A representative. We will do our best to be of continuing service to you.

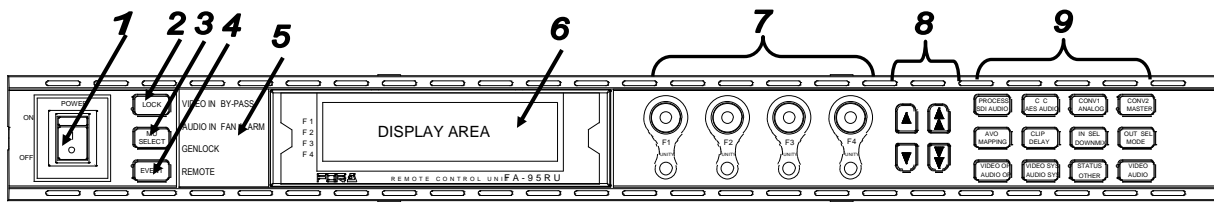
1-2. Features

The FA-95RU is a remote control unit that controls FA-9500/FA-9520 Frame Synchronizer units.

- Control over FA-9500/FA-9520 via ethernet
- Up to 100 FA-9500/FA-9520 units can be connected to be selected for control
- IP address FA-9500/FA-9520 selection and control
- Simultaneous control over one FA-9500/FA-9520 from five FA-95RU units
- Storage and recall of up to 100 events each for FA-9500 and FA-9520
- PC backup of event memory

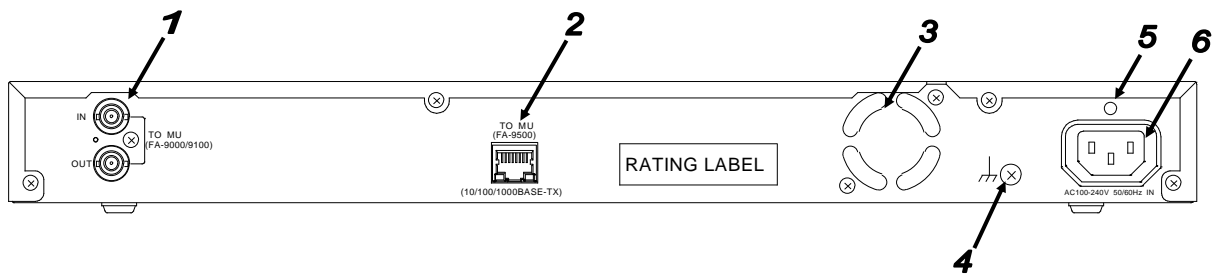
2. Panel Descriptions

2-1. Front Panel



No.	Name	Description	Ref.		
1	POWER switch	Used to turn the unit ON / OFF. Pressing the " " side turns on the power.	4-1		
2	LOCK button	Lit when pressed, and the buttons and controls on the front panel except this LOCK button are disabled. To enable the disabled buttons and controls, press and hold this button down for several seconds.			
3	MU SELECT button	Used to open an FA-9500/FA-9520 control selection menu.	6-1		
4	EVENT button	Used to save and load events.	7		
5	Status indicator	VIDEO IN	Lit green	An input signal is present in the connector selected in the menu.	
			Unlit	An input signal is not present in the connector selected in the menu.	
		AUDIO IN	Lit green	An audio signal is present.	
			Unlit	No audio signal is present.	
		GENLOCK	Lit green	A genlock signal input is present. (Unlit if SYNCHRO is set to INPUT. See FS MODE SET in the FA-9500/FA-9520 Operation Manual for details.)	
			Unlit	No genlock signal input is present.	
		REMOTE	Lit green	FA-9500/FA-9520 is/are connected.	5
			Unlit	No FA-9500/FA-9520 is connected.	
	BY-PASS	Lit red	In BY-PASS mode.		
		Unlit	In operation mode.		
	FAN ALARM	Lit red	Fan(s) on FA-95RU and/or FA-9500/FA-9520 have failed. Turn the power of the unit OFF, and replace the failed fans if needed.	6-1-2,	
		Unlit	All fans are operating normally.	6-1-2,	
6	Menu display	Used to display menus and make operational settings	4-2		
7	Controls (F1-F4) UNITY buttons	Used to change operational settings. Turn and select values. The Unity buttons return the settings to the default values.	4-2		
8	Arrow buttons	Single-arrow buttons	Used to move between parameters. (Indicators light up to indicate the accessible direction.)	4-2	
		Double-arrow buttons	Used to move between menus (same as the menu buttons). (Indicators light up to indicate the accessible direction.)	4-2	
9	Menu buttons	Used to select menus.	4-2		

2-2. Rear Panel



No.	Name	Description	Ref.
1	TO MU (FA-9000/9100)	Used to control an FA-9000/9100 series unit. Not functioning yet.	
2	TO MU (FA-9500)	A LAN connector for FA-9500/FA-9520 control Set the unique IP address and connect to the network.	3, 8-2
3	FAN	Used to air-cool the unit to prevent overheating. Do not block the ventilation with other equipment or objects. The FAN ALARM on the front panel lights up if the fan fails.	2-1 #5 6-1-2
4	Ground Terminal	Used to ground the unit to protect operators against static electricity and electrical shock.	
5	AC cord retaining clip anchor hole	Used to anchor the AC cord retaining clip.	
6	AC IN	Used to connect the unit to an AC power source. (AC100V-240V 50/60Hz)	

2-3. Internal Settings

IMPORTANT

Note that internal switch settings should not be changed from factory defaults. If you have accidentally changed the settings, return them to the factory default settings as shown in this section.

Be sure to have qualified technical personnel perform the settings and adjustments in the interior, or contact your dealer.

CAUTION

Do not access any internal cards while the unit is powered ON. Always power OFF all connected units / disconnect power cords prior to accessing the interior. To protect boards from electrostatic damage, do not touch the components on the boards.

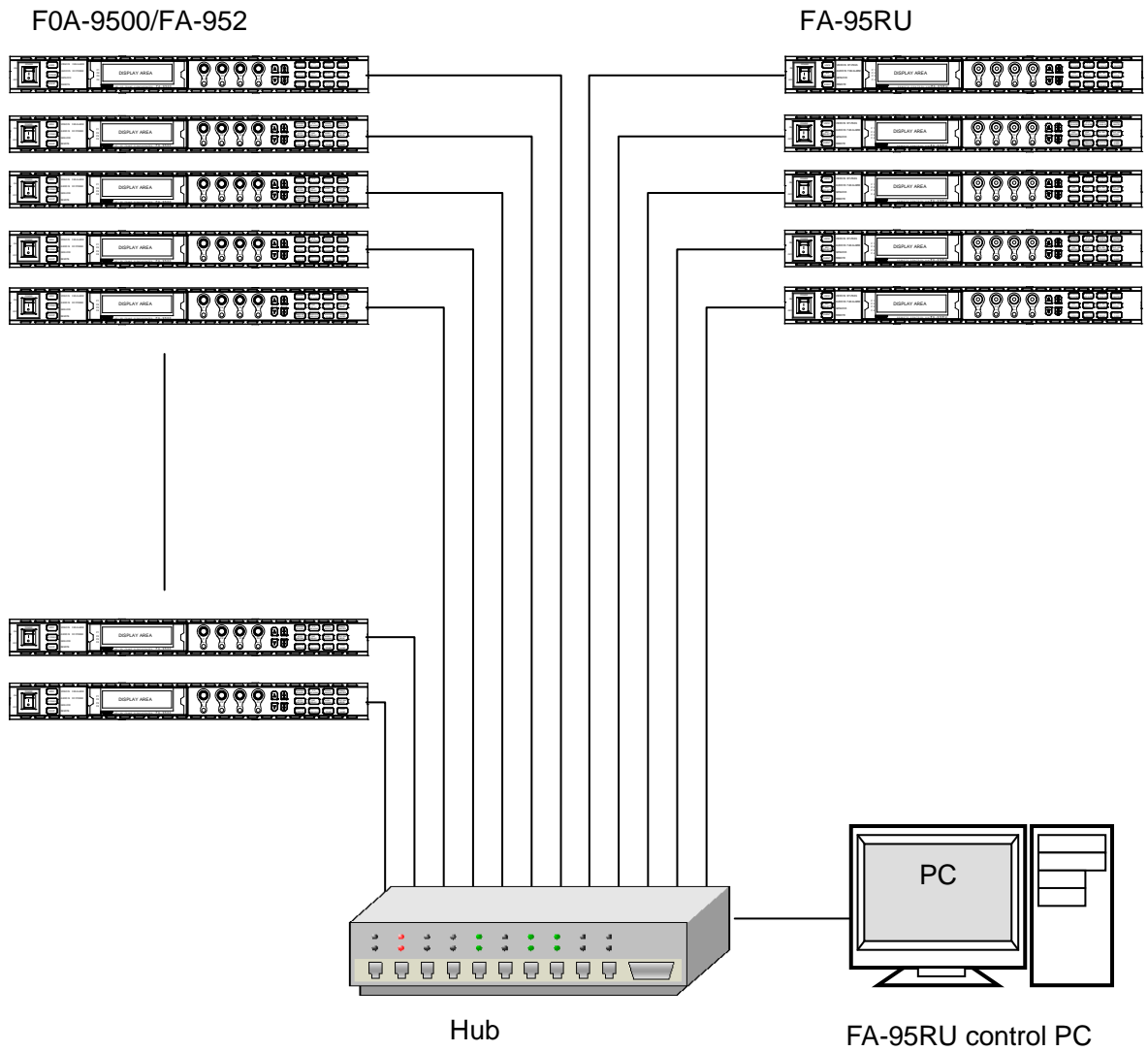
2-3-1. Dipswitch Settings

The following settings can be made at the dipswitches on MAIN CARD inside the unit.

◆ Dipswitch S3 Settings

Pin No.	Default setting	Setting
1	OFF	Do not change.
2	OFF	Do not change.
3	OFF	Do not change.
4	OFF	Do not change.
5	OFF	Do not change.
6	OFF	Do not change.
7	OFF	Do not change.
8	OFF	Do not change.

3. Connections



Specify unique IP addresses for all devices connected to the network.
See section 8-2. Network Settings for details on setting IP addresses.
One FA-9500/FA-9520 unit can be controlled by up to 5 units of FA-95RU maximum.

4. Front Panel Operations

4-1. Powering ON

Turn the power ON after all system connections are complete. The indicators on the front panel light up during startup. When startup is complete, the indicators will go off. The UNIT ID SEL menu will appear if no FA-9500/FA-9520 is connected.

UNIT ID SEL	8 0 1
MU ID:	1
IP:	192.168.0.1
NAME:	FA-9500/FA-9520
F3:	SET
F4:	CANCEL

IMPORTANT

Operation by the FA-95RU is ineffective, except for the ability to change its own settings, unless it is connected to an FA-9500/FA-9520. To enable operation by the FA-95RU, select and connect an FA-9500/FA-9520 to be controlled. See section 5. "Establishing Connection with the FA-9500/FA-9520" for details on connecting FA-9500/FA-9520 units.

4-2. Basic Operations

This section explains how to select menus and parameters.

Most of the menus can be controlled by these basic operations. However, some menus work differently. See the descriptions given for each menu for details.

The FA-95RU has two menu operation modes: NORMAL mode, in which setting changes immediately take effect, and LIVE SAFE mode, in which some settings request confirmation before changes take effect. NORMAL and LIVE SAFE modes can be selected in the FRONT OPERATION menu (sec. 6-2-1). Factory default is NORMAL mode. Menus that request setting confirmation are shown in the menu list in "Menu Buttons" in the FA-9500/FA-9520 Operation Manual with a black circle (●).

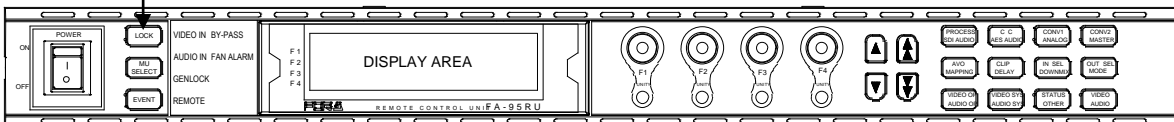
IMPORTANT

Make sure that the LOCK indicator on the front panel is turned off before starting an operation with the connected FA-9500 or FA-9520 in FA-9500 mode. If the LOCK indicator is lit, all operations on the front panel except the LOCK button are disabled. Press and hold the LOCK button to enable operation.

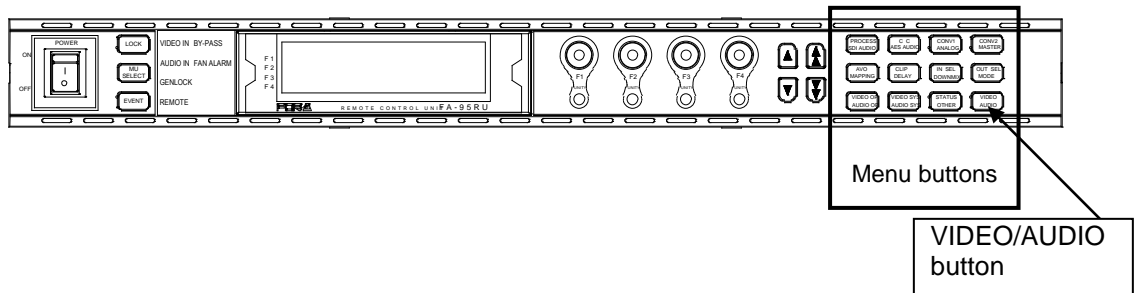
See section 4-2-7. "Operation Lock Function (FA-9520)" for the lock function in the FA-9520 in FA-9520 mode that is different from the above.

The description in Basic Operation starts based on an established connection. To establish a connection with the FA-9500/FA-9520, see section 5. "Establishing Connection with the FA-9500/FA-9520".

LOCK button



4-2-1. Accessing Menus

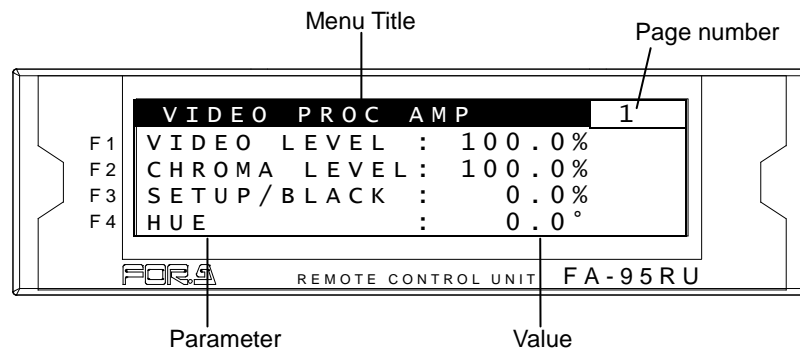
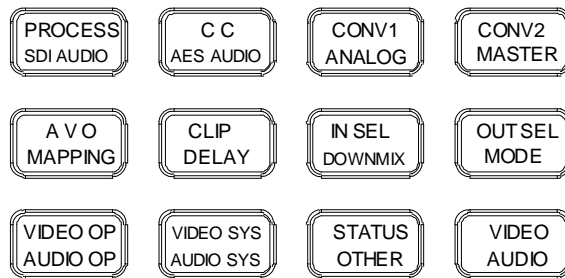


Every press of the VIDEO/AUDIO button alternates the menu button assignments between video menus and audio menus. The button indicators light up green when the buttons are accessible to video menus that are indicated on the top row of each menu button. They light up orange when they are accessible to audio menus that are indicated on the bottom row of each menu button.

Pressing a menu button displays the corresponding menu on the menu display. Menus are divided into categories. The single-arrow buttons allow you to move between menus if the selected menu button has multiple menu pages in the category. The single-arrow button lights up when there are more menus to be accessed in the direction. If the single-arrow button is unlit, the direction is not accessible.

The double-arrow buttons allow you to go to the first menu of the menu button.

◆ Menu Buttons



In the example above, the PROCESS/SDI AUDIO button has been pressed, so that the VIDEO PROC AMP menu is displayed.

4-2-2. Arrow Buttons

◆ Double-arrow buttons (up and down)

<NORMAL mode>

The double-arrow buttons allow you to go to the first menu of the video or audio menus that are assigned to the respective menu buttons. These buttons can also navigate STATUS/OTHER video related menus (designated by “◇” in the menu list).

<LIVE SAFE mode>

Button functions are the same as NORMAL mode, however, double-arrow buttons are inoperative while single-arrow buttons are blinking (indicating the FA-9500/FA-9520 is in the setting change confirming state, because a parameter in one of the menus requiring a setting change confirmation has been changed).

◆ Single-arrow buttons (up and down)

<NORMAL mode>

The single-arrow buttons allow you to move between menus within the menus that are assigned to respective menu buttons.

When it reaches the last menu, the light goes off.

<LIVE SAFE mode>

Single-arrow buttons blink when a parameter in one of the menus requiring a setting change confirmation is changed. To confirm the change, press the single down arrow button. Pressing the single up arrow button cancels the change, and the parameter before change will be displayed.

While single-arrow buttons are blinking, all buttons except single-arrow buttons are disabled until either single-arrow button is pressed.

Menus that request setting confirmation are shown with a black circle (●) in the menu list in the FA-9500/FA-9520 Operation Manual.

4-2-3. Consecutive Viewing of Settings

<NORMAL mode>

While a menu button is turned on, the menu display will be in consecutive display mode when both single (up and down) arrow buttons are pressed simultaneously. Both single arrow buttons blink when they are in consecutive display mode. To exit the mode, simultaneously press both arrow buttons again. Then arrow buttons will stop blinking.

The single down and up arrow buttons, while in consecutive display mode, can consecutively display all menus in which menu list settings can be changed, from the first to last or last to first menu item. Meanwhile, holding down the single down or up arrow button also allows you to consecutively view menus.

<LIVE SAFE mode>

Button functions are the same as NORMAL mode, however, consecutive display mode is inoperative while single-arrow buttons are blinking (indicating the FA-9520 is in the setting change confirming state, because a parameter in one of the menus requiring a setting change confirmation has been changed). Consecutive display becomes operable when the change is either confirmed or canceled.

Order of Consecutive Menu Display

◆ VIDEO Menus (Lit green)

The single down-arrow button consecutively displays menu pages from VIDEO PROC AMP of PROCESS to CONV2 ANC OUT1 of STATUS in the menu list in the FA-9500/FA-9520 Operation Manual. On the other hand, the single up-arrow button consecutively displays menu pages from CONV2 ANC OUT1 of STATUS to VIDEO PROC AMP of PROCESS in the menu list.

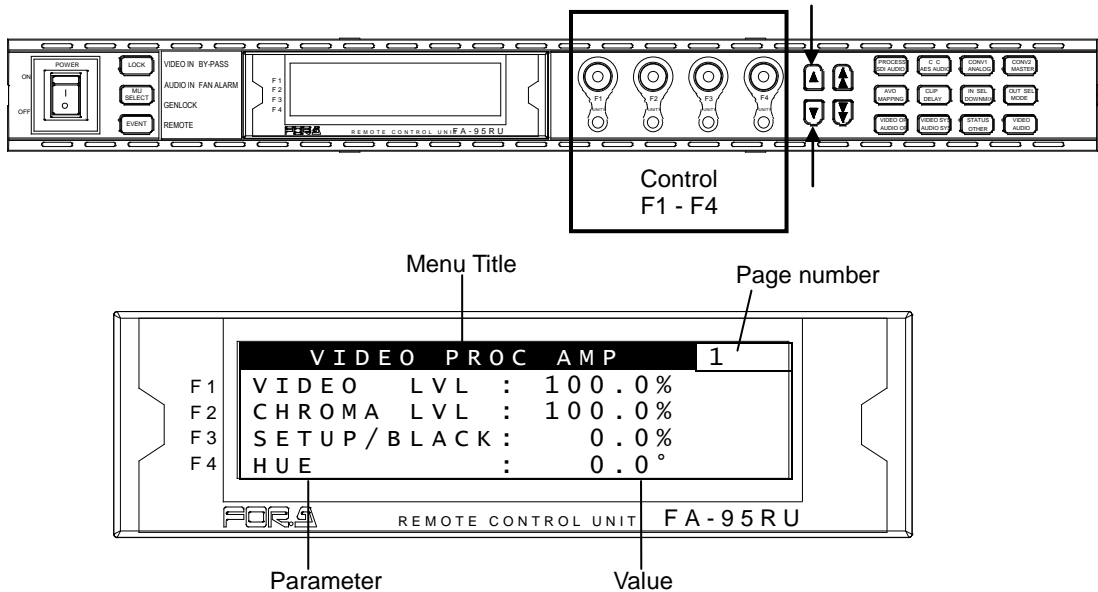
◆ **AUDIO Menus (Lit orange)**

The single down-arrow button consecutively displays menu pages from SDI AUDIO GAIN of SDI AUDIO to SOFT OPTION2 of OTHER in the menu list in the FA-9500/FA-9520 Operation Manual. On the other hand, the single up-arrow button consecutively displays menu pages from SOFT OPTION2 of OTHER to SDI AUDIO GAIN of SDI AUDIO in the menu list.

- * The EVENT button-assigned menus cannot be consecutively viewed. The consecutive display mode is not supported for EVENT menus.
- * While the menu display is in consecutive display mode, pressing the EVENT button cancels the mode.

4-2-4. Changing Setting Values

Once the desired menu is displayed, use the controls (F1-F4) to change the setting values.

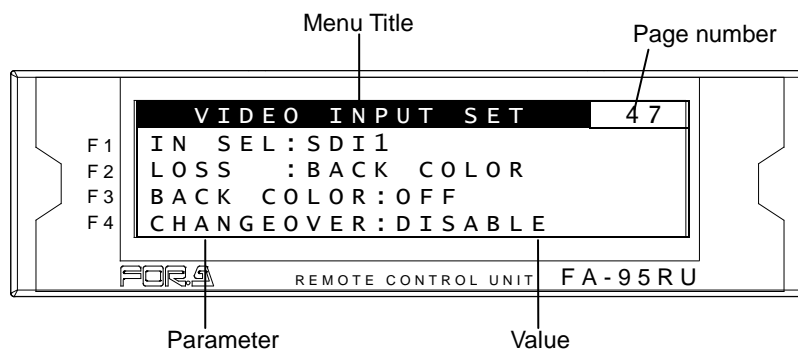


<NORMAL mode>

In the above example, the PROCESS/SDI AUDIO button has been pressed while the menu buttons are turned to video menus (lit green) by pressing the VIDEO/AUDIO, so that the VIDEO PROC AMP menu is displayed.

(If the LEDs around control F1 through 4 knobs are lit, the setting value corresponding to the lit control knob can be changed.)

If you want to change the VIDEO LEVEL setting value, turn F1. To change the CHROMA LEVEL setting value, turn F2. For SETUP/BLACK, turn F3, and for HUE turn F4. To go to other menu assigned to the menu button, press the single-arrow down button. To return to the previous menu, press the single-arrow up button.



<LIVE SAFE mode>

Menus that do not request a setting change confirmation (such as VIDEO PROC AMP) are used the same as in NORMAL mode.

Menus that request a setting change confirmation (such as VIDEO INPUT SET) will be in the setting change confirming state when the parameter is changed.

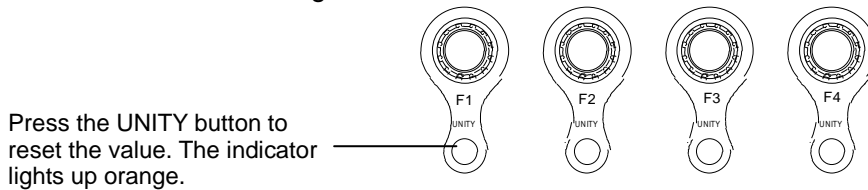
In the above example, pressing the IN SEL/DOWNMIX button while the button is in VIDEO menu selection mode (lit green) will display the VIDEO INPUT SET menu. To change the IN SEL setting, turn F1. Turn F2 for the LOSS setting, and F3 for the BACK COLOR setting. If any setting is changed, single-arrow buttons and the control knob for the setting that has changed will blink indicating the setting change confirming state. Pressing the single down arrow button confirms the change and LEDs stop blinking, then light. Pressing the single up arrow button cancels the change, the setting returns to before the change, and LEDs stop blinking, then light.

While the FA-9520 is in a setting change confirming state, all buttons except single-arrow buttons, control knobs F1 to F4 and their Unity buttons are disabled. To go to other menus, press either single-arrow button to complete the confirmation.

4-2-5. Resetting to Default

<NORMAL mode>

The UNITY indicator light goes off when the setting value is changed from the default value. Pressing the UNITY button while the light is off returns the corresponding setting value to the default value. Then the light goes off. Pressing the button again returns the value to the previous value before resetting to the default value.



<LIVE SAFE mode>

The UNITY indicator light goes off when the setting value has changed from default. Pressing the UNITY button while the light is off returns the corresponding setting value to default, and single-arrow buttons and the LED around the control knob above the UNITY button blink in the setting change confirming state. Pressing the single down arrow button will resets the value to default, and the UNITY indicator light turns on. Pressing the single up arrow button cancels the reset, the setting returns to the value before it was reset, and the UNITY indicator light goes off.

4-2-6. Selecting 2-Channel Frame Synchronizers (FA-9520)

After establishing a connection with an FA-9520, press the MU SELECT button next to the power switch to open the FS SELECT menu as shown below.

NOTE

See section 5. "Establishing Connection with the FA-9500/FA-9520" for details on the connection procedure.

FS SELECT	800
MODE: FS1	
LINK: DISABLE	

Parameter	Default	Setting range	Description
MODE	FS1	FS1 FS2	Allows you to select which FS1 or FS2 settings to change for FS1/FS2-selectable menus. * FS1/FS2-selectable menus are shown in section 4-2-2. "Menu Buttons" in the FA-9520 (FA-9520 Mode) Operation Manual. The selected FS1 or FS2 will be displayed in place of the menu page for 3 seconds after an FS1/FS2 selection change.
LINK	DISABLE	DISABLE ENABLE	DISABLE: Allows you to separately change FS1 and FS2 settings. ENABLE: Allows you to simultaneously change the same amount of setting values for FS1 and FS2 by turning the control knob.

NOTE

Pressing the MU SELECT button while opening the FS SELECT menu allows you to return to the previous menu before the FS SELECT menu was opened.

If either FS1 or FS2 operation is locked, MODE and LINK settings are disabled, and the menu display appears as shown below. See section 4-2-7. "Operation Lock Function (FA-9520)" for details.

FS SELECT	800
MODE: UNADJUSTABLE	
FS2 CHOSEN	
FS1: LOCK	
FS2: UNLOCK	

IMPORTANT

When LINK is set to ENABLE in the FA-95RU, the connected FA-9520 will also be in LINK mode, and FA-95RU units that are connected to the FA-9520 will also be in LINK mode.

LINK cannot be set to ENABLE under the following conditions:

1. Either FS1 or FS2 is set to LOCK.
(See section 4-2-7. "Operation Lock Function (FA-9520)" for details.)
2. Either FS1 or FS2 Color Corrector mode is set to Sepia.
(See section 5-2-4. "COLOR CORRECT (C.C.) in the FA-9520 Operation Manual for details.)
3. AVO mode is not OFF.
(See section 5-4-1. AVO SETTING" in the FA-9520 Operation Manual for details.)

◆ **Example 1: Setting VIDEO PROCESS AMP for FS1**

FS SELECT	800
MODE: FS1	
LINK: DISABLE	

MU
SELECT

1. Press the MU SELECT button next to the power switch to open the FS SELECT menu.
2. Set MODE to FS1, and LINK to DISABLE.

VIDEO PROC AMP	1
VIDEO LEVEL : 100.0%	
CHROMA LEVEL : 100.0%	
SETUP/BLACK : 0.0%	
HUE : 0.0°	

Menu button

PROCESS
SDI AUDIO

3. Press the PROCESS/SDI AUDIO button to open the VIDEO PROCESS AMP menu. Press the FS1/LOCK button for it to light green.
4. Turn F1 to F4 control knobs to change FS1 settings.

◆ **Example 2: Setting VIDEO PROCESS AMP for FS2**

FS SELECT	800
MODE: FS2	
LINK: DISABLE	

MU
SELECT

1. Press the MU SELECT button next to the power switch to open the FS SELECT menu.
2. Set MODE to FS2, and LINK to DISABLE.

VIDEO PROC AMP	1
VIDEO LEVEL : 100.0%	
CHROMA LEVEL : 100.0%	
SETUP/BLACK : 0.0%	
HUE : 0.0°	

Menu button

PROCESS
SDI AUDIO

3. Press the PROCESS/SDI AUDIO button to open the VIDEO PROCESS AMP menu. (If the VIDEO PROCESS AMP menu was open before opening the FS SELECT menu, pressing the MU SELECT button returns to the VIDEO PROCESS AMP menu.)
4. Turn control knobs F1 to F4 to change FS2 settings.

◆ **Example 3: Setting VIDEO PROCESS AMP for FS1 and FS2 simultaneously**

FS SELECT	800
MODE: FS1	
LINK: ENABLE	

MU
SELECT

1. Press the MU SELECT button next to the power switch to open the FS SELECT menu.
2. Set MODE to FS1, and LINK to ENABLE.
(If LINK cannot be set to ENABLE, refer to section 4-2-6. "Selecting 2-Channel Frame Synchronizers (FA-9520)".)

VIDEO PROC AMP	FS1
VIDEO LEVEL : 100.0%	
CHROMA LEVEL : 100.0%	
SETUP/BLACK : 0.0%	
HUE : 0.0°	

Menu button

PROCESS
SDI AUDIO

3. Press the PROCESS/SDI AUDIO button to open the VIDEO PROCESS AMP menu.
4. Turn control knobs F1 to F4 to change setting values. The same amount of setting values are changed for FS1 and FS2 simultaneously.

- To exit simultaneous setting mode, press the MU SELECT button, then set LINK to DISABLE.

NOTE

In FS1/FS2 simultaneous setting mode, each control knob applies identical adjustment values to both FS1 and FS2.

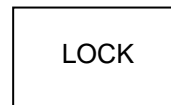
Menus supported for simultaneous setting mode are shown with “Ⓢ” in the menu list in section 4-2-2. “Menu Buttons” in the FA-9520 Operation Manual.

4-2-7. Operation Lock Function (FA-9520)

FA-95RU front panel button operation can be disabled for all or either FS1 or FS2 operation. The LOCK button allows you to set the operation lock function.

```

FRONT LOCK      8 0 4
FS1: UNLOCK
FS2: UNLOCK
PRESS F3 UNITY
TO LOCK FRONT
  
```



Parameter	Default	Setting range	Description
FS1	UNLOCK	UNLOCK LOCK	UNLOCK: FS1 settings can be changed. LOCK: FS1 settings are disabled.
FS2	UNLOCK	UNLOCK LOCK	UNLOCK: FS2 settings can be changed. LOCK: FS2 settings are disabled.

Complete settings for FS1 and FS2, then press the F3 Unity button for the settings to take effect.

The LOCK button lights green if either FS1 or FS2 is set to LOCK.

The LOCK button lights orange if both FS1 and FS2 are set to LOCK. In this case, all buttons on the front panel are disabled except the LOCK button.

```

FRONT LOCK      8 0 4
FS1: LOCK
FS2: LOCK
TO UNLOCK FRONT,
HOLD DOWN LOCK SW
  
```

Press and hold down the LOCK button for at least 3 seconds while it is lit orange to unlock front panel buttons.

IMPORTANT

If either FS1 or FS2 is set to LOCK, the LINK setting under FS SELECT menu will be automatically set to DISABLE.

5. Establishing Connection with the FA-9500/FA-9520

FA-95RU can control the FA-9500/FA-9520 when a connection is established.

There are two ways to connect to the FA-9500/FA-9520; one is in Unit ID Selection mode, which allows you to connect an FA-9500/FA-9520 by selecting an ID from among 100 ID numbers, and the other is in IP Address Selection mode, which allows you to connect an FA-9500/FA-9520 by specifying an IP address.

5-1. Unit ID Selection Mode

Pressing the MU SEL button opens the UNIT ID SEL menu.

(If the FA-95RU is connected to an FA-9520, the FS SELECT menu will be displayed. Press the single down-arrow button to open the UNIT ID SEL menu.)

UNIT ID SEL	801
MU ID: 1	
IP: 192.168.0.10	
NAME: No Name	
F3: SET F4: CANCEL	

MU
SELECT

Turn F1 and select the FA-9500/FA-9520 to be connected from MU IDs 1 through 100.

The IP address and unit name will be displayed for each MU ID. (See section 8-4. "Unit ID Assignment" for details on IP address and unit name settings.)

Press the UNITY button under F3 (SET) to establish a connection with the selected FA-9500/FA-9520 using F1.

The CONNECT STATE menu (5-3) appears when connection is initiated.

To cancel the selection, press the UNITY button under F4 (CANCEL). Cancelling the connection returns the settings to their last state before change.

Select DISCONNECT by F1 and press the UNITY button under F3 to disable the connection of FA-95RU to any FA-9500/FA-9520. (The connected FA-9500/FA-9520 will also be disconnected.)

"MU ID: IP ADDR SEL" indicates the FA-9500/FA-9520 is connected via IP Address Selection mode (5-2. IP Address Selection Mode).

5-2. IP Address Selection Mode

Press the MU SELECT button. The UNIT ID SEL menu appears. Then, press the single down-arrow button. The IP ADDR SEL menu appears.

IP ADDR SEL	802
IP: 192.168.0.10	
NAME: FA-9520	
F3 UNITY SET	
F4 UNITY CANCEL	

MU
SELECT

Enter the IP address of the FA-9500/FA-9520 to be connected using control knobs F1 to F4.

(If the IP address assigned as in section 8-4. "Unit ID Assignment" is selected, the assigned unit name will be displayed under NAME.)

Press the UNITY button under F3 to establish connection with the FA-9500/FA-9520 of the selected IP address. The CONNECT STATE menu (5-3) will then appear. To cancel the selection, press the UNITY button under F4 (CANCEL). Cancelling the connection returns the settings to their last state before change.

The MU ID name will be displayed under NAME if there is a name assigned to the IP address.

5-3. CONNECT STATE

Connections with FA-9500/FA-9520 units can be checked in the CONNECT STATE menu.

CONNECT STATE	803
IP: 192.168.0.10	
STATE: CONNECTED	
ID: FA-9500	
MU: FA-9500	

Menu button

MU SELECT

Item	Description
IP	Shows the IP address of the connected FA-9500/FA-9520.
STATE	<p>DISCONNECT: Connection is disabled.</p> <p>CONNECTED: The FA-9500/FA-9520 of the selected IP address is connected.</p> <p>NO CONNECTION: Connection with the selected FA-9500/FA-9520 could not be established.</p> <p>OVERLIMIT: A maximum 5 FA-9500/FA-9520 units are already connected. No more units can be connected.</p>
ID	Shows the unit name assigned in Unit ID Assignment (section 8-4). NO NAME is indicated if a unit name is not assigned.
MU	Shows the unit name assigned by and in the FA-9500/FA-9520 itself. ^{*1} "MU IS LOCAL MODE" indicates that the connected FA-9500/FA-9520 is set to LOCAL MODE. The FA-95RU cannot control the FA-9500/FA-9520 that is set to LOCAL mode. To enable control, set the FA-9500/FA-9520 to REMOTE mode. ^{*2}

*1 See "Utility Settings" [Set Event Name] in the FA-9500/FA-9520 Operation Manual for details on name assignments.

*2 See "CONTROL SETTING" in the FA-9500/FA-9520 Operation Manual for details on LOCAL/REMOTE settings.

6. Changing and Viewing FA-95RU Settings

6-1. MU SELECT Button Menus

Hold down the MU SELECT button to open menus for changing front panel settings and viewing version information as shown below. (Press the MU SELECT button again to return to the previous state.) While the front panel setting menus (6-1-1 FRONT PANEL SET to 6-1-3 FA-95RU NET WORK INFO) are enabled, all front panel buttons except LOCK and arrow buttons are disabled. To enable the buttons, press the MU SELECT button again.

6-1-1. FRONT PANEL SET

FRONT PANEL SET		8 1 5
VFD BRIGHT	: 50	
VFD AUTO OFF	: DISABLE	
LED BRIGHT	: LEVEL 4	
BUZZER	: ENABLE	

Menu button

MU
SELECT

Parameter	Default	Setting range	Description
VFD BRIGHT	50	10 - 50	Selects the brightness of the front display panel. 10 - 50: Dark to bright
VFD AUTO OFF	DISABLE	DISABLE 5 min 10 min 30 min	Selects a length of non-operating time until VFD goes off. DISABLE: VFD will not go off.
LED BRIGHT	LEVEL 4	LEVEL 1 - 8	Selects the brightness of the front LED. LEVEL 1 - 8: Dark to bright
BUZZER	ENABLE	DISABLE ENABLE	DISABLE: Disable the buzzer function ENABLE: Enable the buzzer function

6-1-2. FA-95RU INFO

Shows the FA-95RU version information and the state of cooling fans.

FA - 9 5 R U I N F O		8 2 5
FPGA	: 01.00	
SOFT	: 01.00	
FAN	: NORMAL	

6-1-3. FA-95RU NET WORK INFO

Shows the FA-95RU network settings.

R U N E T W O R K I N F O		8 2 6
IP	: 192.168.0.100	
SUB	: 255.255.255.0	
GW	: 0.0.0.0	

Parameter	Description
IP	Shows the FA-95RU IP address settings.
SUB	Shows the FA-95RU subnet mask settings.
GW	Shows the FA-95RU gateway settings.

See section 8-2. Network Settings for detail on the FA-95RU network settings.

6-2. Other Settings & Information (STATUS/OTHER)

Menus that can be accessed from Menu buttons in the FA-95RU are common with FA-9500/FA-9520 except following menus that can be accessed using the STATUS/OTHER menu button and arrow buttons.

6-2-1. FRONT OPERATION

FRONT OPERATION	294
MODE : NORMAL	

Menu button

STATUS OTHER

* Menu page number is 294 when an FA-9520 (in FA-9520 mode) is connected. It changes to 196 when an FA-9500 or FA-9520 (in FA-9500) mode is connected.

Parameter	Default	Setting range	Description
MODE	NORMAL	NORMAL LIVE SAFE	Allows you to select a front panel operation mode for the FA-95RU. NORMAL: Changes made by control knobs F1 to F4 will be applied immediately to the unit. LIVE SAFE: Requires confirmation before control knob changes are applied. *

* Whenever a change is made by control knobs F1 to F4, the single-arrow buttons (up and down) and the LED around the control knob of the changed parameter blink confirming the change. Pressing the single down arrow button confirms the change and the control knob LED lights. Pressing the single up arrow button cancels the change and everything reverts to the previous state. Refer to section 4. "Front Panel Operations" for details.

6-3. FA-9500 / FA-9520 Ver.

Displays the version information on the connected FA-9500/FA-9520.

FA-9500 Ver.	298
FPGA1 : 01.00	
FPGA2 : 01.00	
FPGA3 : 01.00	
SOFT : 01.00	

Menu button

STATUS OTHER

Parameter	Description
FPGA1	Shows the FPGA1 version.
FPGA2	Shows the FPGA2 version.
FPGA3	Shows the FPGA3 version.
SOFT	Shows the software version of the FA-9500/FA-9520(in FA-9500 mode).

FA-9520 Ver.	298
FPGA1 : 01.00	
FPGA2 : 01.00	
FPGA3 : 01.00	
SOFT : 01.00	

Parameter	Description
FPGA1	Shows the FPGA1 version.
FPGA2	Shows the FPGA2 version.
FPGA3	Shows the FPGA3 version.
SOFT	Shows the software version of the FA-9520 (in FA-9520 mode).

7. Event Memory

The FA-95RU can store and recall 100 event memories for an FA-9500/FA-9520 (in FA-9500 mode) and FA-9520 (in FA-9520 mode) respectively. It can also control event memories in the connected FA-9500/FA9520.

Every press of the EVENT button alternates the menus: EVENT LOAD (lit green), EVENT SAVE (lit red), and EVENT SETUP(lit orange). To go to the desired page, press the EVENT button a few times, or press the EVENT button once and the up or down single arrow button to move between EVENT pages.

7-1. EVENT LOAD

EVENT LOAD		191
NO.	:	DEFAULT
MODE	:	LOAD ALL
LOAD START	:	F3 UNITY
UNIT	:	FA-95RU

Menu button

EVENT

Parameter	Default	Setting range	Description
NO.		DEFAULT ^{*1} EVENT 1 – 100 ^{*2}	Allows you to select the number of an event you want to load.
MODE ^{*3}	LOAD ALL	LOAD ALL LOAD FS1 ONLY ^{*4} LOAD FS2 ONLY ^{*4}	Allows you to select an event loading mode. LOAD ALL: Allows you to load all settings stored in the selected event. LOAD FS1 ONLY: Allows you to load FS1 settings stored in the selected event. LOAD FS2 ONLY: Allows you to load FS2 settings stored in the selected event.
LOAD START F3 UNITY	-	-	Loads the event that is selected under NO. when the F3 UNITY button is pressed.
UNIT	FA-95RU	FA-95RU FA-9500 FA-9520	Allows you to select whether to recall an event stored in the FA-95RU, FA-9500 or FA-9520. FA-95RU: Allows you to recall an event stored in the FA-95RU. FA-9500/FA-9520: Allows you to recall an event stored in the FA-9500 or FA-9520.

^{*1} DEFAULT recalls the default settings.

^{*2} If FA-95RU is selected under UNIT, event names can be set for events 1 through 100 via the web browser. See section 8-5. “Event Naming” for details. The default event names are EVENT 1 through EVENT 100.

If FA-9500 is selected under UNIT, event names set in the FA-9500 or FA-9520 in FA-9500 mode will be displayed. See the FA-9500 or FA-9520 (FA-9500 Mode) Operation Manual for details.

If FA-9520 is selected under UNIT, event names set in the FA-9520 in FA-9520 mode will be displayed. See the FA-9520 (FA-9520 Mode) Operation Manual for details.

^{*3} MODE will be displayed if an FA-9520 in FA-9520 mode is connected.

^{*4} Only the FS1 or FS2 settings that are shown with ○ or ⊙ in the menu list in section “Menu Buttons” in the FA-9500/FA9520 Operation Manual, and can be respectively set for FS1 and FS2. Other settings will always be loaded regardless of the selected loading mode.

7-2. EVENT SAVE

EVENT SAVE	192
NO.: EVENT1	
LOAD START F2 UNITY	
UNIT: FA-95RU	

Menu button

EVENT

Parameter	Default	Setting range	Description
NO.	EVENT 1	EVENT1 - 100 *1	Allows you to select the number of an event you want to save.
SAVE START F2 UNITY	-	-	Saves the event that is selected under NO. when the F2 UNITY button is pressed.
UNIT	FA-95RU	FA-95RU FA-9500 FA-9520	Allows you to select the unit to save the event to. FA-95RU: Allows you to save the event to the FA-95RU event memory. FA-9500/FA-9520: Allows you to save the event to the FA-9500/FA-9520 event memory.

*1 If FA-95RU is selected under UNIT, event names can be set for events 1 through 100 via the web browser. See section 8-5. "Event Naming" for details. The default event names are EVENT 1 through EVENT 100.

If FA-9500 is selected under UNIT, event names set in the FA-9500 or FA-9520 in FA-9500 mode will be displayed. See the FA-9500 or FA-9520 (FA-9500 Mode) Operation Manual for details.

If FA-9520 is selected under UNIT, event names set in the FA-9520 in FA-9520 mode will be displayed. See the FA-9520 (FA-9520 Mode) Operation Manual for details.

7-3. EVENT SETUP

EVENT SETUP	193
START: LAST SETTING	

Menu button

EVENT

Parameter	Default	Setting range	Description
START	LAST SETTING	LAST SETTING VIDEO FORMAT DEFAULT EVENT1 - EVENT100 *1	Selects an event you want to load at startup. LAST SETTING: Loads the last settings that are used before startup. VIDEO FORMAT: Loads the settings that are stored in event memory for the last format that is detected before startup. DEFAULT: Resets all settings to the default settings at startup. EVENT1 - 100: Loads the selected event memory among event memory settings 1 through 100.

*1 Recalls the events stored in the connected FA-9500/FA-9520.

7-4. Parameters That Are Not Stored in Event Memories

The following parameters are not stored in event memories for FA-9500/FA-9520 (FA9500 mode).

DISABLE/ENABLE settings of CHANGEOVER in the VIDEO INPUT SET menu.

ON/OFF settings of FREEZE in the FREEZE SET menu.

ON/OFF settings of MASTER MUTE in the MASTER OUT GAIN Setting (MASTER) menu.

All settings in the EVENT SETUP menu (7-3).

All settings in the Other Settings & Information (OTHER) menu.

All settings in the Various Signal Status Display (STATUS) menu.

Unit Name settings in the Event Control menu.

All settings under Network Settings.

All settings in the Establishing Connection with the FA-9500/FA-9520 menu (5).

All settings in the LOUDNESS MEASUREMENT menu.

ON/OFF settings of CONTROL in the LOUDNESS CONTROL ENABLE menu.

All settings in the WEB Browser Settings menu (8).

The following parameters are not stored in event memories for FA-9520 (FA9520 mode).

ON/OFF settings of FREEZE in the FREEZE SET menu.

All settings in the EVENT SETUP menu (7-3).

All settings in the Other Settings & Information (OTHER) menu.

All settings in the Various Signal Status Display (STATUS) menu.

All settings under Network Settings.

All settings in the LOUDNESS MEASUREMENT menu.

ON/OFF settings of CONTROL in the LOUDNESS CONTROL ENABLE menu.

* Refer to the FA-9500/FA9520 Operation Manual for details on all above settings that are not given section numbers in parentheses.

7-5. Note on Event Memory Operation

Do not power off the unit while saving an event. The event may not be properly stored.

The FA-95RU periodically checks and saves changes.

Wait at least 5 seconds after changing settings before turning the power off. We also recommend saving important data.

See sections 8-7-1 “Configuration Data Backup”, and 8-7-2 “Event Data Backup (FA-9500/FA9520)” for details on how to save setting data.

8. WEB Browser Settings

This section describes FA-95RU settings via a web browser.

See section 3. "Connections" for details on connecting with a computer.

Open a web browser on the connected computer, and enter the address <http://192.168.0.100/> (factory default setting) in the address bar. The Information window as shown below appears.

8-1. Information

FA-95RU Information Network Settings User Account Settings Unit ID Assignment Event Naming Backup & Restore Restart	Unit Information
	Serial Number : 14230001
	FPGA Version : 1.00
	Soft Version : 1.00
	Network Information
	IP Address : 192.168.0.100
	Subnet Mask : 255.255.255.0
	Default Gateway : Unused
	MAC Address : 00-10-B1-07-50-01
	TCP Port Number : 50010
Connection Status	
Mode : FA-9500 Mode	
Status : Connect	
Unit ID : 1	
Host Address : 192.168.0.10	
Unit Name : FA-9500	

◆ Unit Information

Item	Description
Serial Number	Serial number of FA-95RU
FPGA Version	FPGA version of FA-95RU
Soft Version	Software version of FA-95RU

◆ Network Information

Item	Description
IP Address	IP address of FA-95RU
Subnet Mask	Subnet mask of FA-95RU
Default Gateway	Gateway of FA-95RU
MAC Address	MAC address of FA-95RU
TCP Port Number	TCP port number FA-95RU

◆ Connection Status

Item	Description
Mode	Shows the selected connection state. Disconnect: Indicates no FA-9500/FA-9520 is connected FA-9500: Indicates an FA-9500 is connected. FA-9520: Indicates an FA-9520 in FA-9520 mode is connected. FA-9520 (FA-9500 mode): Indicates an FA-9520 in FA-9500 mode is connected.
Status	Shows the status of connection with FA-9500.
Unit ID	Shows registered ID number if the connected FA-9500's IP address is registered using Unit ID Assignment ^{*1} . Shows the message "IP Address Select" if the connection is established via the IP ADDR SEL menu ^{*2}
Host Address	Shows the IP address of the connected FA-9500.
Unit Name	Shows the unit name of the connected FA-9500.

*1 See section 8 "WEB Browser Settings" for details.

*2 See section 5-2 "IP Address Selection Mode" for details.

8-2. Network Settings

Click **Network Settings**. The authentication dialog box appears. (Only the first time)

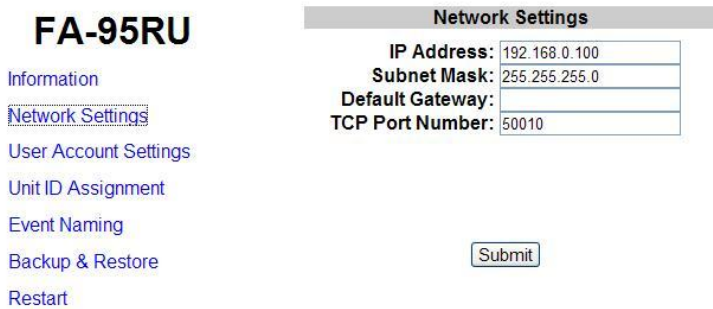


Press the **Enter** key on the keyboard to connect to the FA-95RU. The authentication dialog box appears. Enter your user name and password.

User name: fa95ru

Password: foranetwork

If the authentication is successful, the Network Settings page as shown below appears.



To change the network address, change the settings and click **Submit**. Changes will be applied after rebooting or 8-8 “Restart” is performed.

8-3. User Account Settings

Click **User Account** to open the page as shown below.



To change the user account, change the settings and click **Submit**. The authentication dialog box will not appear if the User Name and Password setting boxes are left empty. Changes will be applied after rebooting or 8-8. “Restart” is performed.

8-4. Unit ID Assignment

Click **Unit ID Assignment** to open the page as shown below.

FA-95RU

Information
Network Settings
User Account Settings
Unit ID Assignment
Event Naming
Backup & Restore
Restart

Unit ID Assignment
Unit 1 ~ 20 / Unit 21 ~ 40 / Unit 41 ~ 60 / Unit 61 ~ 80 / Unit 81 ~ 100

Unit 1 ~ 20

	IP Address	Unit Name
Unit 1 :	192.168.0.10	FA-9500
Unit 2 :		
Unit 3 :		
Unit 4 :		
Unit 5 :		
Unit 6 :		
Unit 7 :		
Unit 8 :		
Unit 9 :		
Unit 10 :		
Unit 11 :		
Unit 12 :		
Unit 13 :		
Unit 14 :		
Unit 15 :		
Unit 16 :		
Unit 17 :		
Unit 18 :		
Unit 19 :		
Unit 20 :		

This page allows you to assign IP addresses to MU IDs to select units to be connected in Unit ID selection mode, described in section 5-1. “Unit ID Selection Mode”.

After assigning IP addresses, click **Submit**. (The assignments are effective without rebooting.) Unit names can be set with up to 15 alphanumeric characters.

8-5. Event Naming (FA-9500)

Click **Event Naming** to open the page as shown below.

FA-95RU

Information
Network Settings
User Account Settings
Unit ID Assignment
Event Naming(FA-9500)
Event Naming(FA-9520)
Backup & Restore
Restart

Event Naming (FA-9500)
Event 1 - 20 / Event 21 - 40 / Event 41 - 60 / Event 61 - 80 / Event 81 - 100

Event Name 1 - 20

Event 1 :	EVENT 1	Event 11 :	EVENT 11
Event 2 :	EVENT 2	Event 12 :	EVENT 12
Event 3 :	EVENT 3	Event 13 :	EVENT 13
Event 4 :	EVENT 4	Event 14 :	EVENT 14
Event 5 :	EVENT 5	Event 15 :	EVENT 15
Event 6 :	EVENT 6	Event 16 :	EVENT 16
Event 7 :	EVENT 7	Event 17 :	EVENT 17
Event 8 :	EVENT 8	Event 18 :	EVENT 18
Event 9 :	EVENT 9	Event 19 :	EVENT 19
Event 10 :	EVENT 10	Event 20 :	EVENT 20

This page allows you to name the events 1 through 100 of the connected FA-9500 and FA-9520 (FA-9500 mode) that are saved in the FA-95RU.

Twenty events each are shown per page. Change the page to display desired events by clicking Event 1-20, Event 21-40, Event 41-60, Event 61-80, or Event 81-100.

Enter a name with 15 alphanumeric characters for the desired event number.

Be sure to click **Submit** after setting the name.

Once the event name is assigned, the assigned name will be displayed for the FA-95RU event memories selected in the event settings. See section 7. “Event Memory” for details.

The default event names are EVENT 1 through EVENT 100.

8-6. Event Naming (FA-9520)

Click **Event Naming** to open the page as shown below.

FA-95RU

Information
Network Settings
User Account Settings
Unit ID Assignment
Event Naming(FA-9500)
Event Naming(FA-9520)
Backup & Restore
Restart

Event Naming (FA-9520)

Event 1 - 20 / Event 21 - 40 / Event 41 - 60 / Event 61 - 80 / Event 81 - 100

Event Name 1 - 20

Event 1	: EVENT 1	Event 11	: EVENT 11
Event 2	: EVENT 2	Event 12	: EVENT 12
Event 3	: EVENT 3	Event 13	: EVENT 13
Event 4	: EVENT 4	Event 14	: EVENT 14
Event 5	: EVENT 5	Event 15	: EVENT 15
Event 6	: EVENT 6	Event 16	: EVENT 16
Event 7	: EVENT 7	Event 17	: EVENT 17
Event 8	: EVENT 8	Event 18	: EVENT 18
Event 9	: EVENT 9	Event 19	: EVENT 19
Event 10	: EVENT 10	Event 20	: EVENT 20

This page allows you to name the events 1 through 100 of the connected FA-9520 (FA-9520 mode) that are saved in the FA-95RU.

Twenty events each are shown per page. Change the page to display desired events by clicking Event 1-20, Event 21-40, Event 41-60, Event 61-80, or Event 81-100.

Enter a name with 15 alphanumeric characters for the desired event number.

Be sure to click **Submit** after setting the name.

Once the event name is assigned, the assigned name will be displayed for the FA-95RU event memories selected in the event settings. See section 7. "Event Memory" for details.

The default event names are EVENT 1 through EVENT 100.

8-7. Backup & Restore

Click **Backup & Restore** to open the dialog box as shown below.

This dialog box allows you to save the FA-95RU settings and event data to a PC.

The saved data can be recalled.

FA-95RU

Information
Network Settings
User Account Settings
Unit ID Assignment
Event Naming(FA-9500)
Event Naming(FA-9520)
Backup & Restore
Restart

Backup Config Data

Save File:

Restore:

Network Setting
 Unit ID Assignment
 Event Name

Backup Event Data(FA-9500)

Save File:

Restore:

Backup Event Data(FA-9520)

Save File:

Restore:

8-7-1. Configuration Data Backup

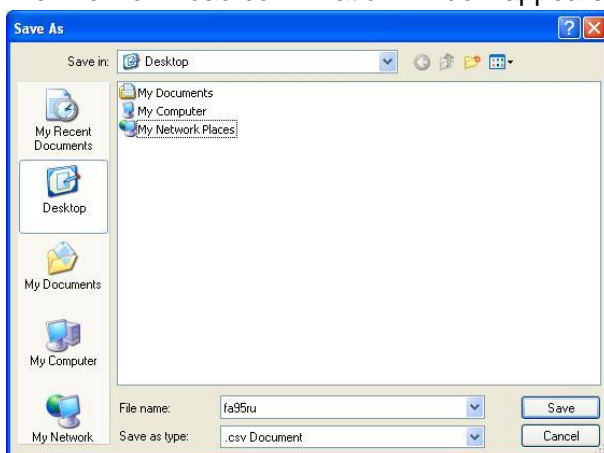
The FA-95RU configuration data can be saved/recalled to/from a PC as a CSV file.

◆ Saving Configuration Data to a file

Click Save File: **Save** under “Backup Config Data”.



The File Download confirmation window appears. Click **Save**.



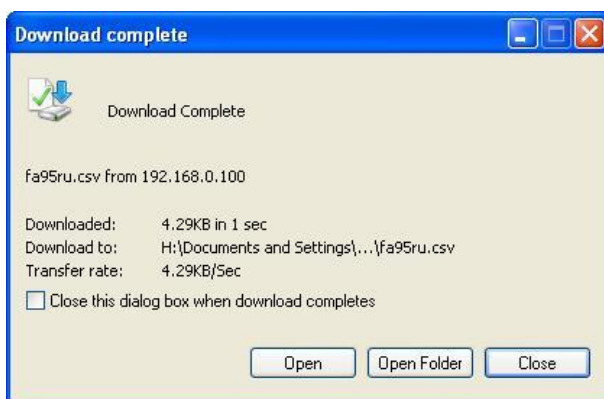
The directory window opens. Select a location to save the file.

Change the file name if you wish.

Click **Save**.

When the file download is complete, the window as shown below appears.

The data is backed up.



Click **Close**.

◆ **Recalling the Saved Configuration Data from a PC**

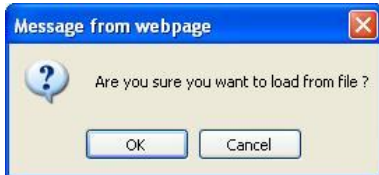
Select items in the configuration data to be recalled.

Checking Network Settings will recall the setting data that is set under the Network Settings menu in section 8-2.

Checking Unit ID Assignment will recall the setting data that is set under the Unit ID Assignment menu in section 8-4.

Checking Event Name will recall the setting data that is set under the Event Naming menu in section 8-5.

Click **Browse** next to **Restore** and select a file in which the configuration data is to be saved. Click **Load**. The confirmation window as shown below appears.



Click **OK** to start recalling the data.

Click **Cancel** to stop the recall.

Checked items such as Network Settings will be applied after restart.

Be sure to perform restart as described in section 8-8 "Restart".

IMPORTANT

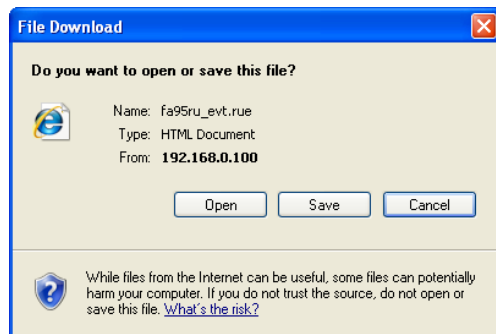
The FA-95RU uses the CSV file format for the configuration data backup, which enables commercially available spreadsheet software to edit the data. However, Unit ID or event names that consist only of numbers may be recognized as numeric values by such software and appears differently after they are recalled to the FA-95RU. It is recommended to use alphabetical along with numeric values for names to enable editing using commercially available spreadsheet software.

8-7-2. Event Data Backup (FA-9500/FA9520)

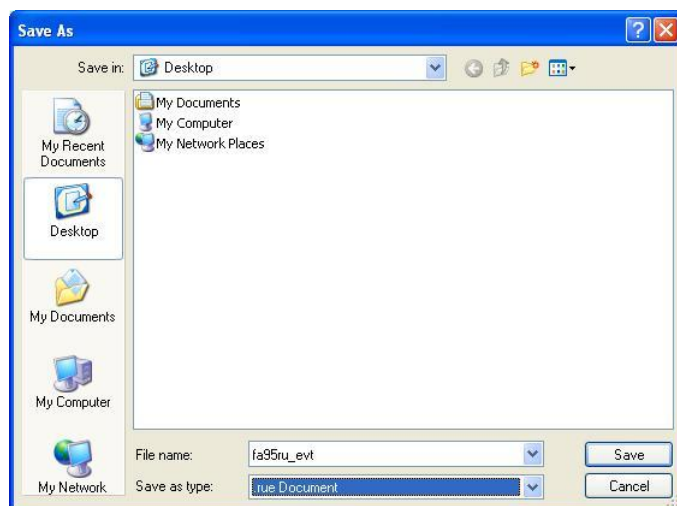
The event data saved in the FA-95RU can be saved/recalled to/from a PC.

◆ Saving Configuration Data to a file

Click Save File: **Save** under “Backup Event Data (FA-9500)” or “Backup Event Data (FA-9520)”.



The File Download confirmation window appears. Click **Save**.



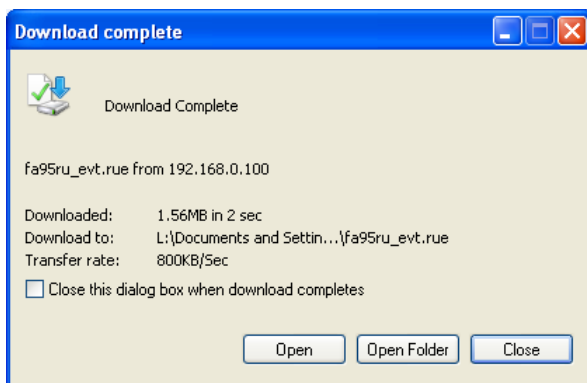
The directory window opens. Select a location to save the file.

Change the file name if you wish.

Click **Save**.

When the file download is complete, the window as shown below appears.

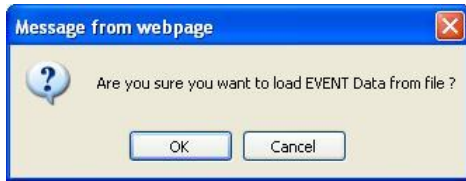
The data is saved.



Click **Close**.

◆ **Recalling the Saved Event Data from a PC**

Click **Browse** next to **Restore** and select a file in which the configuration data is to be saved. Click **Load**. The confirmation window as shown below appears.



Click **OK** to start recalling the data.
Click **Cancel** to stop the recall.

IMPORTANT
The FA-95RU uses the CSV file format for the configuration data backup, which enables commercially available spreadsheet software to edit the data. However, Unit ID or event names that consist only of numbers may be recognized as numeric values by such software and appears differently after they are recalled to the FA-95RU. It is recommended to use alphabetical along with numeric values for names to enable editing using commercially available spreadsheet software.

8-8. Restart

Click **Restart** to open the page as shown below.



Be sure to click **Restart** after changing Network Settings or User Account Settings.

9. System Requirements

To use with the FA-95RU, your computer must meet the following requirements.

OS	Windows® XP operating system SP2 or later Professional (32bit)	Windows Vista® operating system Business (32bit)	Windows® 7 operating system Professional (32bit/64bit)
Browser	Windows® Internet Explorer 8, Firefox®21.0	Windows® Internet Explorer 8, Firefox®21.0	Windows® Internet Explorer 8, 9, 10, Firefox®21.0
CPU	Pentium® 4 processor 2.8GHz or higher	Intel® Core™2 Duo processor 2GHz or higher	Intel® Core™2 Duo processor 2GHz or higher
Memory	512MB or more	2GB or more	2GB or more
Display	1280×1024 pixels or more resolution, 24-bit full-color		
Network	Ethernet (100BASE-TX/1000BASE-T), 1 port or more		
Network cable	Enhanced Category 5 or higher		
Network protocol	HTTP		

IMPORTANT

When using Internet Explorer 8, Windows Updates after 6/13/2011 must be downloaded for proper performance. It is highly recommended to keep your computer updated with the latest Windows Updates.
PCs that do not meet the above system requirements may not properly display web pages.
We recommend the use of a Firefox web browser.

10. FA-95RU Ancillary Data Packet Name List

FA-95RU Indication	DID/SDID (hexadecimal)	Description
S353MMPEG(V)	08/08	MPEG recoding data, VANC space (Picture rate information)
S353M MPEG(H)	08/0C	MPEG recoding data, HANC space (Other part of recording data set)
S305M SD-SDTI	40/01	ARIB STD-B17 Serial Data Transport Interface for Television
S305M HD-SDTI	40/02	ITU-R BT.1557, SMPTE 348M for HD-SDTI
S427 Lk Enc 1	40/04	SMPTE 427 Link Encryption Message 1
S427 Lk Enc 2	40/05	SMPTE 427 Link Encryption Message 2
S427 Lk Meta	40/06	SMPTE 427 Link Encryption Metadata
S352M VPID	41/01	BTA S-004C Video Payload Identification for Digital Interfaces
S2016-3 AFD-Bar	41/05	SMPTE 2016-3 AFD and Bar Data
S2016-4 PanScan	41/06	SMPTE 2016-3 Pan-Scan Data
RP2010 SCTE 104	41/07	SMPTE 2010 ANSI/SCTE 104 messages
S2031 SCTE VBI	41/08	SMPTE 2010 DVB/SCTE VBI data
ITU-R BT.1685	43/01	ITU-R BT.1685 Inter-station control data packets
RDD8 OP47(SDP)	43/02	SMPTE RDD 8 Subtitling Distribution packet(SDP)
RDD8 OP47(Mult)	43/03	SMPTE RDD 8 Transport of ANC packet in an ANC Multipacket
S346M	43/13	Time Division Multiplexing Video Signals and Generic Data over HD-SDI
RP214 KLV(V)	44/04	SMPTE RP 214 KLV Metadata transport in VANC space
RP214 KLV(H)	44/14	SMPTE RP 214 KLV Metadata transport in HANC space
RP223 UMID	44/44	SMPTE RP 223 Packing UMID and Program Identification Label Data into SMPTE 291M Ancillary Data Packets
S2020 Aud	45/01	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr1/2	45/02	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr3/4	45/03	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr5/6	45/04	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr7/8	45/05	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr9/10	45/06	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr11/12	45/07	SMPTE 2020-1 Compressed Audio Metadata
S2020AudPr13/14	45/08	SMPTE 2020-1 Compressed Audio Metadata
S2020 AudP15/16	45/09	SMPTE 2020-1 Compressed Audio Metadata
RP215 Film Xfer	51/01	RP215 Film Codes in VANC space
ARIB TRB.18	5F/CF	Color information packets standardized in ARIB TR-B18 "Color Frame Information for Component Interface of 525/60 Television System"
ARIB B.37	1D0 . . 2DB	Closed caption data packets (for expansion) standardized in ARIB STD-B37 "Structure and Operation of Closed Caption Data Conveyed by Ancillary Data Packets"
ARIB B.37 Mob	5F/DC	Caption format used in digital television broadcasting for mobile receivers standardized in ARIB STD-B37"Structure and Operation of Closed Caption Data Conveyed by Ancillary Data Packets"
ARIB B.37 Ana	5F/DD	Analog signal closed caption data packets standardized in ARIB STD-B37 "Structure and Operation of Closed Caption Data Conveyed by Ancillary Data Packets"
ARIB B.37 SD	5F/DE	SD signal closed caption data packets standardized in ARIB STD-B37 "Structure and Operation of Closed Caption Data Conveyed by Ancillary Data Packets"
ARIB B.37 HD	5F/DF	HD signal closed caption data packets standardized in ARIB STD-B37 "Structure and Operation of Closed Caption Data Conveyed by Ancillary Data Packets"
ARIB TR-B.22	5F/E0	HD ancillary data packet for transmission standardized in ARIB TR-B22 "Operational Guidelines for Transport of the Ancillary Data for HDTV Contribution"
ARIB TRB23(1)	5F/FA	Dummy packet standardized in ARIB TR-B23 "Operational Guidelines for Ancillary Data in Inter-Stationary Information Exchange"

FA-95RU Indication	DID/SDID (hexadecimal)	Description
ARIB TRB23(2)	5F/FB	User data 2 in user data packets standardized in ARIB TR-B23 "Operational Guidelines for Ancillary Data in Inter-Stationary Information Exchange"
ARIB TRB23(1)	5F/FC	User data 1 in user data packets standardized in ARIB TR-B23 "Operational Guidelines for Ancillary Data in Inter-Stationary Information Exchange"
ARIBB.35ProgEx	5F/FD	Trigger signal packets for data broadcasting standardized in ARIB STD-B35 "SD Data Program Exchange Specification for Digital Broadcasting"
ARIB B.39	5F/FE	Control signal packets for inter-studio transmission standardized in ARIB STD-B39 "Structure of Inter-Stationary Control Data Conveyed by Ancillary Data Packets"
ARIB B.15	5F/FF	Resource ID packets standardized in ARIB STD-B15 "Resource Identification Conveyed by Ancillary Data Packets for 52/60 and 1125/60 Television Systems"
SMPTE 12-2	60/60	ARIB STD-B41 for time code
S334-1CDP(708)	61/01	ITU-R BT.1619, SMPTE 334-1 closed captioning (EIA-708-B)
S334-1 CEA608	61/02	ITU-R BT.1619, SMPTE 334-1 EIA-608 data
S334-1 Teletxt	61/03	World System Teletext Description Packet
S334 SDE	61/04	Subtitling Data Essence (SDE)
334/207	62/01	ITU-R BT.1619, SMPTE RP207 DTV program description
S334-1 Future	62/02	ITU-R BT.1619, SMPTE 334-1 DTV data broadcasting
S334/RP208	62/03	ITU-R BT.1619, SMPTE RP208 VBI data
RP196/LTC	64/64	Time code
RP196/VITC	64/7F	Time code
RP165EDH	1F4	SMPTE error detection indication

10-1. AFD Code Abbreviations

◆ SMPTE S2016-3 AFD aspect ratio table

In a 4:3 coded frame		In a 16:9 coded frame		AFD Code
UNDEFINED	Undefined	UNDEFINED	Undefined	0000
RESERVED	Reserved	RESERVED	Reserved	0001
4:3 L 16:9 T	Letterbox 16:9 image, at top of the coded frame	16:9 F 16:9	Full frame 16:9 image, the same as the coded frame	0010
4:3 L14:9 T	Letterbox 14:9 image, at top of the coded frame	16:9 P 14:9	Pillarbox 14:9 image, horizontally centered in the coded frame	0011
4:3 L>16:9	Letterbox image with an aspect ratio greater than 16:9, vertically centered in the coded frame	16:9 L>16:9	Letterbox image with an aspect ratio greater than 16:9, vertically centered in the coded frame	0100
RESERVED	Reserved	RESERVED	Reserved	0101
RESERVED	Reserved	RESERVED	Reserved	0110
RESERVED	Reserved	RESERVED	Reserved	0111
4:3 F 4:3	Full frame 4:3 image, the same as the coded frame	16:9 F 16:9	Full frame 16:9 image, the same as the coded frame	1000
4:3 F 4:3	Full frame 4:3 image, the same as the coded frame	16:9 P 4:3	Pillarbox 4:3 image, horizontally centered in the coded frame	1001
4:3 L16:9PRTD	Letterbox 16:9 image, vertically centered in the coded frame with all image areas protected	16:9 F PRTD	Full frame 16:9 image, with all image areas protected	1010
4:3 L 14:9	Letterbox 14:9 image, vertically centered in the coded frame	16:9 P 14:9	Pillarbox 14:9 image, horizontally centered in the coded frame	1011
RESERVED	Reserved	RESERVED	Reserved	1100
4:3 F ALT14:9	Full frame 4:3 image, with alternative 14:9 center	16:9P ALT14:9	Pillarbox 4:3 image, with alternative 14:9 center	1101
4:3 L ALT14:9	Letterbox 16:9 image, with alternative 14:9 center	16:9F ALT14:9	Full frame 16:9 image, with alternative 14:9 center	1110
4:3 L ALT 4:3	Letterbox 16:9 image, with alternative 4:3 center	16:9 F ALT4:3	Full frame 16:9 image, with alternative 4:3 center	1111

◆ **SMPTE RP186-2008 VI AFD aspect ratio table**

Description		AFD Code
RESERVED	Reserved	0000
RESERVED	Reserved	0001
BOX 16:9 TOP	Box 16:9 (top)	0010
BOX 14:9 TOP	Box 14:9 (top)	0011
BOX>16:9 CTR	Box > 16:9 (center)	0100
RESERVED	Reserved	0101
RESERVED	Reserved	0110
RESERVED	Reserved	0111
AS THE CD FRM	Active format is the same as coded frame	1000
4:3 CTR	4:3 (center)	1001
16:9 CTR	16:9 (center)	1010
14:9 CTR	14:9 (center)	1011
RESERVED	Reserved	1100
4:3 WITH 14:9 PRTD	4:3 (with shoot and protect 14:9 center)	1101
16:9 WITH 14:9 PRTD	16:9 (with shoot and protect 14:9 center)	1110
16:9 WITH 4:3 PRTD	16:9 (with shoot and protect 4:3 center)	1111

◆ **ITU-R BT.1119-2 WSS aspect ratio table**

Description		AFD Code
F 4:3	full format 4:3	1000
BOX 14:9 CTR	box 14:9 centre	0001
BOX 14:9 TOP	box 14:9 top	0010
BOX 16:9 CTR	box 16:9 centre	1011
BOX 16:9 TOP	box 16:9 top	0100
BOX>16:9 CTR	box > 16:9 centre	1101
F 14:9 CTR PRTD	full format 14:9 centre shoot and protect 14:9	1110
F 16:9 AMRPH	full format 16:9 anamorphic	0111

11. Specifications and Dimensions

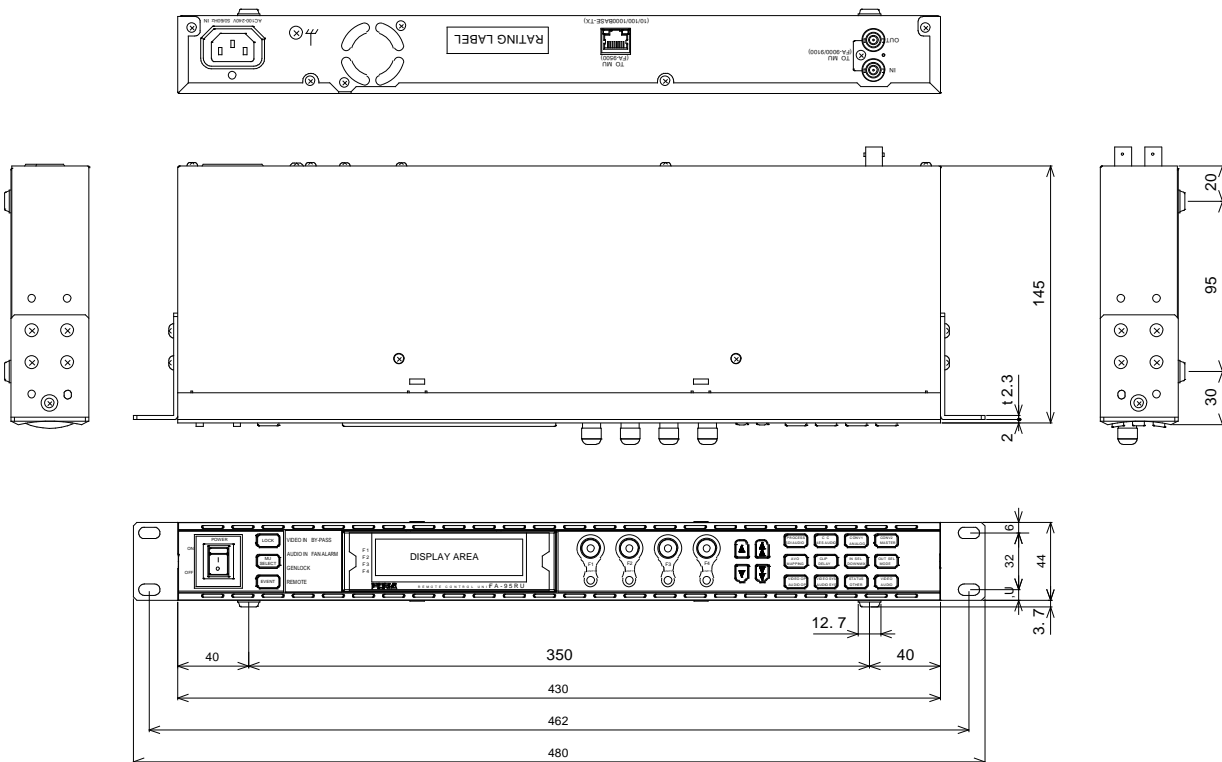
11-1. Unit Specifications

Interfaces

LAN	10 Base-T / 100 Base-TX / 1000 Base-T, RJ-45 x 1
Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	100 VAC to 240 VAC ±10%, 50/60 Hz
Consumption	14VA, 13 W (at 100 VAC to 120 VAC), 20VA, 12 W (at 220 VAC to 240 VAC)
Dimensions	430 (W) x 145 (D) x 44 (H) mm
Weight	2.2 kg
Consumables	(Recommended replacement timespans) Power unit (within 5 years) Cooling fan: P1467-1 (within 5 years)
Accessories	Operation manual, AC cord, rack mount brackets

11-2. External Dimensions

(All dimensions in mm)



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Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.



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*The contents of this manual are subject to change without notice.