

**OFFICIAL FRAMUS  
AMP OWNER MANUAL**

*Framus*®

**DRAGON**

**ENGLISH**

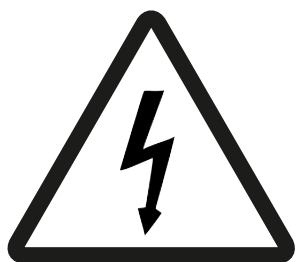
## SAFETY HINTS

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow these instructions



Caution: To reduce the risk of electrical shock, do not remove the cover. Or expose this appliance to rain or moisture. No user serviceable parts inside; refer servicing to qualified personnel.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.



Use only with cart, stand, tripod, bracket or table specified by the manufacture, or cart/apparatus combination to avoid injury from tip-over.

Congratulations on your purchase of a Framus Dragon amp head. Please read this manual before connecting the device and switching on. If you follow the advice given in this manual, you will soon be in a position to take full advantage of the quality of your new Framus amplifier. Please retain this manual as you may need to consult it again. Please send your PAS-SPORT to the address given in it.

## ADVICE FOR THE USER

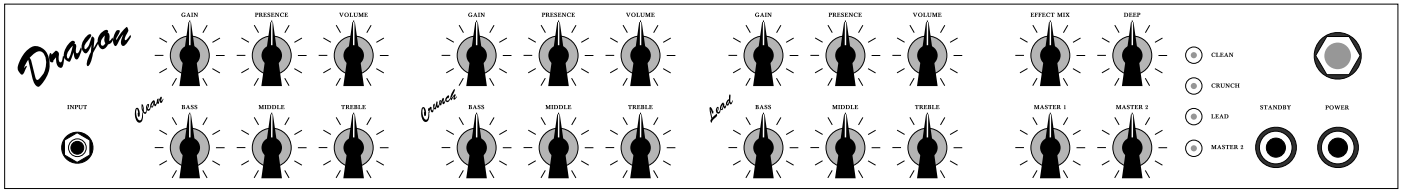
In order that your device should function reliably, please follow the following recommendations :

- This apparatus shall not be exposed dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- This apparatus should be connected to a MAINS socket outlet with a protective earthing connection.
- Mains plug or appliance connector shall be used as the disconnect device, so mains plug or appliance connector should always remain readily operable.
- Tubes can become very hot - risk of burn!
- Never open the case! You might receive an electric shock.
- Do not expose the device to dust, excessive humidity, direct sunlight or extremes of temperature.
- Make sure there is adequate ventilation at the back of the device.
- Do not subject the device to excessive vibration or violent jolts as these could damage the valves (tubes).
- After using the device, allow around 10 minutes for the valves to cool down before moving it.
- Always place the device on a stable, horizontal surface
- Never place the device on a soft surface such as a carpet or cushion.
- Avoid operating the device near radiators or devices that generate significant heat.
- The adjustment or cleaning of internal parts should only ever be undertaken by qualified service engineers.
- Take care not to allow liquid or small objects of any kind to penetrate the device.
- Never operate the device without a load attached (e.g. when there are no speakers connected)
- At power-up, the valves (tubes) need at least 30 seconds to warm up before achieving operation readiness and a further few minutes before they can deliver full power.
- When changing the valves, replace them with only with valves selected by Framus, to avoid problems like noise, microphonism and imbalance. (special selection criteria).
- Only a high quality, undamaged mains lead (power cord) should be used to power the device. Before switching on, make sure the mains voltage corresponds with the voltage indicated by a checkmark alongside the mains socket of the amplifier.
- Always make sure the device is earthed (grounded)!

Make sure the device is examined by qualified maintenance engineers whenever :

- the mains lead or mains plug have been damaged
- liquid or any small object has been allowed to penetrate the case
- the device has been exposed to excessive humidity
- the device has been malfunctioning or abnormal operating conditions have been observed
- the device has been dropped or the case damaged.

# FRONT CONTROL PANEL



## INPUT

Socket for the connection of a guitar

For each of the channels Clean, Crunch and Lead the following controls are separately available:

### GAIN

Rotary control to set the input sensitivity

### PRESENCE

Rotary control to set the level of high frequencies in the power amplifier

### VOLUME

Rotary control to set the volume level (relation of channels among each other)

### BASS

Rotary control to set the level of low frequencies in the preamp

### MIDDLE

Rotary control to set the level of mid frequencies in the preamp

### TREBLE

Rotary control to set the level of high frequencies in the preamp

The following controls affect all channels:

## EFFECT MIX

When using the FX Loop on the rear panel the EFFECT MIX allows you to dial in the desired amount of effected signal into your overall sound. Turning the control fully clockwise will result in a fully effected sound, i.e. no dry signal and turning the control fully counter-clockwise will result in a fully dry sound. When no effects are connected please turn it fully counter-clockwise.

## DEEP

This Control sets the level of low frequencies in the power amplifier.

## MASTER 1

Control to set overall volume level 1

## MASTER 2

Control to set overall volume level 2

## CLEAN BUTTON

Activates Clean Channel and deactivates the other channels (LED lights up green when activated)

## CRUNCH BUTTON

Activates Crunch Channel and deactivates the other channels (LED lights up green when activated)

## LEAD BUTTON

Activates Lead Channel and deactivates the other channels (LED lights up green when activated)

## MASTER 2 BUTTON

Activates the MASTER 2 control and simultaneously deactivates the MASTER 1 control (LED lights up green)

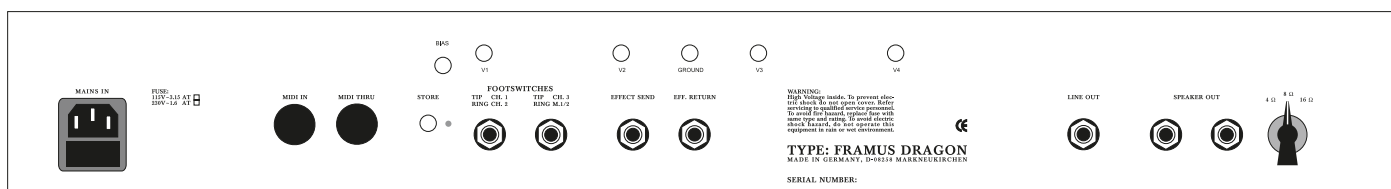
## STANDBY

Switches the power amplifier to Standby mode

## POWER

Switches the device On and Off

# REAR CONTROL PANEL



## MAINS IN

AC terminal with integrated fuse compartment for connection to the mains power supply. MIDI IN-/THRU-Jacks and STORE-Button belong to the integrated MIDI Interface and will be explained separately.

## FOOTSWITCHES

Sockets for the footswitches that are used to switch between the three channels and to switch between the two output volumes (MASTER 1 and MASTER 2). These are both stereo sockets and are prior to MIDI. Don't use latching switches, please use momentary (unlatch) switches.

## EFF. SEND & EFF. RETURN

Sockets to implement the effects loop. Connect the input of the effects device to the SEND socket and its output to the RETURN socket. This is a parallel effects loop and the Wet/Dry balance can be controlled using the EFFECT MIX rotary control on the front panel (see above).

## LINE OUT JACK

For connecting of other Power Amps (Signal behind output transformer i.e. MASTER, DEEP & PRESENCE-Controls have influence on this output)

## SPEAKER OUT

Socket for the connection of speaker cabinets. Two sockets are provided, both of them are internally switched parallel.

## IMPEDANCE

Selector switch used to match the impedance to the connected speakers. (see also under 'Powering Up').

## MEASURE POINTS

for the power tube bias and trimpot to adjust the bias. Adjusting range 25 to 30 mA, max. 35 mA

## POWERING UP

1. Make sure that one (or more) loudspeaker cabinet(s) are connected to the SPEAKER OUT socket, that it (they) has (have) an adequate power handling capability and is (are) suitable for guitar signals. Check that the impedance selector switch on the device corresponds with the total load impedance of the connected speaker(s).

4 Ω	1 x 4 Ω cabinet 2 x 8 Ω cabinets
8 Ω	1 x 8 Ω cabinet 2 x 16 Ω cabinets
16 Ω	1 x 16 Ω cabinet

2. Make sure that the device is plugged in to the mains and that any external (effects) devices are correctly connected and operation ready.
3. Turn the MASTER control all the way to the left
4. Connect your guitar to the INPUT of the amplifier using a screened cable.
5. Turn the device on using the POWER switch.
6. When the valve(tube) warm-up phase is complete, turn the STANDBY switch on (upwards).
7. Set the desired volume using the MASTER control.
8. To obtain the desired sound for each channel, select the channel and adjust the controls. (See further under the heading "Example Settings").

To familiarize yourself first of all with the basic sound of the amplifier, set all the rotary controls to 12 o'clock.

# MIDI INTERFACE

The Dragon features an integrated MIDI interface. This enables all the switching functions of the device to be controlled via MIDI. It also allows a MIDI program number to be assigned to the switch settings which can then be stored. MIDI messages received by the Dragon can also be forwarded to other devices. The interface receives MIDI data via the MIDI IN socket and passes it on to other devices via the MIDI THRU.

The Interface receives Data on all MIDI-Channels. Please pay attention to the Tab below. An example: When you want to select Channel 3 you have to push both the Buttons for CLEAN and for CRUNCH while turning power on.

Turn Power on while pushing:

STORE					‡ Omni Mode	
CLEAN					‡ K 1	
	CRUNCH				‡ K 2	
CLEAN+	CRUNCH				‡ K 3	
			LEAD		‡ K 4	
CLEAN +			LEAD		‡ K 5	
	CRUNCH	+	LEAD		‡ K 6	
CLEAN +	CRUNCH	+	LEAD		‡ K 7	
				MASTER	‡ K 8	
CLEAN +				MASTER	‡ K 9	
	CRUNCH	+		MASTER	‡ K 10	
CLEAN +	CRUNCH	+		MASTER	‡ K 11	
			LEAD	+	MASTER	‡ K 12
CLEAN +			LEAD	+	MASTER	‡ K 13
	CRUNCH	+	LEAD	+	MASTER	‡ K 14
CLEAN +	CRUNCH	+	LEAD	+	MASTER	‡ K 15

Program change messages can be handled for all 128 program numbers (CBh 00h ... 7Fh) as well as control change messages for controllers 1 to 4 (BBh 01h xxh, BBh 02h xxh, BBh 03h xxh, BBh 04h xxh, where "xxh" may be any value between 00h ... 7 Fh). As a result, there are two principal control options:

## 1. Program saving and reloading

To assign the key settings of your Dragon to a MIDI program please do the following: Send your Dragon the favoured program number which will be used later to reload the setting. The red LED above the STORE button on the rear control panel lights up. Now select the desired channel and the MASTER Volume on your Dragon (e.g. CRUNCH + MASTER 2). Now you push STORE and the setting is saved – the LED turns off. If you fail to press STORE, the existing data will not be overwritten. (Manual switching has priority but is not stored automatically).

## 2. Control using the buttons

You can also use MIDI Controller messages for the Dragon's switching using the following table in which Controller values may lie anywhere between 0 to 127.

No	Parameter	Value	Description
1	Clean Channel	0 – 127	Activates Channel
2	Crunch Channel	0 – 127	Activates Channel
3	Lead Channel	0 – 127	Activates Channel
4	Master 1 / 2	0 – 127	Changes between Master 1 and Master 2



## CONCLUDING ADVICE

- This amplifier is capable of generating high volume levels that can cause hearing damage
- At high GAIN settings, feedback between the guitar and the speakers may occur and this can cause hearing damage as well as damage to connected loudspeakers.
- Remove the power cord whenever changing a fuse!
- Only ever replace a fuse with another of the same type. Never bridge defective fuses.
- Valves can become very hot.
- Don't undertake repairs yourself.
- Only allow the case to be opened by qualified personnel.
- Repairs and valve changes should only be undertaken by qualified personnel.
- Never use floor pedal effects in the effects loop; as such devices have the wrong connection values.

## TECHNICAL DATA

Nominal output power level	100 watts
Maximum output power level	160 watts
Output impedance levels	4 $\Omega$ , 8 $\Omega$ or 16 $\Omega$ switchable

Clean channel	
Input sensitivity	-40 dB (8 mV)
Overdrive threshold	-2 dB (600 mV)

Crunch channel	
Input sensitivity	-64 dB (0,5 mV)
Overdrive threshold	-2 dB (600 mV)

Lead channel	
Input sensitivity	-72 dB (0,2 mV)
Overdrive threshold	-2 dB (600 mV)

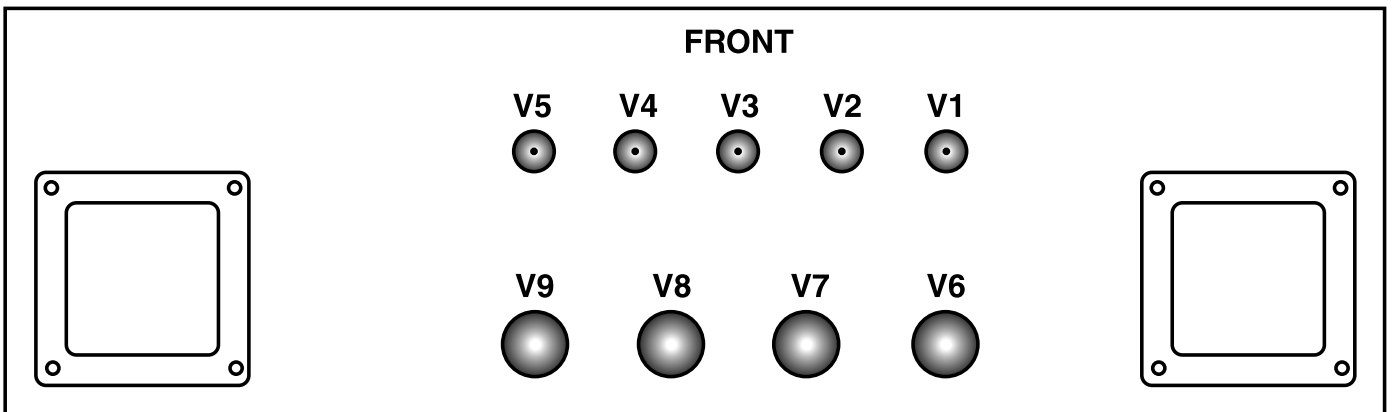
EFFECT SEND	0 dB
EFF. RETURN	0 dB
LINE OUT	0 dB (@nominal output power level of 100 watts)

Fuse ratings	1.6 AT (230V) 3,15 AT (115V)
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Measurements (W x H x D in mm)	725 x 285 x 265
Weight	18,3 kg

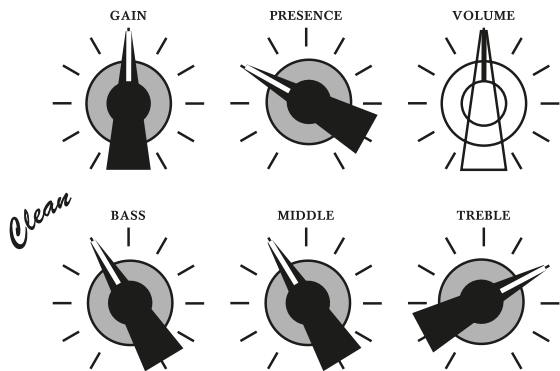
# VALVE MAP

V 1	ECC 83 selected	Input / Clean EQ
V 2	ECC 83 selected	First and second distortion levels
V 3	ECC 83 selected	Third distortion level / Crunch & Lead EQ
V 4	ECC 83 standard	Effects path (buffer)
V 5	ECC 83 standard	Phase reverse stage
V 6 - V 19	EL 34 selected quartet	Power amplifier

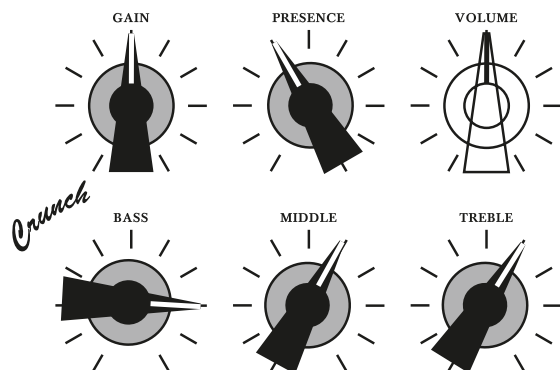


# SOUND SAMPLES

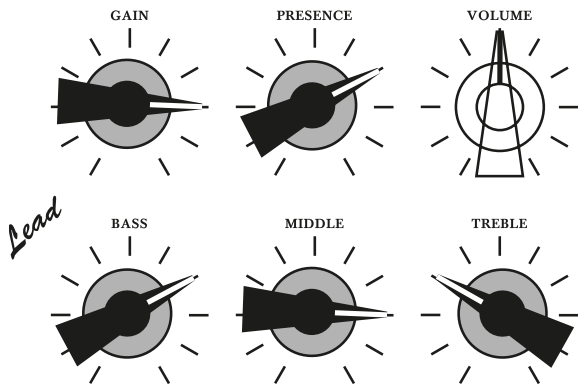
## SINGLE COIL CLEAN



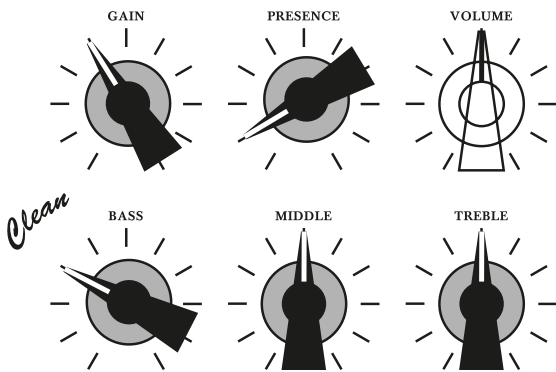
## SINGLE COIL CRUNCH



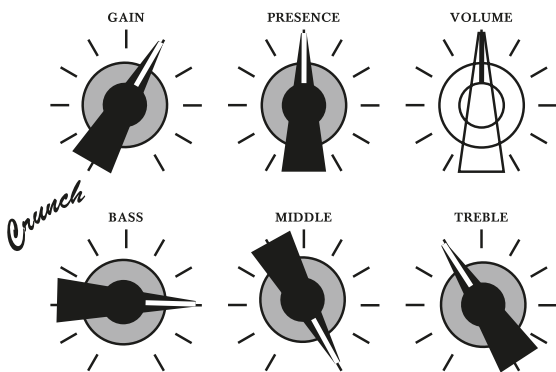
## SINGLE COIL LEAD



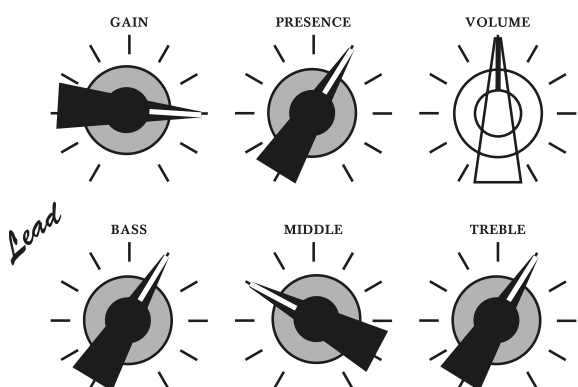
## HUMBUCKER (NECK) CLEAN



## HUMBUCKER (NECK) CRUNCH



## HUMBUCKER (BRIDGE) LEAD



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