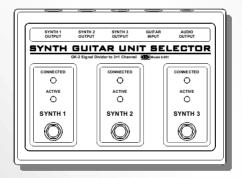
# SGUS-3

# Synth Guitar Unit Selector

Model 6-901 ver. 3.0



# **OWNER'S MANUAL**



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## SGUS-3

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## SGUS-3

#### 1. DEVICE DESCRIPTION

The Synth Guitar Unit Selector (SGUS-3) is comparable to Roland's US-20 or GKP-4, but in comparison to either device, the SGUS-3 offers greater capabilities.

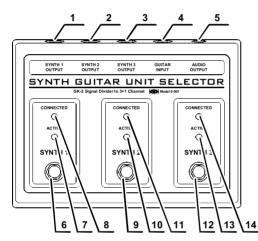
The SGUS-3 enables one guitar with a hexaphonic divided pickup (Roland GK-2, GK-2A, GK-2AH, RMC, Godin, etc.) to be simultaneously connected to up to 3 guitar synthesizers (Roland GI..., GR..., VG..., VGA..., etc.). The hexaphonic signal may be directed to any one of the units, any two of the units, all three, or none at all.

In addition, the SGUS-3 is equipped with an analog audio output which allow the monophonic signal from the guitar's traditional pickups to be sent directly to an amplifier, effects processor or other guitar device.

#### 1.1. CONNECTORS, CONTROLLERS AND INDICATORS

All connectors are located on the rear panel of the SGUS-3. The controllers and the indicators are accessed on the device's top panel. The locations and the names of all components are described on fig. 1.

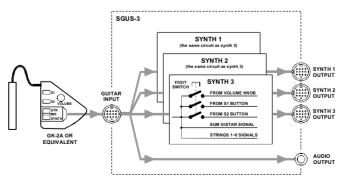
Fig. 1 - Controllers, indicators and connectors



- [1] 13-pin output to Synth 1
- [2] 13-pin output to Synth 2
- [3] 13-pin output to Synth 3
- [4] 13-pin input from hexaphonic guitar pickup
- [5] 1/4" Mono Audio output
- [6] Synth 1 on/off toggle switch
- 7] Synth 1 Active indicator (lit = on)
- Synth 1 availability indicator (lit when synth unit is both connected and powered)
- [9] Synth 2 on/off toggle switch
- [10] Synth 2 Active indicator (lit = on)
- [11] Synth 2 availability indicator (lit when synth unit is both connected and powered)
- [12] Synth 3 on/off togale switch
- [13] Synth 3 Active indicator (lit = on)
- [14] Synth 3 availability indicator (lit when synth unit is both connected and powered)

#### 1.2. DEVICE FUNCTION

Fig. 2 - Block diagram



The functional block diagram is shown on fig. 2. All signals from the guitar pickup come to the input of the selection circuit. The signals from divided pickup (six signals) and common signal from the guitar are transferred through this circuit without changes. The electronic switches are inserted to the way of VOLUME, S1, S2 control signals. These switches are controlled jointly by the foot-switch. The device includes three identical selection circuits independently on each of guitar synths.

Common audio signal from a guitar comes to the audio buffer. The output of the buffer supplies independent audio output.

#### 2. INSTALLATION OF THE DEVICE

The device is connected between the divided guitar pickup, the guitar synths and the amplifier – see fig. 3. The does not require any external supply adapter, because all its circuits are supplied directly from guitar synths.

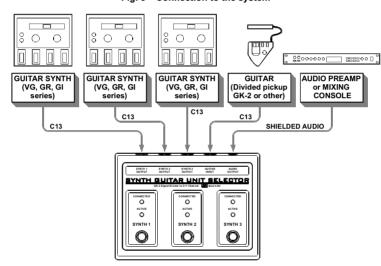
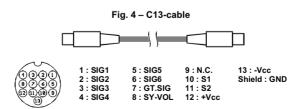


Fig. 3 - Connection to the system

#### 2.1. CONNECTION TO GUITAR DIVIDED PICKUP GK-2

The unit is interconnected with the guitar pickup via standard C-13 cables. This cable must be inserted to GUITAR-IN [4] connector on the rear panel of the device. Type of connector is DIN 13 pins – see fig. 4.





#### 2.2. CONNECTION TO GUITAR SYNTHS

The unit is connected to the guitar synths via standard C-13 cables. These cables must be inserted to SYNTH-OUT [1, 2, 3] connectors on the rear panel of the device. Type of connectors is DIN 13 pins.

Control signals S1, S2, SYNTH VOL can be transferred to guitar synths only if the mode selector on the guitar pickup is in MIX or SYNTH position.

#### 2.3. CONNECTION TO AN AMPLIFIER

The device can be connected to amplifier (mixing console, combo ...) via standard shielded one-wire audio-cable. The audio signal is available on AUDIO-OUT [5] connector. This connector is the Jack 1/4"— see fig. 5.

The audio signal is presented on AUDIO-OUT [5] connector continuously and independently on the function of foot switches, if the mode selector on guitar pickup is in MIX or GUITAR position.

Fig. 5 - Audio-cable



#### 3. DEVICE OPERATION

#### 3.1. SELECTION OF GUITAR SYNTHS

Foot-switches [6], [9], [12] make it possible to select, which of connected guitar synths shall be active. It is possible to activate only the output, to which a turned on synth is connected. Any manipulation with the foot switch will be ignored if no synth is connected to the output or if the synth is connected but it is turned off. All control signals (S1, S2, SYNTH VOL) from the guitar pickup are transferred to the synth after it is activated.

#### 3.2. DEVICE STATUS INDICATION

There are six LEDs on the top panel of the device. These LEDs inform a user about the current status of the device.

#### 3.2.1. INDICATION OF SYNTH CONNECTION

The red LEDs [8], [11], [14] indicate that a guitar synth is connected to the corresponding connector of the device and that it is in turned on. Such an indication is independent for each of the synths.

#### 3.2.2. INDICATION OF SYNTH ACTIVITY

Any of green LEDs [7], [10], [13] indicate that the corresponding synth has been activated by the foot switch [6], [9], [12]. This indication is independent for each of synths.



#### 4. TECHNICAL SPECIFICATIONS

Supply voltage: ± 7V from any of connected guitar synth Current power consumption: max 15 mA / -7V, max 15 mA / +7V

Pickup connector (input): 1x C-13 (DIN 13 pins) Guitar synths connectors (outputs): 3x C-13 (DIN 13 pins)

Audio output connector: jack 1/4" mono

Dimensions (mm / inch): 189 / 7,44 (width) x 48,5 / 1,91 (height) x 139,5 / 5,49 (depth)

Weight: approx. 300 g

Electrical design: under the regulations of the ČSN EN 60335-1+A55, ČSN EN 60335-2-45

EMC: under the regulations of the ČSN EN 55014

Operating environment : standard
Range of operating temperature : +10 to +35 °C
Relative environmental humidity : up to 85 %

2.28 inch 58 mm 189 mm 48.5 mm 7.44 inch 1.91 inch GUITAR INPUT **GUITAR UNIT SELECTOR** SYNTH GK-2 Signal Divider to 3+1 Channel CONNECTED CONNECTED CONNECTED 39.5 mm  $\circ$ 0 0 ACTIVE ACTIVE ACTIVE  $\bigcirc$ 0  $\bigcirc$ SYNTH 1 SYNTH 2 SYNTH 3

Fig. 6 - Device dimensions



#### 5. WARRANTY CONDITIONS

The device is provided with thirty-months warranty commencing from the date of its take-over by the customer. This date must be specified on the warranty list together with dealer's confirmation.

During this period, all defects of the device or its accessories, caused by defective material or faulty manufacturing, will be repaired free of charge.

The customer's warranty repair claim is used with the dealer.

Warranty period shall be extended equally to the duration of the device warranty repair.

The relevant legal regulations are applied in case of cancellation of the purchase contract.

The customer loses the right for free warranty repair in case he is be able to submit properly filled in warranty list or in case the defects of the product had been caused by:

- unavoidable event (force majeure),
- connecting the device to the incorrect supply voltage,
- inputs or outputs overloading by connecting the signals source or load source with not-corresponding characteristics etc.,
- faulty equipment operation, which is in variance with the instructions referred-to in the operating manual,
- mechanical damage caused by customer during transportation or using the device,
- unauthorized interference with the device or by its modification without manufacturer's approval.

