



DT-300

User's Manual







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1 Document revisions

Date	Doc. revision	FW version	Change
20-05-2015	R1.0	V1.0	Initial document
07-08-2017	R1.1	V1.3	Removed sysex program mode
30-06-2021	R1.2	V1.3	Added new document style Added safety instructions Added extra connection information Added settings/cc information

Important Safety Instructions

	
	<p>Equipment from Dtronics marked with the lightning flash with arrowhead symbol intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p> <p>Modification should be performed only by qualified personnel.</p>
	<p>Equipment from Dtronics marked with this symbol, alerts you to the presence of uninsulated dangerous voltage inside the enclosure.</p>
	<p>Equipment from Dtronics marked with this symbol alerts you to the presence of high voltage that may be sufficient to constitute a risk of shock and a life threatening situation.</p>
	<p>The exclamation point within an equilateral triangle, wherever it appears, alerts you to important operating and maintenance instructions. Please read the manual to be informed about the operating and maintenance instructions.</p>
	

Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.



Read these instructions.



Keep these instructions.



Heed all warnings.



Follow all instructions.



Modification should be performed only by qualified personnel.



Use only the supplied AC adaptor and the correct voltage. Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



Use only the supplied power cord. Use only the attached power cord. Also, the supplied power cord must not be used with any other device.



To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids.



Don't place objects filled with liquids near / on the Dtronics equipment to avoid exposure to liquids



Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.



Clean only with dry cloth.



Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



Use only attachments/accessories specified by the manufacturer.



Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.



Unplug this apparatus during lightning storms or when unused for long periods of time.



Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.



Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable

LEGAL DISCLAIMER

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LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding ENGINEERS@WORK Group's Limited Warranty see: <https://www.synthcity.nl/us/service/general-terms-conditions/>

The Federal Communication Commission warns the user that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2 Setup

Intended use

The DT-300 is intended to create new sounds for your synthesizer. The DT-300 is a programmer for the Alpha Juno 1, 2 and MKS-50 synthesizers.

What is included

Please ensure that your DT-800 includes the following:

- DT-300 Programmer
- Worldwide power supply
- 5pin Male-Male MIDI Cable

3 Installation

Connecting the DT300 with the Juno:

1. Connect Midi out from DT300 to midi in on the Juno.
2. Push MIDI button on Juno until MIDI CH = .. is shown.
3. Turn alpha dial until MIDI CH = 1 is shown.
(or set DT300 to the same midi channel as the alpha juno)
4. Push the MIDI button until MIDI EXCL is shown.
5. turn alpha dial until MIDI EXCL = ON is shown.

Write MIDI data to memory:

Set memory protect switch on back of the juno to OFF
push MIDI button

While holding down WRITE button, push the MIDI button
(display shows: Write Complete!)

4 Operation

Power

- When setting up the DT-300 with the JUNO, turn both of them off.
- This unit might not work properly if turned on immediately after turned off. If this happens, simply turn it off and turn it on again a few seconds later.
- Be sure to use the supplied AC Adaptor. Using any other adaptor may cause trouble.

Starting up

Switch on the JUNO, then the DT-300.

The LED in the MANUAL button will lite up, the number of flashes show you the current midi channel (1 flash is channel 1, 2 = 3 etc..)

Depending on the stored setting, the LEDS of the faders will be on or off.

To control the JUNO with a MIDI device, connect the MIDI OUT of the MIDI device to the MIDI IN Connector on the Programmer. The DT-300's MIDI messages for tone color editing and the messages fed into the MIDI IN are mixed and sent through the MIDI PROGRAMMER OUT.

Tone Edit

This Tone Edit function is useful for slightly modifying the tone color. Select the tone color to be modified on the JUNO.

Using the knobs on the Programmer, edit the tone color.

If you move a desired knob even slightly, its setting position of that tone color will be deleted and ready to be manually controlled.

Note:

This Editing function does not automatically rewrite the existing tone color, therefore, if calling the same tone color later, the unchanged original tone color will be heard. To retain the edited tone color, take an appropriate writing procedure on the JUNO.

Note:

While editing a parameter with the DT-300, even if the current set positions of the knobs or switches are exactly what you desire, change the position once then return it. Otherwise, the parameter value might not be affected by the DT-300, thereby remain unchanged.

Creating a new Tone Color

This function is useful for synthesizing a tone color from scratch.

Push the Manual Button

Now, the whole panel setting of the DT-300 decides the tone color. That is, existing tone color in memory has nothing to do with your sound synthesis. You can make a completely new tone color from scratch.

Note:

The tone color you have synthesized will not be retained unless a proper writing procedure is taken on the JUNO. The writing operation, however, inevitably erases a tone color.

Change the settings

- 1) Turn OFF the DT300
- 2) Set the midi channel:

Midi channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DCO SUB OSCILLATOR level knob	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3
DCO NOISE level knob setting	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3

(Factory: midi ch: 1)

- 3) CHORUS FADER ON/OFF = Fader LEDS ON/OFF (Factory: ON)
- 4) CHORUS RATE KNOB to MIN = LED timer off , CHORUS RATE KNOB to MAX = LED timer on (5 min) (Factory: OFF)
- 5) DCO PWM RATE KNOB to MAX = midi CC mode, DCO PWM RATE KNOB to MIN = midi sysex mode (Factory: Sysex)
- 6) HPF LEVEL set to 0 (*)
- 7) press and hold the MANUAL BUTTON and turn on the DT300.
- 8) Release the manual button

(*) make sure this fader is always set to 0.

Midi CC data

When the DT300 is in midi CC mode, each fader will put out a midi CC. All faders will have a range from 0 to 127 (dec) except faders with less positions. Example, the bender range will only transmit 12 values. The chorus on/off will only transmit 2 values.

Fader with 2 positions: 00,7F

Fader with 4 positions: 00,41,6B,7F (SOME FADERS ARE REVERSED)

Fader with 6 positions: 00,27,41,5A,73,7F

Fader with 12 positions: 00,11,1C,26,31,3B,46,51,5B,66,70,7B

It is not possible to change the CC number or values.

Fader	CC HEX	CC DEC	
LFO RATE	18	24	00-7F
LFO DELAY	1B	27	00-7F
DCO RANGE	2A	42	7F,6B,41,00
DCO LFO	2F	47	00-7F
DCO ENV	30	48	00-7F
DCO ENV MODE	24	36	7F,6B,41,00
DCO AFTER	31	49	00-7F
DCO PULSE	27	39	00,41,6B,7F
DCO SAW	28	40	0,27,41,5A,73,7F
DCO SUB	29	41	0,27,41,5A,73,7F
DCO SUB LEVEL	2B	43	00,41,6B,7F
DCO NOISE LEVEL	2C	44	00,41,6B,7F
DCO PWM	23	35	00-7F
DCO PWM RATE	1A	26	00-7F
FILTER HPF	2D	45	00,41,6B,7F
FILTER CUTOFF	32	50	00-7F
FILTER RESONANCE	38	56	00-7F
FILTER LFO	36	54	00-7F
FILTER ENV	34	52	00-7F
FILTER ENV MODE	25	37	7F,6B,41,00
FILTER KEY FOLLOW	33	51	00-7F
FILTER AFTER	35	53	00-7F
VCA LEVEL	39	57	00-7F
VCA ENV MODE	26	38	7F,6B,41,00
VCA AFTER	3A	58	00-7F
CHORUS ON/OFF	54	84	00,7F
CHORUS RATE	55	85	00-7F
ENV T1	53	83	00-7F
ENV L1	4F	79	00-7F
ENV T2	50	80	00-7F
ENV L2	51	81	00-7F
ENV T3	4C	76	00-7F
ENV L3	4D	77	00-7F
ENV T4	4E	78	00-7F
ENV KEY FOLLOW	52	82	00-7F
BENDER RANGE	2E	46	00,11,1C,26,31,3B,46,51,5B,66,70,7B

5 Specifications

[Programmer PG-300]

Power consumption 100 mA (DC 9V , + on center pin)

Weight 0,75 Kg (without the Adaptor)

Dimensions ca. 280 (W) x 45(H) x 160(D)mm



