

Digimet D4
Instruction Manual

USING THE D4 METRONOME

I. Use of the D4

The D4 remote controlled metronome is a teaching tool designed ensemble use. It is specifically designed for use with marching ensembles. As with any tool, teachers will find different and creative ways to use it in various rehearsal situations. Using the remote control can be as simple as controlling the volume and tempo settings or as complex as programming an entire piece of music (or an entire marching show including tempo changes and fermatas). Teachers wishing to use the more complex features such as preset tempos or beat subdivisions should spend time learning to use these features prior to use in rehearsal. In addition to these written instructions, demonstration videos of the various functions of the D4 can be found online at www.youtube.com/diaimetproducts. The D4 is supplied with a RF remote control. It is also compatible with a traditional Digimet infrared remote control. Please note: infrared remote control range is approximately 50 feet. The range of the infrared remote control outdoors is subject to weather conditions and battery strength. The RF remote control supplied with the D4 performs well at a range of 300 feet (line of sight and fresh batteries). Each rehearsal situation presents its own set of challenges. Be sure to keep fresh alkaline batteries on hand (AAA) size).

II. Set Up and Basic Use

Set up a standard speaker stand. Spread the legs of the stand far enough to create a stable base for the D4. FOR BEST RESULTS, ELEVATE THE D4 TO A **HEIGHT OF APROXIMATELY 6 FEET.** Locate the power switch on the back panel and turn the unit on. During the first 5 seconds of power up, the D4 displays a number reflecting the version of the software used in the machine. The D4 can store information (tempo, volume, subdivision, and accent) in as many as 100 presets (there are an additional 200 presets available for linking together or looping). After the display of the software version, the unit is **muted** and ready to use at the setting stored under the number "0" on the remote control. IF THE USER IS USING A D4+ OR D4++, PLEASE CONSULT THE ADDITIONAL INSTRUCTIONS SUPPLIED BY THE NADY CORPORATION REGARDING THE PROPER USE OF THE WIRELESS MICROPHONE CHANNELS. All of the most basic metronome functions may be controlled from the front panel of the unit or the remote control. However, the more complex functions can only be accessed via the remote control. The operation of the metronome is based on a fairly simple premise: enter a number, then define the number. For example, entering the number "120" followed by the "MET" button tells the D4 that "120" represents a tempo. Pressing the number "3" followed by the "X"

button indicates that the "3" represents a beat subdivision. Entering the number "2" followed by the "ACCENT" button indicates that the metronome should accent the first of every two beats (select "0", "ACCENT" to remove the accent). When using the front panel, beat subdivisions are turned directly on or off using the X1, X2, X3, or X4 buttons. The front panel only allows access to mute, tempo, volume, tuning notes, and beat subdivisions through X4. Turning a beat subdivision on or an accent on automatically turns the previous setting off. More complex functions using the remote control are covered under "Using The Remote Control."

III. The Tuning Note Function

The D4 provides over 4 octaves of chromatic tuning pitches. These pitches may be accessed from the F and Bb keys. The user may use the tempo up or down buttons on the remote control to scroll through pitches chromatically. To quickly hear a specific octave, select a number (0 through 4) followed by the F or Bb button. "0" represents the lowest octave while each ascending number will produce a higher octave. The mute and volume buttons function in the usual manner while in the tuning note mode.

Pitch tables: The D4 tuning pitches are available in 9 different pitch tables (A436 - A444). To select a particular pitch table, select the desired number of the pitch table (438 for A438) followed by the RECALL button. To select a different pitch table, select the desired number (436 - 444) followed by the RECALL button. D4 will continue to use the selected pitch table until a new one is selected.

IV. Using The Remote Control

The D4 is compatible with BOTH the traditional Digimet infrared remote control and the RF remote control supplied with each unit. THERE ARE 8 SETS OF IDENTICAL CODES FROM WHICH A SELECTION MUST BE MADE PRIOR TO USE. The different sets of codes insure that one D4 user does not accidentally control another D4 in a nearby rehearsal area. The codes also allow for use of several D4 units simultaneously controlled by a single remote. Using multiple D4 units allows the sound of the metronome (or possibly voice) to be more efficiently spread around the rehearsal facility.

After turning on the power to the D4, USE THE FRONT PANEL TO SELECT A NUMBER (0 - 7) FOLLOWED BY THE "SET" BUTTON. PLEASE NOTE: SELECTING THE NUMBER "0" WILL PUT THE D4 IN INFRARED MODE. WHEN "0" IS SELECTED, ONLY THE TRADITIONAL DIGIMET INFRARED REMOTE CONTROL

WILL OPERATE THE UNIT.

TO USE THE RF REMOTE CONTROL SUPPLIED WITH THE UNIT, SELECT ANY OF THE NUMBERS "1" THROUGH "7".

After the code has been selected from the front panel of the unit, then select the "SET" key on the RF remote control followed by the same number chosen on the unit. The RF remote control will now be sending the same codes that the D4 unit expects to receive.

For best results, be sure the RF remote control has good battery strength. REMEMBER, AFTER BATTERY REMOVAL, BE SURE TO SELECT THE APPROPRIATE CODE FOR USE WITH YOUR UNIT (SEE D4 MULTIPLE CODE INSTRUCTIONS ABOVE). It is also helpful to have the D4 unit elevated on an appropriate speaker stand. BE CERTAIN THE LEGS OF THE SPEAKER STAND ARE SPREAD TO THE POINT THAT THE UNIT IS STABLE. The unit should be elevated to a height of about 6 feet. Under ideal conditions, the remote control should provide good results from a distance of 300 feet (line of sight). Because the D4 unit is so far away from the user, it is not possible to see the LED display on the unit. It is, therefore, advisable to take advantage of the presets that are available and have them ready for recall during rehearsal.

The unit is muted when the power is switched on. Pressing the "MUTE" button will start the metronome or the pitch function (depending upon which is currently selected). The metronome will start or stop on a given beat if the "MUTE" button is pressed on the desired down beat. NOTE: DO NOT HOLD THE "MUTE" BUTTON DOWN ON THE RF REMOTE. IT DIFFERS FROM THE INFRARED REMOTE CONTROL IN THAT IT ALTERNATELY SENDS CODES TO START AND STOP THE UNIT. IF IT DOES NOT RESPOND WHEN YOU PRESS THE "MUTE" KEY, SIMPLY PRESS IT AGAIN. To set a tempo, simply select the numeric key sequence of the desired tempo. If the unit is muted, the tempo will take effect when the "MUTE" button is pressed. If the unit is running and the new tempo is selected, the tempo will change when the "MET" button is pressed. Pressing the "TEMPO" up or down buttons will also change the tempo. Tempo settings can be pre-programmed and saved (up to 300 presets are available). The D4 tempo can be set as high as 300 beats per minute. Volume adjustments are made using the "VOLUME" up or down keys. Settings of the volume may also be pre-programmed (300) presets are available). The metronome can be told to accent the first of any number of beats (0 through 12). This function can be used to create the feel of a particular meter. Simply press the desired number followed by the "ACCENT" button. Accents can be pre-programmed and stored

(300 presets are available). Selecting "0" "ACCENT" removes the accent entirely. Beat subdivisions are created by selecting a number (1 through 9) followed by the "X" button. Beat subdivisions can also be preprogrammed (300 presets are available).

Accents may be created within a given beat subdivision. To create an accent within the subdivided beat, the procedure is the same as a normal beat subdivision with one exception. Instead of using a single digit to create the subdivision, 2 digits are selected. The sum of the 2 digits that are selected provides the total division of the beat. For example, pressing "22" followed by "X" will yield a beat subdivision of 4 (sixteenth notes) and will further divide the group of 4 into two groups of 2 (in effect, placing an accent on the upbeat). Pressing "33" followed by "X" will produce a sextuplet that is split into two groups of 3. Odd beat subdivisions can also be divided. "43" followed by "X" will produce a septuplet that is divided into a group of 4 and 3. The metronome will ignore invalid key sequences. If the user accidentally chooses an invalid key sequence, briefly pressing the "CLEAR" button will return the unit to the setting just prior to the invalid key sequence. Holding the "CLEAR" button will return the unit to the power up mode (muted with the setting that is stored under the number 0).

Some users prefer a higher pitched click for the main pulse. The D4 software allows the user to select one of two options. By pressing "900" followed by "RECALL", the user can change the pitch of the main pulse. To change back to the previous setting, use the same key selection ("900" "RECALL") as this key selection will toggle back and forth between the options.

D4 allows the user to save pre-programmed settings of the tempo, volume, subdivision, and accent for use in rehearsal. Each preset can be recalled on the down beat or when the unit is muted. To pre-program the unit, set the metronome to the desired tempo, volume, subdivision, and accent. Once the desired setting is established, choose a number (0 through 99) followed by the "STORE" key. Note: whatever setting is stored under the number 0 is the default setting of the unit when powered up or cleared. To retrieve a pre-programmed setting, select the desired number (0 through 99) followed by the "RECALL" button. Presets may be recalled while the unit is muted or during use (on the down beat for example). Some users prefer a little more accurate method of changing from one preset to another while the unit is in use. By selecting "800" followed by "RECALL" the metronome will switch into a mode that will complete a beat prior to switching to a new setting. **To** change back to the previous setting, use the same key selection ("800" "RECALL") as this key selection will toggle back and forth between

options.

NOTE: IF THE USER ENCOUNTERS A PROBLEM CALLING UP MANUAL PRESETS MANUALLY ON THE DOWNBEAT, TRY ENTERING "8" "0" "0" "RECALL" TO CORRECT THE PROBLEM.

The D4 preset feature is divided into 3 modes: manual, linked, and **looped**. Presets in the manual mode are defined by the numbers 0 - 99. Manual presets are used in the manner described above. Linked presets are numbered 100 - 199 and looped presets are numbered 200-299. Linked presets can be used to store an entire piece of music or an entire marching show. A linked preset is defined in the same way as a manual preset. Select the desired tempo, beat subdivision, accent, and volume. Once those parameters have been selected, the preset should be saved in the following manner (use only the numbers 100 - 199 to define a linked preset): enter the preset number then, select the "Bb" key followed by the desired number of counts. Then, select the "STORE" key. When selected (using the preset number followed by the "RECALL" key), the linked preset will supply 8 "free counts" at the tempo of the preset followed by the preset. The preset will run for the number of counts selected when stored. D4 will, then, immediately proceed to the next preset. The next preset will begin on the downbeat and run for the number of counts selected when stored. D4 will continue to run the linked presets in order until the chain of linked presets terminates (indicated by an empty OR auto-mute preset).

Some pieces of music (or shows) need a pause within the piece. To accommodate this need, D4 linked presets contain an auto-mute feature. The auto-mute feature uses a single preset. To use this feature, select the desired preset number. Then, store it using the following key sequence: enter the preset number then, select the "Bb" key followed by the "0" key. Then, select the "MUTE" key followed by the "STORE" key. This preset will automatically mute the D4 when it reaches that specific preset number. The user may, then, un-mute it by pressing the "MUTE" key. The unit will give 8 free counts at the new tempo and continue moving through the next series of linked presets until the chain ends (or auto-mutes again). During rehearsal, if the D4 is muted manually by the user, it will automatically begin at the beginning of the current preset with 8 free counts. If the user wishes to begin at a different preset, enter the number of the desired preset followed by the "RECALL" key. When un-muted, D4 will give 8 free counts at the tempo of the selected preset, then begin the chain of linked presets at that point.

The D4 programming worksheet is a useful tool to assist the user in the task of organizing a piece of music (or an entire show) and assigning

linked presets. It is available at the website www.digimet.us.

Looped presets are helpful when a user wishes to loop a section of music in rehearsal (perhaps to work a transition from one segment to the next). Looped presets are defined by the numbers 200 -299. To create a looped preset, select the desired tempo, subdivision, accent, and volume. Enter the preset number (200 - 299) followed by the "Bb" key. Then, enter the number of counts followed by the "STORE" key. After creating a chain of looped presets, recall the group of looped presets for playback by selecting the number of the first looped preset followed by the "F" key. Then, select the last looped preset followed by the "RECALL" key (for example: 200 F 203 RECALL). The selected group of looped presets will begin with 8 free counts followed by the selected presets. It will then, begin again with 8 free counts. This process will continue until the user manually mutes the unit. IF THE USER ENCOUNTERS DIFFICULTY WHILE PROGRAMMING THE PRESETS, SELECT THE CLEAR BUTTON. THIS WILL AUTOMATICALLY PUT THE DIGIMET BACK INTO MANUAL MODE. THE USER SHOULD, THEN, BE ABLE TO CONTINUE PROGRAMMING.

NOTE: CAREFUL PROGRAMMING AND PLACEMENT OF MULTIPLE D4 UNITS CAN ALLOW THE CLICK TO MOVE AROUND THE REHEARSAL AREA. USING D4 IN THIS MANNER ALLOWS THE "CLICK" TO FOLLOW THE DRUMLINE.

VII. Charging The Battery

The D4 should easily be able to provide service for lengthy rehearsals (8 hours or more). When the battery reaches a low charge, "LO" will be displayed on the front panel of the unit. At this point, the unit will not function until re-charged. To charge the unit, simply connect the charger to an outlet and connect the power plug to the jack on the back of the unit. It should take no more than a couple of hours to recharge.

To see videos on how to use D4, please go online to www.youtube.com/digimetproducts. This also an excellent way to keep up with the latest features available in DIGIMET metronomes.

Each D4+ and D4++ uses a wireless microphone system developed by NADY wireless systems. Please consult the instructions provided with each unit to operate each wireless microphone channel. In addition to the ability to mute each microphone at the transmitter, the volume and muting of each wireless microphone channel can be controlled with the remote control. On a D4+, the user should press the "1" key on the remote control followed by either the "MUTE" button or the "VOLUME" keys. This key sequence allows the teacher to either mute or control the volume of

the wireless microphone channel with the remote control. The same instructions apply to a D4++ except the "1" key controls the volume, or muting, of the channel 1 wireless microphone channel and the "2" key controls the volume, or muting, of the channel 2 wireless microphone channel.

Regulatory Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for CLASS B 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 instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

"CAUTION": Exposure to Radio Frequency Radiation. Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

LIMITED WARRANTY: All Digimet products carry a one year warranty covering parts and labor for a period of one year.