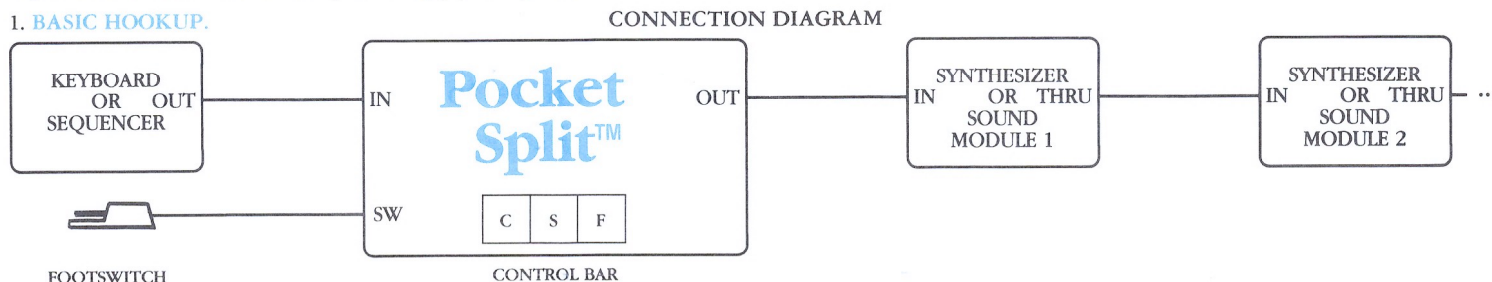# Pocket Split™
OPERATING INSTRUCTIONS

Pocket Split™ can be used to split any MIDI keyboard into eight zones — sending on eight separate MIDI channels or combination of channels. An additional floating split mode floats the split point between the player's left & right hands. Pocket Split™ can be used with all MIDI equipment and requires no batteries or external power supply to operate.

1. BASIC HOOKUP.

CONNECTION DIAGRAM

a) Connect the MIDI OUT of a keyboard or any MIDI device to the input jack labelled "IN" on Pocket Split™.
b) Connect the output jack labelled "OUT" of Pocket Split™ to the MIDI IN of a synthesizer or sound module.
c) Connect optional footswitch to the jack labelled "SW" on Pocket Split™.

When Pocket Split™ is first connected, the status LED lights — indicating the presence of power. When data is transmitted, the status LED turns off for each MIDI message. Real-time (i.e. clock & active sensing) messages do not cause the status LED to turn off (SEE **LED MODES**).

All the sound modules can now be played from the master keyboard or MIDI device. When Pocket Split™ is powered-up, it defaults to TRANSPARENT MODE. In TRANSPARENT MODE, the keyboard is not split, and Pocket Split™ passes all data directly to the MIDI OUT jack.

OPERATION

Pocket Split™ has two basic modes: TRANSPARENT MODE and SPLIT MODE. In TRANSPARENT MODE, Pocket Split™ passes all incoming data directly to the MIDI OUT jack. In SPLIT MODE there are two possible sub-modes: FIXED MODE and FLOATING MODE. In FIXED MODE, the keyboard can be split into 8 separate "zones". These zones can be thought of as opaque pieces of paper that are layered over the keyboard or BASE LAYER. The BASE LAYER transmits notes on the original incoming MIDI Channel. If a FLOATING MODE is selected, Pocket Split™ creates a 2-way split, with the split point floating between the player's left and right hands.

Anatek's unique CONTROL BAR operates all of Pocket Split's™ functions. The primary commands are: C)HANNEL assign, S)ET FIXED SPLIT(s), and F)LOATING SPLIT. Many of these command can also be operated from a footswitch. The complete command set is listed below.

CONTROL BAR COMMANDS

TAP — a single switch closure held for less than ½ second
HOLD — a single switch closure held while selecting a key on the master keyboard
DOUBLE-TAP — two successive switch closures in less than ½ second

SET SPLIT ZONE (FIXED)[1]	HOLD S	Select range: hit low & high notes on keyboard
SET ZONE CHANNEL	HOLD C	Select MIDI Channel(s) from KEYCHART
CHANGE CHANNEL[2]	HOLD C	1. Select any key in a previously defined zone 2. Select MIDI Channel(s) from KEYCHART
SET FLOAT MODE CHANNEL[3]	HOLD F	Select MIDI Channel(s) from KEYCHART
SET FLOAT RANGE[4]	DOUBLE-TAP F	1. Select low & high notes on keyboard 2. TAP F to accept, TAP C to abort
CLEAR ALL SPLITS ON CHANNEL (x)[5]	DOUBLE-TAP C	1. Send a NOTE ON from the keyboard or MIDI Channel you wish to clear 2. TAP C to accept, TAP F to abort
TOGGLE BETWEEN TRANSPARENT & LAST USED SPLIT MODE	TAP S	(Valid only if FIXED or FLOAT is set)
TOGGLE BETWEEN FIXED AND FLOATING SPLIT MODES	TAP F	(Valid only if FLOAT has been set)

NOTES
1. a) Two notes are normally used to define a zone range; however, if only one key is specified for the zone range, it is assumed to be the lower key, and the upper key is set to NOTE #127.
   b) A zone will remain 'blank' (i.e. inaudible) until it has been assigned a MIDI Channel.
2. a) If no zone is specified, the MIDI Channel of all 'blank' layers is changed.
   b) If a key on the BASE LAYER is specified, the channel of the base layer is changed.
3. a) UPPER = Channel from KEYCHART
   b) LOWER = Channel of BASE LAYER
4. The FLOAT RANGE is the minimum distance between the left & right hands. On power-up, the FLOAT RANGE defaults to ONE OCTAVE.
5. The CLEAR MODE clears all splits for a particular keyboard. Several keyboards (transmitting on separate channels) can be merged together and assigned unique splits (so long as the 6-zone maximum is not exceeded). The clear channel command allows one keyboard's splits to be erased, while retaining another's.

FOOTSWITCH COMMANDS

TOGGLE BETWEEN TRANSPARENT & LAST USED SPLIT MODE	TAP FS	
SET SPLIT ZONE (FIXED)	HOLD FS	Select low & high notes on keyboard
SET ZONE CHANNEL	HOLD FS	Select MIDI Channel(s) from KEYCHART

NOTE: Tapping the footswitch always toggles between transparent & split mode. When the footswitch is held, it acts like the CONTROL BAR'S S or C command, depending on which mode was used last. For example, if a split has just been defined—either from the CONTROL BAR or footswitch—it is assumed that the user wants to define the MIDI Channel next, so holding the footswitch invokes the C command. In this setup, both the split range and channel can be set from the footswitch.
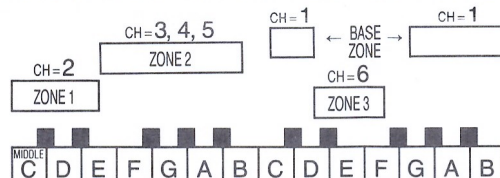
KEYCHART

OPERATION EXAMPLE: A FIXED THREE-ZONE SPLIT

Assume your master keyboard is transmitting on MIDI Channel 1. You wish to create 3 splits so that the first zone transmits on Channel 2, the second zone transmits on 3, 4, and 5, and the third zone transmits on Channel 6.

DEFINING ZONE 1 AND SETTING ITS MIDI CHANNEL—Press and hold S on Pocket Split™. While still holding S, play MIDDLE C and the E above it on the master keyboard. This defines the lower & upper limits of the zone as MIDDLE C and E *inclusive*. Release the CONTROL BAR. Although the zone boundaries have been set, the zone is still considered "blank" since no MIDI Channel has been assigned. To set the **MIDI Channel**, press and hold C on Pocket Split™, refer to the **KEYCHART** and play the key corresponding to the MIDI channel (in this case we want channel 2, so play the D above MIDDLE C). The definition of ZONE 1 is now complete.

ZONE 2—Hold S on Pocket Split™. On the master keyboard, play E and B above MIDDLE C. Hold C on Pocket Split™. Play E, F, and G as indicated by the **KEYCHART**. This assigns ZONE 2 to transmit on channels 3, 4, and 5.

ZONE 3—Hold S on Pocket Split™. Play D and F two octaves above MIDDLE C. Hold C on Pocket Split™. Play A above MIDDLE C as indicated by the **KEYCHART** (Channel 6).

* NOTE 1: You may have noticed that ZONE 1 and ZONE 2 overlap on the E above MIDDLE C. Pocket Split's™ zones are 'opaque' and cannot overlap. In the case where two zones accidentally overlap, Pocket Split™ assigns the overlapping area to the *most recently defined* zone. In the above example, the upper limit of ZONE 1 is reassigned to the D#, and the E becomes part of ZONE 2. The equivalent of an overlapping zone can be created by specifying a 'middle' zone which transmits on the same MIDI Channels as the two adjacent zones.

* NOTE 2: In the above example, all keys outside (and in between) the 3 zones will transmit on Channel 1, since they belong to the BASE LAYER.

SPECIFICATIONS

MIDI DATA TYPES
RECEIVED: ALL
TRANSMITTED: ALL
Active sensing is always sent

DIMENSIONS: Length 3.2" (81mm) WEIGHT 2.3oz (67 grams)
Width 2.1" (53mm)
Height 1.2" (31mm)

SPECIAL NOTE Pocket Split™ is designed to comply with the MIDI 1.0 Specification document Version 4.0, and will operate with all MIDI equipment designed to this specification.

LED MODES

The status LED blinks at different rates indicating Pocket Split's™ operational modes:

TRANSPARENT MODE	◆ Solid (except when transmitting)
BUTTON PRESS	◆ Fast flash when CONTROL BAR or footswitch are pressed
SPLIT MODE	◆ Medium flash
FLOAT MODE	◆ Slow flash