

DIGITRONIC COMPLEX RECEIVER

Description

The DIGITRONIC COMPLEX receiver (Rx) is a multi-user unit, intended for the gates of Town house complexes or commercial premises. It employs secure single channel code hopping, is latch or pulse selectable, and operates with up to 500 Digi e-key 4-button transmitters (Tx). Other features include selective adding and deleting of transmitters in specific locations, and 'erase all'.

Only Digi e_key transmitters can be used with this receiver!

Application

The DIGITRONIC COMPLEX receiver does not require careful record keeping of each TX and in which position in EEPROM it has been stored. Instead, the COMPLEX receiver is designed to accommodate 100 different town houses/units, with each being allocated 5 different positions for storing digi e-key transmitters, giving a total of 500.

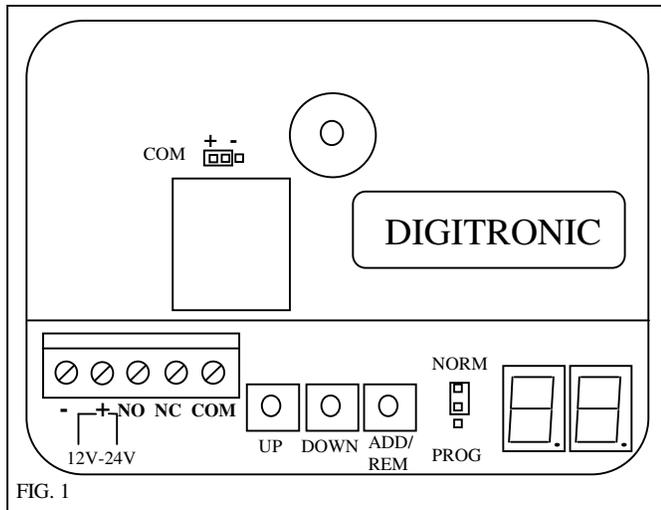
If a transmitter is lost, it is possible to delete a single existing code from a unit's block of five, or the entire block of five.

Coding Procedure

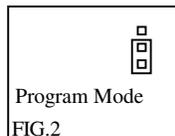
The Complex Receiver records the codes of each e-key Transmitter button by means of a coding procedure. No setting of DIP-switches is necessary.

During normal operation the decimal point of the 7-segment display will flash to show that signals are being received.

To select normal operation the link LK2 must be in the upper 'NORM' position as in Fig.1.



To select administration mode the link LK2 must be in the lower 'PROG' position as in Fig. 2.



(I) Erase all. (Advisable on initial installation.)

Disconnect the power to the Complex Receiver. Insert the link LK2 in the 'PROG' position as in Fig.2. While holding the ADD/REM button depressed, reconnect the power. Keep the ADD/REM button pressed for 16 seconds. During this time the display will indicate [.] After 16 seconds the display will show [EA] to indicate that all the transmitter codes have been erased.

(II) Navigating in admin mode:

- To enter admin mode connect link LK2 in the lower 'PROG' position in Fig.2. The display will indicate [01] which is the unit number.
- Use the 'UP' or 'DOWN' button to select the required unit number. The maximum number is 100. This will be displayed as [0.0.]
- Now press the 'ADD/REM' button once. The display will indicate [01]. This is the first of the five locations allocated to that unit.
- Use the 'UP' or 'DOWN' button to select the required location number. The maximum number is 5.
- If a location is vacant the number will flash. If a location is occupied by a transmitter code, its number will be displayed without flashing.
- To return to the unit number, press both the 'UP' and 'DOWN' button for 1 second.

(II) Removing a transmitter from the receiver:

- As explained above, navigate to the location you want to erase.
- With the occupied location displayed without flashing, press and hold the 'ADD/REMOVE' button. The decimal points will be displayed.
- Hold this button for 8 seconds. Only the points will now be displayed.
- Release the button to remove that single location.
- If you hold the 'ADD/REM' button for a further 8 seconds all five locations of that unit number will be removed, and [EU] (Erase Unit) will be displayed.

(III) Adding a transmitter to the receiver:

- Navigate to the required unit number, and then to a vacant location in the block of five of that unit. The flashing location number will indicate this.
- Now press the 'ADD/REM' button. The display will indicate [-1]. The unit is now waiting for a signal from a valid Digi e-key transmitter. If no signal is received within 30 seconds the 'Add' function will be aborted.
- Press the desired button on the Digi e-key, and [-2] will be displayed.
- Press the same remote button again and, if successful, the display will step to the next vacant location.
- If un-successful, the display will show [--] briefly and revert the flashing location number.
- If during the 'Add' cycle (with [-1] or [-2] displayed), you choose to abort the learning procedure, press the 'UP' and 'DOWN' buttons simultaneously for 1 second.
- Repeat from step 2 to 'Add' further e-key transmitters, up to a maximum of five per unit.

Notes

- The receiver can operate from either a 12V to 24V DC supply or a 9V to 22V AC supply (Fig.1).
- If an attempt is made to add a 6th transmitter to a unit number, then 'UF' (Unit Full) will be displayed.
- If a transmitter battery is low the display will indicate this by showing [BL] when that transmitter is used.
- If a transmitter is lost, in order to maintain the high level of security, it is important to 'Remove' that transmitter code from the Complex receiver as in (II) above. The lost Tx will no longer be able to operate the receiver.
- An e-key transmitter cannot be added to more than one location on the Complex receiver. However, an e-key transmitter can be used to operate several different Complex receivers.
- If a transmitter is 're-added' to the receiver using a different button code, the new button code will replace the previous one. However care should be taken to select the same town house/unit number as before. Refer note 5.
- Button code: Any single button or combination of up to four buttons.

Latch / Pulse Operation

Latch or pulse (500ms-minimum) operation can be selected via the Latch/Pulse solder link (O1). If not soldered, Pulse operation is the default.

Learned button Codes

If solder link O2 is soldered then any of the four buttons on an e-key transmitter will be recognized by the receiver, regardless of which button was used during 'adding'. If left unsoldered, only the button code that was used during 'adding' will be recognized.

Output

The receiver relay output may be linked via the COM link to Negative (-), Positive (+) or removed for 'potential free'. The factory default is 'Negative' output (Fig 1).

TX Identification

If during normal operation the unit number or transmitter number needs to be identified the unique TX identification feature can be used. Press and hold the 'UP' button. Now press the transmitter. The unit number will be displayed. No output will be generated. To display the location number, press and hold the 'DOWN' button. Now press the transmitter. The transmitter number will be displayed. No output will be generated. If the both points on the display are also on this indicates that the TX battery voltage is low and will need to be replaced soon.

Your Digitronic Complex Receiver is now ready for use.