

§ 76.641 Support for Interactive Digital Cable Products on Digital Cable Systems.

(a) The requirements of this section shall apply to all digital cable systems that are subject to the requirements set forth in § 76.640, as specified in § 76.640(a).

(b) All high-definition set-top boxes acquired by a cable operator for distribution to customers shall include both a DVI or HDMI interface and a functional IEEE 1394 interface. A functional interface is one that extends bi-directional communication and control with the cable head-end to other customer premises equipment having the same or a compatible interface, provided that system security as afforded by the operator-distributed device is maintained. Specifically, a functional 1394 interface shall do the following:

(1) Transmit and receive compressed video and audio services isochronously using the IEC 61883 standard as specified in CEA-2027-B.

(2) Provide a graphical user interface using methods compliant with CEA-2027-B. The graphical user interface and user controls provided on the IEEE 1394 interface shall be substantially similar to the graphical user interface and user controls provided on the DVI or HDMI interface.

(a) In a set-top box with a single tuner and without a hard disc drive, support a graphical user interface and content stream for the IEEE 1394 interface in addition to the graphical user interface supported on the DVI or HDMI interface.

(b) In a set-top box with multiple tuners, support at least one graphical user interface and multiple content streams for the IEEE 1394 interface.

(c) In a set-top box with a hard disc drive, regardless of whether such set-top box has a single tuner or multiple tuners, support at least one graphical user interface and multiple content streams for the IEEE 1394 interface.

(3) Enable the remote control of the set-top box to be exported to the IEEE 1394 interface using methods compliant with CEA-2027-B.

(4) In order to comply with the requirements in subsections (b)(1), (2), and (3), the specifications set forth in Paragraph 4.8 of CEA-2027-B shall be required for connections and reservations in order to enable recording and play back devices to register user commands as far in advance as this information is provided by the operator to other ports

on the set-top box and to ensure that the required resources for sourcing and recording (input and output plug registers, bandwidth allocation, tuner access and disk space reservation) will be reserved at that time to complete the operations.