

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	)	
	)	
	)	
EchoStar Technologies L.L.C.	)	MB Docket No. 13-177
	)	
Petition for Waiver of Section 15.117(b)	)	
of the Commission's Rules	)	
	)	
	)	

MEMORANDUM OPINION AND ORDER

Adopted: September 30, 2013

Released: September 30, 2013

By the Chief, Media Bureau:

I. INTRODUCTION

1. In this Order, we grant EchoStar Technologies L.L.C.'s ("EchoStar") unopposed request for waiver of the Federal Communications Commission's ("Commission") analog broadcast tuner requirements to allow EchoStar to import, market, and sell two models of the Channel Master K77 ("Channel Master devices"), a high-definition ("HD"), Internet-enabled, over-the-air digital video recorder ("DVR") that does not include an analog broadcast tuner.<sup>1</sup> We waive the requirement that the Channel Master devices must "be capable of adequately receiving all channels allocated by the Commission to the television broadcast service," as required by Section 15.117(b) of the Commission's rules.<sup>2</sup> We conclude that the waiver is in the public interest because it will enhance consumer choice for retail equipment, offer consumers an additional way to access video programming, and reduce the cost and power consumption of the Channel Master devices. To avoid possible confusion about the devices' capabilities and limitations regarding the reception of over-the-air analog signals, we condition this

<sup>1</sup> EchoStar Petition at 1. EchoStar seeks a waiver for two variants of the K77 device. Model CM-7500GB16 is Flash memory-based with 16 gigabytes ("GB") of memory, but no internal hard drive. DVR capability can be added through the attachment of an external USB hard drive. Model CM-7500TB1 includes a 1 terabyte ("TB") hard drive. See EchoStar Petition at 2, n.2; Letter from Neil A. Chilson, Counsel to EchoStar, to Marlene H. Dortch, Secretary, FCC, at 1, n.2 (Aug. 15, 2013) ("*EchoStar/Channel Master Ex Parte*").

<sup>2</sup> See 47 C.F.R. § 15.117(b). Pursuant to this provision, TV broadcast receivers must currently be capable of receiving both analog and digital broadcast signals. This Order grants a waiver of the National Television System Committee ("NTSC") analog broadcasting standard, which low-power, Class A, and translator over-the-air stations (collectively, "low power television stations") that have not already gone all-digital are permitted to use until September 1, 2015, the date set for the termination of all analog low power television service and the completion of the digital transition. Digital broadcasters use the Advanced Television Systems Committee ("ATSC") broadcasting standard.

waiver on EchoStar's voluntary commitment to a campaign to educate consumers and retailers on the capabilities and limitations of the Channel Master devices.<sup>3</sup>

## II. BACKGROUND

2. The All Channel Receiver Act of 1962 grants the Commission the "authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting when such apparatus is shipped in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."<sup>4</sup> The Commission first exercised this authority in 1962 by adopting Section 15.70(a) of the Commission's rules.<sup>5</sup> The successor to this rule, now codified at Section 15.117(b), states that "TV broadcast receivers shall be capable of adequately receiving all channels allocated by the Commission to the television broadcast service."<sup>6</sup> A "TV broadcast receiver" is defined as a "device designed to receive television pictures that are broadcast simultaneously with sound on the television channels authorized under part 73 of this chapter."<sup>7</sup> For purposes of this rule, the term "TV broadcast receivers" includes "devices, such as TV interface devices and set-top devices that are intended to provide audio-video signals to a video monitor, that incorporate the tuner portion of a TV broadcast receiver and that are equipped with an antenna or antenna terminals that can be used for off-the-air reception of TV broadcast signals, as authorized under part 73 of this chapter."<sup>8</sup> The purpose of this rule was to ensure that television broadcast receivers receive all television broadcast channels irrespective of

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<sup>3</sup> *Infra*, ¶ 8.

<sup>4</sup> 47 U.S.C. § 303(s); the All Channel Receiver Act of 1962, Pub. L. No. 87-529, 76 Stat. 150. *See also* S. Rep. 1526, 87<sup>th</sup> Cong., 2<sup>nd</sup> Sess. 1962 *reprinted at* 1962 U.S.C.C.A.N. 1873, 1875 (discussing "the relative scarcity of television receivers in the United States which are capable of receiving the signals of UHF stations" (only about 16%), which "prevents effective competition between UHF and VHF stations which operate in the same market").

<sup>5</sup> All-Channel Television Broadcast Receivers, 27 Fed. Reg. 11,698, 11,700 (Nov. 28, 1962); 47 C.F.R. § 15.70(a) (1962) (current version at 47 C.F.R. § 15.117(b)) ("[a]ll television broadcast receivers manufactured after April 30, 1964, and shipped in interstate commerce or imported from any country into the United States, for sale or resale to the public, shall be capable of adequately receiving all channels allocated by the Commission to the television broadcast service.").

<sup>6</sup> *See Revision of Part 15 of the Rules regarding the operation of radio frequency devices without an individual license*, 4 FCC Rcd 3493, 3517, ¶ 139 (1989) (adopting 47 C.F.R. § 15.117(b)). A previous Commission statement could be interpreted to reflect some flexibility with respect to the application of this rule. *See Advanced Television Systems And Their Impact Upon The Existing Television Broadcast Service*, Fifth Report and Order, 12 FCC Rcd 12809, 12855-6 (1997) ("We do not believe that our goals would be advanced by mandating that all digital receivers receive and display NTSC signals and DTV signals, regardless of format, aspect ratio, or progressive or interlaced scanning, as broadcasters argue. We expect that equipment manufacturers will make available to consumers digital receivers that receive both NTSC and DTV signals. However, we will not preclude equipment manufacturers from designing digital receivers that do not receive NTSC signals."). However, on its face, Section 15.117(b) of the rules requires a television broadcast receiver to be able to receive "all channels allocated by the Commission to the television broadcast service." 47 C.F.R. § 15.117(b); *see also* Office of Engineering and Technology Laboratory Division Knowledge Database (available at <https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?switch=P&id=42863>), Publication Number 218634 (rel. Dec. 17, 2009) (confirming Section 15.117(b)'s dual ATSC/NTSC tuner requirement).

<sup>7</sup> 47 C.F.R. § 15.3(w).

<sup>8</sup> 47 C.F.R. § 15.117(a).

the channel's place in the broadcast spectrum.<sup>9</sup>

3. On August 9, 2013, the Media Bureau granted TiVo Inc.'s unopposed request for waiver of both the broadcast and cable analog tuner rules<sup>10</sup> to allow it to sell digital video recorders ("DVRs") that receive neither analog broadcast nor analog cable signals.<sup>11</sup> With respect to the Section 15.117(b) analog broadcast tuner requirement, the Bureau concluded that the waiver "will cause minimal inconvenience and disruption to consumers" because consumers "may still rely on the analog tuning functionality required to be in the television sets they already own to view analog low-power broadcast stations."<sup>12</sup> The Bureau also found that waiver of both of the analog tuner rules would reduce the devices' retail cost and power consumption.<sup>13</sup> The Bureau conditioned the waiver on TiVo's voluntary consumer education campaign,<sup>14</sup> which the Bureau concluded was necessary because "there remains a small subset of consumers that will need to understand the limits" of these devices.<sup>15</sup>

4. On June 21, 2013, EchoStar filed a request for waiver of Section 15.117(b) of the Commission's rules with respect to its two Channel Master K77 devices, which it describes as non-subscription boxes that combine digital HD broadcast television content, DVR functionality, and access to over-the-top Internet streaming content.<sup>16</sup> EchoStar has requested expedited treatment in order to make these devices available at retail by fall 2013.<sup>17</sup> To support its request, EchoStar argues that waiver would "afford[ ] consumers access to an innovative, non-subscription, cost-effective device with the sleek size and functionality they want."<sup>18</sup> It argues that requiring the devices to include analog tuners would make them more bulky, less energy efficient, more expensive, and thus less appealing to consumers.<sup>19</sup> Finally, it argues that waiver will have no negative impact on consumers because only low power television

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<sup>9</sup> All-Channel Television Broadcast Receivers, 27 Fed. Reg. 11,698 (Nov. 28, 1962). When the Commission defined a TV broadcast receiver to include "TV interface devices and set-top devices that are intended to provide audio-video signals to a video monitor," it was focused on whether those devices should include digital broadcast receivers because of the impending DTV transition, rather than whether devices should include analog broadcast receivers. See *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, 17 FCC Rcd 15978, 15995-15999, ¶¶ 39-46 (2002) ("Consistent with the intent of Congress that we not use our authority under the ACRA to set broad standards for television receivers, we believe that the rules implementing the DTV tuner requirements should avoid imposing new performance standards on DTV except as necessary to ensure that receivers can adequately tune DTV signals on all of the television channels."). This context informs our analysis of the public interest benefits below.

<sup>10</sup> 47 C.F.R. § 15.117(b) (governing broadcast tuner requirements); 47 C.F.R. § 15.118(b) (governing cable tuner requirements).

<sup>11</sup> See *TiVo, Inc. Petition for Waiver of Sections 15.117(b), 15.118(b), 15.123(b)(1), 15.123(c), and 15.123(d) of the Commission's Rules*, MB Docket No. 11-105, Memorandum Opinion and Order, DA 13-1740, ¶ 10 (rel. Aug. 9, 2013) ("2013 TiVo Waiver Order").

<sup>12</sup> See 47 C.F.R. §§ 15.3(w); 15.117(a), (b); 2013 *TiVo Waiver Order*, ¶ 8.

<sup>13</sup> 2013 *TiVo Waiver Order*, ¶¶ 6-7.

<sup>14</sup> 2013 *TiVo Waiver Order* ¶¶ 1, 9.

<sup>15</sup> 2013 *TiVo Waiver Order* ¶ 9.

<sup>16</sup> EchoStar Petition at 2.

<sup>17</sup> EchoStar Petition at 9.

<sup>18</sup> EchoStar Petition at 3-4.

<sup>19</sup> EchoStar Petition at 6.

stations are currently permitted to broadcast in analog format, that even most low power television stations are already broadcasting in digital, and that all low power television stations must transition to digital by September 1, 2015.<sup>20</sup> EchoStar emphasizes that consumers who want to receive analog signals will continue to be able to do so via their televisions.<sup>21</sup> EchoStar voluntarily made several consumer education commitments to ensure that consumers and retailers are aware of the devices' capabilities and limitations.<sup>22</sup> On July 10, 2013, the Media Bureau released a Public Notice seeking comment on EchoStar's request for waiver. Several parties filed in support of the waiver and no parties opposed EchoStar's request.<sup>23</sup>

### III. DISCUSSION

5. We find good cause to grant EchoStar's request for waiver, subject to EchoStar's voluntary commitment to implement a consumer and retailer education campaign about the capabilities and limitations of the Channel Master devices.<sup>24</sup> EchoStar presents specific benefits to support its waiver request, including promoting competition for retail devices, cost savings, and energy efficiency.

6. EchoStar states that the Channel Master devices have been designed to respond to consumer demand for a cost-efficient DVR that combines over-the-air and over-the-top functionality.<sup>25</sup> EchoStar argues that requiring the Channel Master devices to include an analog tuner would eliminate the features it believes will be most compelling to consumers, namely cost-efficiency and sleek design, making the device a less attractive alternative for consumers and causing it to come to market in a much later time frame, if at all.<sup>26</sup> Ness Electronics, an electronics retailer, commented that "[o]ur market studies demonstrate that low cost products that provide consumers with the ability to combine access to broadcast programming with over-the-top and DVR functionalities, such as the Channel Master K77, are needed to satisfy consumer demand."<sup>27</sup> Based on this record, we find that the retail availability of the Channel Master devices would enhance consumer choice and that some consumers may find the combination of over-the-air broadcasting and over-the-top video free of monthly subscriptions to be compelling.<sup>28</sup> We are also persuaded that the required addition of an analog broadcast tuner in strict compliance with Section 15.117(b) would increase the cost, size, and energy consumption of the devices,

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<sup>20</sup> EchoStar Petition at 7.

<sup>21</sup> EchoStar Petition at 6-8.

<sup>22</sup> *EchoStar/Channel Master Ex Parte* at 2-3.

<sup>23</sup> We received comments from Channel Master, Ness Electronics, Inc., and David Zatz in support of EchoStar's waiver petition. Channel Master Comments at 1; Ness Electronics, Inc. Comments at 1; Zatz Comments at 1. EchoStar filed reply comments reiterating its arguments and highlighting that no parties filed in opposition to its request. EchoStar Reply at 1.

<sup>24</sup> Section 1.3 of the Commission's rules states that "[t]he provisions of this chapter may be suspended, revoked, amended, or waived for good cause shown, in whole or in part, at any time by the Commission, subject to the provisions of the Administrative Procedure Act and the provisions of this chapter. Any provision of the rules may be waived by the Commission on its own motion or on petition if good cause therefor is shown." 47 C.F.R. § 1.3.

<sup>25</sup> *EchoStar/Channel Master Ex Parte* at 1-2.

<sup>26</sup> *EchoStar/Channel Master Ex Parte* at 2 (noting that adding an analog tuner "would dramatically delay introduction of the device in the United States and could ultimately render the product commercially unviable").

<sup>27</sup> Ness Electronics, Inc. Comments at 1.

<sup>28</sup> EchoStar Petition at 5.

potentially substantially undercutting its attractiveness to consumers.<sup>29</sup> As one commenter stated, “the additional expense associated with integrating archaic analog tuning capabilities would be a detractor to many price-sensitive consumers who would otherwise benefit from an advanced television solution, independent of an MVPD.”<sup>30</sup> As EchoStar stated, requiring an analog tuner would increase the retail price by \$20 to \$30 per device, the size of the devices by up to 33 percent, and the energy consumption of the devices by 2 watts, all without a marked benefit for consumers.<sup>31</sup> Taken together, the benefits that will result from a waiver establish that deviation from the general rules will serve the public interest better than strict adherence to them.<sup>32</sup>

7. In addition to finding that the addition of an analog tuner would unduly add to the cost, size, and energy consumption of the devices, we also find that waiving the analog broadcast tuner requirements will have a *de minimis* effect on consumers. As discussed above, the Commission adopted Section 15.117(b) to ensure that television broadcast receivers are “capable of adequately receiving all channels allocated by the Commission to the television broadcast service.”<sup>33</sup> All full-power television is now broadcast in digital and the Commission has set a deadline of September 1, 2015 for the dwindling number of low power television broadcasters to cease analog transmissions.<sup>34</sup> In fact, with little more than two years before low power television stations are required to broadcast in a digital format, more than 60 percent of low power television stations have already fully converted to digital.<sup>35</sup> Therefore, the overwhelming majority of broadcast viewers currently view only digital broadcast signals, and after the low-power digital transition, broadcast viewers will receive only digital broadcast signals. We find it significant that there was no opposition to the waiver by low-power broadcasters, the only group of television broadcasters still transmitting analog signals that arguably could be impacted by the grant of this waiver. Nonetheless, we have carefully considered the potential impact on the remaining low power television licensees and their viewers. We find that waiver in this case will not negatively impact consumers’ access to analog television signals. Channel Master noted that inclusion of an analog broadcast tuner is unnecessary to ensure consumers’ access to analog low power television signals because “consumers [who connect their Channel Master devices to televisions] can still access analog

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<sup>29</sup> EchoStar Petition at 3.

<sup>30</sup> Zatz Comments at 1.

<sup>31</sup> EchoStar Petition at 3, 6; *EchoStar/Channel Master Ex Parte* at 2 (noting that the increase in size would be necessary to dissipate the additional heat of the analog tuner). EchoStar calculated that the addition of an analog tuner would require several non-recurring engineering costs, in addition to the cost of the tuner itself. Those engineering costs include adding a board spin or creating a daughter card to support analog tuner circuitry, rerunning thermal calculations, and designing a new chassis. EchoStar Petition at 6. Channel Master stated in its comments that “requiring Channel Master to include an analog broadcast tuner in its product will dramatically increase the cost . . . of the device.” Channel Master Comments at 1.

<sup>32</sup> *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“[W]aiver is appropriate only if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest.”).

<sup>33</sup> 47 C.F.R. § 15.117(b).

<sup>34</sup> 47 C.F.R. § 74.731(l).

<sup>35</sup> Hossein Hashemzadeh, FCC, Nat’l Translator Ass’n Seminar Presentation, May 2013, at 14, available at [http://www.tvfmrtranslators.com/past\\_papers/2013/Hossein%20Hashemzadeh%20FCC%20Media%20Bureau%20Update%202013.pdf](http://www.tvfmrtranslators.com/past_papers/2013/Hossein%20Hashemzadeh%20FCC%20Media%20Bureau%20Update%202013.pdf).

channels through their television tuner[s,]”<sup>36</sup> which are required under Commission rules to have analog tuners that consumers can use to receive any analog broadcast or cable channels that they wish to receive.<sup>37</sup> Therefore, as EchoStar correctly points out, those viewers that currently view analog signals will not be left stranded by the grant of EchoStar’s requested waiver.<sup>38</sup> We also find persuasive the argument that consumers who are most likely to purchase a Channel Master device are likely looking for digital content and are unlikely to be disappointed by the digital-only functionality of the devices.<sup>39</sup> We believe that any inconvenience or disruption this waiver may cause will be outweighed by the benefits of granting it, especially in light of the consumer and retailer education conditions described below.<sup>40</sup>

8. Although most broadcasts are now transmitted in digital, rather than analog, format, low power television stations may continue to transmit an analog signal for approximately two more years, and some consumers will continue to rely on the availability of these signals. As discussed above, consumers who purchase a Channel Master device will continue to have access to analog signals through their televisions. Even so, consumers of these analog signals should be able to readily understand, and have realistic expectations of, the capabilities and limitations of the Channel Master devices. Therefore, we conclude that it is important to condition this waiver on EchoStar’s voluntary commitment to a labeling, marketing, and retail education program that informs consumers and retailers about the capabilities and limitations of the Channel Master devices.<sup>41</sup> Pursuant to its commitments, EchoStar is required to (i) develop and distribute clear and easily understood point-of sale disclosures and retailer scripts that describe the Channel Master K77’s functionality, including that the devices lack the ability to receive over-the-air analog signals, (ii) clearly disclose in product guides, including in any Quick Start Guides or User Guides, that the device lacks the ability to receive over-the-air analog signals and includes a description of an easy way for consumers to discern whether they are watching an analog or digital channel,<sup>42</sup> and (iii) offer a program allowing for a full 30-day refund or exchange to any customer who

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<sup>36</sup> Channel Master Comments at 1. Accordingly, EchoStar notes that “every TV receiver in the U.S. today has an analog tuner which consumers can use at any time to access over the air” analog television signals. EchoStar Petition at 8.

<sup>37</sup> 47 C.F.R. §§ 15.3(w); 15.117(a), (b).

<sup>38</sup> EchoStar Petition at 4, 8. We recognize that a consumer will need to select a different input on his or her television set to change from an auxiliary input to the antenna input. Because this can be performed with the click of a single button located on the Channel Master remote, we believe that the inconvenience and disruption to consumers will be minimal. See *EchoStar/Channel Master Ex Parte* at 2, n.3.

<sup>39</sup> EchoStar Petition at 8; see also *Samsung Electronics America, Inc. Petition for Waiver of Section 15.118(b) of the Commission’s Rules*, MB Docket No. 13-165, Memorandum Opinion and Order, DA 13-1863, ¶ 5 n.25 (rel. Sept. 6, 2013) (“*Samsung Waiver*”).

<sup>40</sup> We recognize that a consumer will need to select a different input on his or her television set to change from an auxiliary input to the antenna input. Because this can be performed with the click of a single button located on the Channel Master remote, we believe that the inconvenience and disruption to consumers will be minimal. See *EchoStar/Channel Master Ex Parte* at 2, n.3.

<sup>41</sup> *EchoStar/Channel Master Ex Parte* at 3.

<sup>42</sup> We accept EchoStar’s sample language for these disclosures, or language that is substantially similar thereto: “The Channel Master K77 is intended for use with the ATSC digital, over-the-air television broadcast standard used by all U.S. full power television stations and is not capable of receiving the legacy NTSC analog television standard used by some low-power and Class A television stations.” *EchoStar/Channel Master Ex Parte* at 3.

purchases the device under the mistaken belief that it would receive over-the-air analog signals.<sup>43</sup>

#### IV. ORDERING CLAUSES

9. Accordingly, **IT IS ORDERED** that, pursuant to Section 1.3 of the Commission's rules, 47 C.F.R. § 1.3, the request for waiver of Section 15.117(b) of the Commission's rules, 47 C.F.R. §15.117(b), filed by EchoStar Technologies L.L.C., **IS GRANTED** subject to the conditions described above.

10. This action is taken pursuant to authority delegated by Section 0.283 of the Commission's rules, 47 C.F.R. § 0.283.

FEDERAL COMMUNICATIONS COMMISSION

William T. Lake  
Chief, Media Bureau

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<sup>43</sup> *EchoStar/Channel Master Ex Parte* at 3 (voluntarily committing to a 30-day refund program).